COMMUNICATING NURSING RESEARCH CONFERENCE PROCEEDINGS

VOLUME 48

EQUITY AND ACCESS: NURSING RESEARCH, PRACTICE, AND EDUCATION

2015

Western Institute of Nursing

▶ go to PG.

WESTERN INSTITUTE OF NURSING

The Western Institute of Nursing (WIN) is the western regional nursing organization that succeeded the Western Council on Higher Education for Nursing (WCHEN). In 1985, following extensive deliberations by special committees, the decision to create an autonomous, self-supporting organization was implemented. At the first meeting of the new organization, nurses from collegiate schools of nursing and health care agencies adopted the bylaws and the new name of the organization, Western Institute of Nursing. The organization moved to Portland, Oregon on July 1, 1996. The Western Institute of Nursing was incorporated on November 3, 1998 in accordance with the Oregon Nonprofit Corporation Act.

WIN exists to bring together a diverse community of nurses in a shared commitment to transcend the boundaries of knowledge development and application to advance the discipline and drive improvements in practice, outcomes, and cost. The organizational structure includes the Membership Assembly, the Board of Governors, committees, and societies.

There are six categories of membership in WIN: agency, individual, student, retired nurse, associate, and honorary. Agency memberships are open to organized nursing education programs and organized nursing practices in one of the states designated by the Board of Governors as being in the western region. Individual membership is open to RNs who support the mission of WIN. Student members must be matriculated in a degree granting program. Retired nurse membership is open to retired nurses who live in, or relocate to, the region following retirement. Associate memberships are open to individual non-nurses who, and to organizations, agencies, and businesses outside the western region which, support the mission of WIN. Honorary memberships include those designated for Emeritus status and those who have made supporting contributions to WIN.

◀ ▶ go to PG.

COMMUNICATING NURSING RESEARCH

Volume 48

EQUITY AND ACCESS: NURSING RESEARCH, PRACTICE, AND EDUCATION

An annual publication of the Western Institute of Nursing containing the proceedings of the Communicating Nursing Research Conference and WIN Assembly held April 22 - 25, 2015 at the Hotel Albuquerque at Old Town in Albuquerque, New Mexico.

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◀ ▶ go to PG.

COMMUNICATING NURSING RESEARCH

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Volume 1: The Research Critique
Volume 2: Problem Identification and the Research Design
Volume 3: Methodological Issues in Research
Volume 4: Is the Gap Being Bridged?
Volume 5: The Many Sources of Nursing Knowledge
Volume 6: Collaboration and Competition in Nursing Research
Volume 7: Critical Issues in Access to Data
Volume 8: Nursing Research Priorities: Choice or Chance
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◀ ▶ go to PG.

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Volume 44:	Transitions: Unifying Practice, Education, and Research to Improve Health
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Volume 47:	Taking It Global: Research, Practice, and Education in Nursing

The Cumulative Index of the Communicating Nursing Research Conference Proceedings, Volumes 1 to 25, (1968-1992) was published in 1992.

COMMUNICATING NURSING RESEARCH has been published annually by the Western Institute of Nursing. Each volume contains the addresses and abstracts of papers presented at the annual Communicating Nursing Research Conference.

go to PG.

◀ ▶ go to PG.

TABLE OF CONTENTS

◀ ▶ go to PG.

◀ ▶ go to PG.

◀ ▶ go to PG.

◀ ▶ go to PG.

◀ ▶ go to PG.

◀ ▶ go to PG.

go to PG.

◀ ▶ go to PG.

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◀ ▶ go to PG.

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go to PG.

go to PG.

go to PG.

go to PG.

◀ ▶ go to PG.

◀ ▶ go to PG.

◀ ▶ go to PG.

◀ ▶ go to PG.

◀ ▶ go to PG.

go to PG.

◀ ▶ go to PG.

◀ ▶ go to PG.

◀ ▶ go to PG.

go to PG.

go to PG.

FOREWORD

The theme of the 48th Annual Communicating Nursing Research Conference is "Access and Equity: Nursing Research, Practice, and Education." Nurses across the West can attest to access and equity issues, sometimes caused by geographic factors, sometimes by socioeconomic factors.

There are very diverse populations across the Western region, with several states reporting a higher representation of both American Indian/Alaska Native and Hispanic populations when compared to the US. Several states also have a higher poverty rate than the nation. Health issues are often related to poverty, such as childhood and adult obesity, cancer and heart disease. Some Western states have a higher number of teen births than the national average. Lack of access to care compounds the consequences of poverty.

These are all health issues that are addressed daily by nurses across our Western region, whether in research projects, educational endeavors, or practice settings. The proceedings for the 2015 Communicating Nursing Research Conference include papers on: access to health in populations at-risk, including children, pregnant women, patients with specific health problems, the elderly, and cognitive aging; the role of the environment in health issues, such as asthma; domestic abuse; and chronic conditions, such as quality of life among Southwest American Indian/Alaska Natives living with Hepatitis C. The first papers on Ebola are presented at this conference. Clearly nursing research outcomes and best practices make a difference in both access and equity issues.

While we are familiar with the access and equity issues in our Western states, the diversity of our populations also provides us with a rich experience in culture, foods, entertainment, and ethnic traditions. Attendees at this conference in New Mexico will experience some of the Southwestern culture in conference activities. There is much work still to be done to address health access and equity issues, but it is also important to remember and celebrate the strength made available by our Western diversity.

Paula McNeil, MS, RN
Executive Director
February 2015

◀ ▶ go to PG.

go to PG.

PREFACE

The 48th Annual Communicating Nursing Research Conference, “Equity and Access: Nursing Research, Practice, and Education,” was held April 22-25, 2015 at the Hotel Albuquerque at Old Town in Albuquerque, New Mexico.

The keynote address was delivered by **Barbara J. Safriet**, JD, LLM, Visiting Professor of Health Law, Lewis and Clark Law School, Portland, OR. State of the Science presentations were delivered by: **Paula Gubrud**, EdD, RN, FAAN, Special Assistant to the Dean, Associate Professor, School of Nursing, Oregon Health & Science University, Portland, OR; **Sandra L. Haldane**, BSN, RN, MS, Alaska Native Tribal Health Consortium - Southcentral Foundation, Anchorage, AK; and **David Vlahov**, RN, PhD, Dean and Professor, School of Nursing, University of California, San Francisco, CA.

Two award papers were presented:

- **Distinguished Research Lectureship Award: Judith Gedney Baggs**, PhD, RN, FAAN, Elizabeth N. Gray Distinguished Professor and Interim PhD Program Director, School of Nursing, Oregon Health & Science University, Portland, OR; and
- **Carol A. Lindeman Award for a New Researcher: Moonju Lee**, PhD, RN, College of Nursing, The University of Arizona, Tucson, AZ.

The Western Academy of Nurses panel focused on emerging opportunities for big data in nursing. Speakers included **John M. Welton**, PhD, RN, FAAN, Professor, Associate Dean for Research, University of Colorado Denver, College of Nursing, Aurora, CO and **Blaine Reeder**, PhD, Assistant Professor, University of Colorado Denver, College of Nursing, Aurora, CO.

The Proceedings include the abstracts of symposium, podium, and poster presentations. Two hundred and eight papers were presented in podium sessions on a wide variety of topics, including completed research, theoretical papers, and projects. Eighty papers were presented in seventeen symposia, and one hundred and twenty-eight papers were organized in twenty-eight other concurrent sessions. Three hundred and seventy-one posters were exhibited in five poster sessions, representing projects and research, completed or in progress. A total of one hundred and twenty-six posters were submitted from member institutions for the Research & Information Exchange.

Awards were given to numerous WIN individual members during the 2015 conference. Please consult the Table of Contents for the location of the aforementioned papers, the list of awardees honored by WIN, and the name and subject indexes.

The conference was planned and organized by the WIN Program Committee, and we extend our gratitude to the Program Committee members: Donna Velasquez, AZ, Chair; Judith Berg, AZ/CA; Lauren Clark, UT; Tina DeLapp, AK; Mary Ellen Dellefield, CA; Marie Driever, OR/WA; Margo Halm, OR; Lori Hendrickx, SD; Kathryn Lee, CA; Martha Lentz, WA; Lori Loan, MD; Marie Lobo, NM; Kristin Lutz, OR; Anthony McGuire, CA; Roberta Rehm, CA; and Charlene Winters, MT.

go to PG.

We extend special appreciation to:

- Amy Tomlinson, Graphic Designer,
- Elizabeth Woods, MA, MSLS, who created the name and subject indexes for the proceedings; and
- Charlotte Woodward, Graphic Designer.

We extend our gratitude to the WIN Executive Director, Paula McNeil, and her staff, Bo Perry, Conference Manager, and Laura Hottman, Administrative Coordinator, for their work in bringing the Committee's plans to reality. Finally, we thank all of the nurse researchers who submitted papers and participated in the 2015 conference.

Marie L. Lobo, PhD, RN, FAAN President Western Institute of Nursing	Donna Velasquez, PhD, RN, FNP-BC, FAANP, Chair WIN Program Committee

◀ ▶ go to PG.

Distinguished Research Lectureship Award Paper

COLLABORATIVE CARE AND INTERPROFESSIONAL EDUCATION: A 30-YEAR RESEARCH JOURNEY

Judith Gedney Baggs, PhD, RN, FAAN
Elizabeth N. Gray Distinguished Professor and Interim Director of PhD Program
School of Nursing
Oregon Health & Science University
Portland, OR

◀ ▶ go to PG.

◀ ▶ go to PG.

COLLABORATIVE CARE AND INTERPROFESSIONAL EDUCATION: A 30-YEAR RESEARCH JOURNEY

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Portland, OR

Interprofessional collaborative care is extolled currently as one of the keys to providing safer and higher quality health care leading to better patient outcomes. For some in the health care field, this is a new emphasis, something newly discovered. But, like intensive care and palliative care, both rediscovered in the not too distant past, collaborative or team care has an impressive and lengthy history. I'd like to begin by sharing some of that history with you, noting where my research fits into knowledge development in collaborative care. I will conclude with a summary of what is generally thought to be an important forerunner of collaborative care, interprofessional education (IPE) to prepare today's students to provide excellent collaborative care.

Many terms have been used to describe collaborative care using prefixes (Inter-, Multi-, and Trans-), suffixes (-Professional and –Disciplinary), and other terms such as collaborative practice, collaborative care, and team care. In current terminology the former term *interdisciplinary* has been replaced by *interprofessional*. A primary rationale for this move is the usage within some professions, particularly medicine, to use the term *discipline* to refer to subspecialties within the single profession. For example, an interaction between a pathologist and a pediatrician might be termed interdisciplinary. Interprofessional interactions are described as involving the various professions (e.g., dentistry, medicine, nursing, pharmacy, physical therapy, social work). Interprofessional collaborative care is the most common term today and the term I will use. "Interprofessional" is also used to denote education in which students from different professions learn together, and I will talk about that later in this paper because it is an important educational change that is intended to lead to more collaborative care of patients.

Historical Context

In 1986 when I discovered collaboration in care and focused my work on intensive care units (ICUs), I was able to find antecedent literature related to health care teams, to physician/nurse interactions, and to nurse physician collaboration in direct care giving. The first discussions of the importance of teamwork and collaboration I found were published in the late 1960s and early 1970s (Aradine & Pridham, 1973; Lynaugh & Bates, 1973; Pellegrino, 1966). Much of this early work was focused on problems in nurse-physician interactions. Probably the most well know of these is Stein's "Doctor-Nurse Game" published in 1967 in *Archives of General Psychiatry*; it is still being cited. Stein noted that hospital nurses were not allowed to make even simple decisions related to patient safety and comfort, and were expected to appear passive and to defer to medical authority. The game in the interaction was that nurses were to "communicate recommendations without appearing to be making a recommendation statement. The physician, in requesting a recommendation from a nurse, must do so without appearing to be asking for it" (p. 699). Bates (1966), physician author of a long-used text on physical assessment, identified other difficulties in nurse-physician interactions.

She found physicians assessed nurses positively if they were skillful and followed orders. Nurses, on the other hand, assessed physicians positively for communication, coordination, and cooperation.

To overcome some of these interprofessional difficulties, the National Joint Practice Commission (NJPC) was formed with equal membership from the American Medical Association and American Nurses' Association in the late 1970s and continued its work into the early 1980s, publishing *Guidelines for Establishing Joint or Collaborative Practice in Hospitals* in 1981 and *Together: A Casebook of Joint Practices in Primary Care* (Higdon, Offen, Starr, & National Joint Practice Commission, 1977). The NJPC faltered, but the 1980s were a time when many publications on collaboration were written and research began to be conducted into the construct of collaborative care, especially collaborative decision-making between physicians and nurses.

Health care teamwork studies emerged in many settings and were first published in the late 1970s and early 1980s (e.g., Hubbard, 1982, Lamb & Napadano, 1984; Schmitt, Watson, Feiger, & Williams, 1982; Temkin-Greener, 1983). There were three studies of what was then called interdisciplinary health care teams. One was conducted by Feiger and Schmitt (1979). This study is particularly meaningful to me because Dr. Madeline Schmitt mentored me in my own work on collaborative care. Feiger and Schmitt (1979) developed a model of "collegial interactions." They videotaped team meetings (physician, nurses, dieticians) in a long-term care facility and showed that patients had better outcomes when cared for by teams scored as most collegial. Unlike many more recent studies, this one was seminal because it was not simply dichotomous (collaborative intervention vs. usual care); the researchers studied multiple levels of collaboration.

As I began my doctoral work in 1986 I identified several qualitative research studies that were focused on nurse-physician interactions: the Bates one from the 1960s and two others from 1980s. Temkin-Greener (1983) interviewed administrators in nursing and medicine who were part of internal medicine primary care teams. She found that physicians expected nurse team members to act as a physician extender, but nurses expected to use their own knowledge to co-direct patient care. Although physicians and nurses agreed on the definition of team (people with differing expertise working together to provide patient care), there was conflict about leadership, lack of evaluation of members based on team functioning, and concern about territory. These issues are still salient for interprofessional teams today, although perhaps this will improve in the future as interprofessional education becomes a norm for medical and nursing students. I will discuss this later.

Prescott and Bowen (1985) interviewed physicians and nurses about their management of interprofessional interactions. Both groups found their relationship to be mostly positive, however they differed on a number of key points. Similarly to the findings of Temkin-Greener, nurses rated physicians positively if the nurse's judgment was trusted, but physicians evaluated nurses positively if they communicated well and were competent and willing to help. The researchers asked how disagreements between professionals about decision making were managed. To describe their results they used a model of behaviors with cooperativeness (concern for the other's interests) on one axis and assertiveness (concern for one's own interests) on the other axis using a model of collaboration based on work by psychologists (Blake & Molton, 1970; Kilmann & Thomas, 1977). A high level of cooperativeness and assertiveness was labeled

◀ ▶ go to PG.

collaboration. They found that the primary mode of working together for physicians and nurses was competition (high assertiveness and low cooperation) and there was almost no collaboration. I built on the same model but focused on collaboration.

Intensive Care Unit (ICU) Research

Much of the research on collaboration in the 1980s was focused on my clinical area of interest: ICUs. The seminal work from that period, from my perspective, was a descriptive study of 13 ICUs from across the United States funded both by the National Institutes of Health (NIH) and the Robert Wood Johnson Foundation (Knaus, Draper, Wagner, & Zimmerman, 1986). The major finding reported from this study was that "involvement and interaction of critical care personnel can directly influence [patient] outcome" (p. 416). This does not seem like it should be a rocket science conclusion, but the paper has been cited >600 times, as recently as 2014. Although this research remains important, there were many gaps yet to fill in understanding collaborative care. The authors considered effectiveness (their outcome) as likelihood of patient death given severity of illness, and they used the terms involvement, interaction, and coordination variously without definition. They did not set out to measure involvement, interaction, or coordination, and none of the initial independent variables selected at the study onset to be measured (e.g., level of medical administration, teaching vs. non-teaching hospital, proportion of severely ill patients) demonstrated significant differences among units in relationship to their outcome variable, effectiveness. The critical independent variable was identified post hoc based on visits to units, was described only with example comparisons, and included such things as clinical protocols, comprehensive nursing education support, independent responsibilities for nurses, and excellent communication between nurses and physicians.

Personal History

As I move into discussing my own research, I want to provide a bit of personal background. I began my collegiate life with a BA in English literature and taught freshman college composition and high school English for several years. This liberal arts education provided a strong basis for interests I later developed in ethics and ethical decision making. I soon realized my strongest interests were in health care. I completed the pre-requisite courses for both nursing and medicine, but chose nursing for a career as it seemed more focused on patients rather than illnesses. I earned an Associate in Science degree in nursing, assuming I would always be a hospital bedside nurse, unaware of other professional options. After graduation I worked a year in an emergency department and then moved to an ICU, where I found my clinical home, I realized I needed a master's degree for specialization. A BS in nursing was a necessary step, so I did that, then an MS in cardiopulmonary nursing as a clinical nurse specialist. During the latter program I developed a love for research. That led me to doctoral study. I was particularly interested in utilization of the ICU and quality of care. I took courses in ethics and microeconomics, as the relevant foundational disciplines, and entered the PhD program at the University of Rochester School of Nursing. Based on my reading of the Knaus et al. (1986) study, I believed that physician-nurse interaction was a key variable in influencing patient outcomes. It certainly matched my experience as an ICU staff nurse, where I believed that when nurses and physicians worked together, patients seemed to have better outcomes.

I explored the terms Knaus et al. (1986) had identified (interaction, involvement, coordination), but found them not sufficiently sophisticated for the interactions I had

◀ ▶ go to PG.

observed. I selected collaboration as my variable of interest, conducted a concept analysis (Baggs & Schmitt, 1988), identified the critical attributes of shared planning, shared decision making; assertiveness, cooperation; coordination; and communicating openly. I defined the term, based on these attributes and its Latin origins (*co,* together and *labore,* working), as nurses and physicians cooperatively working together, sharing responsibility for solving problems and making decisions together to formulate and carry out plans for patient care. One of the key pieces of my early research was the reconceptualization of collaboration away from referring only to small groups or teams with a common set of patients, which did not fit the ICU setting, to collaboration between a temporarily matched nurse and physician caring for a single patient, to match the ICU context of constant change.

Dissertation Research: Collaboration About Transfer Decisions

In my dissertation work in a Medical ICU (MICU), I studied collaboration between nurses and physicians, as reported by the nurses and resident physicians involved in making decisions to transfer individual patients from the ICU to a less intense level of treatment. I studied the transfer decision because when patients are transferred from the ICU, both nursing and medical care are less intense. Therefore, I reasoned, theoretically, the decision should be better if both disciplines participate and more information leads to better decisions. The transfer decision is critical because there are negative consequences both to patient outcomes and to financial costs for both too short or too long an ICU stay. Thus, it is critical to get the timing of the transfer right.

For my dissertation research, I developed a simple instrument with a single global question about collaboration and another about satisfaction with decision making. For 6 months, each time a patient was identified for transfer, I asked the staff nurse and medical resident caring for the patient to complete my two-question instrument about the transfer. In those 6 months there were 287 transfers, and I completed the study with 287 completed responses from nurses and 286 from residents. Controlling for severity of illness, when nurses reported no collaboration had taken place, the patients' risk of death or readmission to the ICU was 16%; when nurses reported complete collaboration, the risk was reduced to 5%; there was no relationship between resident reports of collaboration and patient outcomes (Baggs, Ryan, Phelps, Richeson, & Johnson, 1992). To assess for complexity of decision making, I measured whether there were alternative decision choices, for example in situations where there were open ICU beds and no patient waiting for an ICU bed. I found that when the nurses and residents perceived that there were alternatives, collaboration was even more powerful in predicting patient outcomes. This led to the conclusion that in situations of greater complexity, collaboration is more important.

When I assessed the provider outcome, satisfaction with decision making, the nurse participants in my study reported lower levels of both collaboration and satisfaction with the process of decision making than the residents. The correlation between collaboration and satisfaction with decision making processes was statistically significant for both nurses and residents. For nurses the correlation was .67, much higher than the .26 correlation for residents. Nurses' average satisfaction with decision making score predicted retention in their ICU position 1 year later (Baggs & Ryan, 1990). This finding is clinically relevant both in terms of retention of expertise of experienced nurses and in decreased costs for recruitment of new nursing staff.

◀ ▶ go to PG.

Nurses and physicians bring different knowledge to patient care decisions. The physicians generally had more complete knowledge of pathophysiology, chemistry, biology, and disease mechanisms. The nurses also brought scientific knowledge based on their education and more lengthy ICU experience. Additionally, the nurses cared for fewer patients than the residents, and spent more time with patients and families, bringing awareness of human responses such as anxiety and other concerns that could influence patient outcomes. I concluded that when collaboration was high it allowed input from both professions and produced decisions leading to better patient outcomes because the decision was based on more complete information and shared decision making.

After completing my PhD, I took a position as a clinical researcher in a university hospital with a joint appointment in a school of nursing. I stayed in the position for 3 years. During that time, I conducted several psychometric studies to develop instruments to continue my research.

Instrument Development

For my dissertation research, I had used a simple instrument with a single global question about collaboration and another about satisfaction with the decision making process. My initial psychometric focus was to improve that single-item scale (Baggs, 1994). The single item scale based on a perception about a specific patient at a specific time, did not allow any testing of reliability and generated little variance. I was focused on collaboration as my primary concept of interest and used my concept analysis work on collaboration to develop new items, recognizing that I still needed a brief instrument because I hoped for it to be completed by ICU care providers immediately following a decision. The seven questions measured each of the critical attributes of collaboration I had identified and also included the global question from the dissertation work. For the new measure, I used a 7-point Likert-type response for each item to offer enough choice to provide variance without increasing complexity of completion. Content validity was supported by use of the model, the extensive literature review, and 12 nursing and medical experts in collaborative practice, all of whom had published about collaborative care or been involved in research projects about collaboration. I asked the experts if the questions were each relevant to the concept and if together they measured the concept. The experts were supportive of the instrument as developed. Additionally 11 potential subjects, staff nurses, resident and attending physicians found the scale understandable. A pilot study with ICU staff nurses and residents who had recently worked in the ICU demonstrated variance in responses to each question, with scores ranging from 1 or 2 to 7 on each. Criterion related validity was supported by correlation between the global question, which had previously been compared to an existing global scale, and the total of the other six questions. Construct validity was supported by correlation with satisfaction with decision making and by factor analysis demonstrating a single factor for collaboration. Internal consistency reliability was supported by a Cronbach's alpha of .93.

I have been asked for copies of this instrument, Collaboration and Satisfaction About Care Decisions, >300, times, including 32 times in 2014. Requestors primarily are health care providers, researchers, or students from universities or health care institutions. The requests have come from 41 states, 7 provinces, and 21 countries. It has been translated into Dutch, French, German, Greek, Italian, Japanese, Spanish, and Thai, and continues to be a relevant measure, with 14 published studies in which

◀ ▶ go to PG.

it has been used. In 2014 I was invited to conduct a webinar sponsored by the National Center for Interprofessional Practice and Education focused on the measure.

Based on my interest in ICU decision making but moving toward concern about ethical decision making, my second endeavor into instrument development and psychometrics was to create two scales to measure bioethical decision making about level of aggressiveness of care in the ICU: The Decisions About Aggressiveness of Patient Care (DAC) and Decisions About Aggressiveness of Patient Care for Specific Patients (DAC [SP]). Phase I of the psychometric study involved 11 nurse and physician national experts and 11 local physician and nurse ICU managers who addressed content validity. In Phase II face validity, variance, and test-retest correlations were addressed with ICU staff nurses and medical residents. Modifications were made to clarify questions and instructions based on input from participants in both phases.

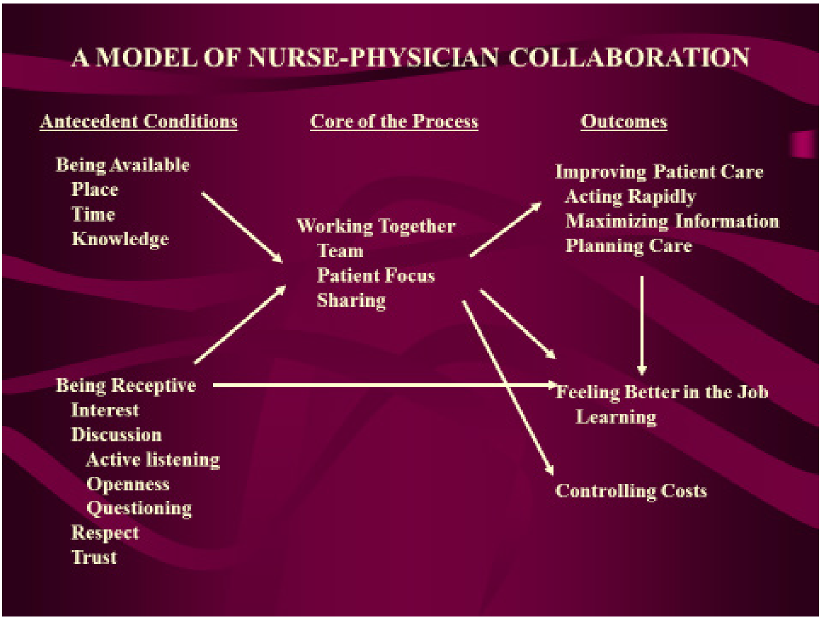
Collaboration in Ethical Decision Making

With funding from the American Association of Critical-Care Nurses (1992-93) and using the instruments I had developed and tested, I studied collaboration in aggressiveness of care decisions in the ICU (ranging from comfort care to high level use of technology). This study of an ethical decision was based on previous studies from the 1970s and 80s in which researchers found nurses and physicians had quite different perspectives on ethical decision making, particularly decisions related to limitation of treatment (Allen, Jackson, & Youngner, 1980; Frampton & Mayewski, 1987; Gramelspacher, Howell, & Young, 1986; Holly, 1989; Youngner, Jackson, & Allen, 1979). My study participants included 57 ICU nurses and 33 medical residents who responded about decisions for 314 patients (Baggs & Schmitt, 1995). I found that all the providers agreed that patient wishes influenced their decisions, with possibility of benefit and diagnosis ranked second and third. Both nurses and residents believed capable patients *should* be making these decisions, a change from a similar study conducted in the 1970s when 74% of nurses but only 32% of residents thought patients should be involved in decision making (Youngner et al, 1979). I asked questions about involvement at three levels: Who should be involved? Who is involved? Who was involved with an identified patient? When I changed from asking who should be involved to asking generally who actually *was* involved, and then about who made the decision for a specific patient they were caring for, both nurses and residents identified attending physicians as the most common decision maker. Residents were more satisfied with the decision making process than nurses.

Grounded Theory Exploration of Collaboration

Returning to a focus on physician-nurse collaboration and because I had found only a .10 correlation between residents' and staff nurses' reports of collaboration in making the same decisions in the dissertation work, I conducted a grounded theory study of collaboration from the perspectives of 10 MICU nurses and 10 medical residents, to see if they defined collaboration differently (Baggs & Schmitt, 1997). I found that they had a similar idea of collaboration, enabling me to build a common model. They identified two primary antecedents to collaboration. The first was *Being Available* with three sub-headings: Available in place or physical proximity, Available in having time, and Available in intellectual ability as knowledgeable competent care givers with knowledge about both their own and the other's role and differing expertise. The physicians were described to have expertise about test results, medications, in some cases knowledge of patients before their ICU admission. The nurses' knowledge

◀ ▶ go to PG.



A MODEL OF NURSE-PHYSICIAN COLLABORATION

Antecedent Conditions

Being Available
  Place
  Time
  Knowledge

Being Receptive
  Interest
  Discussion
    Active listening
    Openness
    Questioning
  Respect
  Trust

Core of the Process

Working Together
  Team
  Patient Focus
  Sharing

Outcomes

Improving Patient Care
  Acting Rapidly
  Maximizing Information
  Planning Care

Feeling Better in the Job
  Learning

Controlling Costs

Figure: A Model of Nurse-Physician Collaboration
Baggs, J. G., & Schmitt, M. H. (1997). Nurses' and resident physicians' perceptions of the process of collaboration in an MICU. Research in Nursing & Health, 20, 71-80.

stemmed in part from physical contact with patients including skin conditions, appetite, comfort, bowel and bladder management, and responses of both patients and their families to patient condition. Both groups saw nurses as effective in discussing limitation of treatment with patients. The second antecedent to collaboration was *Being Receptive*, which had four sub-categories; Interest in collaborating, Discussion (including active listening, openness, and questing), Respect for each other, and Trust, demonstrated by residents who acted on nurses' information without having to re-verify. The core process of collaboration took me back to the Latin roots, it was *Working Together* as a team with the sub-headings of Patient Focus and Sharing. There were three outcomes of Collaboration: *Improving Patient Care*, with the sub-headings of Acting rapidly, Maximizing information, and Care planning; *Feeling Better in the Job* (or satisfaction) with Learning as a sub-heading; and *Controlling Costs*, mentioned primarily by administrators.

Although nurses and physicians had a common model of collaboration, they interpreted events differently, which led to their seeing the same interactions as more or less collaborative. Residents were focused on the strains of working in the ICU, exhaustion, lack of time alone, and multiple patients. Nurses might believe they were initiating a collaborative conversation whereas the resident would see discussion at that time as intrusive or insensitive. The power disparity between nurses and residents also influenced perceptions of collaboration. Residents perceived themselves as ultimately responsible for decision making; they might consider a brief explanation as collaborative, whereas the nurse might perceive it as giving an order.

◀ ▶ go to PG.

Other CIU Collaboration Studies

In the 1990s there were a number of studies that demonstrated the importance of collaborative care in the ICU for outcomes, including my own dissertation work. The group associated with the SUPPORT study (1995), a follow up to the work of Knaus et al. (1986), found a positive association of caregiver interaction with shorter length of stay (Shortell et al., 1994), and communication and collaborative problem solving were found to lead to better ICU care (Zimmerman et al., 1994). Mitchell, Armstrong, Simpson, and Lentz (1989) described an existing ICU that incorporated five key elements of excellence including collaboration that also had lower than predicted mortality.

Replication and Enhancement of Study of ICU Transfer Decision

Because replication was critically important to gaining further confidence in the initial findings in a single unit, I reexamined the association between ICU collaboration and both patient and provider outcomes in multiple units in my first federally funded R01, “Interdisciplinary Collaboration in Intensive Care,” funded by the National Institute of Nursing Research (NINR) from 1994 to 1997. I extended my dissertation work to three types of ICU: a Surgical (SICU), a different MICU, and a community hospital medical-surgical unit (CHICU). I used the multiple item CSACD instrument I had developed to measure collaboration and satisfaction and broadened my study to include attending physicians. I also added some unit level structure and process variables to measure unit collaboration: integrated patient records, the presence or absence of a joint practice committee, joint ICU leadership, scheduled interdisciplinary meetings, scheduled joint patient bedside rounds, written policies supporting collaboration, interdisciplinary orientation of new staff in each profession that included the other profession, and interdisciplinary in-services (possible total of 8 such items). Study participants included162 nurses, 63 residents, and 79 attendings. They responded to questions about decisions related to 1,432 patients.

My findings at the patient level were that nurses’ reports of collaboration were lower than reports of residents, and residents were lower than attendings. In the MICU, and only in the MICU, nurses’ reports of collaboration were associated positively with patient outcomes. If nurses reported complete collaboration, the patient risk of death or ICU readmission was 3%; with no collaboration the risk was 14% (Baggs et al., 1999). I needed to consider the finding that a significant relationship between reports of collaboration and patient outcome was identified only in the MICU, as in my dissertation, but not in the other units. One explanation is that MICU patients are more complex, making it possible to assess the effects of collaboration better. This would align with my dissertation finding that when there were alternatives, collaboration was a better predictor of patient outcome. An indication of MICU patient complexity is that in the SICU 54% of patients were admitted after coronary bypass surgery into a “fast-track” system with standardized care. Complexity could also relate to severity of illness. The SICU and CHICU patients both had lower predicted risk of death than the MICU patients, who were the sickest and most complex.

As in the dissertation work, neither resident nor attending physician reports of collaboration were associated with patient outcomes. Explanations for this finding are suggested by an article revisiting the doctor-nurse game (Stein, Watts, & Howell, 1990). The authors suggested the benefits of collaboration as accruing from better use of nurses’ observational and intellectual skill, which corresponds with my earlier

◀ ▶ go to PG.

explanation that more information leads to better decisions. It is possible that nurses, who link collaboration more closely with satisfaction than physicians, may be better judges of collaboration. Nurses may believe they can influence decision-making only through collaboration, making their reports a more sensitive indicator.

At the unit level I found a perfect rank order correlation between unit collaboration scores (integrated patient records, joint practice committee, joint ICU leadership, scheduled interdisciplinary meetings, scheduled joint patient bedside rounds, written policies supporting collaboration, interdisciplinary orientation of new staff in each profession that included the other profession, and interdisciplinary in-services) and patient outcomes. The MICU had both the highest score on the unit-level collaboration measure and the best patient outcomes, controlling for risk of death

Collaboration and satisfaction with the decision making process again were significantly related for all three groups of providers, but the correlations were strongest for nurses (.79-.85), moderate for residents .41-.62), and least strong for attendings (.23-.31; Baggs et al., 1997). This difference in correlations has been found across every unit in all my studies. Collaboration in decision making has a stronger relationship to satisfaction for nurses than it does for physicians.

In the current health care climate, with collaborative care as a key model expected for delivering excellent patient care, work to improve our understanding and implementation of collaborative care is crucial. Collaboration has shown potential to improve quality of care for the most complex, critically ill population, a group likely to grow as technology improves and the population ages.

Collaboration in ICU Decision Making Near the End of Life

It is also clear that collaborative care is a key to excellence in care for dying patients in the ICU, improving outcomes for dying patients and their families (Baggs, 2002; Baggs & Mick 2000; Baggs, Norton, Schmitt, & Sellers, 2004). My second R01, "Limitation of Treatment Decision Making in the ICU," was funded by NINR from 1999 to 2004. It was an ethnographic study of four adult ICUs in a university hospital. Although linked to my previous studies in ICU collaboration, this study incorporated patients, family members and other care providers in addition to nurses and physicians.

In the ethnographic study there were findings related to collaboration (Baggs et al., 2007; Baggs et al, 2012). Differences between nurses and physicians about the value of do-not-resuscitate (DNR) orders created problems, when some physicians saw no point to a DNR order, but nurses believed the lack led to confusion by families about whether a patient was dying and to the nurses' uncertainly about whether they had to resuscitate a patient in the absence of a DNR order. Attending physicians differed in whether they found it acceptable for nurses to have discussions with families about limiting treatment, leading to nurses having to adapt their communication behavior to different attendings. Decision-making collaboration between family members and physicians generally differed between surgeons, who often waited to approach families about limitation of treatment until very late in a patient's downward trajectory, and medical physicians, who raised such issues much earlier. Lack of clarity about the term "attending physician" (who was in charge) led to confusion by family members, who had trouble figuring out to whom they should direct questions and concerns about decision making. Differences were also seen in collaborative behavior on rounds, which always included physicians, often nurses, and only sometimes and in some units, pharmacists and nutritionists.

◀ ▶ go to PG.

Summary of Learning from My Research

My work was among the first to link interprofessional process of care to outcomes of ICU care, presaging the current emphasis on the provision of evidence linking interprofessional care processes with patient outcomes. This has implications for the Institute for Healthcare Improvement Triple Aim (improved patient experience, improved population health, and reduced costs of care; http://www.ihi.org/Engage/Initiatives/TripleAim/pages/default.aspx). These implications include cost reductions related to savings from overly long ICU stays or premature ICU discharge that results in mortality or readmission, with patient experience and its own cost implications. My work also has provided knowledge about incorporating patient and family perspectives in decision making and care, although less about working with professions other than medicine and nursing. Collaborative care requires interventions at the unit and individual level. Unit and institutional level interventions identified to improve collaboration include policies valuing collaborative care, shared responsibility, interprofessional leadership and collaborative committee structures. At the individual level interventions include education in clinical excellence and effective interpersonal interaction, and rewards for team work, not just for individual accomplishments. In addition, both administrative support with strong leaders from multiple professions who are role models and staff buy-in are needed for effective team functioning.

Current Foci: Interprofessional Education and Collaborative Care

The long-standing focus on physician-nurse interactions has been broadened to include other care providers, patients, and families. The value of collaborative care has been identified in many settings. I refer you to this brief YouTube video for a summary of some of the outcomes that have been identified: https://www.youtube.com/watch?v=IqpT95TKumY.

Although my research was focused on collaboration in care, there is a related current focus on collaborative education of professionals, on interprofessional education (IPE), which is seen as an important way to bring to the clinical setting, providers who already know how to work together. Transformation in care has prompted important work in changing the education of health care providers, so that collaboration models and experiences are incorporated along with professional learning rather than simply continuing with completely siloed educational models.

The focus on effective collaboration's presumed antecedent, interprofessional education (IPE), has expanded exponentially. Since 2000 efforts have been undertaken nationally and globally to identify, define, and measure competencies for collaborative care as part of the education of health care professionals. The Interprofessional Education Collaborative with national organizational participation by nursing, osteopathy, pharmacy, dentistry, medicine, and public health published *Core Competencies for Interprofessional Collaborative Practice* (2011) is the most significant effort to date in the U.S. Additionally, there are studies of faculty perceptions about IPE (Loversidge & Demb, 2014) and comparisons across countries of IPE competencies (Thistlethwaite et al., 2014). I highlight these articles because faculty perceptions are important as starting point for faculty development in teaching IPE, and interprofessional competency comparisons identify global similarities and differences related to interprofessional care models.

New efforts are being supported by the National Center for Interprofessional Practice and Education to assess the relationships among IPE, collaborative practice, and the

◀ ▶ go to PG.

Triple Aim. A few of the recent major salient publications are: a review of instruments measuring teamwork in health care (Valentine, Nembhard, & Edmonson, 2011); a discussion paper on the core principles and values for effective team care (Mitchell et al., 2012), and a review of interprofessional collaborative practice and education using the Triple Aim lens (Brandt, Lutfiyya, King, & Chioreso, online ahead of publication*,* 2014).

Nationally health care professional organizations are working together to identify the work needed to ensure incorporation of IPE in education. The accrediting bodies for Dentistry, Osteopathic and Allopathic Medicine, Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Physician Assistant, and Public Health have added IPE curricular and clinical learning experiences as a requirement for accreditation of their professional schools. Those accreditation standards have been compared among the professions, with some similarities and differences identified (Zorek & Raehl, 2013). A new organization of accreditors has been formed to stimulate IPE (New Health Professions Accreditors Collaborative forms to stimulate interprofessional engagement, 2014).

Educational change at the institutional level is widespread in the U.S. At Oregon Health & Science University (OHSU), the Provost, Dr. Mladenovic, has a mandate to increase IPE/collaborative practice. As evidence of the University commitment, IPE was identified as one of four key themes for the university's regional accreditation. In 2012 the Provost initiated a Steering Committee for an Interprofessional Initiative concerning both IPE and collaborative practice with members from biomedical science, dentistry, ethics, evaluation, medicine, nursing, and pharmacy. I am a member of that group. A personal implication of my research program has been my increasing IPE involvement. My research experience in developing evidence for interprofessional care has contributed to my current credibility in educational leadership of work taking place within my own institution.

The published goal of the OHSU Interprofessional Initiative is to "prepare all OHSU students for deliberatively and intelligently working together with a common goal of building a safer and more effective patient-centered and community-oriented health care system." Our accomplishments are many; some examples include creation of a common academic calendar across schools; development of Graduation Core Competencies for all OHSU graduates; conduct of three pilot studies that are nationally recognized by the National Center for Interprofessional Practice and Education; the launch of a Foundations course focused on patient safety based on curricular mapping across schools that brings together >500 new students in dentistry, medicine, medical physics, graduate and undergraduate nursing, nutrition, pharmacy, physician assistant, and radiation therapy programs to learn from, with, and about each other in small interprofessional groups of 11 to 12 students with 2 faculty from different professions; development of hundreds of faculty to facilitate the small groups in that course; formation of an OHSU Curriculum Committee to certify IPE and multi-professional courses for students across the campus; and support for new IPE courses in such areas as narrative healing and pain management. My research and clinical interest in collaborative practice and a long history of the topic of which my work is only a small part undergird our activities. My research background has supported my contributions as co-course director for the Foundations course, small group facilitator, membership on the curriculum committee, and involvement in two of the pilot studies,

◀ ▶ go to PG.

including use of my CSACD instrument in one that is concerned with improving interprofessional collaboration in the ICU.

I am pleased and proud to have been a part of all the work on collaborative care with my research, to have followed developments in this field over time, to have seen the importance of collaboration coming into the full attention of clinicians, researchers, and educators; and to now be a part of the IPE work that will educate students together for collaborative practice. I have participated personally as a clinician, a researcher, an interprofessional educator, and as a planner in the OHSU Interprofessional Initiative, a natural outgrowth from my research efforts.

◀ ▶ go to PG.

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◀ ▶ go to PG.

◀ ▶ go to PG.

The Carol A. Lindeman Award for a New Researcher Paper

COLORECTAL CANCER SCREENING BEHAVIORS AMONG KOREAN AMERICANS

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◀ ▶ go to PG.

◀ ▶ go to PG.

COLORECTAL CANCER SCREENING BEHAVIORS AMONG KOREAN AMERICANS

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Colorectal cancer (CRC) is the third most common cancer in the United States (U. S.) among both men and women and is the second leading cause of cancer deaths (ACS, 2010; Maxwell, Crespi, Antonio & Lu, 2010). Over the last two decades, CRC incidence and mortality rates have declined in the U. S. and this is likely due to increased CRC screenings (Center, Jemal & Ward, 2009). Despite the effectiveness of CRC screening, disparities of CRC and screening prevalence exist for racial and ethnic groups nationwide (Klabunde et al., 2012). Although research has shown that significant racial and ethnic disparities exist in the general cancer screening (Flynn, Betancourt & Ormseth, 2011; Klabunde et al., 2012), only a few studies have examined trends in CRC screening by ethnic groups (Maxwell & Crespi, 2009), Korean Americans in particular.

Korean Americans are one of the most recent ethnic groups to arrive in the U.S. and they are also one of the most rapidly growing ethnic groups. As Korean Americans are predominately first-generation immigrants (92.5%) (Han, Kim, Kim & Kim, 2011), they are under-represented in cancer screening efforts and less well studied than other ethnic minority groups (Jo, Maxwell, Rick, Cha & Bastani, 2009).

According to the California Cancer Registry (CCR), CRC incidence rates in California have significantly decreased by 29.9% for men and 24.9% for women from 1988 to 2007. Despite the overall state trend of declining rates, CRC incidence rates dramatically increased in Korean Americans (CCR, 2010). The American Cancer Society (ACS) had reported that CRC was the most commonly diagnosed cancer among Korean American men and the second most commonly diagnosed cancer among Korean American women from 2003 to 2007 (ACS, 2010).

However, studies have reported extremely low cancer screening utilization among Korean Americans (ACS, 2010; CCR, 2010; Lee, Kim & Han, 2009). In a study conducted by Ma and associates, the never-screened rate of CRC was 74.5% and only 17% were screened in compliance with the ACS recommendation among Korean Americans (Ma, Shive, Wang, & Tan, 2009). According to the 2005 California Health Interview Survey (CHIS), 77% of Korean Americans have never received any CRC screening as compared to other Asian Americans (55%), Caucasians (39%) and the general population (46%) who are living in California (CHIS, 2005; Jo, Maxwell, Rick, Cha & Bastani, 2009). Korean Americans had the lowest prevalence of CRC screening in all years covered by the CHIS (Maxwell, Crespi, Antonio & Lu, 2010).

Despite rapidly increasing CRC incidence among Korean American men as represented in current cancer statistics (ACS, 2010; CCR, 2010), cancer practices of Korean American men have rarely been studied. Most of the cancer screening studies for Korean Americans are for breast and cervical cancer. Gender differences have rarely been studied in cancer screening behaviors among Korean Americans, and the relationship between gender and cancer screening behaviors is still unclear.

According to the U.S. Census, the Korean American population dramatically grew from 354,000 in 1980 to 1,423,784 in 2010 (U.S. Bureau of Census, 2011). Approximately 90% of Korean Americans are foreign-born (Han, Kim, Kim & Kim, 2011) and 44.3%

◀ ▶ go to PG.

of foreign-born Korean Americans entered the U.S. since 1990 (U.S. Bureau of Census, 2007). Although new immigrants have dramatically increased, there is no study of comparing new Korean immigrants with those who have lived longer in the U.S.

Although the incidence and prevalence of CRC have been increased among Korean Americans, the rates of cancer screening were extremely lower than other ethnic groups and U.S. general population (Lee, Tripp-Reimer, Miller, Sadler & Lee, 2007), and there is little known about Korean Americans' cancer screening practices and the factors that may predict screening practices in this group have not been fully investigated (Chen, 2005). Therefore, the purposes of this study were to: 1) describe CRC screening behaviors among Korean Americans, 2) identify predictors and barriers influencing CRC screening behaviors, 3) identify the difference in the predictors and barriers to CRC screening behaviors between Korean American men and women, and 4) identify the difference in the predictors and barriers to CRC screening behaviors between Korean Americans who have lived in the U.S. less than 10 years and those who have lived in the U.S. more than 10 years.

Conceptual Framework

The Health Belief Model (HBM) was used for this study as a guiding framework for the literature review, instrument development, and study implementation. From the literature review, ten concepts were considered possible predictors and barriers influencing cancer screening behaviors in Korean Americans.

Cultural beliefs for causes of cancer, and annual checkups and periodic cancer screening may influence perceived susceptibility. Korean Americans believe that family history, improper diet, and stress are the major causes of cancer. They believe that they have no risk of cancer if they have no family history of cancer and have not experienced stressful events recently (Lee, Tripp-Reimer, Miller, Sadler & Lee, 2007). Korean Americans have the perception that cancer screening is unnecessary if the person does not have any symptoms of the disease (Lee, Fogg & Menon, 2008; Maxwell, Crespi, Antonio & Lu, 2010; Ma, Shive, Wang & Tan, 2009).

Knowledge of cancer disease and screening can be considered as a perceived benefit. Studies have reported that knowledge of cancer disease, cancer screening tests and/or guidelines was strongly associated with having regular cancer screening and it was considered the predictor of cancer screening for Korean Americans (Kim & Han, 2009; Ma, Shive, Wang & Tan, 2009).

Cancer fatalism, lack of health care access and low health literacy had been identified as perceived barriers to cancer screening among Korean Americans. Korean Americans believe that cancer cannot be cured and a cancer diagnosis is considered a death sentence. They are afraid and do not want to know the diagnosis of cancer because they will not be able to cope with the disease (Juon, Choi, Klassen & Roter, 2006). Lack of health care access has been the most often selected barrier for cancer screening in Korean Americans. Many Korean Americans do not have health insurance and a usual source of health care compared to the general U.S. population (Kagawa-Singer, Dadia, Yu & Surbone, 2010; Song, Han, Lee, Kim, Kim, Ryu & Kim, 2010). Low health literacy, including language barriers have been identified as barriers for Korean Americans in cancer screening. Lack of oral and/or written health literacy makes it difficult for Korean Americans to understand educational materials containing medical terminology without interpretation (Juon, Choi, Klassen & Roter, 2006), and to find the necessary resources for screening (Jo, Maxwell, Wong & Bastani, 2008; Lee, Kim & Han, 2009).

Although a physician's recommendation is one of the most powerful influencing factors on individuals' decision to undergo cancer screening in many studies (Kagawa-

Singer, Dadia, Yu & Surbone, 2010; Maxwell, Crespi, Antonio & Lu, 2010), the role of a physician's recommendation for cancer screening in Korean American remains in question. Most Korean Americans prefer to go to physicians of the same ethnicity because of language barriers; however, Korean American patients receive fewer cancer screening recommendations from Korean physicians (Jo, Maxwell, Rick, Cha & Bastani, 2009; Maxwell, Crespi, Antonio, & Lu 2010), than from non-Korean physicians (Lew et al., 2003).

Acculturation, gender, and length of U.S. residence were considered modifying factors to CRC screening behaviors among Korean Americans. The impact of acculturation has shown inconsistent results in cancer screening studies among Korean Americans (Yip, Tu, Chun, Yasui & Taylor, 2006; Lee, Kim & Han, 2009). The relationships between gender and cancer screening have never been studied among Korean Americans (Im, Lee & Park, 2002). The national statistics and studies have reported that length of U.S. residence is one of the important predictors for cancer screening (Ferrer, Ramirez, Beckman, Danao & Ashing-Gina, 2012; Pons-Vigues et al., 2012); however, a few studies have been reported the relationship between length of U.S. residence and cancer screening behaviors among Korean Americans (Juon, Han, Shin, Kim & Kim, 2003).

Methods

This study employed a cross-sectional descriptive design. Data were collected with a structured questionnaire. Purposive stratified sampling was used to ensure there were sufficient Korean American participants of each gender and length of U.S. residence (≤10 years and >10 years).

After institutional review board approval, data were collected with a structured questionnaire at the recruitment site. Informed consent was obtained from eligible participants who volunteered to participate in the study. After obtaining informed consent, the researcher provided privacy while the participant completed the questionnaires and assisted as needed to minimize missing data. Data collection was about 30 to 40 minutes per each participant.

For this study, seven instruments were selected: (1) the 2009 California Health Interview Survey (CHIS) adult questionnaire version 3.4; (2) the Jacobs' HBM Scale for CRC; (3) the Han's HBM Scale for breast cancer; (4) the Colorectal Cancer Knowledge Questionnaire (CCKQ); (5) the Powe Fatalism Inventory (PFI); (6) the Assessment of Colon Cancer literacy (ACCL); and (7) the Asian American Multidimensional Acculturation Scale (AAMAS). Each scale was analyzed to measure the internal reliability. The items were selected from these seven instruments and translated into Korean using the Brislin's guideline (Brislin, 1970). After translation, the bilingual Korean American cancer screening expert reviewed and evaluated each item of the instrument to validate the content, and a pilot test was conducted with two Korean American men and two Korean American women.

The data analysis procedures involved descriptive statistics, bivariate correlation analysis, Chi-square, and multiple logistic regression with path analytic techniques. All data were entered and analyzed with a computerized statistical program, Statistical Package of Social Science version 18 (SPSS 18.0).

Results

A total of 254 foreign-born Korean Americans aged 50 and older, living in the Greater Los Angeles area, were recruited from three Korean churches, four Korean grocery stores, two shopping centers in Korea town, two community health

go to PG.

seminars, one Korean cultural center, two community organizations working for new immigrants, and two Korean spas.

The mean age of participants was 60.52 years (SD=8.22), ranging from 50 to 85 years. About two-thirds of the sample was under 65 years of age (70.5%). More Korean American women (55.5%) were recruited than men (44.5%). The average length of U.S. residence was 17.59 years (SD=12.46), ranging from 1 year to 50 years. About 49% of the sample was living in the U.S $\leq$ 10 years and 51% were living in the U.S. > 10 years. About 56% reported an annual household income under $35,000 and 46.5% did not have any health insurance. About 72% of participants had at least a college education, but about 60% responded that their ability to speak English was not well or not at all.

There were significant differences between Korean Americans who have lived in the U.S. $\leq$ 10 year and those who lived in the U.S. > 10 years. New immigrants were younger, had less education and household income, and were less able to speak English and higher uninsured than those who have lived in the US longer. The significant difference between the two groups was for health insurance (X^2 (1, N=254)=33.29, p=.000). About 54% of the sample had health insurance. However, 71.3% of Korean Americans who have lived in the U.S. > 10 year reported they had health insurance, and only 35.2% of new immigrants had health insurance.

About 90% of the sample (N= 227, 89.4%) had heard about CRC. However, only 33.5% of the participants have ever had a FOBT, 49% had ever had a colonoscopy, and 19% had ever had a sigmoidoscopy in their lifetime. The main reason for having had CRC screenings was part of a routine exam. The most important reason they did/don't have CRC screening tests was "Haven't had any symptom" (29.1%), "No reason/Never thought of it" (18.9%), and "Too expensive/No health insurance" (13.8%) were followed.

There were no significant differences by gender in CRC screenings. Even though CRC awareness was not different between the two groups divided by length of U.S. residence, significant differences were found on all CRC screenings. Only 26% of new immigrants had ever had a FOBT, while 41% of the counterpart had that test (X^2 (1, N=254)=6.84, p=.009). About 36% of new immigrants have ever had a colonoscopy, while 61% of the counterpart had a colonoscopy (X^2 (1, N=254)=16.19, p=.000). Only 10% of new immigrant had ever had a sigmoidoscopy, while 27% of the counterpart had this test (X^2 (1, N=254)=11.60, p=.001).

Conclusion

In this study, Korean American had lower rates of CRC screenings compared to the U. S. general population. Korean Americans had low rates of annual physical exam and periodic cancer screening, moderate CRC knowledge, low cancer fatalism, limited CRC literacy, lack of health care access, and a low rate of receiving the physician's recommendation of CRC screenings. The greatest predictors influencing CRC cancer screening were annual physical exam and periodic cancer screening for a FOBT, and the physician's recommendation for a colonoscopy and a sigmoidoscopy. There were no significant differences by gender. However, significant differences were found between the two groups divided by length of U. S. residence. Although there were no significant differences in awareness, knowledge, and literacy of CRC and screening, and perceived benefits of screening, new immigrants had lower rates of all three CRC screenings, lower annual physical exam and periodic cancer screening, higher uninsured, less receiving physician's recommendation, and higher perceived barriers to CRC screening than those who have lived in the United States >10 years.

◀ ▶ go to PG.

Implications

The HBM successfully explained CRC screening behaviors for Korean Americans in this study. The findings of this study extended the usefulness of the HBM to CRC screenings and increased utilization of the HBM in a different ethnic group. Although the HBM has been rarely used in the Korean American studies to examine their health behaviors, it was an appropriate theory for this study.

The findings of this study increased knowledge of unique Korean American's CRC screening behaviors and increase cultural competency in practice. It helps healthcare providers to understand Korean Americans and their unique health beliefs and health behaviors. When health care providers have an understanding of health beliefs and behaviors of Korean Americans, healthcare providers can approach differently to Korean patients to increase the health outcomes.

The findings of this study provided the rationale to develop strategies to improve the adherence of CRC screenings in Korean Americans. The annual physical exam and periodic cancer screenings, and physician's recommendations were the most important predictors for CRC screening behaviors in Korean Americans. Therefore, systemic approaches to increase the physician's recommendations for CRC screenings and annual checkups will be appropriate for Korean Americans.

From the findings of this study, several studies can be suggested for further research to improve the adherence of CRC screenings. Although the physician's recommendation for CRC screenings was the greatest predictor for Korean Americans, the role of physician's recommendation for cancer screening was not investigated. Four research studies regarding the physician's recommendations for CRC screenings will be considered for further investigation. First, a study needs to be conducted to clarify the actual number of referrals for cancer screening by Korean American physicians compared to non-Korean physicians. Second, a study needs to investigate why Korean physicians do not recommend cancer screenings to their patients if they have less recommended cancer screenings than non-Korean physicians. Third, a study needs to clarify whether Korean physicians have less recommended cancer screenings for general patients or only Korean Americans patients. Fourth, the effectiveness of the educational seminar for Korean physicians can be studied. To investigate the effectiveness of the educational seminar for Korean physicians, the rates of referral for colorectal surgeons and CRC screenings can be compared before and after the educational seminar.

The community programs may be considered to improve the adherence of CRC screenings among Korean Americans. Korean American family practice physicians and colorectal surgeons can make a network for the community program and provide CRC screenings for low income families with discount price if they can offer. This community program will have many benefits for Korean community, such as increase mutual interests of Korean Americans residents and the community as well, and can be a good model for other community problems to solve together as a one unit.

Strengths of the Study

The study had several strengths: Instruments; recruitment; and two-group analysis. This study utilized culturally and linguistically equivalent instruments. The five of seven instruments have never been translated into Korean and have never been utilized in Korean Americans. The CHIS, PFI, CCKQ, ACCL, and Jacob's HBM scale for CRC were translated into Korean and tested the validity and reliability in this study.

Korean Americans are hard to reach population, and most studies collected data from small groups of churches or community organizations. It caused inconsistent

◀ ▶ go to PG.

results in the previous studies. To increase generalizability and to avoid sampling bias, this study recruited 254 Korean Americans from 16 different sites across the Los Angeles area.

This study used the two-group analysis. It was the first study to compare gender differences in cancer screening behaviors among Korean American. Although there was no difference between men and women, it provided important knowledge in the literature. The two-group analysis discovered many meaningful findings between the two groups divided by length of U. S. residence. These findings clarified the inconsistent results from the previous studies. The findings of this study provide the rationale for the necessity of different strategies to increase the rates of CRC screening in this population.

Limitations of the Study

This study used the self-report method. Social desirability response bias can be a limitation of self-report which may threaten the external validity of this study. A cross-sectional design limits the ability to make strong causal conclusions. Longitudinal research may be considered to improve the validity and an issue of causality. The concept of cultural beliefs was unclear in this study. Cultural beliefs were measured beliefs for the cause of cancer in this study. However, culture and cultural beliefs were broad concepts; therefore, the concept of cultural beliefs should be clearly defined and tested the content validity for this study.

◀ ▶ go to PG.

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◀ ▶ go to PG.

Abstract of the Western Academy of Nurses Panel

EMERGING OPPORTUNITIES FOR BIG DATA IN NURSING

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◀ ▶ go to PG.

go to PG.

EMERGING OPPORTUNITIES FOR BIG DATA IN NURSING

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There is a rapidly growing foundation for electronic data within many healthcare settings that can measure and analyze outcomes, costs, quality, and performance of nurses and nursing care. This emerging capability presents unprecedented opportunity to measure and monitor nursing care delivery and clinical trajectories in nearly all healthcare settings. Yet there are substantial challenges and barriers to implementing new data systems—nursing business intelligence and analytic systems, for example. This presentation will explore the current international efforts to leverage the potential of very large, dynamic, high velocity and high volume data and related specific examples relevant for nursing care.

Outline:

1. What is “big data” and how does it apply to nursing care?

2. Opportunities for using big data—what are the possibilities?

3. Barriers to utilizing big data

4. Informatics challenges

5. Research vs. clinical vs. operational use of big data

6. Nursing business intelligence and analytics using very large data

◀ ▶ go to PG.

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ACADEMIC NURSE-MANAGED FEDERALLY QUALIFIED HEALTH CENTERS

Moderator:
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OVERVIEW: ACADEMIC NURSE-MANAGED FEDERALLY QUALIFIED HEALTH CENTERS

Erica L. Schwartz

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THE BUSINESS OF ESTABLISHING AN ACADEMIC NURSE-MANAGED FQHC

Erica L. Schwartz

* * *

MEETING DATA REQUIREMENTS FOR NURSE-MANAGED FQHC

Jacqueline Ansel

* * *

BEHAVIORAL HEALTH INTEGRATION IN NURSE-MANAGED FQHC

Mary Kay Meintzer

* * *

CHRONIC PAIN MANAGEMENT IN NURSE-MANAGED FQHC

Emily Cheshire, Mary Kay Meintzer

go to PG.

ACADEMIC NURSE-MANAGED FEDERALLY QUALIFIED HEALTH CENTERS

Overview: Academic Nurse-Managed Federally Qualified Health Centers

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Purpose/Aims: The purpose of this symposium is to provide a comprehensive crosswalk for academic institutions considering pursuit or operational transformation towards achieving Federally Qualified Health Center (FQHC) designation. The aims include: 1) review overarching business considerations for transformation, 2) discuss the financial implications for sustainability, 3) explain how the academic mission of student education and impacts workforce development and the triple aim 3) disseminate information regarding mandatory reporting requirements intended to improve population health, 4) convey best practice for integrated behavioral health within FQHC, 5) and showcase evidenced based care for chronic pain management.

Rationale/Background: There are over 250 Nurse Managed Health Centers (NMHCs) in the United States, not including birth centers. Of those, approximately 13 have been designated as federally qualified and at least half are linked to academic institutions. Considerable benefits and barriers exist for institutions forging this path. The benefits of connectedness with universities include rich clinical experiences, evidenced based practice dissemination, grant management, human resources, fiscal expertise, and financial support.

University-based FQHCs depend on grant support but also tend to infuse resources into the health centers. Barriers include the complexity of these systems. Onerous systemic issues impact agility and ultimately responsiveness. It is necessary to appreciate these intricacies in order to create a symbiotic relationship.

Co-applicant participation of NMHC with academic centers realizes summative gains from the capacity to render high quality, affordable care by advanced practice nurses (APNs). APNS work in conjunction with the integrated, behavioral health team. This model creates a breeding ground for workforce development and retention. Students are poised to lead quality improvement initiatives.

Outcomes Achieved/Documented: Sheridan Health Services transformed from a NMHC to a FQHC in June of 2012. Dentistry, pharmaceutical services, and substance abuse treatment ensued. From the coalescence of these programs within the construct of integrated primary and behavioral healthcare, best practice in chronic pain management evolved.

During programmatic development efforts, leadership simultaneously implemented an electronic health record, attested to meaningful use, reported Uniform Data Set measures to, and began true transformation towards becoming a nationally recognized patient centered medical home.

Conclusions: There are many facets to consider during pursuit of community health center sustainability through a FQHC designation. Understanding the layers of complexity will assist those considering the practicalities of transformation. The dual mission to educate students and improve population health is fully realized within this model.

◀ ▶ go to PG.

ACADEMIC NURSE-MANAGED FEDERALLY QUALIFIED HEALTH CENTERS

The Business of Establishing an Academic Nurse-Managed FQHC

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Purpose/Aims: The purpose of this presentation is to discuss the transformation from an academic nurse managed health center (NMHC) to a federally qualified health center (FQHC). The presentation is intended to fulfill these aims: 1) to discuss the importance of transformation for fiscal sustainability, 2) to convey pertinent operational aspects for transformation within academic institutions, and 3) to demonstrate how the dual mission of serving the healthcare needs of the community and building the future nursing workforce fuels integrated, high quality care.

Rationale/Background: There are over 250 NMHC in the United States. Of those, approximately 13 have been designated as federally qualified, and half are linked to academic institutions. NMHC have been nationally recognized as organizations that provide primary care or wellness services to underserved and/or vulnerable populations in conjunction with other entities, such as healthcare centers, educational organizations, and/or social service agencies (NNCC, 2011).

NMHCs that exist as FQHCs in co-application with universities need to establish a distinct 501c3 with organizational bylaws, and co-applicant agreements that delineate roles and responsibilities for the community governing board of directors. The beauty of this arrangement lies with the dual mission of these separate but connected bodies. Workforce development is harbored within these centers through training, recruitment, and retention efforts. The centers provide a rich learning environment, predicated on caring and built upon evidenced based practice. Population health and wellness is enhanced through integrated healthcare delivery systems.

In order to be a FQHC, an organization needs to receive grants under Title 42, formerly known as Section 330 of the Public Health Service Act. FQHCs uniquely qualify for enhanced reimbursement from Medicare and Medicaid, which is imperative to cover the cost of care required for the populations served. Base funding through the Human Resources Services Administration provides a sound infrastructure for care coordination and nursing expertise through an integrative approach. FQHCs are mandated to offer a sliding fee scale based upon federal poverty guidelines and individuals cannot be turned away for an inability to pay. FQHCs are required to have robust, ongoing quality assurance programs and report outcome data annually, efforts that inherently enhance population health.

Outcomes Achieved/Documented: Sheridan Health Services transformed from a NMHC to a nurse managed FQHC in June of 2012. Documented outcomes include:

- Fiscal Sustainability and cost containment
- Comprehensive, integrated primary and behavioral healthcare
- Workforce development
- Adoption, implementation, and use of an electronic health record
- Attestation for meaningful use
- Development of partnerships with local stakeholders
- Faculty, staff, and student engagement in the business operations
- Clinic expansion
- Improvement in health outcomes and patient satisfaction

Conclusions: Pursuing FQHC designation is a viable pathway for fiscal sustainability. HRSA program requirements are designed to optimize healthcare delivery systems through infrastructure development, accountability, and community involvement. Academic nursing centers are poised to venture into this transformation for they are the innovators and experts in improving population health. The dual mission for academic, nurse managed FQHCs creates an optimal, sustainable healthcare delivery model to achieve the triple aim.

◀ ▶ go to PG.

ACADEMIC NURSE-MANAGED FEDERALLY QUALIFIED HEALTH CENTERS

Meeting Data Requirements for Nurse-Managed FQHC

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Purpose/Aims: To discuss how a nurse-managed health center met the data reporting and quality reporting requirements associated with a FQHC designation. The focus of this presentation is centered around electronic health record requirements and data abstraction as it relates to Uniform Data Set (UDS), Meaningful Use, and Patient Centered Medical Home (PCMH). The purpose of this presentation is to give an overview of what to expect during the data reporting process as part of the FQHC designation. The presentation is intended to fulfill these aims: 1) to discuss the basics required to meet federal reporting guidelines, 2) to convey pertinent data reporting elements and ensure data integrity.

Rationale/Background: Receiving FQHC designation, while pertinent for sustainability, comes with stringent federal data reporting requirements and quality improvement initiatives. On an annual basis, UDS measures for financial and clinical indicators need to be reported to ascertain where a funded health center is benchmarked in relation to national indicators and goals. The importance of data integrity and knowledge of measures is imperative for success and continued funding.

Along with UDS, the Meaningful Use benefit under Medicaid and Medicare is something required of all FQHCs. Additionally, the push to have all FQHCs become nationally recognized as a PCMH places additional data analytic responsibilities on the organization. Accurate reporting requires expertise and personnel to ensure the selected indicators are tracked in accordance with guidelines.

Outcomes Achieved/Documented: Sheridan Health Services transformed from a NMHC to a nurse managed FQHC in June of 2012. Documented outcomes in its relation to data include:

- Submission of UDS reports
- Quality improvement tracking
- Adoption of a new electronic health record system
- AIU and Stage 1 Meaningful Use under the Medicaid benefit
- Transformation to prepare application for PCMH national recognition

Conclusions: With the added benefit of becoming an FQHC comes increased data reporting and the production of measurable results. The data measures required of an FQHC, while rigorous, sets the health center apart from others as it ensures patients receive the highest-quality care through national initiatives and quality improvement foci. These measures serve as the framework to achieve the triple aim: 1) cost containment, 2) improved population health, and 3) enhanced patient satisfaction.

◀ ▶ go to PG.

ACADEMIC NURSE-MANAGED FEDERALLY QUALIFIED HEALTH CENTERS

Behavioral Health Integration in Nurse-Managed FQHC

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Purpose/Aims: This presentation discusses the integration of behavioral health (BH) and primary care at Sheridan Health Services (SHS), a multiple-site faculty practice. The presentation aims to: 1) outline necessary programmatic shifts within the SHS BH program to provide broader behavioral health integrated practices, 2) convey the various levels of BH integration, and 3) demonstrate barriers and key achievements that lend to congruity of integrated care delivery.

Rationale/Background: The delivery of primary behavioral health (BH) care is, by necessity, different than the delivery of BH services in traditional, specialty behavioral health clinics or private practices. Literature cites up to 70% of primary care patient appointments include psychosocial concerns covering both the full spectrum of psychiatric disorders—from subclinical distress to serious mental health concerns—and a range of behavioral concerns. The BH Provider (BHP) in this context is tasked with providing brief assessments, targeted treatment, triage, and management of primary care patients with medical and/or BH problems. Integrated primary BH care interventions focus on helping individuals replace maladaptive behaviors with adaptive ones, provide skill training through psycho-education and patient education strategies, and focus on developing specific behavior change plans. SHS has achieved various levels of integration that can be described with the 2013 SAMSHA-HRSA six-level integration framework. They propose three main categories — coordinated, co-located, and integrated care — there are two levels of degree within each category.

Outcomes Achieved/Documented: Our integration model includes universal screening for BH issues done by all providers, self-management support and brief interventions by a BHP, treatment of BH conditions by the care team, group interventions, and appropriate referral to a higher level of BH care when warranted. The SHS BH Program has served a larger numbers of clients and provided more comprehensive behavioral health care. In 2012 the BH Program provided 1253 encounters to 226 individuals, in 2013 it provided 1832 encounters to 376 individuals, and it is on track to provide an increase in encounters to a larger client base in 2014. Twice a month multidisciplinary integrated care meetings have provided a forum for discussions that informed the development of over 10 standard operating procedures that increase congruity of care, efficiency, quality of care, and decrease overall stress to all members of the multidisciplinary team. Increase in client encounters is connected to the implementation of a menu of group visits that utilize evidenced-based curriculum including StressLess, Chronic Pain Management, and Youth Life-Skills Building.

Conclusion: Nurse-managed health centers have long recognized the value of integrating with BH care and have actively been practicing integrated care before it even had its name. A purposeful focus on aligning care provided by the Behavioral Health Program at Sheridan Health Services with the principles of primary behavioral health care has resulted in significant organizational benefits and overall quality of client care. The enhancement and expansion of integrated BH and primary care at Sheridan Health Services has been a key factor in our organization's successful pursuit of and receipt of FQHC designation.

◀ ▶ go to PG.

ACADEMIC NURSE-MANAGED FEDERALLY QUALIFIED HEALTH CENTERS

Chronic Pain Management in Nurse-Managed FQHC

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Purposes/Aims: The purpose of this presentation is to describe an integrated model of care to address chronic pain through shared group medical appointments at a federally qualified nurse managed health center.

Rationale/Background: Colorado ranks No. 2 nationally for prescription drug misuse among people between the ages of 12 and 25. In Colorado, there were 4,030 deaths from opioids in 2000. In 2010, this number quadrupled to 16,651 and remains on the rise.

When the electronic prescription drug monitoring program (PDMP) was introduced to Colorado, it allowed providers to identify patients who were "doctor shopping" by providing access to a centralized database accessible by prescribers and completed by pharmacies. Oftentimes, patients are dismissed from the practice for aberrant behavior, as taking time to assess for addiction is costly and time consuming and there are few resources for addiction treatment for the underinsured in the state.

Approach: Management of non-malignant chronic pain is supported by the guidelines from Washington State through the Agency Medical Directors' Group. Although the guidelines suggest best practices for managing patients through individual appointments, practices use shared medical appointments for management of chronic pain. Shared medical appointments are one method in which to enhance the patient-provider relationship and embrace a multidisciplinary model that provides opportunity for additional education. Shared group medical visits provide information that extends beyond the time constraints limiting a provider in individual appointments. In addition, shared medical appointments are congruent with the integrated care model employed by Sheridan Health Services.

Outcomes Achieved/Documented: SHS uses the CareOregan Pain Management Multidisciplinary Group visits curriculum.

SHS began the first group visit in March of 2013 with 5 participants. SHS deemed shared group medical visits as a requirement for patients suffering from chronic pain who are prescribed opioids as part of their pain management regimen. There are 38 patients managed for chronic pain with opioids and 7 (18%) have completed the groups. There are currently two group sessions with a total of 8 participants. Once the current session is completed, ~ 39% of appropriates patients will have completed the required shared medical appointments with another group planned in Spring 2015.

Outcomes before the current sessions were observational in nature and included the number of patients who stated they began using non pharmacological approaches to pain management, number of patients who considered changing their opioid therapy from short acting to long acting opioid formulations, number of patients who went to the ED for pain management, patients who decided to taper off opioid medications. Additional outcomes have been identified the current sessions.

Conclusions: Shared group medical appointments are an appropriate manner in which to manage patients with non-malignant chronic pain and embrace an integrated health care philosophy. There is a need for more evidence that provides information regarding best practices and identification of curriculums that yield optimal outcomes for patients suffering from non-malignant chronic pain.

◀ ▶ go to PG.

ACCESS TO HEALTH IN POPULATIONS AT-RISK

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OVERVIEW: ACCESS TO HEALTH IN POPULATIONS AT-RISK

Iris Mamier, Heather Fletcher, Eileen K. Fry-Bowers,
Julie A. Pusztai, Lisa R. Roberts

* * *

AS THEY ARE LIVING IT: ACCESS TO MEANING AND PURPOSE FOR THE OLDEST OLD

Julie A. Pusztai

* * *

COGNITIVE AGING PERCEPTIONS OF ETHNO-RACIALLY DIVERSE ELDERS

Lisa R. Roberts

* * *

THE ASSOCIATION OF HEALTH LITERACY WITH SELF-CARE IN OLDER ADULTS IN JAMAICA

Heather Fletcher, Betty Winslow

* * *

MATERNAL PERCEPTIONS OF DEVELOPMENTAL ASSESSMENT FOR LOW-INCOME LATINO CHILDREN

Eileen K. Fry-Bowers

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ACCESS TO HEALTH IN POPULATIONS AT-RISK

Overview: Access to Health in Populations At-Risk

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Purpose: To describe how distinct population groups may experience health-related risk and marginalization as well as ways they might be empowered to improved health.

Background: Continued interest in vulnerable populations is needed given persisting health disparities that are experienced by those who have less access to resources. Indeed, it is the belief of nurses that the health of all is ultimately dependent on the health of those who are most challenged to access health care. Globally, the population above age 65 is expected to triple to 1.5 billion within the next twenty years and this is associated with an increase in chronic disease. Besides aging, pediatric populations with lower socioeconomic status (SES) and less access to resources are particularly at-risk and are in need of effective interventions to reduce their vulnerability to disease. Chronic disease and SES factors are linked to health status across age and around the world. Thus, examining how nurses can research, educate, and provide health to such at-risk populations is imperative.

Methods: Four studies using diverse designs and methods (e.g., quantitative correlational surveys, qualitative phenomenological) are presented in this symposium to provide data-based insights about factors influencing health equity from the perspectives of at-risk groups. That is, symposium presenters will offer evidence that describes the health-related issues or perspectives of several vulnerable populations, including lower SES children with poor access, Jamaican elders with limited education and resources, diverse elderly with cognitive decline and the frail oldest old.

Results: Each presenter has gained insight into the diverse perspectives of those who are often overlooked. From their data, presenters derived a differentiated picture of what it means to become sick or elderly, to experience health needs but lack resources, and to find ways to engage in self-care despite adversity. There are shared and distinct experiences that can be traced in the data. The findings can improve nurses' understanding of these at-risk groups and help them design interventions that will mitigate some of the disparities.

Implications: Nurse researchers can successfully contribute to understanding the needs of populations at-risk and thereby identify specific health concerns that are often overlooked or inadequately addressed. Understanding the perspectives of at-risk populations will further allow for health promoting interventions. This, consequently, can contribute to a decrease in adverse outcomes and an increase in quality of life in these populations.

◀ ▶ go to PG.

ACCESS TO HEALTH IN POPULATIONS AT-RISK

As They Are Living It: Access to Meaning and Purpose for the Oldest Old

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Purpose/Aims: The oldest old face numerous losses in mobility, independence, life roles, and more. Access to what formerly created a sense of meaning and purpose is therefore changed and challenged. Thus, the purpose of this study is to describe where meaning and purpose are found and accessible in the everyday experiences of the oldest old.

Rationale/Conceptual Basis/Background: Because national and global epidemiological data indicate more aged persons are living longer, in-depth exploration of aging among the oldest old is vital. The oldest-old season of life involves increased, varied, and cumulative changes. Change and loss inherently stimulate a search to re-create or conserve meaning and purpose. Knowing how the oldest old experience and access meaning and purpose provides nurses with increased perceptiveness and ability to care for these vulnerable and frail persons.

Methods: As one aspect of a larger hermeneutic phenomenology study on the experience of aging, the question of what brings purpose and meaning in life was posed to 13 participants aged 87-100 years. Participants included men (5) and women (8), blacks (2), Hispanics (3), and whites (8). All spoke English, lived independently, and were without cognitive impairment. Purposive sampling ensured that all would portray distinct aging experiences. Three in-depth semi-structured interviews with direct observation were conducted in the home of each participant focusing on life history, daily life, and current experiences of aging. Interview prompts included questions such as “What is it like to be __ (exact age)?”, “Can you tell me an instance when it felt good (or bad) to be your age?”, “What gets you out of bed each morning?”, and the direct question of “What provides purpose in your life?” All text was transcribed verbatim and analyzed using phenomenological approaches to content analysis and interpretation. Field notes and researcher reflection, thoughts, and observations contributed to the collected data.

Results: Findings reveal meaning and purpose that are unique to the individual and shared by others with common life experience. While some may access meaning and purpose in their days by doing what they have always done, most have moved to a time of less participation and more observation, seeking meaning in memories of their past, and vicarious purpose through others. Examples are grown children who are successful, or grandchildren who have inherited the wanderlust. People do not age in isolation; when former sources of meaning have faded away, meaningfulness and purpose are often found in relationship with the lives of others.

Implications: This portrayal of possibilities for accessing purpose and meaning during very late human life not only enriches gerontological theory, and nursing knowledge but also offers insights about nursing care practices. These caring practices can support the creation of meaning and purpose for the oldest old, in their final years.

Funding: Supported in part by the Loma Linda University School of Nursing Dissertation Fund.

◀ ▶ go to PG.

ACCESS TO HEALTH IN POPULATIONS AT-RISK

Cognitive Aging Perceptions of Ethno-Racially Diverse Elders

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Purpose: To explore how elderly Latino, African American, and White participants in the Inland Empire region of Southern California view and experience cognitive decline and aging.

Background: In an aging, diverse U.S. population, cognitive illnesses disproportionately affect minority ethno-racial groups. Yet those seeking care for the treatment of cognitive decline are mostly White. Differences in knowledge, awareness, and beliefs about cognitive health may contribute to the observed disparities in negative outcomes among ethno-racial groups. Understanding beliefs and perceptions of cognitive aging among diverse groups is essential to improving access to care and health outcomes.

Methods: Semi-structured key informant interviews (KI) and focus groups (FG) were conducted among diverse elderly community members, family caregivers, and physicians (geriatricians, psychiatrists, neurologists, and internists). All interviews were audio recorded and transcribed verbatim. All transcripts were analyzed using Grounded Theory methods including inductive and deductive processes to guide analysis.

Results: Men and women (N = 75) self-identified their ethno-racial group. Fifteen KI interviews related to the care of elderly and cognitive aging issues were conducted in the local region among health care professionals and support staff from community based older adult serving agencies. Eight validation FG included a group of family caregivers, a group of physicians, and 6 FG among Latino, African American, and White elderly community members. To assure a broad representation of community members, separate FG were conducted with individuals from lower and more affluent backgrounds of each ethno-racial group. Major emerging themes included (a) personal expectations about physical and cognitive aging versus what was observed; (b) societal value of older adults, often determined by one's ability to contribute to family or society; (c) model of care preferred and barriers to obtaining the desired care; as well as (d) community concerns such as lack of resources, treatment choices, social support, choice of primary care givers, and ethics. Latinos were more accepting of aging as a natural process and defined aging by assets. Whites and African Americans expressed that social value of older adults was influenced by financial status. African Americans and Latinos preferred to rely on family/neighbors for care, whereas Whites preferred to pay for care, in or out of the home. Community concerns for all groups included availability of care. Physicians' perceptions often differed from elder community members and caregivers regarding expectations about aging, and care preferences. Physicians overwhelmingly expressed frustration regarding system-wide lack of access to care. An overarching theme across all groups was a sense of loss associated with aging. The way this loss was experienced and dealt with, however, varied between ethno-racial groups.

Implications: These findings offer nurses a crucial understanding of unmet needs related to cognitive decline experienced among diverse elderly community members, and perceived barriers to accessing care. This descriptive knowledge can inform nurses as they plan interventions for improving access to care for patients and family living with cognitive decline, especially among Latinos and African-Americans known to have previously failed to access such health care.

◀ ▶ go to PG.

ACCESS TO HEALTH IN POPULATIONS AT-RISK

The Association of Health Literacy with Self-Care in Older Adults in Jamaica

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Purposes/Aims: This study was designed to determine whether relationships exist among aspects of health literacy and self-care practices while controlling for potential socio-demographic influences in a sample of community-dwelling adults 60 and older living in Jamaica.

Background: Older adults are the fastest growing segment of the population in Jamaica. With an increase from 10% (252,225) of the total Jamaican population in 1995 to 11% (279,051) in 2005, the rate is expected to rise to 25% by 2025. Thus, it is critically important to understand factors that may contribute to health maintenance, disease prevention, and wellness promotion. Two such factors, not studied extensively in Jamaica, are health literacy and self-care. This study was guided by the Orem Self-care Model providing a sociocultural orientation that outlines the factors that can influence a person to self-care. These factors include beliefs, personal characteristics and knowledge (a pre-requisite for health literacy skills). Health literacy suggests that persons not only obtain the knowledge but the ability to process and use the information to self-care.

Methods: A cross-sectional and correlational design with multistage sampling and a survey were used to meet the research aim. The Health Literacy Questionnaire measures nine aspects of health literacy (e.g., gathering, reading, and understanding health information, social support, and healthcare provider and system engagement). Self-care was measured with an established scale, the Appraisal of Self-care Agency Scale. Demographic characteristics and self-reported health status were collected in the survey.

Results: A sample of 200 community-dwelling elders 60 years and older living in a rural section of Jamaica completed the survey. There was variation in scores across the nine aspects of health literacy, and among the highest scores were those for social support and active engagement with healthcare providers. Scores for self-care were relatively high, with 84% of the sample scoring in the high perceived capacity range (based on an established cut off score). As predicted, there was a strong positive correlation between health literacy and self-care. Regression analysis revealed three of the health literacy scales - critical appraisal, social support and ability to engage the healthcare provider - to be statistically significant predictors for self-care after controlling for education, region, health status, age, and gender.

Implications: It is reasonable to conclude that gains in health literacy can facilitate improvements in older adults' self-care ability thus promoting health equity. Nurses can play pivotal roles in this by assessing health literacy, providing education and information, improving access to care and, particularly, fostering genuine understanding of relevant health information in order for older adults to care for themselves.

Funding: This study was funded in part by the Karen J. Radke Doctoral Student Fellowship and the Loma Linda University School of Nursing Research Dissertation fund.

◀ ▶ go to PG.

Maternal Perceptions of Developmental Assessment for Low-Income Latino Children

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Purpose: This study examines the relationship between the level of maternal health literacy (HL) and perceptions of assessment and referral for developmental concerns for low-income Latino children aged 3 to 48 months.

Background: Guidelines for well-child care recommend that pediatric development be routinely assessed to identify developmental risk factors, provide parents with appropriate anticipatory guidance, and secure adequate intervention to support optimal development. National data suggest that health care providers (HCP) do not adequately address parental concerns regarding pediatric development, behavior and mental health. Many children with problems remain undetected or do not receive referral until problems escalate. This is especially true for children from low-income and racial and ethnic minority families. Notably, Latino children are diagnosed with autism spectrum disorders 2.5 years later than white children and exhibit more severe symptoms at time of diagnosis. Similar delays are noted for other developmental, behavioral or mental health conditions.

During the pediatric well child visit, parents must provide information, and respond to questions, which guide assessment and plan of care. Individuals with low HL experience challenges in communicating with HCP, demonstrate poor comprehension of instructions, ask few questions within a clinical encounter, and report poor satisfaction with patient-provider communication. Low parental HL has been associated with suboptimal pediatric health outcomes, but whether parental HL plays a role in developmental assessment and referral remains poorly understood.

Methods: Low-income English- and Spanish-speaking Latina mothers of children aged three months to four years were recruited from WIC sites in Southern California (n= 124) to participate in this cross-sectional, correlational study. Maternal HL was measured using the *Newest Vital Sign*. Perception of pediatric developmental screening and receipt of information or referral was evaluated using the *Promoting Health Development Survey*. Demographic data included maternal acculturation status, child health insurance status, and whether the child received care from a regular place and regular provider.

Results: Fifty-three mothers were identified as having a “high likelihood of limited HL”, 43 with the “possibility of limited HL,” and 28 with “adequate HL.” Chi-square analysis revealed a significant association with moderate effect size between the level of maternal HL and maternal identification of child being at risk for developmental problems, χ^2 (6) = 15.185, p = .019, ϕ = .238. Overall, 61 mothers identified their child as at “high risk” for a developmental concern; only 32 reported being asked by their HCP if they had such concerns, and 34 reported being provided with information to address these concerns. There was no association between identification of the child as “at risk” and whether the mother reported developmental assessment (χ^2 (6) = 5.917, p = .433), or received information or referral (χ^2 (3) = 6.794, p = .079).

Implications: Children who receive timely and appropriate assessments are more likely to receive needed services. Low maternal HL may be a risk factor for incomplete pediatric developmental assessment and referral among low-income Latino families. Providing culturally relevant, understandable anticipatory guidance materials to Latino families may be one way to reduce disparities in pediatric health care.

◀ ▶ go to PG.

ADDRESSING EBOLA IN THE UNITED STATES: A NURSING VIEW

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TAKING THE BODY HOME: IMPACT OF EBOLA ON FAMILY CAREGIVERS

Ebere Ume, Magda Shaheen, Shirley Evers Manly

A NURSE'S TOUCH: PREPARE, PLAN AND CARE FOR EBOLA WORLDWIDE: THE CALM BEFORE THE STORM

Shirley Evers Manly, Magda Shaheen

HOUSE OF HOPE: PREPARING STUDENT NURSES TO FIGHT INFECTIOUS DISEASE

Shirley Evers Manly, Magda Shaheen, Ebere Ume

PREPARING TO SERVE: ALLEVIATING THE FEAR TO CARE FOR PATIENTS WITH EBOLA

Tavonia Ekwegh, Shirley Evers Manly

◀ ▶ go to PG.

Taking the Body Home: Impact of Ebola on Family Caregivers

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Purpose: To explore the impact of the global Ebola outbreak on cultural expectations of transporting deceased loved ones to their home countries or states after death.

Background: Many cultures take their deceased loved ones to countries, states or cities of origin for burial after death of that loved one. United States of America returns the body of deceased soldiers that die in foreign countries. Many African countries have the value and expectation and death practices to return the remains to the home land for proper burial.

Methods: This mixed methods study examined the effects of transporting the deceased to their countries. Individual interviews were done with 40 participants.

Results: Many Nigerian-born participants expressed the value, belief and expectations of taking the body of their loved ones home for burial. American born participants also shared the same belief. Several costs associated with this practice include extended mortuary costs, costs of airline tickets, extensive immigration process for permits to fly the body etc. However, family caregivers believe that this practice helps the deceased's spirit rest in peace, assure families that they have performed the final rites of respect to their loved one and provide opportunities for others to participate in providing final rite. Nigeria, one of the initial countries to be hit with Ebola has banned the practice of transporting deceased bodies into the country. This is creating severe theoretical moral and spiritual challenges for the people who belief in this practice.

Implications: In the wake of the Ebola Virus global apprehension, and to curtail the spread, the ban from transporting the deceased bodies is causing undue emotional financial and physical strain on the community. Nurses must assist families to deal with the emotional trauma of not being able to bury their loved ones according to their beliefs and practices.

Funding: This research was supported by NIH-NIMHD grant U54MD007598 and NIH/NCATS Grant # UL1TR000124.

◀ ▶ go to PG.

ADDRESSING EBOLA IN THE UNITED STATES: A NURSING VIEW

A Nurse's Touch: Prepare, Plan and Care for Ebola Worldwide: The Calm before the Storm

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Purpose: To provide an overview of Ebola; describe the similarities/differences of Ebola and Black Plague; describe the American Nurse's role in the preparation for control/ prevention of Ebola Globally; and define Misconceptions/Myths about Ebola.

Rationale/Background: The Ebola virus causes viral hemorrhagic fever that affects multiple organ systems and is often accompanied by bleeding. The virus is named after the Ebola River in the Democratic Republic of Congo, where one of the outbreaks occurred in 1976.

Bubonic Plague (BP) was one of the most feared diseases of the ancient and medieval worlds. Victims of the BP were found in poor districts. They lived in the slum areas of London, invested with rats or someone who had the disease. Individuals infected by BP were locked in their homes for forty days and nights. A red cross was painted on the door to warn others of the plight of those in the house. No one was allowed in except 'nurses' who were local women with no training but got paid to visit the homes of plague victims to see their disease progression and to take them food. Many of these nurses were condemned for their deeds.

Like the plague, the outbreak of the Ebola Virus Disease (EVD) in West Africa occurs in countries recovering from civil wars, economic upheaval, and where approximately 85% of the population lives below the international poverty line. The EVD outbreak is global threat and of particular concern that many medical personnel are being infected, with nurses who have close contact with patients at particular risk. Similar to the nurses condemned for caring for the first recorded outbreak of BP in 542–543. The first nurse diagnosed with Ebola in the U.S. is being attributed to breaching the standard infections disease protocol recommended by the CDC. WHO is seeking 600 doctors and at least 1,000 nurses to dispatch to Africa to counter the epidemic. But with 301 health workers known to be infected with the virus - almost half of whom have died- finding volunteers will be difficult.

Brief Description of the Best Practice: The Charles R. Drew University of Medicine and Science School of Nursing's Global Health Initiative (CDU-GHI) includes health professionals with a mission to globally serve underprivileged populations and provide healthcare, education, and disease prevention. They collected sterile medical equipment from hospitals and home care agencies, and pharmacies and took them to Ghana to help prepare for any impending cases of Ebola.

Outcomes: While in Ghana universal precautions and hand washing techniques was taught to health care professionals and participants built their capacity to control EVD. These include surveillance and data management; infection prevention and control; case management; laboratory sample collection and transportation, social mobilization, communication techniques and development of messages; logistics and proper use of Personal Protection Equipment and preparation of response and preparedness plans.

Conclusions/Implications: Education/training of EVD among healthcare personnel globally is important for ensuring that prevention/control measures are understood and practiced properly to prevent/control and protect the health care providers and population worldwide.

Funding: This research was supported by NIH-NIMHD grant U54MD007598 and NIH/NCATS Grant # UL1TR000124.

◀ ▶ go to PG.

ADDRESSING EBOLA IN THE UNITED STATES: A NURSING VIEW

House of Hope: Preparing Student Nurses to Fight Infectious Disease

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Purpose: To describe the design, evaluation and debriefing of an Ebola clinical immersion simulation for pre-licensure and advanced practice nursing students.

Background: Currently there is no confirmed case of Ebola in LA County; however, there have been many cases that reflect a rule out diagnosis. In such situations, the protocol is to restrict exposure and contact to only required personnel in those isolation areas. However, it is imperative to review with student's isolation protocols as well as personal protective devices available and their proper use in a clinical immersion simulation. According to the CDC in 2011, there is an estimated 722,000 hospital associated infections in Acute Care Hospitals. Moreover in 2012, there were 54,500 catheter associated urinary tract infections, 30,100 central line associated bloodstream infections, 53,700 surgical site infections associated with 10 surgical procedures, and 107,700 hospital cases of clostridium difficile infections. Moreover, the overall annual direct medical costs of HAI to U.S. hospitals ranges from \$28.4 to \$33.8 billion. As we are faced with the Ebola Viruses in the U.S., it is important that schools of nursing serve as champions of hand hygiene and infection control campaigns so the students will serve as role models to motivate change and will take over the aging nursing workforce in the near future. A lack of institutional priority for hand hygiene and following universal precaution protocols could be a major factor in poor adherence to recommendations for hand washing.

The applications of simulation using different high fidelity simulation modalities can enhance retention in learning and improve training. Virtual simulation, mannequin simulation, and standardized patients can improve knowledge and skills. To facilitate appropriate learning during the simulation sessions, prior preparation of the participants is usually required. Preparation includes reading material and lectures, with a demonstration of what to expect during the simulation. Virtual Simulation is a unique tool in education that allows computer-aided simulation of virtual reality to introduce material and improve understanding of participants on a topic. With the use of Virtual Simulation, mannequin simulation, standardized patients, in addition to reading materials and lectures, we hope to improve our participant's knowledge, skills and performance.

Brief Description of the Undertaking/Best Practice: Five Case Scenarios were designed with varying levels of complexity for both high fidelity and virtual simulation. Facilitators, raters, standardized patients, and mannequin operators received appropriate training on the scenarios. Participants read materials, attended lectures and received a two-hour virtual session on CliniSpace-virtual simulation with a facilitator, which served as preparation for the simulation. Debriefing followed every case scenario.

Outcomes: measures of outcomes included: pre and post simulation survey; technical skills simulation evaluation; pre and post perception survey; student self-reflection; rater evaluation; evaluation of simulation experience; and standardized patient evaluation of the participants' simulation. Participants of the simulations have higher score in the post evaluation of knowledge, skills, and practice compared to the pre-evaluation scores.

Conclusion/Implications: The implementation of the simulation enhanced the training on infectious disease control and prevention and subsequently protecting the health care professionals and the public at large.

Funding: This research was supported by NIH-NIMHD grant U54MD007598 and NIH/NCATS Grant # UL1TR000124.

◀ ▶ go to PG.

ADDRESSING EBOLA IN THE UNITED STATES: A NURSING VIEW

Preparing to Serve: Alleviating the Fear to Care for Patients with Ebola

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Purposes/Aims: With the recent scare of Ebola Virus Disease (EVD) in several metropolitan cities across the United States, and the recent diagnosis of two Dallas nurses from this disease the purpose of this discussion is to describe the recent efforts to train hospital personnel regarding the Ebola procedures.

Rationale/Background: Our local community hospital admitted a patient with suspected Ebola. This patient was transferred to our hospital directly from the airport with signs and symptoms of this virulent disease. After simulated Ebola preparedness meetings in our hospital; nurses still felt unprepared to care for this patient.

Brief Description of the Undertaking/Best Practice: Extensive efforts over the last two months have involved a task force with key stakeholders from administration, Infection Prevention/Control, Nursing Leadership, Emergency Medicine, Laboratory services, and Disaster Preparedness. Leadership has been working closely with California Department of Public Health (CDPH), Los Angeles Acute Communicable Disease and Control to gain more insight and knowledge of best practices in EVD management, including training and guidance from The University of Emory and Nebraska.

Outcomes: Currently all high risk health care personnel have been properly trained in donning and doffing of personal protective equipment (PPE), and what to do in the event if a suspect EVD is to arrive in the hospital. If a patient is identified as at risk for Ebola, the patient is isolated in a negative pressure room by staff using recommended PPE, and key stakeholders are notified. Designated Ebola teams, consisting of nurses, laboratory staff, and emergency room physicians have been identified and received extensive training for the care of Ebola inpatients and the fear that nurses might encounter.

Conclusions/Implications: Education and training of EVD and PPE compliance among healthcare personnel is a paramount for ensuring that policies and procedures are understood and practiced and to determine first and foremost if your hospital has the capacity to care for an Ebola patient.

Funding: This research was supported by NIH-NIMHD grant U54MD007598 and NIH/NCATS Grant # UL1TR000124.

◀ ▶ go to PG.

BUILDING A UNITED FRONT FOR DOCTORAL PROGRAMS IN NURSING

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OVERVIEW: BUILDING A UNITED FRONT FOR DOCTORAL PROGRAMS IN NURSING

Janice Hayes

MODELS PROMOTING RESEARCH AND PARTNERSHIPS FOR EQUITY AND ACCESS IN CARE OF OLDER ADULTS

Michele C. Clark

NEXUS/HARTFORD COLLABORATION: A CONSORTIUM MODEL TO EXPAND EDUCATION AND RESEARCH PARTNERSHIPS IN GERONTOLOGY

Pauline Komnenich

BUILDING ACADEMIC GERIATRIC CAPACITY THROUGH DOCTORAL COURSE SHARING

Theresa A. Harvath

◀ ▶ go to PG.

BUILDING A UNITED FRONT FOR DOCTORAL PROGRAMS IN NURSING

Overview: Building a United Front for Doctoral Programs in Nursing

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Objective: To describe collaboration between two consortia in nursing that aim to enhance the education of health care providers in gerontology.

Rationale/Background: The purpose of this symposium is to discuss the impact and potential outcome of the collaborative agreement between The Nursing Education Exchange (NEXus) and the National Hartford Center of Gerontological Nursing Excellence (NHCGNE). The collaborative agreement was created to address issues of equity and access for students, faculty and institutions to educational programs in nursing that address healthcare concerns of older adults.

Approach: The interface of these two national endeavors is intended to: (a) increase course availability in Gerontology; (b) foster collaborative relationships between faculty and students in providing equity and access to services for older adults; and (c) encourage intra and inter-professional relationships that are responsive to new initiatives committed to transforming quality and safety in the care of older adults.

Outcome: A brief description of each of the partner consortia will be provided. The role of NEXus in building a united front in doctoral education addressing IOM goals as that role relates to promoting research, education and partnerships supporting equity and access to health care for older adults will be discussed.

Conclusion: Hartford sought collaboration with NEXus, an established institutional consortium, to expand its educational impact preparing health care providers in the care of older adults especially in rural communities.

◀ ▶ go to PG.

BUILDING A UNITED FRONT FOR DOCTORAL PROGRAMS IN NURSING

Models Promoting Research and Partnerships for Equity and Access in Care of Older Adults

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Purpose/Aims: Budgetary constraints along with the educational demand for specialties in PhD programs have led to innovative approaches with the intent of increasing the availability of doctoral courses. The purpose of this paper is to highlight the lack of access to gerontological scholarship in higher education and explicate how consortium models facilitates growing the science and scholarship of nursing so nursing scholars can remain active participants in the national debate on elder health care.

Rationale/Background: The evolution of consortia in higher education will be presented. Examples of collaboration between academic institutions and different disciplines as well as consortia between institutions and service providers will be examined with a focus on deliverables and challenges. However, a special emphasis will be on the goals of different nursing consortia throughout the country.

Description: The need for nursing scholarship in gerontological care will be discussed and how partnerships through the consortia model can assist in meeting this need. A discussion on the limited access to gerontological higher education courses from known gerontological centers of excellence will be presented as well as how such centers are critical in increasing nursing's contribution and voice in directing policy and practice based on research in elder care.

Conclusions: Challenges of delivering gerontological courses from centers of excellence will be discussed and how consortia can meet this challenge will be reviewed. Identified deliverables from consortia and an evaluation of the processes of successful consortia will also be presented.

◀ ▶ go to PG.

BUILDING A UNITED FRONT FOR DOCTORAL PROGRAMS IN NURSING

NEXus/Hartford Collaboration: A Consortium Model to Expand Education and Research Partnerships in Gerontology

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Purpose/Aims: Issues of equity and access of students, faculty and institutions to educational programs in nursing and the promotion of research partnerships have been successfully addressed in the NEXus approach to collaboration for doctoral programs in nursing. Given the budgetary constraints in higher education addressed in the previous paper, the purpose of this paper is to discuss the potential impact of two national initiatives, NEXus with a focus on education in nursing doctoral programs and the National Hartford Centers with a focus in Geronotology as they come together to address budgetary constraints and the expansion of education through the NEXus consortium to include care of older adults. Challenges and opportunities for expansion of gerontological education specifically within the NEXus consortium framework will be presented

Rationale/Background: This paper will focus on the rationale for using the established successful consortium of NEXus as one mechanism for building a united front among doctoral programs in Nursing. This collaboration addresses a specific student population's learning needs for gerontological specialty. Approached by the National Hartford Centers for Gerontological Nursing Education, NEXus worked with the Centers to develop a viable approach for collaborating in a way that would meet the goals of both national initiatives.

Description: Building on the principles of cooperation and collaboration utilized through a variety of mechanisms such as Memoranda of Agreement, institutional commitment to education and scholarship, core values such as mutual trust and respect among colleagues and attention to sustainability, NEXus was an attractive model for addressing national gerontological initiatives. This paper examines how issues related to equity and access for students can be enhanced through merged efforts in care of older adults and potentially other populations of interest. Documentation of success through NEXus in expansion of available courses, institutional commitment and national impact will be discussed as an example of the potential outcome of the focus in gerontology.

Conclusions: Although the collaborative initiative is in its infancy, the potential impact for increasing equity and impact for accessibility to doctoral courses in state and public institutions has potential for making a major impact in the current healthcare environment and is consistent with the IOM recommendations for nursing.

◀ ▶ go to PG.

BUILDING A UNITED FRONT FOR DOCTORAL PROGRAMS IN NURSING

Building Academic Geriatric Capacity through Doctoral Course Sharing

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Sacramento, CA

Purpose/Aims: The mission of the National Hartford Centers of Gerontological Nursing Excellence (NHCGNE) is to enhance and sustain the capacity and competence of nurses to provide quality care to older adults through faculty development, advancing gerontological nursing science, and facilitating adoption of best practices. Of particular concern has been the development of sufficient numbers of faculty prepared to teach gerontological nursing at all levels of education. As a strategy to meet this mission, a new consortium relationship was created between NHCGNE and the Nursing Education Xchange (NEXus) to increase the offerings of doctoral level distance-delivered courses. This paper will describe the innovative consortium effort between NHCGNE and NEXus, designed to build and sustain academic capacity.

Rationale/Background: The NHCGNE Board of Directors examined methods to increase academic capacity in geriatric nursing. Since NEXus existed since 2004 as a proven course sharing consortium, the NHCGNE Board approached NEXus to determine whether a new consortium could be created, allowing NHCGNE programs to participate in the course sharing. Of particular interest, NEXus included both PhD and DNP courses in its catalogue, expanding the options both for preparing faculty to teach geriatric nursing and clinicians to provide care to the elderly in rural and urban communities.

The method selected for the new NEXus/NHCGNE consortium was the creation of a Memorandum of Understanding, which outlined the relationships, roles, and responsibilities of the parties. Schools joining NEXus would become full academic collaborators. In addition, the MOU outlined an opportunity for schools to receive awards to cover the first year of membership in NEXus and in NHCGNE if they signed a NEXus MOU by December 2014. As part of the MOU, NEXus agreed to reduce its membership fee for the first 3 years of membership for those joining through the award. Inclusion criteria were identified for the award, the RFP was issued, and participants were selected. NEXus staff provided two webinars to assist in educating the selected participants on the procedures that need to be accomplished in order to join NEXus.

Outcomes: Four schools responded to the first RFP and one more responded to the second RFP. All were accepted to the program. Case Western Reserve University became the first new member of NEXus and began offering courses in Fall 2014. The remaining programs are still in the process of working through the administrative processes on their campuses.

Conclusions: The Hartford/NEXus model is resulting, as intended, in the addition of programs that have demonstrated strength or high potential for expertise and curricular strength in gerontological nursing. Subsequently, there has been an expansion of elective courses for doctoral students offered by those joining NEXus. The schools of nursing benefit by being able to offer elective courses through NEXus, reducing the pressure for each school to offer multiple specialized courses in an environment of economic constraint. Students benefit by taking courses from faculty they would not ordinarily meet. This new consortium model has high replicability for other nursing specialties that would benefit from the shared courses and faculty resources.

Funding: Supported by a grant through the Gerontological Society of American, with funding from The John A. Hartford Foundation.

◀ ▶ go to PG.

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CARE TRANSITIONS: AN EVOLVING SCIENCE

Moderator:
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OVERVIEW: CARE TRANSITIONS: AN EVOLVING SCIENCE

Cynthia F. Corbett

END OF LIFE INPATIENT CARE: AN OPPORTUNITY FOR IMPROVED CARE TRANSITIONS

Kenn B. Daratha, Mason H. Burley, Molly Altman

DESIGNING TRANSITIONAL CARE FOR OLDER ADULTS WITH MULTIPLE CHRONIC CONDITIONS

Shigeko (Seiko) Izumi, Basilia Basin, Margot Presley, Jean McCalmont

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TRANSITIONAL CARE RESPITE FOR HOMELESS PATIENTS: PROGRAM DEVELOPMENT AND OUTCOMES

Rebecca Doughty

MEDICATION MANAGEMENT CHALLENGES AND OPPORTUNITIES DURING CARE TRANSITIONS

Cynthia F. Corbett, Joshua J. Neumiller, Kenneth B. Daratha

◀ ▶ go to PG.

CARE TRANSITIONS: AN EVOLVING SCIENCE

Overview: Care Transitions: An Evolving Science

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Improving the quality and safety of care as patients transition from one care setting to another is a national healthcare priority. Despite the existence of several large randomized controlled trials showing the effectiveness of various models of hospital to home care transitions (e.g., Care Transitions Interventions, Transitional Care Intervention, Project RED), effective translation of transitional care models to clinical practice has been challenging. For instance, provisions in the Affordable Care Act mandated that the Centers for Medicare and Medicaid Services fund care transition demonstration projects. Many of the projects of failed to be offered continuation funding as a result of either ineffective implementation (e.g., enrollment goals not met) or poor outcomes (e.g., failure to reduce hospital readmission rates). In addition, while some common interventions may improve quality and safety for all patients, there is increasing realization that a “one size fits all” care transition intervention is both ineffective and cost prohibitive. Thus, the science of care transitions continues to evolve. This symposium will present four papers that contribute to advancing the science of care transitions. First, a study exemplifying how secondary analysis of existing databases can identify patients that may benefit from specialized care transition interventions will be presented. Second, a study that identified strategies to fulfill the unmet transitional care needs of hospitalized older adults with multiple chronic conditions will be presented. The third presentation will address a novel program that facilitates safe care transitions for patients that are homeless. Finally, lessons learned from multiple studies that tested transitional care interventions to improve medication management will be presented. In addition to study or project findings, each presentation will identify implications for practice and research to advance this critical area of science to improve healthcare delivery, care transitions and, ultimately, patient outcomes.

◀ ▶ go to PG.

CARE TRANSITIONS: AN EVOLVING SCIENCE

End of Life Inpatient Care: An Opportunity for Improved Care Transitions

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Purpose: The purpose of this study was to examine the hypothesized heterogeneity of inpatient utilization trajectories in the 2 years preceding terminal hospitalization.
Background: End-of-life acute inpatient hospital care is common and costly. Between 32% and 38% of U.S. deaths occur in hospital settings. Costs and lengths of stay are much higher for hospital stays ending in death compared to patients discharged alive among patients served by all payers. Factors associated with high inpatient utilization at end of life may inform care transition decisions.
Methods: This retrospective cohort study included adult persons with terminal hospitalizations in non-federal hospitals in the state of Washington in 2012 (N=17,688). Group Based Trajectory Modeling (GBTM) was used to identify groups of patients with distinct trajectories of inpatient utilization. Modeling of each trajectory includes a review and selection of the best fit (linear, quadratic or cubic) by use of the maximum likelihood method and an assessment of the model Bayesian Information Criteria (BIC) score. The final number of trajectory groups is determined by evaluating successive models according to improvement in BIC score (2(ΔBIC) >2), average posterior probability of group assignment exceeding 70%, and a minimum group assignment including at least 5% of the study sample.
Results: GBTM yielded a 3 class solution, in which sixty-two percent (n=10,934) of the study population was classified in the low hospital days trajectory and was labeled as the ‘*persistently low*’ cohort. Twenty-two percent (n=3,906) of the study population was classified by initial low hospital day utilization and increasing hospitalization days in the last 6 months before terminal hospitalization; this cohort was labeled as ‘*escalating*’. Sixteen percent (n=2,848) of the study population was characterized by increasing hospital day utilization throughout the last 2 years of life and was labeled as the ‘*persistently high*’ cohort.

Bivariate cohort differences were observed in patient and clinical characteristics at terminal hospitalization. Younger terminal patients (≤ 64 years of age), the long term disabled (dual enrollees in Medicare and Medicaid), those on Medicaid only, and patients with a race other than White had higher than expected counts in the *persistently high* cohort. Patients in the *persistently high* cohort had the highest rates of comorbid heart failure, chronic lung disease and kidney failure while patients in the *escalating* cohort had the highest rates of comorbid metastatic cancer. Patients in both the *escalating* and *persistently high* cohorts were more likely to be hospitalized for infectious diseases at terminal hospitalization. Lengths of stay and estimated costs of the terminal hospitalization were similar across all three cohorts.
Implications: Few studies have examined health care utilization trajectories before death. Increases in healthcare utilization have been shown to be dominated by increases in hospital use. A contemporary examination of inpatient utilization at end-of-life among patients of all ages and all payers helps identify opportunities for changes in care, care transitions and opportunities for advance care planning and palliative care.

◀ ▶ go to PG.

Designing Transitional Care for Older Adults with Multiple Chronic Conditions

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Purpose: The purpose of this study was to design an evidence-based and practice-based intervention to support older adults with multiple chronic conditions (MCC) through their transitions from hospital to home.

Background: Development of effective interventions to improve health outcomes and reduce unnecessary health service utilization among high risk population is an urgent healthcare issue. Although care models shown to be effective exist, the specific interventions needed by the fastest-growing population of older adults with MCC have not been thoroughly examined. The purpose of this study was to develop an intervention to assist older adults with MCC by combining transitional care approaches with palliative care principles (i.e., symptom management and advance care planning). The goal was to design an intervention that was evidence-based, and practical and acceptable in a local healthcare system.

Methods: Twenty-six people (12 RNs, 5 MDs, 6 SWs, 2 PAs, 1 patient advocate) who were involved in care of older adults with MCC were identified using snowball sampling and invited to an interview. Seventeen individual and small group interviews were conducted. Participants were given a prototype transitional care intervention for older adults with MCC that was developed based on evidence in the literature by the researcher. They were asked to review and evaluate its acceptability, practicality, and potential efficacy based on their clinical experiences, current practice, and existing healthcare structures. The interviews were audio recorded and analyzed using conventional qualitative content analysis approach (Hsieh & Shannon, 2005). IRB approval was obtained from the researchers' institution.

Results: Areas of concerns addressed by participants included: 1) different needs required by different patients, 2) discrete and overlapping roles of various disciplines, and 3) existing practices in the healthcare system. Participants described that patients' needs vary by their bio-psycho-social profile. Diversity in their needs requires flexibility and inclusion of a multi-disciplinary approach in the intervention. Participants also expressed concerns that the new intervention might duplicate or hinder current practice or services. Based on participants' evaluations, the prototype intervention was modified to be a nurse providing hands-on symptom management and advance care planning in addition to the treatment as usual provided by social workers and other healthcare providers in existing clinical practice.

Implications: Intervention based on existing evidence still needs to be examined in the context of local practice. Development of a clinically useful and effective intervention and testing of its efficacy require careful examination balancing scientific rigor and clinical practicality.

Reference: Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*(9), 1277-1288.

Funding: This study is supported by National Palliative Care Research Center Career Development Award.

go to PG.

CARE TRANSITIONS: AN EVOLVING SCIENCE

Transitional Care Respite for Homeless Patients: Program Development and Outcomes

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Purpose: To describe the development and outcomes of a transitional care respite program for patients who are homeless.

Background: People who are homeless have longer lengths of stay in the hospital—a homeless patient is hospitalized for 7.2 days, compared to 4.8 for a patient who discharges to housing. Patients that are homeless who are discharged to a transitional respite program are 50% less likely to be readmitted to the hospital. In 2012, the Inland Northwest Transitional Respite Program began as a collaboration between local hospitals, homeless service agencies, and a school of nursing. It began with one bed for men, but now serves homeless men and women in Spokane, Washington who are discharging from area hospitals. Patients admitted to respite are not sick enough to remain hospitalized, but are not ready to be back on the streets. Respite beds provide a safe place for patients to recuperate and receive community services from visiting nursing services, mental health professionals, and housing experts. In addition to reducing length of hospital stays, transitional respite care has been shown to reduce hospital readmissions and emergency department visits among homeless populations.

Program Processes: Once approved for respite, the patient is discharged from the hospital to the shelter via cab. The respite guest is assessed by the RN, who is a care transitions coach, and admission paperwork is completed. The RN reviews hospital discharge instructions and medications with the respite guest. Respite guests are given a small, waterproof notebook in which to record current medications, health goals, and questions for their health care providers. While in respite, guests are encouraged to be engaged in their own health care. The guest identifies health goals and learns how to navigate the health care system as independently as possible.

Program Outcomes: A day of hospital care in our community costs approximately $2,200, compared to the $38 dollar charge of a day in respite. In 2013, respite provided 1,405 bed nights of care and served 100 men and women, saving area hospitals $4 million. Homeless patients who are receiving IV antibiotics can discharge to respite, decreasing the length of stay from 8 weeks to 3 days. In the first 8 months of 2014, 17 respite guests have been discharged from the respite program into permanent housing. Case studies will be presented that will detail the improved health, engagement in care, and quality of life that our respite guests experience as a result of enrollment in our transitional care program.

Future Plans: The Inland Northwest Transitional Respite Program will increase capacity to 40 beds in January 2015. The director is currently consulting on implementation of similar transitional respite programs in Washington, Alaska, and California. Further research will be conducted to determine the financial and social impact of respite care for the homeless.

Funding: The author is grateful to Providence Health & Services for support of this program.

◀ ▶ go to PG.

CARE TRANSITIONS: AN EVOLVING SCIENCE

Medication Management Challenges and Opportunities during Care Transitions

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Purpose: Drawing from multiple care transitions studies completed by our team, this presentation will describe the challenges of improving medication management during care transitions and present innovative strategies to reduce medication-related problems.

Background: Medication management has been reported as the most challenging aspect of transitional care and medication-related problems are the most prevalent adverse event following hospital discharge. Research findings from our team revealed that patients with multiple chronic conditions have an average of 4-7 medication discrepancies following hospital discharge and that identifying and resolving medication discrepancies significantly reduces acute care utilization and costs.

Methods: Studies conducted by our team include: (1) a non-randomized cohort study involving 201 patients ≥ 50 years of age admitted to a home health care agency to test the impact of a pharmacist home visit in identifying and resolving medication discrepancies;[1] (2) a randomized clinical trial of patients transitioning from acute care to home health care (n=232) to test the effect of nurse interventionists who were trained to identify and resolve medication discrepancies;[2] (3) a secondary analysis of medication regimen complexity of hospital discharge medication lists versus the regimen complexity of medications participants actually reported taking once home (n=213);[3] (4) a qualitative study involving focus groups (n=10) of stakeholders (n=69) that included physicians, nurses, pharmacists, social workers, health plan administrators, and health care lawyers to identify strategies for reducing transitional care medication discrepancies and improving patient safety;[3] and (5) a randomized clinical trial (n=140) that tested a pharmacist-led medication information transfer intervention in patients with CKD recently discharged from the hospital to home.[4]

Results: In each of the prospective studies, medication discrepancies were common and pervasive among hospitalized adult patients transitioning to home. Stakeholders were uniformly aware of the limitations and ineffectiveness of medication reconciliation during hospitalization and the limitations of hospital discharge teaching for home medication management following discharge. Medication regimens patients reported taking in the home were less complex than those listed on hospital discharge medication lists, and patients with less complex regimens were at lower risk for adverse drug events. Home visits following hospital discharge by pharmacists or nurses nearly always led to additional interventions to improve safe medication management, even among patients who believed they were managing their medications well.

Lessons Learned: Current transitional care interventions often use telephone follow-up, yet our findings suggest home visits are essential to identifying and resolving discrepancies and other medication management problems. Other finding suggest transitional care interventions that can be done to improve safety include simplifying medication regimens to the extent possible, using teach back, and having the patient/family demonstrate medication administration. Health system solutions to improve medication information transfer between providers, patients, and families are also critical.

Funding: The authors gratefully acknowledge financial support from:

[1] American Society of Health System Pharmacists Foundation grant 2006-2008.

[2] Robert Wood Johnson Foundation Interdisciplinary Nursing Quality Research Initiative grant 2008-2010.

[3] Agency for Healthcare Research and Quality (R21HS019552) Medical Safety and Liability grant 2010-2011.

[4] National Institute of Diabetes, Digestive, and Kidney Diseases (R34DK09014016-01 Type 2 Translation grant 2012-2014.

◀ ▶ go to PG.

COLORADO COLLABORATIVE FOR NURSING RESEARCH: NURSES, PIONEERS, TRAILBLAZERS

Moderator:
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OVERVIEW: COLORADO COLLABORATIVE FOR NURSING RESEARCH: NURSES, PIONEERS, TRAILBLAZERS

Karen H. Sousa

DRAWING MAPS, SETTING COURSES: THE NURSE SCIENTIST'S ROLE IN THE CCNR

Kathleen S. Oman, Regina Fink

RUGGED TERRAIN: THE CHALLENGES OF USING EHR ACROSS SYSTEMS

Cynthia A. Oster

BLAZING NEW TRAILS: MECHANISMS AND OBJECTIVES OF CCNR DATA SHARING

Blaine Reeder, Karen H. Sousa, Mustafa Ozkaynak, John M. Welton

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THE LOST CITY OF GOLD: FINANCE AND QUALITY INDICATORS IN BIG DATA

John M. Welton

◀ ▶ go to PG.

COLORADO COLLABORATIVE FOR NURSING RESEARCH: NURSES, PIONEERS, TRAILBLAZERS

Overview: Colorado Collaborative for Nursing Research: Nurses, Pioneers, Trailblazers

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Academic and service leaders in the Colorado healthcare system lament the inability of the nursing profession to assert its place in the evolving world of healthcare. They agree with Tim Porter-O'Grady's statement that we as nurses are "living in the actual"—the current state of things—rather than "living in the potential"—the state that is yet to come. To drive nursing into the future, the Institute of Medicine (2010) has famously recommended that nurses *become more involved* in making changes to the healthcare system and *use data* more effectively. Following the IOM recommendations entails many actions (e.g., forming partnerships between nurse scientists and nurse clinicians). But most importantly, for nursing to blaze its trail into the future, the profession must strike out into the bold new frontier of health care: the volume and variety of data found in the electronic health record (EHR). The EHR is the one-stop change locus where nursing can both help shape the healthcare system and start to use data more efficiently.

This is not to say that nurses do not already employ EHR. We do. But nurse leaders do not yet use EHR data to drive day-to-day decision-making. Nurse clinicians do not yet use EHR data to determine best practices. In short, the nursing profession can exploit the volume and richness of EHR data in much more sophisticated ways.

Therefore, to stay at the forefront of healthcare progress, nursing must (a) explore the intricacy of EHR territory and (b) establish nursing-specific metrics, extract resources from the EHR that are pertinent to those metrics, and develop value-added interventions that yield optimal nursing-sensitive patient outcomes. The best means to those ends is *dynamic, intrepid, nursing-centered research*.

This symposium will describe a new nurse-empowerment vehicle called the Colorado Collaborative for Nursing Research (CCNR). The objective of the CCNR is to develop and use high-quality, nursing-centered data to do leading-edge, nursing-centered research that guides nursing practice. The CCNR vehicle is driven by forward-looking Nurse Pioneers.

- The CCNR slogan is "Nurses Shaping Nursing's Future," and Dr. Kathy Oman will discuss how the Nurse Scientist helps accomplish that objective through the CCNR.
- Dr. Cynthia Oster will discuss the challenges of using electronic health record (EHR) elements for research purposes.
- Dr. Blaine Reeder will discuss how the CCNR is leading the effort to develop a distributed data-sharing system. Ultimately, the CCNR—through its CU Patient-initiated Data initiative—will (a) aggregate data from multiple facilities, (b) extract data from the different EHR systems, (c) process those data and translate them into a uniform CCNR nomenclature, and (d) stream data in real time to participating facilities for informed, real-time response.
- Dr. John Welton will discuss one of the current CCNR proofs-of-concept—the Cost & Quality Project. Very little is known about patient-level nursing costs either in individual hospitals or across the spectrum of healthcare. This project uses EHR data to capture direct nursing-care costs per patient.

Nurses must take charge of shaping nursing's future. The CCNR will help lead the way.

◀ ▶ go to PG.

COLORADO COLLABORATIVE FOR NURSING RESEARCH: NURSES, PIONEERS, TRAILBLAZERS

Drawing Maps, Setting Courses: The Nurse Scientist's Role in the CCNR

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Acute care hospitals are increasingly engaging in research and evidence-based practice (EBP) activities to improve patient outcomes, enhance the work environment, and generate new knowledge. The Research Nurse Scientist (RNS) may hold a joint appointment with the local College of Nursing, providing linkages between academic and clinical environments. The RNS typically has five functions: (1) conducting research, (2) obtaining research funding, (3) leading and overseeing the research/EBP enterprise, (4) mentoring nurses and other professionals in research/EBP activities, and (5) providing education.

- **Research and Grant Funding:** As our nursing research enterprise grows and matures, the RNS is increasingly involved in seeking grant opportunities. We have successfully obtained federal grants, foundation grants, professional association grants and intramural grants for our hospital-based research initiatives. The CCNR gives us a stronger connection to the academic nursing environment and provides access to federal funding mechanisms more commonly available to academicians.
- **Leadership:** The RNSs co-chair the Research and EBP Council and are liaisons to the evidence-based champion teams in the hospital. Champions are clinical nurses who continually promote new ideas and are unit experts for a particular topic area (e.g., skin, pain, palliative care).
- **Mentoring:** Research indicates that nurses who are mentored by colleagues with expertise in EBP gain confidence in EBP and help promote its implementation. Mentoring fosters professional nursing expertise in activities such as searching for evidence, appraising research evidence critically, and publishing research findings. The RNS mentors nurses in grantsmanship and institutional review board processes.
- **Education:** The RNS provides many levels of education in an organization. At the most basic, a 30-minute introduction to research/EBP is included in new hire orientation. RNSs offer workshops and full-day seminars on research/EBP.

In addition to the essential functions already performed by RNSs in acute care facilities, the Colorado Collaborative for Nursing Research (CCNR) initiative offers the RNS an expanded role: in the CCNR, PhD-prepared RNSs can ally with PhD-prepared RNSs from other facilities/hospital systems to set their own research agendas and choose which indicators to examine. Therefore, in the CCNR—rather than expertly overseeing a program of research that others have set—RNSs set research objectives, reach consensus on the best route toward reaching those objectives, and follow the course that we have plotted. The CCNR allows Nurse Scientists both to excel in traditional capacities and to determine the direction that nursing research should go.

The CCNR also gives the hospital-based RNS the opportunity to explore clinical questions in a big data repository. The RNS "lives" in the clinical setting and brings a level of expertise to developing the Collaborative's research questions. The RNS is also familiar with the electronic health record (EHR) and the challenges associated with getting data reports and assuring the accuracy of the reports.

In sum, the CCNR gives the RNS a critical role in shaping the future of nursing.

◀ ▶ go to PG.

COLORADO COLLABORATIVE FOR NURSING RESEARCH: NURSES, PIONEERS, TRAILBLAZERS

Rugged Terrain: The Challenges of Using EHR across Systems

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The purpose of this presentation is to discuss the rough road one must travel when trying to use electronic health record (EHR) data to do research across multi-hospital systems. This "rough road" is actually the merger of two uniquely challenging paths: (1) the path toward operationalizing EHR data to do significant research and (2) the path toward getting different, competitive hospital systems to collaborate. Starting down these trails means tackling some pretty brutal terrain—still, the CCNR initiative has begun tackling this terrain and all of its attendant challenges.

The EHR offers advantages over a paper-based health record system. While paper-based records contribute to fragmentation of care (patient encounters are documented on site-specific charts accessible only at the local level), the EHR accommodates collection of structured, coded, electronically available data that longitudinally records the story of a patient's health experiences beyond the local level. The use of data elements for purposes other than clinical documentation and billing are growing in response to meaningful use of electronic health information mandated by national policy. The increasing use of EHR and their "meaningful use" have potential to improve the quality, safety, and cost of health care through immediate access and reuse of clinical data. So in conclusion—anecdotally and intuitively—EHR will improve health care and thereby patient health.

But moving beyond the anecdotal and the intuitive to the tangible and factual requires research. The CCNR has been mandated by its clinical partners to (a) use the EHR for all research projects and (b) develop a data-extraction/data-sharing mechanism to inform nurse leaders' decision-making. Natural language processing and IT-hardware consultants have started working with the CCNR on (a) getting structured, semi-structured, and unstructured data out of the EHR, (b) making those data from different EHR systems mutually intelligible, and (c) moving/storing those massive datasets in a secure way (challenging path #1). Numerous healthcare systems have initiated (a) monthly meetings of representatives from all external clinical stakeholders, (b) establishment of consensus goals, and (c) frequent electronic contact. These measures have fostered a greater sense of inter-system trust (challenging path #2). Path #1 leads to extraction of various forms of data from different proprietary EHR systems and then translating those data into a uniform CCNR nomenclature. Path #2 leads to facilitation of collaborative clinical research, quality improvement, benchmarking, and real-time, data-driven decisions that improve healthcare outcomes. Again, the CCNR has begun hiking up both of these difficult paths—and we are making progress.

Data challenges still to be discussed include the accuracy, completeness, transformation, recoverability, provenance, and granularity. The concept of semantic harmonization and implications related to the conduct of research also must be addressed in greater detail.

The realities of doing research across different facilities using electronic health records, even when working from EHRs from the same vendor are extremely challenging. The CCNR has already made headway in this tough landscape. The CCNR stakeholders are energized to negotiate the challenges yet to come.

◀ ▶ go to PG.

COLORADO COLLABORATIVE FOR NURSING RESEARCH: NURSES, PIONEERS, TRAILBLAZERS

Blazing New Trails: Mechanisms and Objectives of CCNR Data Sharing

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Aim: The aim of this presentation is to describe efforts to design and develop the University of Colorado (CU) Patient Initiated Data system, or CUPID. CUPID is a data analysis system designed to extract near-real-time patient-outcome metrics from electronic health record (EHR) data and deliver trending metrics back to hospitals for operational decision-making. The purpose of CUPID is to improve the efficiency and quality of patient care by (a) integrating nurse-sensitive patient-outcome data and (b) representing data in useful formats for decision-making.

Background: There is a need for distributed data sharing that enables analysis of patient data aggregated from multiple hospitals to answer operational research questions - especially those questions related to patient outcomes such as HRQOL. The University of Colorado College of Nursing (CON) is leading the effort to develop such a data sharing system, in collaboration with regional hospitals and other stakeholders.

Approach: The Colorado Collaborative for Nursing Research (CCNR) provides research leadership for connecting specific modes of acute care nursing to desired patient-outcome trajectories. The CCNR technical team has deep experience in nursing research, informatics, and system design. The current goal of the team is to specify data-sharing system requirements and evaluate candidate systems that will meet these requirements. Our design approach is informed by a reusable design philosophy through which we are leveraging existing systems and infrastructure to meet system goals.

Outcomes: We have created a general system process flow (Figure 1). A partial list of CUPID usage includes (a) isolating patient-outcome metrics and trends that predict 30-day hospital readmission and (b) capturing nursing work as it relates to HRQOL and other patient outcomes.

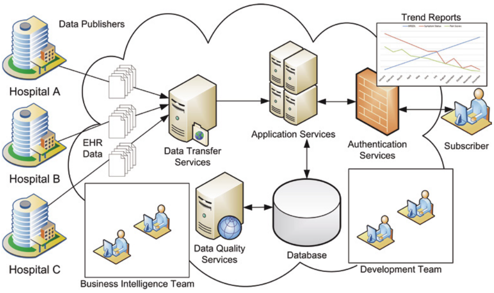

Figure 1. Overview of System Process Flow

Conclusion: CUPID sets up a mechanism for (a) establishing nurse-sensitive patient-outcome metrics; (b) extracting EHR data to operationalize those metrics; (c) converting extracted data to a common format; (d) providing features for statistical analysis; and, (e) delivering timely results back to decision-makers at data-contributing hospitals. The CUPID system design permits near-real-time tracking of nurse-sensitive patient outcomes and evaluation of nursing interventions. This presentation will cover system design principles, project collaborators, and project progress.

◀ ▶ go to PG.

COLORADO COLLABORATIVE FOR NURSING RESEARCH: NURSES, PIONEERS, TRAILBLAZERS

The Lost City of Gold: Finance and Quality Indicators in Big Data

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How much does nursing care cost? What is the relationship between nurses and the quality and outcomes of care? How can we compare and benchmark nursing care across many different settings? Answering these questions has become a nursing "holy grail," the pursuit of which has been difficult due to lack of available data. Emerging nursing- and patient-centric data in the electronic health record (EHR) are resolving this problem. And concerted effort by the Colorado Collaborative for Nursing Research (CCNR) is making progress in accessing this treasure.

There are several potential advantages in these new, very large datasets that will have a substantial influence on future research and operational information:

- Linking Nurses to Patients – Many EHRs have the ability to link individual nurse to individual patient within and across different healthcare settings. For example, the actual nursing assignment within a hospital shift can provide information about the actual direct care hours and associated nursing care costs. This could also allow for study of the effects of individual nurse characteristics (e.g., experience and academic preparation) for all nurses caring for a particular patient.
- Benchmarking Nursing Care Across Settings – With linked databases, we will have the opportunity to share and compare the different amounts of nursing care administered at different hospitals, clinics, home care, hospice, long-term care, etc. These represent "touch points" of both nurses and other healthcare professionals engaged and interacting with the same patient across time and settings.
- Developing Performance Metrics and Analytics – The use of real-time clinical and operational data will allow better measurement of nursing and individual nurse performance in patient care. For example, data from electronic medication administration (eMAR) and bar code medication administration (BCMA) systems will allow direct measurement of medication administration delays or omissions for high-risk drugs such as aminoglycoside antibiotics. This measurement can reduce potential safety-risk events or identify patterns of care such as high workload conditions that predispose inpatient units to medication administration delays. Other potential performance metrics include pain assessment and treatment, patient education, discharge planning, and care coordination across multiple settings.

These exemplars represent potential benefits from EHR and other clinical or operational information systems commonly referred to as "big data." There are a number of key issues and challenges to consider. First, hospitals or other practice sites must dedicate personnel to mining these rich data sources. Second, the complexity of the data collection is problematic and can vary across different settings, necessitating new data-extraction techniques. Finally, there is no broad consensus on how to pose relevant clinical or operational questions in ways that allow coherent, informative sharing and comparing of nursing data. The forum established by the CCNR focuses constant attention on these issues and gives stakeholders consistent opportunities to confer and develop solutions.

A quest this ambitious with consequences this important necessitates a national dialog and vision. Participating healthcare systems have already given the CCNR this broad reach. The holy grail of patient- and nursing-centric data has never been nearer at hand.

go to PG.

ENHANCING SOCIAL PRESENCE ONLINE USING THE COMMUNITY OF INQUIRY

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OVERVIEW: ENHANCING SOCIAL PRESENCE ONLINE USING THE COMMUNITY OF INQUIRY

Annette Garner, Michelle Hall

FACULTY COLLABORATION WITH AN INSTRUCTIONAL DESIGNER IN ONLINE LEARNING

Susan Adams

USING VIRTUAL MEETING ROOM DISCUSSIONS TO ENHANCE SOCIAL PRESENCE ONLINE

Michelle Hall, Renee' Menkens, Annette Garner, Wendy Neander

PROMOTING EFFECTIVE COMMUNICATION AND COLLABORATION USING VIRTUAL SIMULATION

Mary Moran Clark, Juliana C. Cartwright

BLOG PROMOTING SOCIAL PRESENCE BETWEEN STUDENTS AND THEIR FACULTY

Amanda Marcus, Annette Garner, Renee' Menkens

ASYNCHRONOUS DISCUSSION REDESIGN TO REBALANCE PRESENCE IN ONLINE LEARNING

Annette Garner, Amanda Marcus, Reneè Menkens

◀ ▶ go to PG.

ENHANCING SOCIAL PRESENCE ONLINE USING THE COMMUNITY OF INQUIRY

Overview: Enhancing Social Presence Online Using the Community of Inquiry

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Faculty in an online baccalaureate completion program (RN-BS) identified the need to enhance the support of social presence in their courses. Faculty desired to provide ways to rebalance attention to cognitive, teaching, and social presence as a method to improve the online learning environment. The Community of Inquiry (CoI) is a framework developed to describe online learning, and is an appropriate guide to online educators when developing courses and course activities (Garrison, Anderson, & Archer, 2000).The CoI framework identifies three types of presence essential to developing a community of inquiry: social presence, teaching presence, and cognitive presence. Social presence is defined as showing emotion, being perceived as real and human and encourages self-expression. Teaching presence involves facilitating discourse and instruction, and includes course design. Cognitive presence is the exploration and connection of ideas, where true learning occurs. Social presence is often neglected in course design as compared to teaching and cognitive presence. Without adequate development of social presence students may feel isolated and disconnected from the course, and this disconnection can interfere with student success.

Faculty focused on the redesign of several RN-BS program course activities to provide increased opportunities for social presence. Each new activity was designed to enhance social presence while continuing to support teaching and cognitive presence. Additionally, the activities were developed to incorporate emerging technology that would strengthen the student's experience. Student course evaluations and faculty feedback showed increased satisfaction as a result of the redesign.

This symposium includes five papers, each paper presenting a particular online learning activity developed by members of the RN-BS team. The first paper presents how faculty, working in collaboration with an instructional designer, can use emerging technologies to redesign course activities that strengthen students' social presence. Two papers describe different applications of web-conferencing technology. Paper two describes the implementation of synchronous discussion sessions early in the program that helps students to transition to online learning. Paper three outlines the implementation of an online virtual simulation, focusing on high-stakes communication and collaboration skills. The fourth paper describes the use of a weekly blog to allow for a more private and collegial exchange between student and faculty, away from the more public group forum discussions. The fifth paper describes the redesign of online forum discussions to increase social presence and promote collegial discourse. Together, these five papers demonstrate the value of the CoI framework and attending to social presence in online education course design.

Reference:
Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. The Internet and Higher Education, 2(2–3), 87–105.

ENHANCING SOCIAL PRESENCE ONLINE USING THE COMMUNITY OF INQUIRY

Faculty Collaboration with an Instructional Designer in Online Learning

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Purpose/Aims: The aim of this abstract is to show how faculty, working in collaboration with an instructional designer, can use emerging technologies to redesign course activities that strengthen students' social presence, increase their identity with the program and facilitate trusting interpersonal relationships with their faculty.

Rationale/Background: Implementing the Community of Inquiry (CoI) framework in a statewide online program enhances inter-professional collaboration. A creative mind and a realistic grasp of technology are important to the success of bringing the CoI framework to the online environment. This includes social, cognitive and teaching presence.

Approach: This paper reviews both assignment examples, and technology choices. The highlighted activities include: student voiceover presentations, virtual office hours, virtual simulation, and blog reflections with faculty. One of the roles of an instructional designer is to match course activities and assignments with the right technology. It is important to ask exploratory questions of the faculty to determine the purpose of the assignment, the learning outcomes and how the activity fits in the scope of the course. This collaborative exploration contributes to strategic choices of technology that help students meaningfully connect online.

A demonstrative example is the 2 minute voiceover presentation "Passport to Success" that is placed in the first week of the first course of the program. By choosing the question "what is your passion for nursing?" students projected their individual personalities that allowed them to connect meaningfully to increase their social presence. Students also discovered any technological limitations of their computer system that would prevent them from completing the assignment. These issues were resolved before students moved into a higher-stakes graded assignment using the same technology later in the term.

In addition to consulting with faculty on technology choices in a course, instructional designers work collaboratively when writing assignment instructions. Designer and faculty consider how students will comprehend instructions and interpret visual cues in a course site. Brevity, consistency, and accurate word choice are important approaches to provide less-stressful completion of activities.

Outcomes Achieved:

- Students increased their social presence by communicating more purposefully in a trusting environment.
- Faculty improved their teaching presence and facilitated social processes that lead to meaningful and educational learning experiences.

Conclusion: With a focus to increase social presence, the RNBS program discovered how regular consultations with an instructional designer invited creative exploration into increasing students' social presence in the curriculum.

Objectives and Content:

1. Illustrate strategies for enhancing course activities that promote social presence.
2. Identify approaches to increasing faculty awareness of technology and course activity design.

◀ ▶ go to PG.

ENHANCING SOCIAL PRESENCE ONLINE USING THE COMMUNITY OF INQUIRY

Using Virtual Meeting Room Discussions to Enhance Social Presence Online

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Purpose/Aims: The Community of Inquiry framework was used to guide the development of a synchronous discussion activity. This activity was developed to support social presence between students in the first course in an online program.

Rationale/Background: Social presence includes emotional expression and open communication to support group cohesion (Garrison, Anderson & Archer, 2000). Students in the RN-BS online program typically come from face-to-face pre-licensure nursing programs with varying online learning experiences and levels of proficiency. Transitioning to online education can be difficult with some students feeling isolated. Since this may be the first fully online course for these students, the faculty developed an activity promoting social presence through student-student and faculty-student synchronous interaction. The activity required students to actively interact with peers and faculty while discussing course content.

Approach: Faculty implemented virtual meeting room (VMR) sessions in an online course using a web-conferencing system that enabled live interaction via audio and video media. The purpose of the VMR session was to provide a real-time opportunity for students to talk with faculty and other students. This activity was initially highly recommended for students to attend, but was not mandatory. Most students attended at least one session to discuss questions identified from course materials. During the pilot sessions, students found the activity to be helpful in providing connections to students and instructors (Hall, 2014). In a subsequent term the VMR session was refocused into a mandatory course activity that included a faculty facilitated discussion. These sessions provided opportunities for small groups of students to talk about their nursing practice, their perceptions of practice change due to health care reform and ask questions about the course early in the term. These real-time meetings supported social presence among students and faculty and paved the way for collaboration and critical discourse in subsequent course forum discussions.

Outcomes Achieved: 1) The VMR sessions provided an opportunity for students to talk with faculty and each other about course requirements and address course questions. 2) Students actively engaged in discussions about their nursing practice and implications of health care reform. 3) Synchronous interaction in an online course activity supported social presence, providing a foundation for dialog in the online course forums in a meaningful and collaborative manner.

Conclusion: Synchronous virtual meetings provide an opportunity for students to talk with faculty and peers about course requirements. Students found VMR sessions to be helpful in providing connections to peers and faculty, enhancing social presence. VMR sessions support students in the transition from the face-to-face class to online learning. A faculty-facilitated discussion encouraged a rich dialog among students that continued in the weekly asynchronous forum discussions.

References:

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education, 2*(2–3), 87–105.

Hall, M.A. (2014). *RN-BS online students' perceptions of social presence using a virtual meeting room* (Unpublished DNP project). Regis University, Denver, CO.

◀ ▶ go to PG.

ENHANCING SOCIAL PRESENCE ONLINE USING THE COMMUNITY OF INQUIRY

Promoting Effective Communication and Collaboration Using Virtual Simulation

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Purpose/Aims: The purpose of this paper is to describe how students in an online course participated in a web-based activity to develop critical communication skills.

Rationale/Background: According to the Joint Commission, the leading cause of sentinel events in the United States is miscommunication. The Institute of Medicine (IOM), the Agency for Health Care Research and Quality (AHRQ) and the Joint Commission recommend using simulation as a tool to promote effective communication and collaboration skills using the adopted Introduction, Situation, Background, Assessment and Request/Read Back (I-SBAR) and Concerned, Uncomfortable, Unsafe, Scared (CUUS) tools.

Approach: In an on-line Leadership course, a simulation focusing on communication and collaboration skills was developed by faculty. The simulation scenarios consist of a potential sentinel event requiring immediate provider response, thus necessitating a phone call and a courageous conversation from a primary nurse (student) to a health care provider (faculty).

Students are assigned readings and AHRQ TeamStepps videos, incorporating the use of I-SBAR and CUUS; and are sent one of three scenarios and reflection questions prior to the simulation. Initially the simulations were conducted via phone with one student; later sessions were conducted in a web conferencing room with three students and one faculty member. Prior to the simulation students assign themselves roles – primary nurse, secondary nurse or recorder. The faculty pay close attention to the students' use of I-SBAR and CUS. If the students fail to provide the necessary information, faculty coach the students.

Following the simulation there is an immediate structured debriefing led by the faculty. Students submit a written reflection of the activity, which focuses on the experiential learning during the courageous conversations simulation.

Outcomes Achieved: The use of the web conferencing system promotes social presence as students work collaboratively to communicate effectively and courageously with a *provider* about an eminent patient care situation. Faculty involvement, debriefing and reflection support teaching and cognitive presence.

Conclusion: This online experiential learning activity, *Courageous Conversations*, demonstrates the use of simulation using web-based technology to promote effective communication skills in high stake events. The structured activity promotes social, teaching and cognitive presence.

◀ ▶ go to PG.

ENHANCING SOCIAL PRESENCE ONLINE USING THE COMMUNITY OF INQUIRY

Blog Promoting Social Presence between Students and Their Faculty

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Purpose/Aims: The purpose of this paper is to describe a Blog learning activity developed to support both clinical and theoretical course objectives by providing students a confidential venue to talk about sensitive clinical experiences with faculty that students then have the choice to bring forward into forum discussions with their student colleagues.
Rationale/Background: When analyzing the Integrative Practicum (IP) course for opportunities to enlarge the student/faculty, student/student interactions, as well as to increase the student investment in actively participating in substantive online discussions, use of a weekly blog was identified. The blog was a strategy to allow for a confidential and collegial exchange between student and faculty that could lead to more current clinical experiences being brought forward into discussions. There were two main concerns about how students and faculty interacted in the online course that led to creation of the blog activity. First, faculty and students felt that there were some missed learning opportunities in the more public asynchronous forums where the postings were generally required to be formally written. Secondly, the open platform of the forum discussion presented an obstacle to some students' sharing and reflecting on some of their more personal and sensitive practice experiences. Lack of sharing can represent missed opportunities for learning. Further, students may feel isolated after having a significant experience without a confidential venue to process and discuss the situation. These types of events often need coaching from faculty for the student to appreciate the learning that has taken place.
Approach: Our blog was created to provide students a place to discuss clinical events with their faculty member. The format was narrative and did not require formal writing conventions generally required in papers or group discussions. Setting up the blog in the more informal way allowed students the freedom to focus on their thoughts and observations, rather than syntax and evidence. Opportunities were built into the course where students were asked to bring forward items of their choice from their blog to the forum discussion at least twice per term. These posts spurred dialogue among forum members relating to clinical events specific to each student.
Outcomes Achieved: Students and faculty had increased one-to-one virtual interaction during the course. Both the student and faculty had a better understanding of the learning taking place in clinical. There was the additional benefit related to students bringing forward more personal clinical experiences for their peers to learn from.
Conclusion: A blog used as a communication device between faculty and each student can lead to a discussion that is rich in student-directed learning and interactive dialogue based on clinical interests of students and course materials. The safety in processing the learning with the faculty alone then allowed the student to bring forward items they wanted to share with academic peers. This increased the inclusion of poignant first-hand learned experiences in the online forum discussions.

◀ ▶ go to PG.

ENHANCING SOCIAL PRESENCE ONLINE USING THE COMMUNITY OF INQUIRY

Asynchronous Discussion Redesign to Rebalance Presence in Online Learning

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Purpose/Aims: Describe how asynchronous online group discussions were structured to increase social presence and promote student leadership in an RN-BS Integrated Practicum (IP) capstone course.
Rationale/Background: The IP course has two components: theory and clinical. Group discussions are the primary learning activity for the theory portion of the course. Faculty had been exploring the Community of Inquiry (CoI) framework as a best practice in online instructional design (Garrison, Anderson, & Archer, 2000). Three types of presence are essential to developing CoI: social presence, teaching presence, and cognitive presence. IP faculty recognized that the assignments related to the theory objectives offered strong teaching and cognitive presence while there was limited opportunity for social presence in the online discussions. Additionally, students' end-of-term course evaluations regularly noted the students' desire to learn more about the clinical experiences of their fellow students. Faculty saw the opportunity to address both gaps by having students provide content from their clinical experiences to address the course objectives in asynchronous group discussion.
Approach: The redesign of group discussions needed to have a structure that would frame each student's exploration of a particular clinical issue for their discussion group. The Practical Inquiry Model (Garrison & Archer, 2007) was used for this purpose. The model has four elements: triggering event, exploration, integration and resolution. To give time to move through the four phases of the model, the discussion period was expanded from two to three weeks. Specific course objectives were identified for each discussion period by faculty. A student's initial discussion post (triggering event) would address the objectives, using a situation from the student's clinical experience. Exploration, integration and resolution phases guided the unfolding of content over the three-week discussion period. For example, a three week discussion with concepts of collaboration, broader health care system and ethics and values found students with *triggering events* including emergency room usage, hospice, access to dental care, addiction services, dual diagnosis care and health promotion. Over the discussion period, each student *explored* the literature related to their topic, sharing findings and offering scholarly responses to their colleagues' posts. On-going discussion posts began to *integrate* information shared across the discussion with a final post that summarized their learning (*resolution)*. Faculty posted to the discussions to pose questions, share from their own clinical experiences and offer perspectives regarding the unfolding discussion.
Outcomes Achieved: Students took the lead in identifying and exploring relevant clinical issues. The content of the discussions became more diverse and participation was more robust. Students' course evaluations acknowledged the value of learning from one another's clinical experiences. Faculty noted students' increased social presence and a growing collegial relationship among students and faculty.
Conclusion: The practical inquiry model effectively guides asynchronous online discussions as students share in learning from one another's clinical experiences. Student-led/faculty-coached group discussions offer students an opportunity to practice their leadership skills. Strengthening social presence in online group discussions can improve satisfaction of both students and faculty with the learning activity.

◀ ▶ go to PG.

◀ ▶ go to PG.

ENVIRONMENTAL HEALTH RISKS: PERSPECTIVES FROM RESEARCH, EDUCATION AND PRACTICE

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OVERVIEW: ENVIRONMENTAL HEALTH RISKS: PERSPECTIVES FROM RESEARCH, EDUCATION AND PRACTICE

Elizabeth C. Schenk

HISPANIC CAREGIVERS' PERCEPTIONS ABOUT ASTHMA MANAGEMENT: A PHOTOVOICE STUDY

Julie Postma, Robin Evans-Agnew

ACUTE CARE NURSES' AWARENESS OF ENVIRONMENTAL IMPACTS OF NURSING PRACTICE

Elizabeth C. Schenk, Celestina Barbosa-Leiker, Cindy Corbett, Patricia Butterfield, Julie Postma

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RESEARCH, COMMUNICATION, AND ENGAGEMENT FOLLOWING AN ENVIRONMENTAL DISASTER

Charlene A. Winters, Sandra W. Kuntz, Colleen Moore

go to PG.

ENVIRONMENTAL HEALTH RISKS: PERSPECTIVES FROM RESEARCH, EDUCATION AND PRACTICE

Overview: Environmental Health Risks: Perspectives from Research, Education and Practice

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The World Health Organization (WHO) recently reported that a significant portion of global disease burden is due to environmental risk factors: 24% of adult health problems and 34% of children's health problems can be attributed to environmental factors (Pruss-Ustin, 2006). In the WHO report, environment was defined as "the physical, chemical and biologic environment to the human host and related behavior, but only those parts that could reasonably be modified" (Pruss-Ustin, 2007, p. 168). Health impacts from these risks are widespread, and include issues nurses encounter in the Western United States and around the globe. Chronic illness due to environmental toxicants is a growing public health concern. Asthma is a health condition that is impacted by environmental irritants in both children and adults. Climate change, an environmental condition affecting most areas of the globe, albeit in different ways, poses numerous health challenges for young and old. Healthcare itself creates environmental risk through the pollution it causes in daily practice in energy use, waste creation and use of toxic chemicals. Human-caused environmental disasters present a significant threat to public health as evidenced by the recent Gulf oil spill and the destruction of Japan's nuclear reactor. For decades, nurses have addressed environmental health issues and their impacts on health in the workplace, in homes, and in communities. Nurses conduct research, develop educational approaches and community outreach related to environmental risk prevention and health promotion, and provide nursing care to the ill and injured following an environmental mishap.

In this symposium, nursing researchers and educators will focus on the global disease burden posed by environmental risks and environmental toxicant exposure. The presenters will describe approaches in nursing science to better understand environmental health risks, mitigation of risk, and educational and research methodologies. In the first paper, asthma risks as perceived by Hispanic caregivers will be explored using photovoice methodology. The second presenter will report findings from research conducted with acute care nurses, on their awareness of the environmental impacts caused by nursing practice. A conceptual review of nursing's role in the mitigation of and adaptation to climate change is the topic of the third paper. The last presenter will discuss residents' attitudes regarding participating in research after a community-wide environmental disaster and declaration of a public health emergency. Environmental risk is widespread and far-reaching, and thus difficult to consider as an isolated event or domain. These papers, while broad in range and approach respond to the significant disease burden impacted by environmental risk from a scholarly perspective.

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Pruss-Ustin, A. C., C. (2006). Preventing disease through healthy environments. In W. H. Organization (Ed.). Geneva: World Health Organization.
Pruss-Ustin, A. C., C. (2007). How much disease burden can be prevented by environmental interventions? *Epidemiology, 18*(1), 167-178.

◀ ▶ go to PG.

ENVIRONMENTAL HEALTH RISKS: PERSPECTIVES FROM RESEARCH, EDUCATION AND PRACTICE

Hispanic Caregivers' Perceptions about Asthma Management: A Photovoice Study

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Purposes/Aims: The purpose of this study is to report how photovoice was used to 1) ascertain Hispanic caregiver perspectives about asthma management, and 2) engage caregivers in disseminating their work.
Rationale/Conceptual Basis/Background: Hispanic children are 70% more likely to visit the emergency room for asthma and 40% more likely to die from asthma, as compared to Non-Hispanic whites. Although clinical practice guidelines exist for asthma management, asthma disparities result from a complex interaction of factors on multiple ecological levels. As causes of asthma are poorly understood, and there is no cure for asthma, a better understanding of asthma management among Hispanic caregivers is an important step to developing a partnership in care and diminishing health disparities associated with this chronic disease.
Methods: Photovoice is a participatory methodology through which people identify, represent, and enhance their community by taking photographs that record their everyday realities. In the Spring of 2014, eleven adult, Hispanic caregivers of children with asthma were recruited and given cameras to photograph people, places or things that helped or hindered their ability to care for their child with asthma. Through participation in four photovoice sessions, participants prioritized which images to share, discussed the images with the group, and wrote accompanying titles and captions. Sessions were facilitated in Spanish and occurred in a community setting. Titles and captions were translated into English by the facilitator. Participants presented their work to peers and community members in two photo exhibitions. Identified issues were subsequently categorized by investigators according to the four components of asthma care identified in the guidelines.
Results: Participants prioritized 32 phototexts, the majority of which (n=20, 63%) represented "Control of Environmental Factors and Comorbid Conditions." Caregivers highlighted asthma triggers, and suggested ways to maintain indoor air quality through home cleaning. The need for policies that enforce smoking bans in shared housing and public places was identified as an important strategy to improve outdoor air quality. "Education for a Partnership in Asthma Care" was represented in six (19%) phototexts. Five phototexts (16%) represented "Assessment and Monitoring." Only one phototext (3.13%) primarily represented "Medications."
Implications: Evidence from this study supports the development of active partnerships between clinicians and caregivers, especially in the area of environmental control. Photographs can be used as the basis for reciprocal education between patient and provider as well as a tool to collectively advocate for healthy housing and protective public health policies.

Funding: Provided by the MultiCare Institute for Research and Innovation (MIRI).

◀ ▶ go to PG.

ENVIRONMENTAL HEALTH RISKS: PERSPECTIVES FROM RESEARCH, EDUCATION AND PRACTICE

Acute Care Nurses' Awareness of Environmental Impacts of Nursing Practice

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Purpose/Aims: The purpose of this study is to measure environmental awareness and behaviors of nurses in multiple acute care settings. Findings are compared across work setting, age, experience and other demographic features. Awareness and behaviors are contrasted for relationship.

Conceptual Basis/Background: Healthcare is an environmentally impactful enterprise, causing pollution through energy use, waste accumulation, and the use of toxic chemicals. Nurses are the most represented profession in health care, and have a Standard of Practice that requires nurses to "practice in an environmentally safe and healthy manner." Yet, nurses' awareness of these impacts and what behaviors they take to mitigate them are not known.

Methods: The newly developed and tested tool "Nurses Environmental Awareness Tool (NEAT)" consisting of six scales, was used to query almost 700 registered nurses in seven hospitals in three western states. An anonymous, web-based survey was used to administer the tool. Psychometric analysis was performed on the tool.

Results: Six hundred eighty-nine registered nurses from seven hospitals responded to the on-line survey: 93% were female, 85% Caucasian. Mean age was 46.8 years, and mean years as a nurse 18.3. Several differences in results between demographic groups were statistically significant. Older age predicted higher awareness and higher levels of mitigating behaviors, both at work and at home. Males showed lower awareness, but no difference in behaviors. Of the various unit types queried, intensive care nurses showed significantly lower work behaviors to mitigate environmental harm. Scores on the different scales were compared using regression, which showed a positive relationship between awareness and behaviors, both at work and at home ($p<.0001$). Nurses who thought environmental impacts were related to human health reported higher mitigation behaviors at home ($p=.001$), but not at work ($p=.182$).

Implications: The Nurses Environmental Awareness Tool is the first psychometrically analyzed instrument to measure nurses' awareness of the environmental impacts of nursing practice. Presented here is the first study to use the tool to measure and compare awareness and behaviors of registered nurses practicing in acute care. Results give researchers an opportunity to begin to understand awareness, and the relationship of that awareness to behaviors aimed at reducing environmental impacts of nursing practice. This will help nurses follow their standard of practice to practice in an environmentally safe and healthy manner.

◀ ▶ go to PG.

ENVIRONMENTAL HEALTH RISKS: PERSPECTIVES FROM RESEARCH, EDUCATION AND PRACTICE

Research, Communication, and Engagement Following an Environmental Disaster

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Purpose: Research to understand the effects of a community-wide environmental disaster, relies on the willingness of individuals to participate in research. The purpose of this presentation is to report (a) knowledge, acceptance, and participation in research, and (b) attitudes toward researchers among residents of a rural Superfund site.

Background: The study was conducted in response to (1) the National Institutes of Health call: (a) to study methods and strategies to engage and inform the public regarding health science, and (b) to increase scientists' understanding of and outreach to the public, and (2) the lack of knowledge about research engagement in rural communities in the aftermath of an environmental disaster. Three conceptual approaches framed the study: (a) cardinal rules of risk communication/risk communication model, (b) community-based participatory research principles, and, (c) rural nursing theory.

Methods: Case study research methods were used. Participants were English proficient adult residents of a Superfund site and surrounding rural communities. Descriptive statistics, principal component factor analysis, and regression analysis were used to address study aims.

Results: Of the 120 participants, most were women (66%); aged 54.4 years; with 14 years education. Most (56%) had been screened for asbestos-related disease (ARD) and 23% were diagnosed. Fifty percent participated in local research; 70% were aware of local research while 28% were not. Analysis of *attitudes* toward researchers and *influences* to participate in research resulted in four factors accounting for 62% of the variance. *Attitudes* loaded on a single factor; the *influence* to participate fell into three factors. The maximum correlation of *attitudes* and *influences* was with the first influence factor ($r = 0.29$) (identity of researcher, asked to participate, topic/length of study). The three influence factors were more strongly correlated with each other, r's = .39 (factor 2 with 3), .52 (factor 2 with 4) and .45 (factors 3 with 4). Factor scores were used as predictor variables to examine the relationships among *attitudes* and *influences* to participate in research. *Desire to be invited to participate.* The regression model accounted for 9% of the variance, $p = .05$. The *attitudes* factor was the only significant predictor ($b = .44$, $se = .15$, $p < .01$). *Having participated in local research.* None of the four factors were significant predictors of research participation. *Research benefits the community.* The regression model accounted for 28% of the variance in responses to this question, $p < .01$. The *attitudes* factor was a significant predictor ($b = .38$, $se = .10$, $p < .01$), as was the third *influence* factor ($b = .27$, $se = .11$, $p < .02$ (study is perceived as worthwhile, or helped the community, oneself, or family). *ARD screening.* Logistic regression found a significant overall model for having been screened for ARD, with the third *influence* factor showing a significantly positive effect ($p < .01$).

Implications: Attitudes towards researchers, the perception of research as beneficial to the community/individual/family, and screening for disease are important factors to consider when soliciting research participants in rural communities effected by an environmental disaster.

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◀ ▶ go to PG.

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FACULTY PRACTICE FOCUS: REDUCING THE HEALTH IMPACTS OF POPULATION-BASED DISPARITIES

Moderator:
Barbara Overman, CNM, PhD
Clinical Educator, Associate Professor
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OVERVIEW: FACULTY PRACTICE FOCUS: REDUCING THE HEALTH IMPACTS OF POPULATION-BASED DISPARITIES

Barbara Overman

PRENATAL GROUP CARE WITH COMMUNITY HEALTH WORKERS: TEACHING AND PRACTICE BENEFITS

Felina M. Ortiz

MENTAL HEALTH IN PRENATAL CARE

Rachel Marzec

DEVELOPMENT AND INITIAL USE OF A PRIMARY CARE ORAL ASSESSMENT TOOL (PCOAT)

Christine Cogil

EVOLUTION OF A PATIENT CENTERED MEDICAL HOME

Jan Martin

◀ ▶ go to PG.

FACULTY PRACTICE FOCUS: REDUCING THE HEALTH IMPACTS OF POPULATION-BASED DISPARITIES

Overview: Faculty Practice Focus: Reducing the Health Impacts of Population-Based Disparities

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Purpose: The symposium describes selected faculty practice strategies developed to address health impacts of population-based disparities in prenatal care, mental health, oral health and access to quality care. The aims are to prepare students to understand rural and underserved clients in context of community while practicing innovative and collaborative practice approaches to reduce health effects of disparities.

Background: The family nurse practitioner and nurse-midwifery education programs at UNM College of Nursing share the mission to prepare graduates to serve rural and underserved populations who bear a disproportionate burden of disease associated with poverty, rurality and Native and marginalization. The University of New Mexico assumes responsibility to address the workforce disparity in the state where only 37% of nurses are bachelors-prepared, half the Institute of Medicine target and its primary care advanced practice programs strive to close the access to services gap. Diversifying the nursing workforce to more closely mirror New Mexico's communities is a shared faculty value.

While rich in diverse cultural heritage and natural beauty, New Mexico's households have a median income greater than only four other states according to the American Community Survey. Marked health status and health care access disparities persist alongside poverty and marginalization. Endemic levels of diabetes and its associated health conditions impose risks and morbidities throughout the lifespan.

Brief Description: The symposium presentations describe practice approaches to disturbing disparities for New Mexicans. 1) Ranking in the lowest 5% of all states in the proportion of women receiving prenatal care in the first trimester. Additionally, less than one third (32.7%) of women giving birth have adequate care, as measured by the Koetelchuk index. 2) An estimated 30% of women suffer from perinatal depression, a descriptor that goes in hand in hand with the Annie E. Casey Foundation ranking of 48th in Child well-being. 3) Dual oral health disparities of inadequate access to dental care (the dentist to population ratio is one third of the federal standard) and concentration of dental disease in lesser-advantaged populations affect New Mexicans. 4) Overall access to primary care services at 214/100,000 doctor to population ratio falls well below the U.S. mean of 248/100,00. Access to patient-centered and culturally safe services for lesser advantaged patients has received no attention.

The practice based teaching and learning environment where faculty and students engage in innovative programming to address the health impacts of disparities. The practice is situated in a majority-minority county that mirrors population and health disparities found across New Mexico while being commute-accessible to main campus. Key methods prominent in the symposium presentations include group care partnership with Community Health Workers, integrated nurse provider mental health services, community and inter-professional academic partnerships and advancing culturally-sensitive patient-centered care that addresses economic and social determinants of health and access.

Outcomes: The faculty presenters in this symposium share educational, patient care and practice innovation outcomes focused on reducing New Mexico health disparities.

Funding: Author acknowledges funding support from HRSA # D11HP18976 and HRSA # UD7HP 25045.

◀ ▶ go to PG.

FACULTY PRACTICE FOCUS: REDUCING THE HEALTH IMPACTS OF POPULATION-BASED DISPARITIES

Prenatal Group Care with Community Health Workers: Teaching and Practice Benefits

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Purpose: 1) To address group based care in marginalized populations for reduction of health disparities and improved student and patient satisfaction. 2) To improve the status of maternal child health (MCH) in Sandoval County, while demonstrating an innovative model of graduate and undergraduate nursing education in a faculty practice where students learn together.

Background: Only 60% of pregnant women in Sandoval County receive adequate prenatal care according to the Kotelchuck Index. Many of these women are affected by social determinants such as: low social-economics status, lower educational levels, poor living conditions and increased behavioral health needs. Nurses must develop collaborative, team-building skills that proactively adapt to the ever-changing healthcare system in the United States.

Brief Description: Group faculty-practice model: Demonstrates family-centered care during both the child-bearing and postpartum year; Utilizes Community Health Workers (CHWs) and nurse-midwives co-facilitation of prenatal groups; Responds in a culturally-sensitive manner to individual needs; Interfaces graduate advance practice and undergraduate nursing students in clinical learning.

Outcomes Achieved: A CHW and a nurse-midwifery team developed comprehensive educational group sessions, which supportive family members or friends were encouraged to attend. Group prenatal care with CHWs: Exceeded the educational standards of conventional prenatal care by including topics such as, family-infant bonding, budgeting, oral care, breast-feeding, infant care, and pain management during labor, as well as, any issues raised by group participants; Received positive feedback from patients and achieved a higher than average postpartum return rate (98%); Achieved a high rate (93%) of the women starting prenatal care in the first trimester; Surpassed the county's rate of women that received adequate levels of prenatal care (85%); Attained low levels of preterm births (6%); Provided care for a high percent of underserved patients (66% Medicaid; 23% self-pay; and 1% privately insured).

A year-long Community-Maternal Child Health (MCH) baccalaureate nursing elective was created to offer students the opportunity to follow families through their pregnancy and first postnatal year. MCH undergraduate elective: Each student had an opportunity to share their clinical experience at a monthly seminar; Course evaluations were significantly higher than other courses in this discipline; Twenty-one students participated. A common theme among students was that continuity developed better relationships with patients. They observed how a family's needs change throughout pregnancy and in the child's first year; Fourteen percent have applied for admission to an advanced practice nursing program; Four students presented at a national public health nursing conference on this course experience.

The project provided a home-visit shortly after hospital discharge for mom and baby. The visit consisted of a nurse-provider and CHW, and often included a nursing student. The timing of the visit was optimal for supporting successful breast-feeding.

We strived to increase access to care by reducing transportation needs and making care affordable. Our partnership with various community agencies (WIC, Santa Fe Young Fathers, GRADS, etc.) enriched the success of our project.

Conclusion: This comprehensive nurse provider model increased patients' access to care and offered students a unique experience to learn community connection, advocacy, and innovative, inter-professional skills.

◀ ▶ go to PG.

FACULTY PRACTICE FOCUS: REDUCING THE HEALTH IMPACTS OF POPULATION-BASED DISPARITIES

Mental Health in Prenatal Care

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Purpose: This presentation describes the integration of mental health services in a faculty based practice. The practice was designed to reduce the effects of health disparities in Sandoval County, New Mexico by utilizing family nurse practitioners and nurse midwives. This county experiences a maldistribution of mental health care providers to meet the needs of rural residents who experience a disproportionate number of mental health care issues. Prenatal care was supported by nurse midwives using a group care format that included community health workers. The mental health nurse practitioner utilized therapeutic counseling and medications as needed to support women and their families during antepartum and postpartum period. The underlying goal was to stabilize the mental health of the mother and support her relationships with her infant and other family members.

Background: Depression is now acknowledged as one of the most common complications of pregnancy with far reaching complications for women, family, infant and child health and well-being. National data indicate prevalence scores of 7.4 percent, 12.8 percent and 12.0 percent during the first, second, and third trimesters, respectively. The New Mexico Commission on the status of women estimate the prevalence of antenatal depression as 20 percent. Scores from the Edinburgh Depression Scale indicated a 30 percent prevalence rate of depression in those who sought out WIC services in Sandoval County.

Brief Description: The Edinburgh Depression Scale was administered to women who participated in prenatal groups at initial appointment, thirty six weeks and six weeks post-partum. Topics on maternal and child health for supportive care of family such as interpersonal violence stress management and self-care were highlighted during prenatal groups.

Outcomes Achieved: Forty six of fifty seven new obstetric patients received prenatal services from nurse midwife with approximately 30 percent being referred to mental health clinician based on scores from Edinburgh Depression Scale of greater than nine. Of the 17 women completing the depression scale during the third trimester, 14 scored low risk and three scored high risk. Of the ten women rescreened in post-partum period, seven scored low risk and three scored high risk. Our data suggests a trend that contrasts with national norms. National data demonstrated an increase in depression as pregnancy progresses. However our data indicate a decrease in depression from first trimester through postpartum period.

Conclusions: Data from this project suggest that participation in prenatal groups contributed to pregnant women feeling less depressed. In those women referred to mental health nurse practitioner, lower scores on Edinburgh during third trimester and postpartum period propose treatment may have also been a contributing factor to less depression. Data collected from this project will be used to demonstrate need for the development of mental health services in a rural community health center.

◀ ▶ go to PG.

FACULTY PRACTICE FOCUS: REDUCING THE HEALTH IMPACTS OF POPULATION-BASED DISPARITIES

Development and Initial Use of a Primary Care Oral Assessment Tool (PCOAT)

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Purpose: This presentation describes the development and use of an oral risk assessment tool for primary care. A primary care oral assessment tool, PCOAT evaluates patients' level of oral health risk indicating need for oral health.

Background: Historically, physical assessment training for most nurses and physicians did not include an examination of buccal areas, teeth, and tongue. Care of oral structures has been the dentists' realm. Recently, research established links between oral health, cardiovascular disease and diabetes, as well as, associations with dementia, preeclampsia and low birth weight.

Brief Description: Health care providers in a rural, community-based health center recognized oral conditions affecting their patients' overall health. A disproportionate burden of oral disease is borne by the least advantaged. Many patients experience barriers in obtaining dental care, or simply lack knowledge of oral care importance.

An inter-professional collaborative, including a dentist, nurse practitioner, and nurse midwife, researched oral risk assessment tools. All existing tools required oral and radiographic evaluations not available or practical in primary care. Therefore, the inter-professional team utilized ideas from oral risk tools and developed an oral assessment tool appropriate for primary care.

Health care providers set standards for PCOAT use during new patient visits, annual exams, well child visits, and with diabetic patients. During pilot testing of the PCOAT, providers and staff gave input for modifications of the tool.

The PCOAT designates risk status for oral health diseases in low, moderate and high categories. Based on individual risk levels, a discussion ensues between the health care provider and patient about self-management goals such as oral hygiene, diet choices, consumption of sweets, tobacco avoidance, and the affects oral health on overall health. A risk score of moderate or high prompts a discussion about self-care changes, a dental referral, and potentially an increase in visits to monitor oral health.

Outcomes Achieved: Health care providers admit to struggles with incorporating oral history and assessment into deeply ingrained practice routines. A dental professional referral network was established at the request of health care providers. The network provides dental resources for uninsured and underinsured patients who need surgery and/or dental prosthesis.

Community health workers assist patients with transportation, insurance issues or other barriers that impede dental appointment attendance. Patients express gratefulness for help with obtaining oral care. Anecdotal clinical outcomes on selected cases demonstrate improved HbA1c outcomes after dental treatment.

From August 2013 through September 2014, 207 PCOATs were completed on children and adults with permanent dentition. Of those patients, 16 or 7.7 percent were in the low risk category, 55 or 32.4 percent were moderate risk, and 124 or 59.9 percent were at high risk for oral conditions.

Conclusions: PCOAT has provided a systemic approach to oral health assessment and management in primary care. Patients have increased awareness of oral health, especially pregnant women, children and people with diabetes. Further assessment of PCOAT in other primary care settings, as part of disease assessment and management protocols, can further tool refinement, validity and reliability.

◀ ▶ go to PG.

FACULTY PRACTICE FOCUS: REDUCING THE HEALTH IMPACTS OF POPULATION-BASED DISPARITIES

Evolution of a Patient Centered Medical Home

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Purpose: The purpose of this presentation is to construct a patient-centered medical home (PCMH) intervention strategy guided by an evidence based implementation framework. The aim of the nurse faculty practice in Sandoval County is to demonstrate and teach effective community-responsive practice evaluation and management to achieve sustained impact on New Mexico primary care and the nursing workforce.

Background: The faculty practice initially provided patient care and student teaching as a separate entity of the College of Nursing. Group prenatal through infancy innovations and integrated behavioral health incorporated engagement with patients and the community. An example from group care includes collaboration with the Sandoval County Women, Infants, and Children (WIC) program. Patient education provided by Community Health Workers (CHW) also meets WIC eligibility criteria. Patients attending group save three visits to WIC thereby reducing patient (and Medicaid) burdens of transportation and time away from work or school. Integration of oral health into primary care practice is an example of inter-professional team-based care and care coordination innovations. It increases equity of access to an oral health clinical pathway that crosses organizational boundaries. A business model change resulted in the integration of the faculty practice into the Community Health Center (CHC) organization. Integration enhanced awareness of disparities in patient-centered processes within the CHC. Increased capacity through CHW resources and DNP student learning in quality improvement activities contributed to the decision to jointly pursue PCMH certification.

Brief Description: PCMH results nationally have been inconsistent. Successes appear linked to the presence of locally designed innovative practices that embrace PCMH key attributes, and less so to the certification process itself. There are additional benefits to certification however, as a vehicle for clinic re-design and the potential for increased reimbursement opportunities. The Consolidated Framework for Implementation Research provides the foundation for the PCMH model that will guide the CHC re-design process. Domains include Intervention Characteristics, Outer Setting, Inner Setting, Individual/Team Characteristics, Process of Implementation, Measures of Implementation, and Outcomes.

Outcomes Achieved: Administrative outcomes achieved reflecting key PCMH concepts include expanded integration of the faculty practice into the CHC. This has expanded capacity for the CHC including group care, CHW, integrated behavioral health, quality improvement, and increased access for patients. Patient care activities now occur within a single EHR system. Increased organizational readiness demonstrated through CHC Leadership Team and Board of Directors approval of the certification proposal. Selected clinical outcomes include a 50% increase in completed dental referrals due to CHW interventions. Ninety-eight percent of prenatal patients remained in our care through delivery. Thirty percent of prenatal patients received referral for behavioral health care. Of those, 88% entered care.

Conclusions: Following certification, the PCMH framework will be applied to continuous quality improvement and evaluation activities. CHC re-design through PCMH certification enriches this site for student learning. As a site for BSN through DNP students, experiences include high quality evidence-based patient care, inter-professional teams, and community-engagement. It also affords opportunities for the DNP student in leadership, quality, research, and innovative practice.

◀ ▶ go to PG.

INNOVATIVE APPROACHES TO CHRONIC DISEASE MANAGEMENT

Moderator:
Heather M. Young, PhD, RN, FAAN
Associate Vice Chancellor for Nursing
Dean and Professor
Betty Irene Moore School of Nursing
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OVERVIEW: INNOVATIONS IN CHRONIC DISEASE MANAGEMENT

Heather M. Young

MHEALTH BEHAVIOR CHANGE: WHO IS READY?

Sheridan Miyamoto, Stuart Henderson, Heather Young, Jay J. Han

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CHANGING THE CONVERSATION: TECHNOLOGY ENABLED NURSE COACHING

Sarina Fazio, Sheridan Miyamoto, Madan Dharmar,
Yajarayma Tang-Feldman, Matthew Lange, Jay Han, Heather Young

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PATIENT-CENTERED COMMUNITY-WIDE CARE COORDINATION IN RURAL AREAS

Robin Whitney, Katherine K. Kim, Janice F. Bell,
Sarah C. Reed, Andra Davis, Jill G. Joseph

TRAINING PROGRAM TO DELIVER NURSE-LED CARE COORDINATION FOR CHEMOTHERAPY PATIENTS

Andra Davis, Sarah C. Reed, Katherine K. Kim, Janice Bell,
Robin Whitney, Richard Bold, Dawn Stacey, Jill G. Joseph

FEASIBILITY OF A PERSONAL HEALTH NETWORK TECHNOLOGY FOR CANCER CARE COORDINATION

Sarah C. Reed, Katherine K. Kim, Andra Davis, Robin Whitney,
Janice F. Bell, David Copenhaver, Richard J. Bold, Jill G. Joseph

◀ ▶ go to PG.

INNOVATIVE APPROACHES TO CHRONIC DISEASE MANAGEMENT

Overview: Innovations in Chronic Disease Management

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Purpose: This symposium will highlight programs and research focused on the utilization of emerging mobile technologies to enhance and improve the lives of those living with chronic disease.

Background: Chronic diseases are the leading cause of mortality and disability in the United States. Current solutions focus primarily on diagnosis and pharmacological treatment, yet there is increasing evidence that person-centered models of care that target behavioral health are more successful in improving and addressing chronic illnesses. Mobile technology allows care to move from traditional clinic and hospital-based care to where individuals are in their daily lives. If this technology is harnessed to allow bi-directional, timely communication of data and tailored feedback, it has the potential to change an individual's health behavior and prevent or mitigate the factors that lead to disease. Given that 96% of the United States population is currently living in areas where mobile networks exist, the potential to reach underserved populations and reduce health care disparities is another great promise of mHealth technologies. With 91% of adults in the United States reporting they own a mobile phone and 63% of adult cell phone owners reporting use of their phone to access the internet, it appears the barriers to mHealth technology access are being quickly overcome and will assume a larger role in future health care.

Presentation: This symposium will feature a brief overview of mobile health technologies and the potential of new care delivery models to reach people who would not otherwise receive specialized chronic disease management programs or tools. The first will describe results of a qualitative exploration of who is likely to engage with technology and how through knowledge of the barriers and drivers to engagement, we can design programs to maximize participation. The second describes how a platform that is able to collect sensor-driven patient generated data can inform and enhance a nurse health coaching intervention. The third describes the development of a HIPPA-compliant platform to deliver nurse-led care coordination during chemotherapy treatment. The fourth presentation describes a rural community-wide care coordination model that includes personal health network technology and social networking capabilities to enable self-management. The final presentation demonstrates how a personal health network for cancer care coordination can engage all the major stakeholders and increase opportunities for accessible cancer care.

Conclusion: Innovative mobile technologies have the potential to reach individuals with personalized, targeted education, action plans or feedback wherever they may be. Designing programs that are person centered and responsive to patient priorities can optimize care and outcomes.

◀ ▶ go to PG.

INNOVATIVE APPROACHES TO CHRONIC DISEASE MANAGEMENT

mHealth Behavior Change: Who Is Ready?

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Background: Despite promising statistics of widespread mobile adoption and studies which detail preferences of potential mhealth users, little evidence exists about which users are likely to adopt and benefit from the technology being created. Types of users most appropriate for mHealth as well as barriers and drivers for this technology are still not well understood. As mhealth expands, better understanding of potential users is essential to ensure the right content and technology is offered to the right user at the right time in order to move people forward on a behavior change continuum.

Objective: As part of a project aimed at developing mobile support to improve the health and wellness of an employee workforce, focus group were conducted to understand potential users' views about mHealth technology. We explored users' opinions and reactions to multiple mobile health technology devices, delivery approaches, and health care team interactions to gain a better understanding of the role technology may play in sustaining individuals' interest in improving their health.

Methods: Our team conducted 4 focus groups with employee/patient groups. Prior to attending the group, participants completed a survey requesting demographic information, experience with mobile health technology, and self-rated wellness. Focus group topics included participants' experiences with mobile technology and with health behavior change, reactions to current mobile health technology, preferences for the type of health data to be collected, and views on privacy and data sharing. A combination of deductive and emergent coding strategies were used to identify themes from the focus groups.

Results: The focus groups were comprised of 24 women and 6 men, with an average of 7 participants in each group. Participants ranged from 25 to 64 years; 63% self-identified as white, 20% as African-American, and 13% as Latino. Most participants rated their health as fair, good, or very good, although 63% reported living with a chronic health problem.

Despite variation of participants' reactions to mobile health as a technology to support behavior change, some patterns emerged. At the extremes were potential users who were enthusiastic about using mobile health technology for behavior change and those who were skeptical it could add value to what they were already doing. General reactions could be placed on a high/low preparedness continuum regarding their desire for health data and their attention to their current health habits. In addition, contextual factors such as trust, functionality, integration and customization play a role in moving people along the continuum of wanting to track personalized health data and/or focusing on health behaviors.

Conclusions: In order to engage participants to use technology to improve their health, we must be aware of the user's baseline interest in making health changes and not only understand their base interest in utilizing technology as a tool to assist behavior change. We must learn to effectively address barriers toward adoption and harness the drivers of adoption and engagement. Depending on where each individual is at the initial assessment, approaches should be tailored to move them along the preparedness continuum.

Funding: UC Davis Office of Research, Research Investments in the Sciences and Engineering.

◀ ▶ go to PG.

INNOVATIVE APPROACHES TO CHRONIC DISEASE MANAGEMENT

Changing the Conversation: Technology Enabled Nurse Coaching

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Purpose: The purpose of this project is to describe how the integration of mobile health (mHealth) technology informs nurse health coaching for individuals with chronic conditions, such as diabetes mellitus.

Background: Traditional approaches to diabetes management have proven insufficient as the incidence of both diabetes mellitus and the resulting complications continue to grow. Significant advances have been made in improving chronic disease and diabetes outcomes by utilizing Motivational Interviewing, an evidence-based health coaching intervention focused on patient motivations, goal setting, and attainment. Patients have also voiced that implementation of mHealth technology, sensor tracking, and health coaching can help to facilitate positive health conversations with their providers. Incorporating mHealth technologies with evidence-based nurse coaching interventions has the potential to achieve improved health and sustainable behavior change among patients with diabetes.

Approach: This project uses a comprehensive approach to develop a mHealth technology informed nurse coaching intervention that involves patients, providers, and technology experts. These team members offer ongoing input in project design and development of intuitive, customizable, and trustworthy digital platforms that integrate with existing electronic health records and mobile technology. For the mHealth coaching intervention, patients are given a Fitbit, a wireless wearable sensor device to track accurate, real-time physical activity and sleep quality data. The activity and sleep data allows coaches to perform meaningful analysis of patient generated data and correlate data with patient health behaviors to provide timely and personal feedback based on their health goals.

Outcomes Achieved: The use of mHealth technology platforms to gather data related to physical activity and sleep quality provides actionable data in which nurse health coaches can use real-time data to evaluate goal progression, identify barriers to behavior change, deliver targeted feedback, recognize opportunities for behavior change, and reinforce positive health activities.

Conclusions and Implications: Integrating patient generated real-time activity data into nurse health coaching provides a fuller understanding of the patient's experience outside of traditional clinic offices by gaining insight into daily health behaviors and their effect on quality of life and disease management. If future research can confirm the benefits of mHealth technology enabled nurse health coaching, this intervention may be scaled up and utilized to achieve outcomes in larger populations with various health challenges.

Funding: UC Davis Office of Research, Research Investments in the Sciences and Engineering and Patient-Centered Research Outcomes Institute (PCORI) HIS-1310-07894.

◀ ▶ go to PG.

INNOVATIVE APPROACHES TO CHRONIC DISEASE MANAGEMENT

Patient-Centered Community-Wide Care Coordination in Rural Areas

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Purpose/Aims: To solicit feedback from a broad range of stakeholders on a novel care coordination (CC) approach that employs principles of person-centered care to enhance CC efforts in low-income, ethnically diverse populations in California's rural communities. This nurse-led CC approach emphasizes patient engagement and addresses the triple aim: 1) enhanced patient experience; 2) improved population health; and 3) reduced healthcare costs, consistent with the Institute for Healthcare Improvement's (IHI) framework for optimizing health system performance.

Rationale/Background: Individuals in rural and underserved areas face disparities in healthcare access, quality of care, and health outcomes. For the low-income, ethnically diverse population in California's rural communities, these disparities include a high prevalence of cardio-metabolic conditions, such as heart failure, hypertension and diabetes, and worse outcomes related to these conditions. Traditional approaches that emphasize patient education and adherence often fail in this type of community setting. However, there is evidence that improved patient engagement and health information technology (HIT) could enhance traditional CC efforts.

Approach: Feedback was collected from an interdisciplinary group that included academic and clinical nurse leaders, public health and technology experts, and the leadership of sites serving this vulnerable population. We presented a CC model designed to engage patients, caregivers, and family members as equal partners with an interdisciplinary care team. We discussed potential roles of Nurse Care Coordinators, Medical Assistants, Health Coaches, and Community Health Workers, who would be trained to support patients' needs within the community context. We presented evidence-based protocols that could be used, technologies that could be integrated, and other interventions that might support the implementation of CC. This approach would permit the CC team to address not only clinical, but also behavioral and social determinants of health, using evidence-based techniques to identify needs, goals, and challenges of importance to patients and their families.

Outcomes: Formative feedback has been uniformly enthusiastic, and also permitted us to identify areas of challenge. These included 1) the competing needs for serial quality improvement versus a stable program that can be predictably disseminated; 2) issues of clinic-based Medical Assistants and LVNs versus Community Health Workers, and the sharp focus of community health centers on managing access; and 3) the need for technology not only to enhance communication among patients, family members, and care teams, but also to collect, analyze and display population-level improvements in health. There was agreement that the efficacy of this approach needs to be assessed rigorously, using triple aim criteria.

Conclusions: This innovative CC approach highlights the role of nurses in leading and transforming healthcare delivery in partnership with patients and communities. Careful attention to adapting the approach to the specific needs of the community is critical. Personalized interventions and innovative HIT support patients at the point of need and allow nurse-led CC teams to plan and deliver care more effectively. This empowering approach holds the potential to improve healthcare quality and patient experience while reducing costs for some of California's most vulnerable rural communities.

Funding: This work was funded by a grant from the Gordon and Betty Moore Foundation to the University of California, Davis, Betty Irene Moore School of Nursing.

◀ ▶ go to PG.

Training Program to Deliver Nurse-Led Care Coordination for Chemotherapy Patients

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Purpose/Aims: To adapt evidence-based protocols designed to assess and manage chemotherapy-related symptoms into an oncology clinic, beginning by training nurses in their use.

Background and Rationale: Cancer treatment is often accompanied by distressing symptoms yet most therapy is administered in outpatient settings where patients have intermittent access to healthcare providers. Evidence suggests that care can be fragmented and costly. Inadequate care related to symptoms, psychological support, and access to information has been reported. Early recognition, triage and, response to symptoms may prevent conditions from progressing. In addition, complex care needs of cancer patients are often provided across multiple settings and provider specialists. Successful delivery of care coordination (CC) supports early identification of potential complications or treatment-related side effects, efficient and timely communication between providers, and the ability to mobilize meaningful and ongoing support systems. Nurse CC has demonstrated benefits in other chronic conditions such as diabetes and heart disease, but little research exists on application of these models in oncology. Nurse-directed cancer CC aims to improve care and quality of life for patients undergoing chemotherapy treatment. Rigorous training was required to introduce this new model of care delivery.

Description of the Project: Evidence-informed symptom protocols developed using systematic reviews to identify international symptom guidelines and evaluated by Canadian nurse researchers served as the platform for guiding this feasibility study. Weekly training was led by an oncology nurse and oncology social worker, and overseen by an interdisciplinary research team including oncology-experienced professionals and a Canadian who was involved in leading the development of the protocols. Training methods included: 1) orientation to and use of the 13 Canadian symptom assessment and response protocols (e.g. nausea/vomiting, fatigue, fever and depression); 2) development of two additional protocols for management of pain and sleep disturbances, based on existing literature and guidelines; 3) development of patient vignettes using varying symptom constellations and severity; and, 4) application of the 15 protocols to simulated patient interactions. Training included role-play as both the patient and the nurse. Protocol fidelity was evaluated in real-time with appropriate feedback, guidance, and re-training as needed. Additional CC training included attention to communication skills, relationship-building, health coaching, and, orientation to community support services. A strong emphasis was placed on ensuring that all interactions were patient/family-centered, with attention to identification and monitoring of shared goals. Finally, the nurse was also trained in a mobile health technology to support CC.

Outcomes Achieved: 1) Training manual development for nurses to provide chemotherapy care coordination; 2) Preliminary evidence of acceptability and effectiveness of these training methods based on initial experience which is being expanded to include additional trainees; 3) Interprofessional support for methods and outcomes of this training.

Implications: This study contributes to a growing understanding for the need for, and methods to deliver, evidence-based cancer care coordination. This training is an essential step toward developing models of CC that provide early recognition and appropriate intervention for managing treatment-related side effects, tailor locally available sources of information and support to patient needs, and enhance the cancer care experience.

Funding: This work was funded by a grant from the McKesson Foundation (201401953) and the Gordon and Betty Moore Foundation through its support of the Betty Irene Moore School of Nursing.

◀ ▶ go to PG.

INNOVATIVE APPROACHES TO CHRONIC DISEASE MANAGEMENT

Feasibility of a Personal Health Network Technology for Cancer Care Coordination

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Purposes/Aims: A personal health network (PHN) is a social networking technology that allows for collaborative and patient-centered communication, utilizes evidenced-based screening and assessment tools and symptom protocols, and supports nurse-led care coordination services. Our purpose was to assess the feasibility of implementing a personal health network (PHN) to enhance care coordination in a comprehensive cancer center.

Our primary aims were to: 1) Assess the acceptance and use of the PHN among multidisciplinary oncology clinicians (medical oncologist, nurse, dietician, social worker); 2) Assess the acceptance and use of the PHN among patients with cancer; 3) Develop a fully functional PHN that reflects patient care and clinic workflow needs.

Rationale/Background: Cancer care is complex and often requires multiple providers in diverse clinical settings. As the population of newly diagnosed cancer patients and cancer survivors continue to grow, particularly among older adults, engaging patients and their families, in addition to the multidisciplinary care team is critical in *achieving high-quality cancer care*. Despite the Institute of Medicine's call to address quality in cancer care fifteen years ago, including use of evidence-based care and care recommendations, considerable gaps remain. Health technology offers opportunities to address rising costs, fragmented and disorganized care, and the utilization of evidence-based care. The use of technology to coordinate cancer care is an understudied field.

Methods: Key elements of a PHN and care coordination in cancer were identified and have been described elsewhere. Fundamental to an integrated and useable PHN is the engagement of patients and the multidisciplinary care team. We recruited 4 cancer survivors and 6 multidisciplinary health care professionals (medical oncologists, nurses, social workers, dieticians) to participate in individual demonstrations followed by a semi-structured interview. We developed a demonstration and interview script prior to interviews that oriented patients and clinicians to key features within the PHN. Staff testing was conducted on either a website version and/or tablet application, while patients used the tablet application.

Outcomes Achieved/Documented: Overall, patients and members of the multidisciplinary care team thought the PHN provided value and was easy to use. Both groups were able to navigate the technology within the first demonstration. Patient usability challenges included the order of the information presented within the application and lack of a clear "home screen". Staff challenges included integration with clinic workflow, the timeliness and management of communication. For example, alerts and notifications were automated and there was significant concern about overload. This input was incorporated into a final version of the PHN.

Conclusions: We successfully developed a PHN for cancer care coordination that reflects complex workflow and care demands for both care teams and patients. The PHN offers a novel and innovative solution to addressing quality issues in cancer care coordination. Optimizing the usability and acceptance of the PHN required an iterative process with all partners (multidisciplinary care team, patients, technology developers) for successful development and implementation. The PHN will be tested in a small, randomized control trial with 60 newly diagnosed adult cancer patients initiating chemotherapy.

Funding: This work was funded by a grant from the Gordon and Betty Moore Foundation to the University of California, Davis, Betty Irene Moore School of Nursing; the McKesson Foundation (201401953); and Boston University Center for Future Technologies in Cancer Care (4500001576).

go to PG.

◀ ▶ go to PG.

THE “INS AND OUTS” OF CONDUCTING RESEARCH WITH AND FOR CHILDREN

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COMPLEXITIES IN CONDUCTING RESEARCH WITH LIMITED POPULATIONS

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“LISTEN UP” – CHILDREN AS CONTENT EXPERTS

Martha Driessnack

PASSIVE CONSENT WITH A HEALTH BEHAVIOR SURVEY OF NATIVE AMERICAN YOUTH

Mark Siemon, Marie L. Lobo

IMPLEMENTING RESEARCH IN ELEMENTARY SCHOOLS IN A HISPANIC, RURAL COMMUNITY

Carolyn Montoya

A RESEARCHER’S LESSONS FROM A CHILD IN THE HOSPITAL: ASSENTS, CONSENTS, AND GATEKEEPERS

Susan M. Wechter

go to PG.

THE “INS AND OUTS” OF CONDUCTING RESEARCH WITH AND FOR CHILDREN

Complexities in Conducting Research with Limited Populations

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Purposes/Aims: The purpose of this paper is to discuss the complexities of implementing research projects in rare disease states or in less populated areas.

Rationale/Background: Children with rare diseases or living in less populated areas need to be studied. One of the challenges of including these individuals in research is the increased potential for loss of confidentiality and anonymity. Specialty clinics may see only 10 or 20 children per year with a specific diagnosis. Similar issues may occur in specialty clinics in less populated communities where only a small number of children with a specific chronic illness are seen.

Methods: Recruitment in these populations is a major concern. The clinic staff will know participants for studies are being recruited and they will know who meets the criteria for the study. Both of these scenarios can present ethical concerns if clinic staff encourage or discourage potential subject’s participation in the study. Research designs may also influence study recruitment.

Data collection must be sensitive to personal health information (PHI), but potential identifiers must be considered more broadly. Zip codes may make a participant from a rural community identifiable. No links to the chart or other records should be retained. This includes scanning consent into electronic medical records (although this may differ if the research includes drugs or other materials which can affect the pathophysiology of the disease process). Such information as school name or distance from health care might also make a participant identifiable. Privacy must be insured during data collection, this may also include insuring siblings are not listening to data collection. Consent forms should be kept in a separate, locked file with no links to the data files. One strategy is to include these children in studies which are non-categorical, that is multiple diagnoses are used to meet the entry criteria.

Results: Careful implementation of the methods discussed above can insure that participants with rare diseases or from clinics with a small number of patients meeting study criteria will consider participation. Attention must be given to the entire research process so the subject’s confidentiality and anonymity remains intact.

Implications: Great care must be taken when doing research with children when the rarity of their disease makes them more easily identified. Consideration of data which would not be identifiable in larger populations must be given. These include information on zip code and school attended.

◀ ▶ go to PG.

THE “INS AND OUTS” OF CONDUCTING RESEARCH WITH AND FOR CHILDREN

“Listen Up” – Children as Content Experts

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Purpose/Aims: The purpose of this paper is to discuss the use of children as content experts in research, especially during the instrument development.
Rationale/Background: Despite ongoing rhetoric about the need to listen to children, powerful social and cultural tendencies continue to exclude the voice of children in matters that affect them, including research and clinical practice. To access the experience and perspectives of children more fully, researchers and clinicians need to re-conceptualize children as capable participants, but also as partners to be listened to and encouraged to speak. The challenge is how to devise research methods that open opportunities to involve children in the process.
Undertaking/Best Practice/Approach/Methods/Process: Content or subject-matter experts are often used in research, especially for instrument development, to provide expertise on a specific subject. The ‘expertise’ usually is established from their education, publication record, or experience. For this project, a group of school-age children were invited to serve on a content expert panel for a pediatric nurse researcher for one year. In this role, thee children not only learned about the research process, but they also directly engaged in the instrument development process for a number of projects. To nurture their curiosity and provide opportunities for them to present their own views and explore the complexity of issues, they were also encouraged to identify and formally present their ideas for research priorities for future health-related research related to children.
Outcomes Achieved/Documented: The engagement of children as content experts is a practical application, in which children perceptions and experiences can be actively engaged in the research process, rather than as subjects of research. The formative and summative feedback from the children, their parents, and the researchers with whom the children shared their ‘expertise’ was overwhelmingly positive. Most notable is that all of the children wish to continue in their role. A more objective outcome is that one research study team that engaged the children in a challenging instrument revision study progressed to publication, not only acknowledging the pivotal role the child ‘content expert’ panel played in their research, but also acknowledging the children in their publication. Further, the students presented their suggestions for research priorities, which they titled ‘Listen Up’. Their presentation, which they titled ‘Listen Up’, in turn influenced the program of study of the pediatric nurse researcher.
Conclusions: Researching children’s experiences not only requires us to engage children as participants, but also to educate children about research and what it means to participate in a research project as participants, co-researchers, or in this project, as content experts. Methods that engage children in the research process can provide key insights into children’s nuanced language, social contexts, and concepts from their perspective and experience. Such understanding not only enhances the validity of our instruments and research process, but also works toward repositioning children’s voices.

◀ ▶ go to PG.

THE "INS AND OUTS" OF CONDUCTING RESEARCH WITH AND FOR CHILDREN

Passive Consent with a Health Behavior Survey of Native American Youth

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Objective: There are many barriers to conducting research with children. Many institutional review boards are concerned about exploiting children, not realizing children will say no when they do not want to do an activity. This symposium addresses both the joys and frustration of doing research with and for children.

Background: This paper will discuss the use of passive consent from parents with active assent from children and youth within a vulnerable population. Research on active versus passive consent for adolescent risk behavior research has shown that response rates to requests for active consent are 30 to 60 percent compared to over 90 percent for passive consent (Tigges, 2003). Research protocols for working with Native American tribes will be discussed as well as challenges of publishing research using passive consent in vulnerable populations.

Methodology: The researchers received permission from the University of New Mexico Institutional Review Board to allow legally authorized representatives (LAR) to provide passive consent for minors participating in a regional youth soccer program evaluation. The passive consent forms were mailed to LAR of all registered participants at least two weeks prior to the beginning of the event. LAR's capacity to consent was not be evaluated, but the researchers assumed that LARs had the capacity to consent to the evaluation survey as they will had previously consented to allowing minor children to participate in the youth soccer program. Minors participating in the evaluation were be asked to assent to the survey questionnaire, the New Mexico Youth Risk and Resiliency Survey, prior to taking the evaluation survey. Minor participant's ability to assent to voluntarily complete the survey was assessed by the primary researcher, Dr. Siemon, at the time of the evaluation survey.

Outcomes: The research was completed successfully and results were presented to the New Mexico Legislature's Interim Indian Affairs Committee. However, efforts to publish the research in peer reviewed journals have been met with questions about the use of passive consent.

◀ ▶ go to PG.

THE “INS AND OUTS” OF CONDUCTING RESEARCH WITH AND FOR CHILDREN

Implementing Research in Elementary Schools in a Hispanic, Rural Community

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Purposes/Aims: Discuss the challenges/solutions of implementing research in an elementary school setting; translating consent forms in to another language; and the use of incentives with a population of vulnerable children.

Rationale/Conceptual Basis/Background: Recruitment strategies play a large part in determining the success of any research project. Several research studies discuss the importance of specific strategies when conducting research in school settings including: planned community engagement; the use incentives, particularly with vulnerable populations; and issues of consent and assent with children (Geller, et al., 2007; Ross, et al., 1999; Sexton, et al., 2003)

Methods: A total of 424 children, 70% Hispanic, from a rural community in New Mexico, aged 8 to 11 years and in grades 3 through 5 participated in this study. Strategies to conduct the research in the school settings included community engagement at the following levels: initial contact with the school nurses; meetings with appropriate school personnel; and approaches to discussing the research with parents (primarily Hispanic). Careful consideration was given to the use of incentives in a population where the majority of children enrolled in the elementary schools qualified for free lunches.

Results: The participation rate for this study where recruitment was conducted in a limited time period (2 months) was 42% (n =424). Grade level, gender, and race/ethnicity were not found to be significantly associated with study participation.

Implications: Early involvement of school and community personnel is crucial. Challenges in rural settings include the added expense and time involved in travel. Spanish-speaking populations need study materials in Spanish. Study personnel who speak Spanish are an asset. Careful consideration needs to be given regarding the approrpriateness of incentives, particularly with vulnerable populations, in order to avoid incentives which could be considered coercive.

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3. University of New Mexico, College of Nursing, Dean’s Scholar Award.

◀ ▶ go to PG.

THE "INS AND OUTS" OF CONDUCTING RESEARCH WITH AND FOR CHILDREN

A Researcher's Lessons from a Child in the Hospital: Assents, Consents, and Gatekeepers

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Purpose/Specific Aim: The purpose is to describe the issues of assent, consent and gatekeeping in a research study of children in the hospital. The specific aim of the study was to explore the perceptions of stress of school-age children.

Background: Over 3 million children are hospitalized every year (1). Hospitalization is reserved for increasingly complex care of the sickest children, and accounts for 10 billion dollars of annual hospital costs (1,2). Since the 1960's, it has been well known that hospitalization can be traumatic for children (3, 4, 5, 6). Distress from fear, uncertainty, pain and discomfort can affect a child's healing, behavior and health outcomes (7, 8, 9). Although the psychosocial impact of hospitalization is evident, it has not been fully explored from a child's perspective. Child assent, parental consent and respect for gatekeepers are important elements when gaining a child's perspective in a research context (10, 11). Understanding of a child's way of thinking is critical to addressing these issues (11, 12). Prior research on child assent addresses a child's decision-making ability with little emphasis on practical advice and tools for gaining assent (13, 14). Consequently, there is a lack of research offering assent methods appropriate for a child's developmental, social and emotional capabilities.

Methods: Thirty children participants, ages 7-9, were interviewed in a large Midwest children's hospital, using a child-centered 'draw and tell' technique (15, 16) to elicit their perceptions of stress. A qualitative interpretive description framework was applied (17) to explore stress through a child's voice (18). A pictorial assent tool was designed and piloted to address ethically sound and developmentally appropriate issues of child assent in research. A pictorial script (19) was utilized to help children visualize and conceive the concepts of research, confidentiality, privacy, data management, and refusal/withdrawal from the study (20, 21).

Results: Five important messages from hospitalized children were communicated to professional caregivers: a) children express their stress through descriptions of fears, worries, discomforts and primarily things that make them 'sad'; b) children want to be listened to, as they believe they have something important to say; c) children want to know what is expected and be informed of what they need to do; d) relief of stress is going home; and e) children tell about simple things health care providers can do to help them during hospitalization (i.e. talking to them instead of just their parents.) The use of the new assent tool elicited comfort, safety, and caring prompted from the child's engagement with storytelling. Lessons for the researcher about assent, consent and gatekeepers included: a) instant rapport and trust; b) enhanced child control and choice; c) enhanced parental knowledge and consent; and d) gatekeeper approval, with less unanticipated events due to affirmative informed assent.

Implications: Discovering the meaning of stress from a child's view launches a trajectory of exploration of relevant remedies for psychosocial trauma for hospitalized children. Further study on the pictorial assent tool regarding comprehension, recruitment timeframe, and child/parent satisfaction is warranted.

◀ ▶ go to PG.

LAUNCHING A NURSING PROGRAM: IMPACT ON THE COMMUNITY AND NURSING PROFESSION

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OVERVIEW: LAUNCHING A NURSING PROGRAM: IMPACT ON THE COMMUNITY AND NURSING PROFESSION

Casey R. Shillam, Jill Mount, Kelly Espinoza

IMPACT OF BSN EDUCATION ON PROFESSIONAL NURSING PRACTICE

Kelly Espinoza, Casey R. Shillam, Denise Sartz

OUTCOMES OF STUDENT ENGAGEMENT IN COMMUNITY-DIRECTED HEALTH INITIATIVES

Casey R. Shillam, Dave Flarry

UNIVERSITY-HOSPITAL PARTNERSHIP PROVIDES EBP LEARNING OPPORTUNITIES

Jill Mount

◀ ▶ go to PG.

LAUNCHING A NURSING PROGRAM: IMPACT ON THE COMMUNITY AND NURSING PROFESSION

Overview: Launching a Nursing Program: Impact on the Community and Nursing Profession

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Purpose: Launching a new RN-to-BSN program in an underserved region of the state of Washington has resulted in numerous benefits to both the nursing profession and the community members receiving nursing care in Northwest Washington. The purpose of this symposium is to highlight three specific outcomes integral to advancing the profession of nursing and providing the community with access to high-quality, safe healthcare.

Rationale/Background: Western Washington University (WWU) launched one of three new Washington State RN-to-BSN programs partially supported through the Robert Wood Johnson Foundation-funded initiative to promote academic progression in nursing. This program adds to the statewide strategy to meet the IOM Report on the *Future of Nursing* (2010) goal of an 80% BSN prepared workforce by 2020. This new program offers a commitment to fostering innovative and interdisciplinary academic-community partnerships in the North Puget Sound region of the state.

Methods: The RN-to-BSN program was initiated in partnership between Western Washington University and community agencies all dedicated to meeting the healthcare needs of the community. Faculty worked with nurses in these agencies to provide quality and timely learning experiences for students that reflect the current rapidly-changing landscape of healthcare and to identify community needs and contribute directly to meeting those needs.

Outcomes: Three innovations directly resulting in improved healthcare in the community include:

1. University-Hospital partnership between WWU and PeaceHealth St. Joseph's Medical Center that involved BSN students participating in the hospital's Nursing Research Council to identify real-time needs for implementation of Evidence-Based Projects. These projects directly improved patient care quality and safety in the health system and offered students the opportunity to present their findings in multiple settings, both locally and regionally;

2. The Palliative Care Initiative which identified a need to mobilize the community to take collective action to improve palliative health services and create a palliative community. Over the first year of the initiative, over 400 people have attended events organized by the nursing program, a 3-day Summer Institute was held, and two research presentations and two manuscripts involving students have been accepted for presentation and submitted for publication;

3. Professional nursing practice is now being highlighted as a priority by nurses in the region. Multiple initiatives have launched to support nurses in pursuit of lifelong learning, pursuit of advanced leadership skills, and planning for positions on community and hospital boards throughout the region.

Conclusions: As interest in continued nursing education heightens and new programs emerge, lessons learned from innovative programs such as the one at Western Washington University should be considered for the impact beyond simply that of nurses achieving higher degrees of education. The impact of nursing education reaches far beyond the attainment of a degree; it positions nurses with the skills and knowledge to directly impact the health and healthcare of the community and simultaneously raises awareness of the importance of the nursing profession to improving the quality and safety of healthcare.

◀ ▶ go to PG.

LAUNCHING A NURSING PROGRAM:
IMPACT ON THE COMMUNITY AND NURSING PROFESSION

Impact of BSN Education on Professional Nursing Practice

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Purpose: The launch of a new RN-to-BSN program in an underserved area of the state of Washington has resulted in a variety of benefits to the nursing profession throughout the region. This program adds to the statewide strategy to meet the IOM Report on the *Future of Nursing* (2010) goal of an 80% BSN prepared workforce by 2020, but has also contributed to raising awareness in nurses, other health care providers, and the general community-at-large of the important role nurses take in advancing the health and healthcare of the community.

Rationale/Background: PeaceHealth St. Joseph's Medical Center (PHSJMC) has been a key partner with Washington University (WWU) in the launch of a new RN-to-BSN program. With the advancement of nursing practice outlined in the *Future of Nursing*, the Northwest region of Washington State was critically underserved for continued education opportunities for nurses. As a result, the PHSJMC system nursing workforce is comprised of 41% BSN-prepared nurses, far below the recommended 80% by 2020.

Methods: The RN-to-BSN program actively engages community partners in the ongoing quality improvement methods of the program and actively seeks input from these stakeholders in the implementation of the curriculum. To date, the program has contributed directly to the improved professional practice of the PHSJMC health system.

Outcomes: As key partners, PHSJMC nurses, physicians and other providers in the system serve in three important roles:

1. Clinical practice faculty, offering insight and support to emerging nurse leaders exploring organizational issues of quality and safety in healthcare;

2. Contributors to initiatives such as the Palliative Care Initiative, ensuring emerging issues relevant to patient care such as competency in palliative care are supported by the RN-to-BSN program to meet the needs of the health system; and

3. Offering opportunities for professional development for practicing nurses and BSN students, supporting state-wide and national efforts in nurses attaining knowledge and skills for leadership positions. Nurses between WWU and PHSJMC have partnered to engage in the "Best on Boards" initiative by the Robert Wood Johnson Foundation and the American Organization of Nurse Executives to support nurses in attaining board positions on hospital and community boards.

Conclusions: As the WWU RN-to-BSN program evolves, there are multiple opportunities for industry to partner with education to ensure the emerging needs of a rapidly-changing healthcare system are met. This partnership between WWU and PHSJMC provides a strong example of how these partnerships can be replicated in other regions and continue ensure a high-quality nursing workforce to deliver safe patient care.

◀ ▶ go to PG.

LAUNCHING A NURSING PROGRAM:
IMPACT ON THE COMMUNITY AND NURSING PROFESSION

Outcomes of Student Engagement in Community-Directed Health Initiatives

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Purpose: The Western Washington University RN-to-BSN program's inaugural class began the BSN program fall 2013. As the only BSN or higher-degree program in Northwest Washington, the program is already making an impact on meeting multiple needs in this underserved area of the state of Washington. Students in the program have engaged in a shared learning model of nursing education in which they have already made significant contributions to the community-directed health needs in the region.

Rationale/Background: RN-to-BSN education is facing exciting opportunities to advance the nursing profession in light of the IOM's *Future of Nursing* recommendations to reach an 80% BSN-prepared nursing workforce by 2020. As new programs are created cross the western region, it is important to understand the impact of these programs on the health of the community, but also on the learning opportunities for students enrolled in the program.

Methods: Students in the RN-to-BSN program are offered multiple learning opportunities and experiences throughout the program. In each of these learning experiences, they are encouraged to look beyond the "assignment" to understand the underlying professional implications of the work and identify ways in which they can incorporate the learning into their professional practice and disseminate the learning to colleagues in their practice settings.

Outcomes: Students have participated in several professional development opportunities directly relating to their professional growth and dissemination of their work:

1. All students in the inaugural class presented the findings of their Evidence-Based Practice projects at the Western Institute of Nursing's Research Information & Exchange session;
2. Three students participated in the school's Palliative Care Initiative Summer Institute conducting qualitative analysis under the direction of several faculty members. The resulting research abstracts and manuscripts all contain these students as co-authors and presenters;
3. Students have made contributions directly to the health system within our community, such as advocating to the State of Washington for the Whatcom Health Department to receive Hepatitis B testing kits, when our region was the only one in the state not receiving this resource, and supporting disaster preparedness organizations such as the American Red Cross with recruitment sessions to ensure that nurses are prepared to serve in times of disaster.

Conclusions: The launch of the WWU RN-to-BSN program serves as a model for emerging education programs to understand the impact of student engagement on community-driven health initiatives. Supporting students in active learning provides opportunities for their learning to have real-world relevance and contribute directly to the organizations in which they work and the health of the communities in which they live.

◀ ▶ go to PG.

University-Hospital Partnership Provides EBP Learning Opportunities

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Rationale/Background: The Essentials of Baccalaureate Education for Professional Nursing Practice, Essential III mandates nursing students learn "Scholarship for Evidence-Based Practice." Western Washington University's RN-to-BSN program's mission is "to advance system changes that promote healthy communities and safe, quality healthcare for all."

Purpose: To provide rigorous and relevant evidence-based practice learning opportunities for RN-to-BSN students by providing opportunities for them to collaborate with hospital nurses to research current local health issues.

Description: The RN-to-BSN students learn evidence-based research principles, which they then use to research current health issues in collaboration with local hospital nurses.

Results: Student research projects included a variety of topics including catheter associated urinary tract infections (CAUTI), wound care, and improving patient sleep quality. Students disseminated their research results through research poster presentations to the hospital nurses they collaborated with and also at a national nursing research conference. Students' quantitative evaluations rated the class as good to very good. One student described the research project as "a relevant synthesis of evidence and dissemination of evidence with our CAUTI work- that had practical application."

Conclusions: Developing innovative university-hospital partnerships create opportunities for RN-to-BSN students to learn about evidence-based practice by actively collaborating with hospital nurses to research and disseminate information about relevant health issues.

◀ ▶ go to PG.

◀ ▶ go to PG.

LOCAL AND GLOBAL APPLICATION OF CBPR METHODS TO PREVENT AND TREAT HIVAIDS

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COMMUNITY-BASED PARTICIPATORY RESEARCH TO ADVANCE NURSING SCIENCE: AN OVERVIEW

Deborah Koniak-Griffin

UTILIZING CBPR TO IMPROVE ANTIRETROVIRAL ADHERENCE AMONG RURAL INDIAN WOMEN

Adeline Nyamathi, Sanjeev Sinha

ADDRESSING HEALTH NEEDS AND HIV RISK BEHAVIORS AMONG MIDDLE AGE AND OLDER HOMELESS WOMEN

Benissa E. Salem, Jenn Ma-Pham

ENTRY INTO HIV TESTING AMONG NEWLY DIAGNOSED OLDER AFRICAN AMERICAN WOMEN

Ariel M. Rankin

◀ ▶ go to PG.

LOCAL AND GLOBAL APPLICATION OF CBPR METHODS TO PREVENT AND TREAT HIVAIDS

Community-Based Participatory Research to Advance Nursing Science: An Overview

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Purpose/Aims: This symposium illustrates how researchers design and implement quantitative and qualitative research methods that apply principles of community-based participatory research (CBPR) to promote the health of vulnerable populations. As a foundation for the studies, an overview of CBPR principles is presented as an approach for addressing health disparities in order to promote social justice; attention will similarly be given to the theoretical and philosophical groundings for the approach.

Background: In the past decade, CBPR, also known as community-partnered research, has become increasingly popular whereby researchers collaborate with communities in the design, implementation and evaluation of health promotion research. CBPR differs from traditional research by involving community members in the research process to promote culturally - relevant studies and sustainability of interventions over time. Use of the approach builds on strengths and resources within the community and fosters capacity building among all partners. The phases of CBPR are delineated in Anderson's Community Partnership Model (i.e. pre-engagement; engagement; community assessment; intervention design; implementation, evaluation and dissemination; and sustainment).

Overview of Studies: Exemplary models of how CBPR principles are integrated into research and the strategies applied are provided by symposium presenters. First, Dr. Adey Nyamathi will describe how application of CBPR principles led to development of a culturally-relevant, theory-based intervention for the treatment of HIV-infected women in India and the involvement of village women as direct caregivers in her longitudinal experimental study. Second, Dr. Benissa Salem will discuss the development of a two-phased pilot study which addresses health needs, HIV risk behaviors and areas of intervention among middle age and older homeless women. Next, Ariel Rankin describes applications of CBPR in designing her qualitative research study aimed to examine the experience of older African American women, diagnosed with HIV/AIDS at the age of 50 and older, experiences navigating the healthcare system.

Implications: Domestically and internationally, the insights gained from this these studies enhance understanding about differing strategies used to integrate CBPR principles in research with vulnerable populations. Researchers working with communities recognize the strengths of their community partners and how their combined efforts may lead to co-learning that fosters development of relevant research that promises to improve health outcomes of vulnerable populations.

◀ ▶ go to PG.

LOCAL AND GLOBAL APPLICATION OF CBPR METHODS TO PREVENT AND TREAT HIVAIDS

Utilizing CBPR to Improve Antiretroviral Adherence among Rural Indian Women

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Purpose: To assess the impact of Community-based Participatory Research (CBPR) strategies utilized by lay village women in India to improve antiretroviral therapy (ART) compliance and health outcomes of rural women living with AIDS (WLA) in India.

Background: CBPR ensures full engagement of communities in the research process. By understanding social and health inequities, researchers can better understand the profound challenges rural WLA face in caring for themselves and their families, and maintaining optimal health. While Asha (lay village women) in India have predominantly focused on reproductive health for mother and infants, investigators have utilized CPPR approaches to train Asha, partnered with healthcare providers, to deliver an intervention designed to improve the medication adherence among rural WLA and enhance their physical and psychological health.

Method: CBPR approaches were infused in the conduct of a randomized clinical trial designed to improve psychological and physical health of 68 rural WLA. Community leaders and WLA living in similar villages guided the research design, assisted with revision and clarity of the questionnaires, and were actively involved in implementing and evaluating the program. Rural WLA were randomized into Asha Life (AL) or usual care (UC) groups. The AL - intervention was delivered over six months and included group sessions, nutritional supplements, life skills and Asha support in maintaining adherence to ART. Inclusion criteria for the WLA were: (a) aged of 18-45; and (b) screened as receiving ART for a minimum of 3 months. Physical health status was obtained by anthropometry (bio-impedance analyzer) and CD4 counts, while depressive symptomology was assessed by structured instruments. ART adherence was measured by monthly pill counts and self-reports for frequency taken. Except for anthropometry and ART monitoring- all other assessments were conducted at baseline and six months.

Findings: At six-month follow-up, findings revealed that adherence was significantly improved ranging from 93% -100% for the AL group (mean 99%; 0.02) and 60% - 95% for the UC group (mean 67%, 0.22). In multivariate analyses, the AL participants also had significantly greater odds of reducing depressive symptoms, improving CD4 levels and weight, BMI, percent fat, fat weight, and lean weight significantly higher in the AL group compared to the UC group.

Implications: The findings of this intervention highlight the benefits of CBPR in addressing the challenges which rural WLA face in overcoming barriers to care and improving psychological and physical outcomes. Likewise, the culturally-relevant AL intervention was significant in impacting the HIV medication adherence.

Funding: Support provided by NIMH - MH82662.

◀ ▶ go to PG.

LOCAL AND GLOBAL APPLICATION OF CBPR METHODS TO PREVENT AND TREAT HIVAIDS

Addressing Health Needs and HIV Risk Behaviors among Middle Age and Older Homeless Women

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Purpose/Aims: The purpose of this study was to utilize the tenets of community-based participatory methods (CBPR) to develop a two-phased pilot study which addresses health needs, HIV risk behaviors and areas of intervention among middle age and older homeless women.

Background: The United States faces consistently high rates of homelessness; in large urban cities, such as Los Angeles County, recent reports indicate that over 50,000 people were homeless and 23% were women. Among homeless women in particular, estimates of drug use have ranged from 26% to 50%; moreover, only 52% of homeless women reported having access to condoms and/or birth control. Less is known about middle age and older homeless women who may have unique health needs and may be at risk for HIV due to drug use and lack of consistent condom use.

Methods: Utilizing CBPR methods, a two-phased study was developed. In phase one, a descriptive, qualitative study among older homeless women (N=20; ages 43-62) was conducted; women were eligible if they were: (a) $\geq$ 40 years of age; (b) homeless; (c) pre-frail or frail; (d) free of evidence of acute, psychotic hallucinations, and (e) English-speaking. Content analysis was utilized; codes and subcategories were developed based on line-by-line coding and reviewed by several researchers. Trustworthiness of the data was established by using credibility, transferability, dependability and confirmability. Building upon phase one, phase two focused on the development of a pilot intervention for homeless women in collaboration, discussion and development with community partners.

Results: In phase one, several themes emerged which included 1) healthcare access, seeking and management; 2) lack of information about sex and sexual decision making; 3) lack of availability of food options and healthy eating; 4) seeking employment and support systems; and 5) areas of future program planning. Participants discussed program planning which included having those who experienced homelessness to be involved in the program delivery; further, challenges negotiating sex and sexual decision making were described. In phase two, a two-group, six session intervention and attention control program was designed by the researchers and formerly homeless community health workers (CHWs) from the community. Working in tandem with the partner site, CHWs were trained to lead six sessions. Topics presented included Hepatitis A, B, C and HIV transmission, drug use, chronic health conditions, nutrition, etc.

Implications: Utilizing the hallmarks of CBPR and working with the community-based partner site, these study findings provide a foundation for future work with this community which should build upon a CHW-delivered intervention designed to address drug use and dependency, HIV risk behaviors and health needs among middle age and older prefrail and frail homeless women.

Funding: This work was supported by the NIH/NINR T32 NR007077.

◀ ▶ go to PG.

LOCAL AND GLOBAL APPLICATION OF CBPR METHODS TO PREVENT AND TREAT HIVAIDS

Entry into HIV Testing among Newly Diagnosed Older African American Women

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Purpose: This qualitative study aimed to describe the experience of older African American women, diagnosed with HIV/AIDS at the age of 50 and older, experiences in navigating the healthcare system.

Background: The National HIV/AIDS Strategy highlights the need to increase access to care and improve health outcomes for people living with HIV. The first step in this strategy is to ensure timely testing. It is estimated that approximately 20% of individuals living with HIV are unaware of their HIV status. For older African American women, barriers to timely testing include a decreased perception of HIV risk and failure of healthcare providers to offer HIV tests.

Methods: Constructivist Grounded Theory (CGT) was used for this study. In taking the constructivist approach, analysis stemmed from shared experiences and relationships with participants. Semi-structured interviews were conducted, audio-recorded and transcribed.
Women were eligible if they (a) received an HIV/AIDS diagnosis at the age of 50 or older, and (b) self-identified as African American and/or Black. A total of eleven interviews were used. The interview guide was created using community-based participatory research (CBPR) methods. Open-ended, non-leading questions and probes were developed from a literature review and community member's suggestions. Coding, mapping, analytic strategy usage, and memoing all assisted in creation of the categories.

Results: A provisional grounded theory was constructed, which emphasized that delayed entry into HIV care was related to delayed HIV testing. Majority of the women reported receiving an AIDS diagnosis within months of being tested. Two categories that emerged from these interviews included: "missed opportunities" and "it was almost too late." Both categories emerged from codes surrounding gaps in care.

Implications: The use of CBPR principles aided in gathering meaningful data from the participants. The data elicited from these categories have highlighted several common concerns among older African American women diagnosed with HIV/AIDS after the age of 50. The question that arose for many of the women was "why didn't anyone test me before?" Nurses and other healthcare providers are in a prime position to assess risk behaviors and educate older women about their HIV risk earlier in their disease trajectory. Aligned with the principles of CBPR, implications for this research study include the dissemination of these findings to both healthcare providers and the African American community.

Funding: NIH/NINR T32 NR007077 Vulnerable Populations/Health Disparities Training.

go to PG.

◀ ▶ go to PG.

THE ROLE OF ENVIRONMENT IN HEALTHCARE EQUITY AND ACCESS AMONG VULNERABLE POPULATIONS

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OVERVIEW: ENVIRONMENTAL CONTEXTS OF VULNERABLE POPULATIONS: IMPLICATIONS FOR NURSING RESEARCH

Eden Brauer, Fayette Nguyen, Felicia Schanche Hodge,
Christine Samuel-Nakamura

BARRIERS TO TREATMENT FOR LATENT TUBERCULOSIS INFECTION AMONG LOW-INCOME POPULATIONS

Fayette Nguyen Truax

ENVIRONMENTAL ISSUES OF EQUITY AND ACCESS TO DIABETES CARE AMONG THE SIOUX

Felicia Schanche Hodge

URANIUM & OTHER HEAVY METAL CONTAMINATION IN HERBAL TEA IN AN AMERICAN INDIAN COMMUNITY

Christine Samuel-Nakamura

◀ ▶ go to PG.

THE ROLE OF ENVIRONMENT IN HEALTHCARE EQUITY AND ACCESS AMONG VULNERABLE POPULATIONS

Overview: Environmental Contexts of Vulnerable Populations: Implications for Nursing Research

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Purpose: Our overall aim is to report on the role of the environment as inhibiting equity and access to healthcare services among vulnerable populations. A second aim is to make recommendations for alleviating barriers to healthcare that arise from the environment.

Background: It is now widely recognized that health outcomes depend far more on social and physical environments than on medical care. The interplay of biologic, social, economic, behavioral, environmental, and other factors influence the health of individuals, populations, and sub-groups. The environmental context contributes to the underlying causes of health, wellness, and illness and perpetuates health disparities, particularly among vulnerable populations. Nurse researchers face many barriers when working with vulnerable populations, such as rural residence, poverty and isolation. Barriers rooted in the environment create unique challenges in research that require attention. An environmental perspective in nursing research can result in a broader understanding of determinants of health and improved access to high-quality health services.

Methods: This presentation briefly highlights the components of succeeding presentations that address the role of the environment in healthcare equity and access among vulnerable populations.

Results: A detailed background that identifies several research projects that both identifies barriers to care and reports on methods used to either overcome these will be presented. A nurse scholar conducting research among low-income populations with latent tuberculosis infection identifies complex social-cultural barriers, such as personal illness beliefs to accepting and completing treatment. A research project among American Indian Plains tribes identifies both environmental factors and illness beliefs that inhibit access to care. And finally, a post doctoral fellow presents the very real problem of uranium contamination on the Navajo reservation that is mired in unequal access to information, screening and healthcare surveillance which may result in future illness. These presentations have both common factors as well as unique issues that require exploration for adequate solutions.

Implications: There is a significant need for increased attention and recommendations regarding the contribution of environmental factors on health as well as equity and access to healthcare among vulnerable populations. Key findings in these research projects point to the need for better understanding of environmental contexts of health as well as environmental barriers to care. These research projects call for an environmental lens in nursing research as well as changing structures for healthcare delivery and policy to address complex equity and access issues.

Funding: This work was supported by the National Institute of Health (NIH)/Nursing Research (NINR) T32 NR007077.

◀ ▶ go to PG.

THE ROLE OF ENVIRONMENT IN HEALTHCARE EQUITY AND ACCESS AMONG VULNERABLE POPULATIONS

Barriers to Treatment for Latent Tuberculosis Infection among Low-Income Populations

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Purpose: Successful treatment for latent tuberculosis infection (TLTBI) can reduce active TB cases among vulnerable populations consisting of both immigrants and low-income individuals. The purpose of this study is to identify barriers to accepting and completing TLTBI from eligible patients receiving care at the Orange County, CA Health Care Agency Public Health TB clinics from January 1, 2010 to August 31 2011.

Background: Low-income populations including immigrants experience complex social-cultural barriers to accepting and completing TLTBI. National completion rates for TLTBI continue to fall short of the Healthy People 2020 goal of 79% for persons who were diagnosed with latent TB infection that started and completed a course of treatment. Current literature lacks data describing barriers to TLTBI reported by patients from various racial/ethnic groups. A better understanding of these barriers will help inform current practice to improve acceptance and completion rates thus reducing the number of active TB cases in the future.

Methods: This retrospective, descriptive study examined barriers to accepting and completing TLTBI from both the Public Health Department's LTBI database and chart review of all eligible patients within the time frame specified. Descriptive statistics and chi-square analysis were used to identify barriers and predictors related to treatment acceptance and completion.

Results: The study population consisted of 854 males (50.6%) and 832 (49.3%) females categorized as White, Black, Asian and Hispanic. The largest age group was 18-44 years of age (32.0%). Of the 1687 persons diagnosed with LTBI, 1660 were eligible for TLTBI and 1280 (77.1%) accepted. A total of 380 (22.9%) patients declined treatment primarily due to concerns with medication side effects (23.4%). Of the 1280 patients that accepted TLTBI, treatment was not completed by 429 (33.5%). Reasons for treatment dropout include patients' decision to stop (7.1%) and lost to follow-up (5.6%). Race was not a significant predictor of treatment non-completion among this study group. Barriers to LTBI compliance were identified as fear of side effects and personal illness beliefs that reduced their access to care.

Implications: Findings from this study informs health care providers of the barriers immigrants commonly encounter when deciding to accept, initiate, or complete TLTBI. Future interventions aimed at improving overall TLTBI completion rates among immigrants should consider these barriers and tailor current treatment practices to address the concerns identified.

Funding: This work was supported by the National Institute of Health (NIH)/Nursing Research (NINR) T32 NR007077.

◀ ▶ go to PG.

THE ROLE OF ENVIRONMENT IN HEALTHCARE EQUITY AND ACCESS AMONG VULNERABLE POPULATIONS

Environmental Issues of Equity and Access to Diabetes Care among the Sioux

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Aims: This presentation reports on a 5-year type 2 diabetes intervention study among American Indian tribes in South Dakota and Nebraska. The study findings, tied to environmental barriers to care, identified cultural illness beliefs and the physical environment as limiting access and equity to care.

Background: Type 2 diabetes is highly prevalent among American Indian populations (more than three times that of the general population). This study designed and tested a culturally sensitive intervention among the Sioux and Winnebago tribes. Focus groups identified cultural constructs of type 2 diabetes which pointed to illness beliefs that inhibited healthcare usage. Environmentally based barriers were also identified.

Methods: Adult American Indians (324) residing on the Yankton, Rosebud, Pine Ridge and Winnebago reservations and diagnosed with type 2 diabetes were recruited to participate in the experimentally-designed study. Focus groups provided a window into the cultural constructs of illness and barriers to care. An intervention was designed consisting of diabetes education delivered via storytelling and self-empowering Talking Circles sessions. Grounded Theory methods identified environmental issues of equity and access to diabetes care. Descriptive statistics and chi-square analysis examined the impact of the intervention.

Results: Environmental factors that inhibited access and equity to care included isolation, rural reservation roads, poor food access, sedentary lifestyles and illness beliefs stemming from historical trauma and cultural beliefs. The intervention proved statistically significant in increasing diabetes knowledge and self-help behaviors, however, many environmental barriers remain.

Implications: Improved access to health education and to healthcare services must consider solutions that will respond to special population needs. Equity in health education and health services must start at the level of the targeted vulnerable population and take into consideration long-held beliefs and lifestyles that inhibit diabetes prevention and control. Equal access to educational information healthcare services is often lacking among vulnerable populations.

Funding: This work was supported by the National Institute of Health (NIH)/National Institute of Nursing Research (NINR) R01-NR004722.

◀ ▶ go to PG.

THE ROLE OF ENVIRONMENT IN HEALTHCARE EQUITY AND ACCESS AMONG VULNERABLE POPULATIONS

Uranium & Other Heavy Metal Contamination in Herbal Tea in an American Indian Community

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Aims: This study examines environmental contamination in a commonly used American Indian herbal tea in New Mexico (NM). Uranium (U) and associated heavy metals (As, Cd, Cs, Mo, Pb, Se, Th, V) were examined. The study aims were to: (1) identify dietary behavior in relation to the intake of locally harvested herbal tea, (2) compare U and heavy metal (HM) levels in tea from areas with high and low levels of U contamination, and (3) disseminate study findings to the Diné (Navajo) leadership and communities.

Background: Vulnerable populations are disproportionately exposed to toxic environmental materials. From the 1940s - 1980s, northwestern NM contributed 40% of the U.S. U production. There remain more than 1,100 unreclaimed mining sites in the study area. In the Diné community, *Thelesperma megapotamicum* is infused and utilized as a common beverage and is also a diuretic to address urinary or digestive problems or used to dye sheep wool for textiles. Studies that examine *T. megapotamicum* in relation to HM contamination do not exist. Preliminary human studies are emerging from the current community that demonstrate that chronic HM exposure may be correlated to increased incidences of autoimmune disorders, increased risk of developing hypertension, diabetes and renal failure. Uranium enters the body by inhalation or ingestion (contaminated water or food). Human/animal studies of those exposed to U have shown kidney chemical toxicity and damage to liver, muscle, cardiovascular, and nervous systems. Surveillance and screening for health problems is problematic.

Methods: Participants from the Diné Network for Environmental Health study were asked to join the study. New participants were invited by word-of-mouth, public announcements, chapter house meetings fliers, and community event announcements. Two questionnaires were administered. Data plant and soil levels were determined on a scale of milligrams (mg) per kilogram (kg). Heavy metal concentration levels were derived from fresh tea and paired with soil samples utilizing Inductively Coupled Plasma-Mass Spectrometry (ICP-MS). GIS data collected distance proximity data and sample location information.

Results: In herb soil, as exceeded the Human Health Screening Level (HHSL) but was not reflected in the infused portion of tea. Tea roots contained greater levels of HM than those parts used to infuse tea. Overall, the infused portion of tea was not contaminated above the recommended guidelines set by the World Food and Agriculture Organization.

Implications: Larger tea samples in other mine impacted areas of the community should be explored to identify potential contamination. Education regarding safe drinking water use needs to be emphasized. Research should focus on the extent of HM transfer to boiled tea water and determine biological contaminant levels in humans who consume tea. The use of herbal tea is common world-wide but safe ingestion is unknown. Equal access to contaminant assessment and information is lacking when discussing herbal products or traditional use of plants.

Funding: This work was supported by the National Institute of Health (NIH)/Nursing Research (NINR) T32 NR007077.

◀ ▶ go to PG.

go to PG.

SCAFFOLDING INNOVATION IN UNDERGRADUATE NURSE EDUCATION

Moderator:
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OVERVIEW: SCAFFOLDING INNOVATION IN UNDERGRADUATE NURSE EDUCATION

Angie Docherty, Rana Halabi Najjar, Nick Miehl,
KellyAnn Garthe, Patti Warkentin

THE CLINICAL AWARENESS LEARNING MODEL (CALM) FOR UNDERGRADUATE NURSE EDUCATION

KellyAnn Garthe, Stella Heryford, Katie O'Rourke

OBJECTIVE STRUCTURED CLINICAL EXAMINATIONS (OSCES) IN UNDERGRADUATE NURSE EDUCATION

Rana Halabi Najjar, Angie Docherty, Nick Miehl, Adria Gredvig

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APPLICATION OF A SCALE-UP APPROACH IN UNDERGRADUATE NURSE EDUCATION

Nick Miehl, KellyAnn Garthe, Stella Heryford, Patti Warkentin

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LEGAL SIMULATION IN UNDERGRADUATE NURSE EDUCATION

Patti Warkentin, Nick Miehl, Rana Halabi Najjar,
Angie Docherty, Judy Borgen, Adria Gredvig

◀ ▶ go to PG.

SCAFFOLDING INNOVATION IN UNDERGRADUATE NURSE EDUCATION

Overview: Scaffolding Innovation in Undergraduate Nurse Education

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Nick Miehl, MSN, RN, Clinical Instructor, Simulation Specialist
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Purpose/Aims: 1) To enhance engagement and diversity of adult learning through the introduction of student centered innovation in undergraduate nurse education. 2) To scaffold and structure active learning methodologies that safely support student development from introductory thinking towards complex critical thought.

Rationale/Background: In undergraduate nursing education, there is a common purpose: the creation of registered nurses able to perform in a safe and competent manner. Reports, however, have suggested schools could do more to equip graduates to meet the demands of modern practice (Benner et al, 2010; IOM, 2010). A solution may be found in the crossover between our pedagogical approach and the introduction of innovation: specifically, the interaction between scaffolding new methodologies and an educational climate of 'discovery learning'. Intentional scaffolding provides a safe, responsive and adaptable method of supporting students in educational settings. It is based on three criteria: 'contingency', 'fading' and the 'transfer of responsibility'. At the *contingency* stage, competency assessment informs teaching responsiveness to individual students. *Fading* refers to the structured withdrawal of scaffolded support as students develop their critical thinking. Finally, students are supported through the *transfer of responsibility* to develop accountability as learners and registered nurses. Integral to each criterion is the principle of 'discovery learning' which engages each student as 'active agents' in their own learning and development: essential if we are to meet the diverse needs of adult learners in the diverse settings in which contemporary learning occurs.

Brief Description of Project: In a concept-based baccalaureate curriculum within OHSU School of Nursing - Monmouth, four innovative learning methodologies have been introduced:

- Clinical Awareness Model for Student Learning (CALM)
- Objective Standardized Clinical Examinations (OSCEs)
- Student Centered Adult Learning Environment with Upside Down Pedagogies (SCALE-UP)
- Interprofessional Legal Simulation

Each methodology actively engages the student and has been situated to uphold scaffolding principles throughout the curriculum: CALM addresses contingency and fading by providing a safe and structured method of starting and progressing students in the clinical environment; OSCEs afford an objective approach to the assessment of clinical competency (essential in a scaffolded curriculum); SCALE-UP, as students transfer to more self-directed learning, is a bridge towards transfer of responsibility; and the Interprofessional Legal Simulation continues this transfer of responsibility as students transition to professional accountability. This symposium outlines the content and delivery of each methodology and its contribution to scaffolded, discovery based learning.

Outcomes Achieved: The outcomes to date include: (a), the active engagement of students in the new instructional methodologies; (b), enhanced opportunity for the development and safe assessment of competency and progression to structured, self-directed learning; and (c), enhanced spiraling towards complex critical thought and professional accountability.

Conclusions/Recommendations: To date, we have completed a foundational year of project delivery. Each distinct component has contributed to a 'whole program' environment where the scaffolded criteria of contingency, fading and the transfer of responsibility are embedded. We are now embarking on a program of research that will strengthen the evidence base for each of the components and their overall contribution to scaffolded innovation in undergraduate nurse education.

◀ ▶ go to PG.

SCAFFOLDING INNOVATION IN UNDERGRADUATE NURSE EDUCATION

The Clinical Awareness Learning Model (CALM) for Undergraduate Nurse Education

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Purpose/Aims: 1) To scaffold a structured approach to clinical education that maximizes the development of clinical judgment, leadership, and advocacy skills, and real-time understanding of evidence-based practice in undergraduate nursing education. 2) To expose new undergraduate learners to all aspects of clinical learning in a psychologically safe learning environment through the early use of student dyads to the later integration of individualized learning.

Rationale/Background: Current challenges in undergraduate nursing include creating a safe, meaningful and responsive clinical learning environment where student nurses can develop their awareness of the healthcare environment and develop their critical thinking and clinical reasoning. As the clinical environment gains in complexity, supporting students to develop informed decision-making skills has become necessary for safe and effective practice (Parsonage, 2010). Further, trends in nursing literature suggest the need to safely support students to adapt to dynamic clinical environments while their skills in decision making and clinical judgment develop (Benner, Tanner, & Chesla, 2009). In these dynamic environments, it is essential to develop a safe and structured clinical learning model that can promote real-time understanding at all stages of the undergraduate program.

Brief Description of Project: The Clinical Awareness Learning Model (CALM) purposefully integrates four essential concepts into the clinical day: discovery of evidence, direct patient-centered care, communication with the interprofessional team, and effective use of information technology. Students operate in pairs: one student functions as the "body" with primary responsibility for practice-performance. The other student assumes the role of "brain" using information technology and institutional policies to link best-practice and rationale to the actions of the "body" in real-time. Hourly meetings between the "brain" and "body" maximize communication between the two students and other members of the interprofessional team. Learning is supported by 'Grand Rounds' mid-shift at which all students can collectively teach, learn, and reflect with their peers about their patient interactions. Adopting the contingency and fading principles of scaffolded instruction, the CALM is adaptable to real time learning and assessment and the gradual progression from dyads to single student clinical practice as learning progresses across the program.

Outcomes Achieved: The outcomes to date include: (a), creating time and space for students to connect evidence to practice in real-time; (b), starting beginning students in dyads and gradually progressing to individual student practitioners as they progress in their program; and (c), generating interest among community partners and other schools of nursing to address a variety of clinical learning obstacles.

Conclusions/Recommendations: As the environment of healthcare becomes more complex, clinical learning has not kept pace with the changing environment. The literature suggests that graduate nurses have underdeveloped decision making skills and points to the need for nursing education that minimizes clinical deficits (Tanner, 2010). An intentionally scaffolded Clinical Awareness Learning Model provides an environment for students to progressively adjust to dynamic learning experiences and may be an opportunity to safely and purposefully address many of the challenges in real-time and case-based education. Research to determine this is underway.

◀ ▶ go to PG.

SCAFFOLDING INNOVATION IN UNDERGRADUATE NURSE EDUCATION

Objective Structured Clinical Examinations (OSCEs) in Undergraduate Nurse Education

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Purpose/Aims: 1) To develop the OSCE as an evaluative tool of clinical performance in a scaffolded simulated environment. 2) To examine psychometric properties of tools used in the OSCEs.

Rationale/Background: The 2011 IOM report on the Future of Nursing calls for a need to focus on both competency and performance based assessments in which students demonstrate their grasp and application of theory in real-world or realistically simulated situations. In addition, a recently published study through the NCSBN provides strong evidence for simulation as a powerful learning tool (Hayden, et al, 2014). Results indicate that students participating in high-quality, structured simulation-based learning experiences versus those in traditional clinical learning placements had similar outcomes. Objective Structured Clinical Examinations (OSCEs) provides a simulated assessment, reflecting real-life situations, where the level of difficulty is standardized relative to the stage of learning. OSCEs have been used in international nursing education for some time and are beginning to be used in programs within the US. Potentially they can enhance the assessment of clinical competencies using pre-determined objectives with the advantage being strict control over the clinical context in which students demonstrate specific behavioral outcomes.

Brief Description of Project: OSCEs include several stations which simulate different healthcare scenarios. Participants are given instructions at the beginning of the term informing them of the constructs and competencies the OSCE will measure. A few weeks before the OSCE, students are given additional instructions, which include the overall focus of the OSCE, the types of stations (i.e. safety or health interviewing), SBARs, and tools needed during the activity. The course content, learning activities and instruction combine to support students in preparing for the OSCE, as well as engage students to become active agents in their learning. Currently, in our project, all OSCEs are going through content validity of scenarios as well as testing psychometric properties of the grading rubrics. In addition, a remediation plan is in place to allow faculty and students to focus on active student learning. The goal is to ensure valid, reliable, fair, and objective assessment of students while providing them with formative feedback to improve and enhance their nursing practice.

Outcomes Achieved: The outcomes to date include: (a), a detailed plan for scaffolding and spiraling learning throughout each course and throughout the nursing program; (b), being able to accurately align clinical assessment opportunities to the outcomes and competencies students need to achieve in each course; and (c), enhancing educational practice by allowing faculty and students to discover where the gaps in learning occur.

Conclusions/Recommendations: With the current complexity of nursing practice, the need for assessment of student clinical performance was recognized by the IOM. Further, scaffolded instruction should be based on periodic and accurate assessment of performance as students' progress in their programs. OSCEs add a rigorous, controllable method of assessing this clinical competency and progression in a safe environment. Future research will focus on validity and reliability of OSCE rubrics and on developing more advanced objective standardized clinical assessments (OSCAs) to align with scaffolded and spiraled learning.

go to PG.

SCAFFOLDING INNOVATION IN UNDERGRADUAT NURSE EDUCATION

Application of a SCALE-UP Approach in Undergraduate Nurse Education

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Purpose/Aims: 1) To design and implement an interactive, authentic and student-centered learning environment using the SCALE-UP methodology. 2) To evaluate the impact of the SCALE-UP approach on student learning, academic and practice outcomes.

Rationale/Background: *Educating Nurses: A Call for Radical Transformation* (Benner et al., 2010) highlights the "under-education" of nursing students in relation for the demands of professional nursing practice. This gap in "readiness" or preparation for practice continues to grow with an ever changing and technologically advanced healthcare system, consumer demand, advances in research and is potentiated by a general shortage of nurses, in particular well prepared nurse educators. A changing patient demographic coupled with increased demands for safe, effective quality care is a major driving force for the reinvention of the educational system. This system redesign seeks to increase the educational capacity of nursing programs while pushing innovative curricular design to encourage continued progress through all levels of nursing education. Science, technology, engineering, arts and mathematics programs have documented successful student academic and performance outcomes using the Student-Centered Active Learning Environment with Upside-down Pedagogies (SCALE-UP) approach (Beichner, 2014). Adopting and scaffolding a SCALE-UP approach is one method by which to transform the delivery of undergraduate nursing education.

Brief Description of Project: A SCALE-UP approach has been scaffolded across three courses in the nursing curriculum, creating space for both personal and social learning. As active learners, students are given preparatory work, prior to each class session, as the primary source of content delivery. In class, the environment has been physically transformed to promote interaction between individual students, groups of students and faculty. Adopting the scaffolding principle of 'transfer of responsibility of learning', the majority of class time is spent on students working with each other on case-based learning activities, simulation-based learning experiences and other problem-solving exercises. Students work collaboratively to solve complex, real-world problems while faculty act as a guide or facilitator within the learning environment. At the conclusion of each class period, groups share their learning through a live, full-class debriefing. Individual learning is enhanced through reflective exercises on personal and social learning.

Outcomes Achieved: The outcomes to date include: (a) transforming the skills lab into a complex adaptive learning environment as a theory-guided intervention, (b) using an active, student-centered hands-on approach to immerse students in applying core nursing concepts and competencies, and (c) integrating technology to enhance the learning experience and expand the learning environment.

Conclusions/Recommendations: Using the SCALE-UP approach has increased the interactivity between and among student groups and faculty while allowing students to actively work to solve real-world problems. The next phase of the SCALE-UP project is to evaluate the impact of SCALE-UP on student: (a) approaches to learning, (b) course expectations and experiences, (c) achievement of benchmarked nursing competencies, and (d) academic and practice outcomes.

◀ ▶ go to PG.

SCAFFOLDING INNOVATION IN UNDERGRADUATE NURSE EDUCATION

Legal Simulation in Undergraduate Nurse Education

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Purpose/Aims: 1) To engage participants, through experiential and intentional learning, in the development of knowledge, skills and abilities related to legal issues in nursing and healthcare. 2) To evaluate the comparative effectiveness of scaffolding legal simulation, both observational versus participatory, in the junior versus senior year of undergraduate nursing education.

Rationale/Background: Simulation has been shown to be an effective and rich learning environment for students. However, much of the practice and evidence around simulation focuses on replicating clinical experiences. There is a paucity of evidence regarding civil and legal simulation in nursing education. However, in the past10 years 20% of all medical malpractice cases with awarded payments involved registered nurses. Legal simulation has the potential to impact students in three areas: raise awareness of causal factors preceding cases, dialogue with ethics in practice, and at least minimally improve courtroom skills should they be required. As such, it may be a highly appropriate learning approach in which to culminate scaffolded learning through the transfer of responsibility towards professional accountability.

Brief Description of Project: We have developed and implemented an interprofessional legal simulation for undergraduate nursing students. The simulation consists of three case based (criminal & civil) learning experiences engaging community partners including the District Attorney's office, local judges and law school faculty and students. The simulation was conducted in a real courtroom with senior students participating in at least one case as the 'defendant', 'witness' or jury. Junior students watched the proceedings but did not participate. Both groups debriefed each case together.

Outcomes Achieved: The outcomes to date include: (a), the ability to identify professional implications when engaged in a criminal/civil case; (b), the ability to thoughtfully integrate ethics in nursing practice; and (c), the lived experience of the professional nurse and the patient/client as they progress through the legal processes.

Conclusions/Recommendations: The outcomes highlighted above underscore the value of the legal simulation in nursing education. Student nurses must be given an opportunity to grapple with the reasons why legal and civil cases occur whilst developing competence in their courtroom skills. The value of clinical simulation is not in question but, to adhere to the principles of scaffolding, evidence is needed as to when to introduce simulations such as this into the curriculum. The next phase of the project will explore this issue of timing, and also explore the role of participation versus observation versus participatory learning as we develop our knowledge in these new simulation environments. It is believed that this study will inform strong/best practices in experiential and scaffolded learning within nursing undergraduate education.

◀ ▶ go to PG.

SEX, DRUGS & HIV: NURSING SCIENCE TO ACHIEVE AN AIDS-FREE GENERATION

Moderator:
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OVERVIEW: SEX, DRUGS & HIV: NURSING SCIENCE TO ACHIEVE AN AIDS-FREE GENERATION

Jessica E. Draughon

VIOLENCE PREDICTS SEX RISK AND STIMULANT USE AMONG FEMALE SEX WORKERS

Jessica E. Draughon, Adam W. Carrico, Jennifer L. Evans,
Ellen S. Stein, Kimberly Page

PROCESSES OF RECOVERY IN METHAMPHETAMINE-USING MEN WHO HAVE SEX WITH MEN

Kimberly M. Rush, Jessica E. Draughon,
Carmen J. Portillo, Adam W. Carrico

GENDER DIFFERENCES IN ALCOHOL, TOBACCO AND DRUG USE IN HIV POSITIVE ADULTS

Kellie Freeborn, Roland Zepf, Carol Dawson-Rose

go to PG.

SEX, DRUGS & HIV: NURSING SCIENCE TO ACHIEVE AN AIDS-FREE GENERATION

Overview: Sex, Drugs & HIV: Nursing Science to Achieve an AIDS-Free Generation

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In recent years, a series of groundbreaking randomized controlled trials demonstrated that expanded access to antiretroviral medications decreases rates of HIV infection and seroconversion. Consequently, there is a renewed sense of optimism that we have the tools necessary to end the HIV/AIDS epidemic and achieve an AIDS-free generation. In order to realize the full promise of these emerging biomedical treatment and prevention strategies, expanded efforts are necessary to address the needs of marginalized, underserved groups that experience profound HIV-related health disparities. Nursing professionals have been at the forefront of HIV/AIDS prevention efforts for more than three decades, and are uniquely positioned to develop combination HIV/AIDS prevention approaches to achieve health equity.

The co-occurrence of sexual risk taking and substance use remains an important driver of the HIV/AIDS epidemic. Nursing science is needed to inform the development of novel, multi-level approaches to targeting these intertwined epidemics of HIV/AIDS and substance use. The overarching goal of this symposium is to examine factors associated with sexual risk taking and substance use behaviors in high risk populations to inform the development of novel approaches to HIV/AIDS nursing care.

Informed by Syndemics Theory, we will present longitudinal findings linking physical and sexual violence to subsequent sexual and amphetamine type stimulant use behaviors in a cohort of young Cambodian women engaged in sex work.

A second presentation will examine theory-based psychosocial processes that support successful recovery in a substance abuse treatment outcome study with methamphetamine-using men who have sex with men.

The final presentation will describe gender differences in the patterns of alcohol, tobacco, and illicit substance use in a cohort of people living with HIV.

Taken together, these findings will inform efforts to develop and refine new approaches to optimize the benefits of antiretroviral medications for HIV/AIDS prevention. Interventions are needed to target structural factors like gender-based violence and cultivate psychosocial processes that promote recovery from a substance use disorder. Targeted intervention efforts are also needed to address gender-based differences in substance use in HIV-positive persons.

Funding: This work is partially based on funding from the National Institutes of Health, National Institute of Nursing Research T32 NR07081 (PI: C. Portillo, D. Vlahov).

◀ ▶ go to PG.

SEX, DRUGS & HIV: NURSING SCIENCE TO ACHIEVE AN AIDS-FREE GENERATION

Violence Predicts Sex Risk and Stimulant Use among Female Sex Workers

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Purposes: We examined data from the Cambodia-based Young Women's Health Study-2 for associations of prior violence exposures with sexual and drug risk behaviors over time. We hypothesized female sex workers (FSW) with recent violent victimization would be more likely to engage in sexual risk taking and amphetamine type stimulant (ATS) use during the prospective follow-up. Furthermore, we hypothesized heightened sexual risk among those with prior violence exposure would be independent of ATS use.

Background: FSW are disproportionately burdened with HIV. Consistent with syndemics theory, previous cross-sectional studies demonstrate that physical and sexual violence are prevalent in FSW and associated with engagement in sexual risk taking or drug use. Both sexual and drug risk behaviors place FSW at higher risk for HIV. Women may engage in risk behaviors to escape or avoid the psychological effects of violence. It is also possible that women engaging in risky sex and drug use are more likely to be in circumstances that increase risk for violence. Prospective studies examining violence exposure with subsequent sexual and drug risks will shed light on mechanisms and intervention opportunities.

Methods: Between August 2009 and 2010, 220 FSW age 15-29 were enrolled in a 1-year prospective study. Socio-demographic characteristics, sexual and drug use behaviors and violence exposures were assessed via self-report at baseline and quarterly study visits. Using questions developed by the World Health Organization, violence exposure was characterized as moderate physical violence (i.e., slapped pushed shoved, object thrown at them), severe physical violence (i.e., hit, kicked, beaten up, choked, burnt, threatened with a weapon), or sexual violence. Generalized estimating equations were performed to examine independent associations between baseline violence (in the prior 12 months, measured at baseline) and sexual and drug use behaviors measured over follow-up.

Results: Almost half (48%) the women reported physical or sexual violence in the 12 months preceding the baseline study visit: 35% experienced moderate physical violence, 21% severe physical violence; and 27% sexual violence.

Controlling for sexual and severe physical violence and days of ATS use, baseline moderate physical violence was associated with increased number of sex partners over time (adjusted incidence rate ratio [aIRR] 1.33; 95% CI: 1.04-1.71). Baseline sexual violence predicted decreased odds of consistent condom use with non-paying partners (adjusted odds ratio [aOR] 0.24; 95% CI: 0.10-0.59). Moderate physical violence was independently associated with a higher number of days of ATS use (aIRR 2.74; 95% CI: 1.29-5.84) and increased odds of having sex while high or intoxicated (aOR 2.42; 95% CI: 1.10-5.33).

Implications: Findings from this prospective study are among the first demonstrating that physical and sexual violence are independently associated with subsequent sexual risk taking, even after adjusting for ATS use. Consistent with syndemics theory, the intersection of violence exposure, sexual risk taking, and ATS use has important implications for HIV prevention in FSW. HIV prevention efforts often focus on individual behavior, however violence is not an individually modifiable risk. Nursing interventions targeting structural and social factors contributing to violence are needed to decrease HIV-related health disparities among FSW.

Acknowledgement: On behalf of the Young Women's Health Study Collaborative: John Kaldor, Serey Phal Kien, Lisa Maher, Kimberly Page, Joel Palefsky, Vonthanak Sapphon, Mean Chhi Vun

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◀ ▶ go to PG.

Processes of Recovery in Methamphetamine-Using Men Who Have Sex with Men

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Purpose: This longitudinal study examined theory-based processes of recovery in methamphetamine-using men who have sex with men (MSM) enrolled in outpatient substance abuse treatment. Processes of recovery included: self-efficacy for managing methamphetamine triggers; perceived social support for reducing methamphetamine use; and stages of change (e.g., pre-contemplation, contemplation, action, and maintenance). Processes of recovery were examined as predictors of number of anal sex partners while high on methamphetamine and decreased self-reported methamphetamine use over 6-months.

Background: Methamphetamine-using MSM experience human immunodeficiency virus (HIV) health disparities including higher HIV seroconversion rates and accelerated disease progression. Studies are needed to identify processes of recovery that predict better substance abuse treatment outcomes among methamphetamine-using MSM. Results would support the development of treatment approaches and nursing interventions to optimize HIV/AIDS prevention efforts in MSM.

Methods: In total, 88 methamphetamine-using MSM seeking substance abuse treatment in San Francisco were enrolled in a treatment outcome study. At baseline, 3- and 6-months follow-up, participants completed a computer-based assessment. Predictors included: self-efficacy for managing methamphetamine triggers measured by the Drug Taking Confidence Questionnaire (α=.97); perceived social support for reducing methamphetamine use measured by an adapted Processes of Change measure (α=.86); and the University of Rhode Island Change Assessment (α=.79) measured stages of change. Outcomes included: number of anal sex partners while high on methamphetamine in last 3 months; and self-reported days of methamphetamine use in last 30 days. Generalized estimating equations were used to assess whether changes in processes of recovery were associated with these outcomes.

Results: Self-efficacy for managing methamphetamine triggers (incidence rate ratio [IRR]= 1.8, 1.04-1.11) and perceived social support for reducing methamphetamine use (IRR=1.04, 1.01-10.6) increased over 6 months. Of the stages of change, contemplation (IRR=0.98, 0.97-0.99) and maintenance (IRR=0.98, 0.96-0.99) decreased over 6 months. In a multivariate model controlling for age, race and HIV-status, perceived social support for reducing methamphetamine use was independently associated with decreased number of anal sex partners while high on methamphetamine (adjusted incidence rate ratio [aIRR]=0.92, 0.96-0.99). Conversely, contemplation was independently associated with increased number of anal sex partners while high on methamphetamine (aIRR=1.08, 1.01-1.16). Greater perceived social support for reducing methamphetamine use (aIRR=0.92, 0.89-0.95) and self-efficacy for managing methamphetamine triggers (aIRR=0.97, 0.96-0.97) were independently associated with decreased self-reported methamphetamine use.

Implications: Results suggest that methamphetamine-using MSM may have better substance abuse treatment outcomes if they build social relationships that support efforts to reduce methamphetamine use and engage in activities that increase self-efficacy for managing triggers. Nurses on the forefront of HIV prevention and care efforts can encourage linkage to support groups. Interestingly, contemplation was associated with increased number of anal sex partners while high on methamphetamine, suggesting it may be a marker of ambivalence. Nurses are uniquely positioned to identify and assist with resolution of ambivalence toward reducing methamphetamine use through stages of change processes and motivational enhancement strategies that support treatment goals. These results will assist in the development of novel interventions to target methamphetamine use as a key driver of the HIV/AIDS epidemic among MSM.

Funding: NINR T32 (T32 NR 07081) & California HIV/AIDS Research Program (CR08 SFAF 422, CR08 SF 423).

◀ ▶ go to PG.

SEX, DRUGS & HIV: NURSING SCIENCE TO ACHIEVE AN AIDS-FREE GENERATION

Gender Differences in Alcohol, Tobacco and Drug Use in HIV Positive Adults

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Purpose: To describe differences in alcohol, tobacco and substance use patterns in a clinic recruited sample of HIV-positive women and men.

Rational: Health promotion screening is an important practice for nurses who care for adults with chronic illnesses, including HIV disease. High rates of substance use are associated with both HIV risk acquisition and disparities in health outcomes among people living with HIV (PLWHIV). In PLWHIV cocaine use exacerbates disease progression compared to non-cocaine users. It is also linked to HIV-associated neurocognitive disorders. Amphetamine use is associated with primary drug resistance to non-nucleoside reverse transcriptase inhibitors and higher sexually transmitted infection rates. PLWHIV who use tobacco have higher rates of anal, cervical and lung cancer, chronic obstructive pulmonary disease, cardiovascular disease, and decreased virological response to antiretrovirals compared to non-smokers. Screening for substance use is an evidence-based approach to identify individuals whose substance use is causing harm and creates an opportunity to diminish harmful risk behavior. Further, an understanding of the differences and similarities between the genders with respect to drug, alcohol, and tobacco use may be useful in shaping health promotion messages and health screening guidelines for providers caring for PLWHIV.

Methods: We performed a secondary analysis of baseline data collected as part of a randomized controlled trial that compared substance use screening modalities. Participants were recruited from an urban HIV-primary care clinic. Substance use was determined by the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST). Participants completed the ASSIST measure to determine patterns of substance use over the prior three months. Specific substances measured were: tobacco, alcohol, cannabis, cocaine, amphetamines, opioids, sedatives or sleeping pills. Frequencies were: never, once or twice, monthly, weekly, daily or almost daily.

Results: A total of 210 participants (23% women) were enrolled. Women were African-American 61%, Caucasian 27%, Hispanic 4%. Men were Caucasian 36.4% African-American 33%, Hispanic 19%. Most (83%) reported their income as inadequate. Mean ages were: women, 49 years, (s.d. ±8.421); men, 45 years, (s.d. ±8.017). Daily cocaine use was significantly higher in women (66.0%) when compared to men (53.8%); $p = 0.045$). Although not statistically significant the following gender differences were observed: weekly alcohol use was higher in men than in women (21.3% vs 10.6%). Cannabis use was higher in men than in women, both daily (24.0% vs 11.0%) and weekly (18.9% vs 11.1%). Amphetamine use was higher in men weekly (11.9%), monthly (11.2%), and once or twice (17.2%), than in women who were less than 4% in all use frequencies. There were no significant gender differences for tobacco, or alcohol use.

Implications: These data demonstrate PLWHIV are continuing to use drugs, alcohol and tobacco leaving them at risk of multiple health deficits. Evidence based approaches for addressing harmful substance use as part of clinical care could be integrated into the care of PLWHIV similar to this sample. Nurses are positioned to administer clinic based screening utilizing evidence based interventions to tailor health promotion that addresses harmful substance use for PLWHIV.

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go to PG.

TOWARD A BETTER UNDERSTANDING OF COMPASSION FATIGUE AMONG REGISTERED NURSES

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OVERVIEW: TOWARD A BETTER UNDERSTANDING OF COMPASSION FATIGUE AMONG REGISTERED NURSES

Kate G. Sheppard

EMERGENCY NURSES' EXPERIENCES OF COMPASSION FATIGUE

Lindsay Cais, Kate G. Sheppard

COMPASSION FATIGUE AMONG ONCOLOGY NURSES

Brooke A. Finley, Kate G. Sheppard

COMPASSION FATIGUE AMONG DNP STUDENTS

Kathleen Kulesa, Kate G. Sheppard

RECONCEPTUALIZING COMPASSION FATIGUE AMONG REGISTERED NURSES

Kate G. Sheppard

go to PG.

TOWARD A BETTER UNDERSTANDING OF COMPASSION FATIGUE AMONG REGISTERED NURSES

Overview: Toward a Better Understanding of Compassion Fatigue among Registered Nurses

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Purpose: To describe compassion fatigue as experienced by registered nurses, in order to better understand this potentially devastating phenomenon.

Background: As it is currently conceptualized in the widely-used Professional Quality of Life (ProQOL-5) model and instrument, compassion fatigue stems from the negative attributes of burnout (reactions to the work environment), and secondary traumatic stress (witnessing the distress of others), with a subsequent loss of compassion satisfaction (work-related satisfaction at a job well done). Nurses who are experiencing compassion fatigue usually feel physically and emotionally depleted. Outcomes of unresolved compassion fatigue include increased sick time, self-medicating with alcohol or other substances, distancing from patients and others, impaired social connectedness, and even prematurely leaving the profession.

Method: Descriptive studies conducted among hospital-based registered nurses (n=16) and nursing graduate students (N=59) over a one-year period.

Content of Papers:

Paper One: Describes compassion fatigue among emergency department nurses, guided by the ProQOL model. Secondary data analysis from semi-structured interviews (N=4) led to themes that depicted the nurses' experiences with compassion fatigue. Burnout was frequently descried but often minimized. Numerous examples of secondary traumatic stress were provided. Several distressing symptoms emerged that do not fit within the ProQOL conceptual model.

Paper Two: Describes compassion fatigue among oncology nurses, guided by the ProQOL model. Secondary data analysis from semi-structured interviews led to common experiences and associated feelings of distress. Again, stories of burnout and secondary traumatic stress were depicted, with each nurse describing the emotional duress associated with compassion fatigue.

Paper Three: Describes the prevalence of compassion fatigue symptoms among graduate nursing students (N=59), as measured by the ProQOL-5. The majority of students are hospital-based nurses who may be seeking a graduate degree as a means to escape the emotional distress of compassion fatigue; 69% of the sample appear at moderate to high risk of compassion fatigue.

Paper Four: Describes findings from two studies that explored compassion fatigue among two nursing populations, guided by the ProQOL. Findings stem from semi-structured interviews with hospital-based nurses (N=16) and weekly self-reflective journal submissions among graduate nursing students (N=59). Symptoms of burnout were described but were quickly normalized. Multiple experiences with secondary traumatic stress were recounted, and participants reported how these experiences significantly compromised professional, interpersonal, physical, and mental well-being. Additional elements that were not adequately captured in the compassion fatigue conceptual model (ProQOL-5) were identified.

Funding: The University Arizona College of Nursing Laurence B. Emmons Research Award, and Foundation of the American Association of Nurse Practitioners.

◀ ▶ go to PG.

TOWARD A BETTER UNDERSTANDING OF COMPASSION FATIGUE AMONG REGISTERED NURSES

Emergency Nurses' Experiences of Compassion Fatigue

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Purpose: To describe experiences related to compassion fatigue among emergency nurses.

Background: Professional quality of life is affected by the work (organizational features and required tasks), client (patient and family), and person (nurses' actions and characteristics) environments. These domains are consistent with the commonly accepted nursing professional metaparadigm that contains the themes of environment, person, and nursing. Professional quality of life is composed of positive compassion satisfaction and negative compassion fatigue. Compassion fatigue is further delineated into burnout and secondary traumatic stress. Burnout is characterized by overwhelming exhaustion, feelings of detachment, and a sense of ineffectiveness. Secondary traumatic stress refers to negative emotions driven by exposure to work-related trauma. Emergency nurses are especially at risk for developing compassion fatigue due to their frequent exposure to traumatic events and high levels of work-related stress.

Method: A secondary analysis was conducted of four semi-structured interviews in which emergency nurses were asked to describe their perceptions and experiences related to compassion fatigue. Thematic analysis consisted of identifying common feelings, emotions, triggers, and experiences.

Results: All four nurse participants described symptoms of compassion fatigue related to burnout and secondary traumatic stress. The first identified theme was the reported signs of burnout, which included feelings of ineffectiveness and mental exhaustion while at work. Secondly, the nurses recounted symptoms and triggers of secondary traumatic stress, which involved strong emotions related to caring for patients and their families in the emergency department. These "traumatic experiences" were related to "seeing things happen" at work and described by the nurses as "intense," "shocking," "upsetting," and "my worst fear…it was a little too close to home." These emotions led to a subsequent need to "depersonalize your patients" in order to do the work. In addition, the nurses reported overwhelming physical exhaustion from the required tasks and night shifts, leaving them "completely drained…both mentally and physically." The symptoms of compassion fatigue extended well beyond the work setting. These included negative and inappropriate emotions at home, difficulty sleeping, and worrying about patients, worrying about forgotten tasks at work, and worrying about their own family's health.

Implications: Compassion fatigue can contribute to a decreased professional quality of life, diminished job performance, and turnover. Results indicate that emergency nurses experience a variety of burnout and secondary traumatic stress symptoms, and that the detrimental effects can extend to outside of work. More research to explore emergency nurses' experiences of compassion fatigue is needed. Additionally, emergency nurses require effective education and interventions aimed at decreasing the lasting negative effects of their work.

go to PG.

TOWARD A BETTER UNDERSTANDING OF COMPASSION FATIGUE AMONG REGISTERED NURSES

Compassion Fatigue among Oncology Nurses

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Purpose: To describe symptoms and experiences of oncology nurses with compassion fatigue.
Background: Recognizing the dark, depleting side of caregiving may provide insight on why nurses leave the field, thus contributing to the national nursing shortage. The psychological phenomenon of compassion fatigue provides insight to the nursing profession's emotional burden by identifying the effects of secondary traumatic stress (witnessing the trauma of patients and internalizing their pain), burnout (workplace environment conflict), and low compassion satisfaction (not feeling an intrinsic reward when connecting to patients). Currently, oncology nurses have the highest rates of turnover and the highest rates of compassion fatigue (CF) when compared to any other nursing specialty. There is also a significant lack of coping-strategy education and mental health resources for oncology nurses. CF causes negative psychological, physiological, and social manifestations and is correlated with a decrease in job performance, increased risk of error and lower patient satisfaction. In order to establish effective interventions, we must first understand the unique experiences of CF among oncology nurses.
Method: Secondary data analysis. During semi-structured, in-depth interviews, five in-patient oncology nurses were asked to describe their experiences with compassion fatigue and how their experiences impacted their health, work performance, and personal lives. Thematic analysis was utilized to identify shared psychological, somatic, emotional, social, and job performance consequences of compassion fatigue.
Results: Six themes were identified. *#1: You're just going to die*. Caring for patients with high mortality rates caused nurses to depersonalize their patients, assuming all would die. *# 2: All your emotions are spent*. Symptom clusters included feeling emotionally depleted, unable to give, collective unit sadness, and the inability to feel "normal". *# 3: I still cry about him*. Participants voiced feeling haunted by the death of certain patients, usually long-term, young patients with children. *#4: This could happen to me or mine.* Participants personalized cancer, and assumed that every ailment among self or others was cancer. *#5: I just need to go to bed*. Physiological symptoms included exhaustion, anger, frustration, and sobbing. *#6: You don't always get out of it what you put into it*. Sources of frustration and resentment stemmed from lack of time, high patient loads, ethical dilemmas, and conflicts with oncologists. Examples of healthy and harmful coping mechanisms and high compassion satisfaction were also identified. Lastly, many oncology nurses did not intend to enter the field, but rather "oncology picked me".
Implications: Oncology nurses may be at significant risk of compassion fatigue. It is essential that education programs be provided for nurses working in high-risk settings. Improved education may help oncology nurses to recognize risk factors, obtain support, and ultimately lessen the attrition stemming from unresolved compassion fatigue.

◀ ▶ go to PG.

TOWARD A BETTER UNDERSTANDING OF COMPASSION FATIGUE AMONG REGISTERED NURSES

Compassion Fatigue among DNP Students

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Purpose: To describe the risk for compassion fatigue (CF) among doctor of nursing practice (DNP) students seeking nurse practitioner certification, a previously unstudied and potentially at-risk population.

Background: Compassion fatigue is severe emotional and physical exhaustion resulting from unresolved burnout and/or secondary traumatic stress. Prevalent in registered nurses and physicians, CF negatively impacts both the caregiver and the care provided and is associated with job attrition. There is no direct measure for CF. Risk is assigned according to the intensity of each constituent part and the relationships between these parts.

Methods: A descriptive study was performed to describe: 1) the prevalence of compassion satisfaction; 2) the prevalence of burnout; 3) the prevalence of secondary traumatic stress; 4) the prevalence of risk profiles developed by Stamm (2010); and 5) the relationship between demographic characteristics and CF risk profiles in a sample of DNP students. 59 graduate nursing students seeking nurse practitioner certification and a DNP degree self-selected to participate in the study. The Professional Quality of Life Scale-5 (ProQOL 5) was utilized to measure the components of CF: compassion satisfaction, burnout, and secondary traumatic stress. Patient demographics included: gender, age, years in nursing, nursing specialty, and employment status.

Results: The DNP student population appears to be at-risk for CF, with 69% of the sample demonstrating moderate to high risk for CF. 63% of participants did not fit within Stamm's (2010) five profiles, so the profiles were expanded to include the entire sample. There were no statistically significant relationships between demographic variables and the expanded CF risk profiles, consistent with previous studies on the individual ProQOL components. A weak trend of increasing CF risk with years of nursing practice suggests that accumulated exposure to suffering increases CF risk. Furthermore, several participants who scored in the moderate risk profile self-identified as being away from patient care for six months to 10 years.

Implications: DNP students are at risk for CF, and it is highly likely that the students enter graduate education with unresolved CF. The applicability of the ProQOL 5 test is hindered by scoring inconsistencies and self-normalization bias; therefore this instrument should not be the sole method of identifying those at risk for CF. We recommend incorporation of CF education, self-awareness, and risk reduction techniques into the DNP curriculum.

◀ ▶ go to PG.

TOWARD A BETTER UNDERSTANDING OF COMPASSION FATIGUE AMONG REGISTERED NURSES

Reconceptualizing Compassion Fatigue among Registered Nurses

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Purpose: Describe a conceptual model of compassion fatigue and how it captures the phenomenon among registered nurses.

Background: The term compassion fatigue was first used to describe the emotional distress and loss of job satisfaction experienced by nurses. Subsequent terms have included secondary traumatic stress, and vicarious traumatization. The most widely used conceptual model of Professional Quality of Life (ProQOL) proposes that burnout, secondary traumatic stress, and compassion satisfaction directly impact compassion fatigue. Burnout stems from interactions within the work environment; secondary traumatic stress is the individual's negative emotional response from work-related trauma, and compassion satisfaction is the sense of a job well done. Although the model has been utilized to describe work-related emotional distress, the model may not capture the emotional distress experienced by registered nurses.

Method: Two qualitative studies were conducted. The first included semi-structured interviews with hospital-based registered nurses (N=16). Participants were asked to describe their meaning of compassion fatigue, and events or experiences that may have precipitated it. The second study included learning modules on compassion fatigue, burnout, secondary traumatic stress, and means to reduce risk: mindfulness, healthy boundaries, and self-care. Participants (N=59) journaled emotional triggers, physical and mental symptoms of distress, and efforts to incorporate mindfulness and boundary-setting into their nursing practice. Data from both studies were thematically analyzed.

Results: During all interviews and in most of the journals, participants described experiences of burnout. However, the burnout was rarely a significant source of distress but was just perceived as "a normal part of the job". Numerous examples of secondary traumatic stress were also provided, and themes such as hypervigilance (my kid will not ski after I've seen so many freaky things) and fearing for one's own health (I have a headache, and immediately think neuroblastoma) echoed the concepts within the ProQOL. Four themes emerged that were not well captured by the ProQOL. 1) Life is unfair: bad things happen to good people, and those who abuse their bodies seem to survive. 2) Endless suffering: witnessing distress, grief, loss of hope, feeling powerless to help. 3) Unable to let go: skipping breaks, calling in on days off, thinking or remembering 24/7. 4) Wanting support but pushing away: seeking comfort and support but feeling more distressed when the partner or friend asked too many questions or voiced discomfort. Many participants self-described as a caring nurse with compassion fatigue, and felt the term is stigmatizing.

Implications: Burnout does not appear to be a significant risk factor to compassion fatigue. The emotions associated with secondary traumatic stress (hypervigilance, fear, distress) were strong predictors of compassion fatigue. Additional factors such as the inability to forget or to disconnect, and the interpersonal dynamics of wanting social support while pushing others away are not captured in the ProQOL. The term compassion fatigue was perceived as stigmatizing and shameful, and an unfitting label for nurses who care. A term such as "provider saturation" may be a more fitting term for the nurse experiencing emotional devastation and secondary traumatic stress, who still cares deeply.

Funding: The University Arizona College of Nursing Laurence B. Emmons Research Award, and Foundation of the American Association of Nurse Practitioners.

◀ ▶ go to PG.

Abstracts of Podium Presentations

ACUTE PEDIATRICS

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THE IMPACT OF EARLY AMBULATION IN THE PEDIATRIC POSTOPERATIVE APPENDECTOMY PATIENT ON LENGTH OF STAY

Kelly Rothman, Tiffany Callahan, Madalyn Neu, Oliwier Dziadkowiec

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MATERNAL CARE PRACTICES FOR INFANTS WITH GASTROESOPHAGEAL REFLUX DISEASE (GERD)

Madalynn Neu

CHILDREN DRAW-AND-TELL ABOUT STRESS IN THE HOSPITAL

Susan M. Wechter

REDUCED CENTRAL LINE ASSOCIATED BLOODSTREAM INFECTIONS IN PEDIATRIC CARDIAC PATIENTS

Jennifer K. Peterson, Wendi Gornick

PARENTS' PERCEPTION OF CHILD SYMPTOM MANAGEMENT AS AN OUTCOME OF CARE FOR THE EMERGENCY DEPARTMENT: A QUALITATIVE DESCRIPTIVE STUDY

Donald W. Mitchell

◀ ▶ go to PG.

ACUTE PEDIATRICS

The Impact of Early Ambulation in the Pediatric Postoperative Appendectomy Patient on Length of Stay

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Purpose: The purpose of this study was to identify the effect of early ambulation on patient outcomes and length of stay in the pediatric postoperative appendectomy patient.

Rationale: Extended immobilization has been shown to result in decreased function of the gastrointestinal and respiratory systems and delayed return to normal function. Scant literature is available addressing early ambulation for pediatric patients after appendectomy. In practice, we noted that patients are not routinely ambulated early in the immediate postoperative period.

Methods: Data was gathered from a retrospective review of 300 pediatric appendectomy patient charts at a children's hospital. Information included: age, time of admission and discharge, time to ambulate, admitting unit, nausea and vomiting episodes, and pain medication given. Patients were divided into one of three groups based on the length of time before ambulation: less than 4 hours, 4 to 12 hours, and greater than 12 hours.

Results: Significantly fewer patients ambulated within 4 hours of surgery compared with both the group that ambulated between 4 and 12 hours postop and greater than12 hours postop ($p < .001$). Within each ambulatory group there were no significant differences in assigned acuity level. Patients who ambulated more than 12 hours after surgery had a significantly longer length of stay compared with patients who ambulated less than 4 hours postoperatively and patients who ambulated between 4 and 12 hours after surgery ($p<.001$, $p<.001$), although the patients in the latter two groups did not differ significantly. Only one patient who ambulated less than 4 hours postoperatively stayed in the hospital for 100 or more hours (2.5%), compared with 69 patients who took 12 hours or more to ambulate (44.5%). Patients in the more than 12 hour group most frequently experienced nausea and vomiting, with all three ambulatory groups significantly differing from each other ($p<.001$, $p<.001$, $p<.001$). Patients in the more than 12 hour group most often required pain medications of all types including acetaminophen, NSAIDs, and IV and PO narcotics. A multiple linear regression suggested that patients in the more than 12 hour group had a 34 hour longer length of stay, after adjusting for age, medication use, and nausea and vomiting ($p<.001$).

Implications for Practice: The results of this research study suggest that early ambulation has a significant impact on length of stay in the pediatric postoperative appendectomy patient. Further research using a prospective intervention to promote early ambulation, evaluate the patient and family experience with early ambulation, and uncover barriers and obstacles to nurses pursuing early ambulation in the postoperative patient is planned. This will include development and evaluation of the effectiveness of education sessions on changing nurse perspective and prioritization of ambulation as an early nursing driven intervention to improve patient outcomes.

◀ ▶ go to PG.

Maternal Care Practices for Infants with Gastroesophageal Reflux Disease (GERD)

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Purpose: The aim is to describe maternal care practices to alleviate distress in infants diagnosed with gastroesophageal reflux disease (GERD).

Background: Frequent regurgitation, heightened irritability, and feeding difficulties, are primary symptoms of GERD in infants less than 6 months of age. These symptoms can be extremely stressful and taxing to infants and parents. Mothers report feelings of worry, anxiety, frustration, and anger. The maternal-infant dyad displays poor feeding interactions. Treatment, such as anti-reflux medication, relieves acid reflux, but does not decrease symptoms more than placebo. Examining various maternal activities to alleviate infant symptoms will increase understanding of the daily living experience of these dyads during the early months.

Methods: Thirty-six infants were 6 to 10 weeks of age at enrollment in a randomized trial examining benefits of massage therapy for infants with GERD symptoms. Eligible infants were referred by care providers in 11 offices. They were born at term, diagnosed by their care provider with GERD, and had no other medical conditions. All infants scored above the recommended cut-off of 16 for GERD diagnosis on the Infant Gastroesophageal Reflux Questionnaire-Revised (Kleinman,et al., 2004). Mothers were over 18 years of age and spoke English. Mothers completed weekly diaries for 6 weeks that included administration of anti-reflux medication, type of feeding, formula used, and any interventions mothers used to relieve infant symptoms.

Results: The most common intervention was anti-reflux medication given by 91% of mothers. In addition to massage and nonmassage treatments provided in the study, 2 mothers consulted a chiropractor. Twenty mothers (57%) held the baby upright after feedings for 20 minutes and kept the baby's upper body elevated in an infant seat or in bed. Five mothers (14%) gave gripe water, and five administered probiotics (14%). Other remedies were increased holding time, prone positioning, drops to alleviate gas, nightly baths, slower and/or smaller feedings, more frequent burping, car rides, a commercially made swaddling blanket, an electrolye formula for dehydration, co-sleeping, mint tea, and praying. Nineteen (53%) mothers exclusively breast fed their infants. Of these, 8 (42%) changed their diet to avoid dairy or spicy foods. Six mothers (32%) stopped exclusive breast feeding to add special formula to the infant's diet. Mothers who fed their infants formula used hypoallergenic, soy, or commercially made thickened formulas. Formulas were changed at least once by 35% of these mothers. 16 mothers (44.5%) used 1-3 interventions; 16 mothers (44.5%) used 4-6 interventions and 4 mothers (11%) used 7 -11 interventions to alleviate symptoms of their infants.

Implications: Although GERD is considered a self-limiting condition, the efforts made by mothers in this study add to the literature suggesting that GERD is quite disruptive to family life and a pleasant mother-infant relationship during the first 6 months postpartum. The volume of interventions used demonstrate the how hard mothers strive to try to make their infants comfortable. Research to find an effective conservative treatment that would ease symptoms, has the potential to improve the lives of mothers and infants with GERD symptoms during the early months of life.

Funding: NINR R21NR011069.

◀ ▶ go to PG.

Children Draw-and-Tell about Stress in the Hospital

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Purpose: The purpose of this study was to explore the perceptions of stress for hospitalized school-age children, seven to nine years of age, through a child-centered draw- and-tell technique.

Background: Over 3 million children are hospitalized every year and over 40% of these children are 7 years of age and older (1). Hospitalization of children is reserved for increasingly complex care where acute hospital stays in specialized children's hospitals, and produces $10 billion of annual hospital costs for children (1,2). Since the 1960's, it has been well known that hospitalization can be a traumatic experience for children (2,3). This experience elicits feelings of fear, uncertainty, pain and discomfort that can affect a child's healing, behavior and health outcomes (4,5). Although the psychosocial impact of hospitalization is evident, it has not been fully explored from a child's perspective.

Methods: Thirty child participants were interviewed in a large Midwest children's hospital through a 'draw and tell' technique (6) to elicit their perceptions of stress in the context of hospitalization. Interpretive description framework was applied (7) to explore stress through a child's lens. An interpreted child drawing is recognized as a powerful communication tool that promotes rapport building, emotional expression and empowerment of the child (8). Constant vigilance of children's rights was conducted through human subjects reviews, pictorial child assent, and child empowerment during data collection. A clinical expert group was engaged to validate interpretive themes and propose transferable information to practice.

Results: The analysis of children's words, behaviors and drawings revealed five interpretive thematic conceptual messages from children communicated to professional caregivers in the hospital. The messages include: a) children express their stress through fear, worry, discomfort but primarily sadness; b) children ask us to talk to them and not just their parents, as they have something important to say; c) Children want to know what you are going to do to them and why; and what you expect them to do during their hospital stay; d) the ultimate relief of stress for children in the hospital is going home and children want to know what they need to do to go home; and e) children identify simple things health care providers can do to comfort them during hospitalization such as like hold their hand, give them a hug, talk nicely to them, give them a band-aid, and give them their favorite food and drink. These new insights from a child's view direct congruent comfort care for a child in the hospital.

Implications: The themes are the initial building blocks for a conceptualized framework of a child's view of stress and remedies to comfort for the hospitalized child. Application of 'evidence' to practice is prompting a child-designed creation of a home-going 'Star' chart for children, identifying the main things they need to do to go home on a calendar time-line. Future research to explore child satisfaction, improved health outcomes and expedited discharge is warranted.

◀ ▶ go to PG.

ACUTE PEDIATRICS

Reduced Central Line Associated Bloodstream Infections in Pediatric Cardiac Patients

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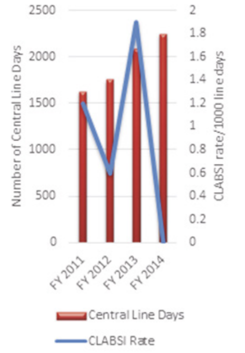
Purpose/Aims: To reduce the incidence of central line associated bloodstream infections (CLABSIs) in a 12 bed Cardiovascular Intensive Care Unit (CVICU).

Background: Our 238 bed children's hospital participated in a collaborative of 24 children's hospitals led by Children's Hospital Association (CHA) in 2005-2006 to reduce CLABSI through development of evidence-based catheter insertion and maintenance bundles. Adoption of these care bundles led to organization-wide and unit level reduction in CLABSI rates, from 1.2/1000 catheter days in FY 2011 to 0.6/1000 catheter days in FY 2012. However, 4 CLABSIs occurred in CVICU over an 8 week time period in Fall 2012. Root cause analysis of the individual events as well as the cluster of events revealed that prescribed care bundles were followed; however, there was an increased use of larger bore peripherally inserted central catheter (PICC) lines in infants undergoing cardiac surgery that were left in place for longer periods of time. Larger PICC lines allow lab draws and administration of blood products which resulted in more frequent line access and increased risk for CLABSI. Central line days increased from 1625 in FY 2011 to 2248 in FY 2014.

Table 1. Central Line Days and CLABSI Rate, Fiscal Year 2011-2014



Methods: Staff received refresher education on PICC line dressing changes due to some inconsistent practices identified in root cause analysis. In late October 2012 the "hub scrub" agent for accessing any line hub was changed from 70% isopropyl alcohol pads to Chlorascrub® wipes (3.15% chlorhexadine (CHG) + 70% isopropyl alcohol). To ensure that this practice change was enacted, all alcohol prep pads were removed from the CVICU and replaced with Chlorascrub wipes. Although no literature demonstrates that either agent is superior, an easily implemented, rapid change was needed in the CVICU due to the cluster of infections. Some case reports describe a decrease in CLABSI after changing "hub scrub" agents, secondary to increased attention to the "hub scrub" procedure. In October 2013, daily bathing with CHG-impregnated bath cloths was also implemented in the CVICU as supported by clinical practice guidelines.

Outcomes: Since October 2012, there have been no CLABSIs in the CVICU, despite increasing central line days (see Table 1). The CHG "hub scrub" procedure has been easily incorporated, after some initial concerns about longer drying time for CHG compared to alcohol. CHG bathing has produced some concerns about skin dryness, but no significant adverse effects have been seen.

Implications: Significant reduction of CLABSI is achievable, and the goal of zero seems less formidable following this evidence-based quality improvement project. Initial implementation of evidence-based practice bundles was effective in reducing CLABSI, but changes in practice required willingness to investigate and adopt new evidence-based strategies to meet changing needs. Root cause analysis is an effective method of identifying need for practice revision.

◀ ▶ go to PG.

Parents' Perception of Child Symptom Management as an Outcome of Care for the Emergency Department: A Qualitative Descriptive Study

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Purpose: The study had two specific aims: the first was to describe parental perceptions of their young children's illness symptoms when they bring their child to the ED; and the second was to describe what's important to parents about their young children's illness symptom management after visiting the Emergency Department (ED).
Background: Patient-centered outcomes are an increasingly important area of study as the United States transitions to a care model in which providers are evaluated and compensated based on the outcomes of care they provide rather than the amount. Symptom management is consistently identified as an important health care outcome, but has primarily been studied in the context of chronic illness such as cancer. There is a significant knowledge gap regarding the meaning of symptom management for acute illness symptoms and acute exacerbations of chronic illness for young children (up to eight years of age). This also has not been studied in the ED context. Parents are best positioned to provide this understanding as they know their young children's expressions better than providers, and because parents are the decision-makers and caregivers for their children.
Methods: This was a qualitative descriptive study using maximum variation sampling. Thirteen parents who brought their young child (up to eight years of age) to the ED for treatment of illness-related symptoms were subsequently interviewed within three weeks of their visit. Interview transcripts were analyzed using an open coding approach. These codes were iteratively reviewed by the primary investigator, and discussed with a team of colleagues to validate the analysis. Participant validation was also obtained.
Results: Three main interactive categories were identified: first, the cyclic process of *symptom management*; second, *provider interactions*; and third, the contextual background of *life logistics* and *supports*. The *symptom management* cycle starts with parents noticing *something is wrong* with their child, becoming *alarmed*, learning about and *knowing the illness*, to *manage the illness*, and get their child *back to normal*. *Provider interactions*, which significantly affect this cycle, are *communications* involving discussions with providers, parental expectations, communication around care, and provider behaviors; and the *interventions* involved. *Social supports* and *life logistics* form the underlying context for families in which the symptom management cycle and provider interactions occur, and can have an effect on both.
Implications: The findings from this study address a gap in the considerable literature related to symptom management in nursing and allied health. The meaning of acute symptom management, and the management of acute exacerbations of chronic symptoms, has not been previously described for young children in the Emergency Department context, particularly from the patient-centered outcomes perspective. Symptom management as a phenomenon is broadly recognized as an important health care outcome to consider. Expanding understanding in this area adds to researchers' and clinicians' ability to study this outcome as they strive to improve care.

◀ ▶ go to PG.

CLINICAL RESEARCH IN ACUTE CARE

Moderator:
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CLINICAL EVALUATION OF SERUM 25 (OH) D LEVELS IN ACUTE REHABILITATION PATIENTS

Diane Drake, Debbie Motley, Hongthao Pham

TESTING THE QUALITY HEALTH OUTCOME MODEL FOR INFECTION PREVENTION IN HOSPITALS

Heather M. Gilmartin, Karen H. Sousa

CONCEPT ANALYSIS: WRONG-SITE SURGERY

Donna S. Watson, Carrie Holiday, Cynthia F. Corbett

COMPARING SINGLE & MULTILEVEL RESULTS FOR PATIENTS NESTED IN HOSPITAL UNITS

Lynne C. Andrus

◀ ▶ go to PG.

CLINICAL RESEARCH IN ACUTE CARE

Clinical Evaluation of Serum 25 (OH) D Levels in Acute Rehabilitation Patients

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Purposes: The purposes of this study were to investigate the integration of a vitamin D (VitD) monitoring program for patients in an acute rehabilitation unit (ARU) and to summarize subsequent investigation of VitD status risk factors for ARU patients.

Background: Low serum 25-hydroxyvitamin D [25(OH)D] levels (the most widely recognized marker of total body VitD status) are common in ARU patients. Low levels, 25(OH)D < 20 ng/mL have been reported to affect as many as 49% to 89% of ARU patients. Measurement of plasma 25(OH)D concentrations is not routinely ordered for ARU patients. Inadequate VitD concentrations are potential risk factors affecting ARU patient outcomes. VitD status may be a modifiable risk factor for musculoskeletal status and various forms of musculoskeletal pain in ARU patients.

Approach: Following a family member's concern about low VitD levels in an ARU patient, the hospital dietitian consulted with the hospital nurse research scientist to investigate VitD levels in ARU patients. A multi-disciplinary study team was formed including dietitian, nurses, physicians, pharmacists, and occupational and physical therapists. Monthly study team meetings were conducted to design the study questions, operationalize study variables and create an SPSS database for statistical analysis. Physicians developed standing orders for measurement of serum [25(OH)D] with a treatment protocol as indicated. The hospital laboratory assumed the cost of measurement of the serum [25(OH)D] during the one year study period. Following hospital Institutional Review Board approval, study data was collected by a hospital staff nurse and dietitian retrieving laboratory and administrative information from the electronic medical records of individuals admitted to a single, 21-bed ARU in Mission Viejo, California over one year (July 2011 to June 2012). During the study period there were 427 adult admissions (age ≥18 years) to the ARU.

Outcomes: In a preliminary evaluation of 355 patient cases, VitD levels, 220 (69%) were deficient (<31nmol/L). Of the 42 patients receiving nutrition support prior to admission 64% (N=27) were deficient (<31nmol/L). Eighty six percent of the patients were not supplemented prior to ARU admit. Those who were supplemented had a significantly higher VitD level than those not supplemented (26.3 +/- 9.2SD vs. 44.3 +/- 17 SD). Lack of vitamin D supplementation was significantly associated with increased LOS PTA (p value .032).

In a subsequent cross-sectional study, findings demonstrated that serum 25(OH)D level on admission to the ARU was inversely associated with persistent non-specific musculoskeletal pain. Among the 414 patient cases reviewed, mean (SD) 25(OH)D level was 29 (12) ng/mL and 30% were found to have non-specific musculoskeletal pain.

Implications: A research initiative to evaluate methods to advance best practices was conducted with a collaborative interdisciplinary team. Because serum 25(OH)D level on admission to ARU was inversely associated with non-specific musculoskeletal pain, standing orders to measure VitD and order supplementation was instituted. Initial study results support the need for randomized, controlled trials to test the role of vitamin D supplementation to improve non-specific musculoskeletal pain in ARU patients.

◀ ▶ go to PG.

CLINICAL RESEARCH IN ACUTE CARE

Testing the Quality Health Outcome Model for Infection Prevention in Hospitals

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Purpose: This study used structural equation modeling (SEM) methodologies to test a middle-range theoretical model, based on the Quality Health Outcome Model (QHOM), to identify and explain the relationships between the concepts of adherence to healthcare-associated infection (HAI) prevention interventions, organizational context, and HAI outcomes.

Definition of Theory: The QHOM is a conceptual model of nursing that contains four major constructs: system or context, intervention, client, and outcomes and is an extension of the time honored structure-process-outcome framework described by Donabedian for quality assessment. The QHOM is a unique systems model for it challenges the traditional view that interventions directly produce expected outcomes, as adjusted for client characteristics. In this secondary analysis study, measures to represent the QHOM concepts were selected from the Prevention of Nosocomial Infection and Cost-effectiveness – Refined dataset. Instruments that measured adherence to central line-associated bloodstream infection (CLABSI) prevention interventions, and the organizational context variables of organizational climate and the work environment were selected, along with CLABSI outcomes from participating intensive care units.

Internal Consistency: The QHOM for Infection Prevention in Hospitals was tested and confirmed using data from 614 hospitals. One-half of the dataset was used for exploration of the concepts, the second half for confirmation of the model. The latent variable for adherence to CLABSI interventions was confirmed as a single factor model (x^2 (9) = 50.64, p <.0000; CFI = .99; RMSEA = .12), while the organizational context variable was confirmed as a second order model represented by organizational climate and work environment items (x^2 (980) = 1,680.75 p <.0000; CFI = .94; RMSEA = .05). Ultimately, SEM indicated support for the proposed middle-range theoretical model, for the model fit the data well (x^2 (1,315) = 1,986.30, p <.0000; CFI = .97; RMSEA = .04). The relationship between adherence to CLABSI interventions and organizational context was confirmed (β = .22, p <.01). The relationship between organizational context and CLABSI outcomes was not statistically significant (β = -.06, p = .37).

Concept to Practice: The prevention of HAIs is a complex topic of research. Organizational context is believed to be a key factor in the success or failure of HAI initiatives. This study confirmed a middle-range theoretical model that identifies and explains the relationships between the concepts of adherence to CLABSI interventions, organizational context, and CLABSI outcomes. Though we have not completely answered the question of why some HAI programs are successful and others are not, we are able to offer that the context of an organization has a direct effect on adherence to CLABSI interventions.

Conclusion: This study is the first to empirically test the relationships between interventions, organizational context, and outcomes, using infection prevention concepts. Our findings support the current recommendation that organizational context be measured in HAI prevention studies to determine the role of context in the success or failure of patient safety programs. Ongoing use of this theory will inform the planning and interpretation of HAI research projects and will aid in the explanation of variations in HAI project outcomes.

◀ ▶ go to PG.

Concept Analysis: Wrong-Site Surgery

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Purposes/Aims: The purpose of this presentation is to examine the concept of wrong site surgery (WSS) in perioperative practice using the principle-based approach to concept analysis by Penrod and Hupcey.

Definition of the Concept: The operational definition following completion of the principle-based analysis: WSS is a preventable medical/nursing error that involves surgery on the wrong patient, wrong site, wrong level/part, wrong procedure, or wrong side during surgery or invasive procedure.

Concept Analysis Approach: Principle-based concept analysis was utilized to examine WSS in the context of epistemological, pragmatic, linguistic, and logical principles. The conceptual analysis from the epistemological principle is that WSS is an accepted universally defined concept. From the pragmatic principle, the role of the perioperative nurse in WSS is recognized as a critical component to ensuring patient safety and minimizing risk for WSS. However, there is limited research in the nursing domain on the concept of WSS that include, but is not limited to nursing interventions, perceptions, attitudes, and contributions to prevention of WSS. The linguistic analysis revealed WSS has consistent meaning and utilization in research. However, there are specific labels that occur within the concept of WSS that should be defined by a national authority such as the Association of periOperative Registered Nurses (AORN) or The Joint Commission to enhance clarity of the concept (i.e., wrong patient, wrong site, wrong level, wrong part, wrong procedure and wrong side). Despite this analysis, the logistic analysis supports that WSS is a broadly defined concept that does not lose meaning when applied to research with different concepts. The concept would benefit from application of theoretical frameworks to enhance conceptual clarity.

Logical Linking the Concept to Nursing Practice or Research Problem: Research in the area of WSS is primarily within the discipline of medicine. It is essential that that research must be conducted to represent the significant role of the perioperative nurse in prevention of WSS. Recently, members of the Association of periOperative Registered Nurses (AORN) identified the prevention of wrong site/procedure/patient surgery as the top patient safety priority for perioperative nursing practice. The principle-based concept analysis identified characteristics associated with the concept of WSS that include: (a) the dynamic state of WSS, (b) the challenges for determining an accurate incidence of WSS in the United States, (c) lack of a universally acceptable set of definitions for WSS research and (d) minimal research reflecting perioperative practice contributions to patient safety involving risk reduction strategies to minimize patient risk.

Conclusion: In this concept analysis, literature from medicine, nursing and psychology was reviewed and an operational definition of the concept of WSS was developed.

Additional nursing research directed at factors associated with WSS that include patient, nurse, system and environmental factors are an essential step in promoting patient safety. The prevention of WSS is a multidisciplinary responsibility, in which the perioperative nurse serves an integral role. Nursing research on best practices to prevent WSS is essential to eradicate the egregious preventable patient error.

◀ ▶ go to PG.

Comparing Single & Multilevel Results for Patients Nested in Hospital Units

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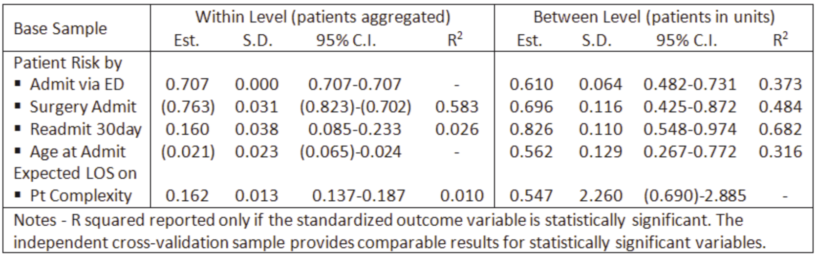
Purpose: For meaningful statistical and clinical results, this presentation demonstrates the need to account for multilevel or nested effects of patient risk and hospital unit factors on the mediator (patient complexity) and the outcome (actual length of stay from expected).
Rationale: Reports from the Institute of Medicine cite the emerging body of literature that links patient quality and safety directly to nursing care. However, systematic literature reviews show that methods used and outcomes found in these studies are often incomplete or misleading. Studies using new and sophisticated analytic methods help clarify and evaluate the complex effects of nursing on patients nested in hospital units.
Methods: Following IRB approvals, this study examined two 10% random samples by unit after dividing 60,156 inpatients from 38 units in 8 hospitals into two independent groups to form base (*n*=5,987) and cross-validation (*n*=5,896) samples. These samples included calendar year 2012 inpatients admitted to medical, surgical, critical care, pediatric, and perinatal units. The study utilized mediated multilevel latent path analyses and Bayesian estimation to examine actual length of stay (LOS) from expected as affected by patient risk factors (table below) and unit characteristics of unit staff quality (RN education, certification, experience), unit staff quantity (RN direct HPPD, RN to patient ratio, skill mix), unit culture (NDNQI RN Satisfaction survey), perceived workload (unit complexity and NDNQI RN satisfaction surveys), and unit churn (patient admits, discharges, transfers).
Results: The table below illustrates a small but key subset of results that compares the outcomes from patients aggregated into a single (within) level and also nested into their unit (between) level. Without accounting for nested effects, the researcher might falsely determine that patient complexity as a mediator had a slight but statistically significant effect on length of stay (LOS) and that only surgical admits demonstrated both a statistical and clinical significant effect on patient risk. By accounting for multilevel effects, the researcher may conclude that the patient risk factors of admits via ED, surgery admits, readmits within 30 days, and age at admit significantly influence patient risk.



Base Sample	Within Level (patients aggregated)				Between Level (patients in units)			
	Est.	S.D.	95% C.I.	R^2	Est.	S.D.	95% C.I.	R^2
Patient Risk by								
▪ Admit via ED	0.707	0.000	0.707-0.707	-	0.610	0.064	0.482-0.731	0.373
▪ Surgery Admit	(0.763)	0.031	(0.823)-(0.702)	0.583	0.696	0.116	0.425-0.872	0.484
▪ Readmit 30day	0.160	0.038	0.085-0.233	0.026	0.826	0.110	0.548-0.974	0.682
▪ Age at Admit	(0.021)	0.023	(0.065)-0.024	-	0.562	0.129	0.267-0.772	0.316
Expected LOS on								
▪ Pt Complexity	0.162	0.013	0.137-0.187	0.010	0.547	2.260	(0.690)-2.885	-
Notes - R squared reported only if the standardized outcome variable is statistically significant. The independent cross-validation sample provides comparable results for statistically significant variables.								

Implications: Using sophisticated analytical methods, scientists in education, social studies, and medicine account for nested effects to help avoid mixed and inaccurate results. To meaningfully evaluate outcomes, nursing scientists must further explore multilevel methods to account not only for patients nested in units, clinics, and hospitals, but also for students in classes, individuals in families, and clients by healthcare providers.

◀ ▶ go to PG.

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COMMUNITY HEALTH NURSING

Moderator:
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PROVIDER-TO-POPULATION RATIOS, POPULATION HEALTH AND COUNTY-LEVEL RURALITY

Bronwyn Fields, Jeri Bigbee, Janice F. Bell

MAXIMIZING STUDENT SUCCESS BY STRENGTHENING PROGRAM LEADERSHIP

Samantha Blackburn

COMMUNITY HEALTH NURSING ADVOCACY: A CONCEPT ANALYSIS

Mabel Ezeonwu

GIVING VOICE TO ENVIRONMENTAL HEALTH THROUGH COMMUNITY ARTS

Adelita G. Cantu, Meaghan Mugleston

go to PG.

COMMUNITY HEALTH NURSING

Provider-to-Population Ratios, Population Health and County-Level Rurality

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Aim: To examine associations of population ratios for nurses, physicians and dentists on measures of population health, and effect modification of these associations by rurality.

Background: Maintaining an adequate health care workforce is one of the most persistent and serious challenges facing rural health care today. Health disparities among rural population are also persistent, with recent county-level analyses demonstrating an inverse relationship between life expectancy and rurality. There has been limited research regarding the relationship between population health and provider-to-population ratios, and few studies address rurality. As the largest group of health care providers, nurses represent a vital force in promoting the health of rural populations; however little previous research has studied this assumption.

Methods: This cross-sectional analysis used existing national data at the county level. Data on 1,929,414 RNs were obtained from the National Council of State Boards of Registered Nursing's Nursys® database, representing 2017 counties in 33 states. County-level RN-to-population ratios were computed using 2010 U.S. Census data. Primary care physician and dentist-to-population ratios were drawn from the 2012 County Health Rankings database, as were four county-level health measures (premature death rate, self-rated poor or fair health, teen birth rate and mammography screening rate). Four categories of rurality were created based on Rural Urban Continuum Codes. Logistic regression was used to model the county-level health measures using provider-to-population ratio quartiles in each of the rurality categories, adjusted for socio-demographic covariates.

Results: Overall, provider-to-population ratios declined as rurality increased. In fully adjusted models, the highest quartile of each provider-to-population ratio was compared to the lowest quartile. The highest RN-to-population ratio was associated with significantly better health measures in all rurality categories, but the magnitude of these associations generally increased as rurality increased. In the smallest rural counties, the highest RN-to-population quartile was associated with 1508 fewer years of potential life lost (YPLL), 3% lower rates of poor or fair health, 10/1,000 fewer teen births and 5% more mammography screening. For primary care physicians, significant associations were found in medium and small rural counties where the highest ratio was associated with 1411 fewer YPLL, 3% lower rates of poor or fair health, 7/1,000 fewer teen births and 4% more mammography screening. The highest quartile of dentist-to-population ratio was associated with 1104 fewer YPLL, 3% lower rates of poor or fair health, 4/1,000 fewer teen birth and 4% more mammography screening in metropolitan counties.

Implications: The results of this national multifactorial study suggest the number of nurses and other health care professionals per capita matters in promoting healthy communities, particularly in rural areas. These findings strengthen the argument for increasing the ratio of providers-to-population in currently underserved rural areas. Further investigation of the unique impacts of various provider-to-population ratios on population health is warranted, including longitudinal studies tracking changes in ratios and population health measures over time.

Funding: Provided by the National Council of State Boards of Nursing Center for Regulatory Excellence.

◀ ▶ go to PG.

COMMUNITY HEALTH NURSING

Maximizing Student Success by Strengthening Program Leadership

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Purpose: This interview study addresses the substantial literature gap related to the work of school health administrators (SHAs) in the United States. The researcher explored key informants' perspectives on the skills needed to manage school health programs (e.g., school nursing, mental health), and on related organizational and funding contexts in California.

Background: The Centers for Disease Control and Prevention recommends that school districts employ SHAs to conduct health program planning, coordination, and evaluation, and to manage school-community health partnerships. Though most SHAs come from a nursing background, there are no training programs specific to SHAs offered by schools of nursing or school nurse credential programs. There are limited funds for school health programs, and not all districts can afford to employ a SHA. Regardless, schools have become a de facto health provider for students with increasing levels of acuity and chronic disease. SHAs provide critical leadership for ensuring the health and safety of 50 million schoolchildren in the U.S.

Methods: Key informants were asked to share their perspectives on what leadership skills were needed for SHAs to be successful, and what strategies SHAs should employ to secure more support and funding for their programs. Utilizing a grounded theory approach, eight semi-structured interviews were conducted with participants recruited using purposive and snowball sampling. Participants included state and county school health and education administrators, a school administration professor, a school reform expert, a school health grantmaker, and a school health lobbyist. The interviews were recorded for subsequent analysis. Participant responses were de-identified to protect their anonymity.

Results: Interviewees called for SHAs to be knowledgeable about both community health and educational systems, and to align school health program goals with those of district administrators. Participants felt that SHAs could best secure support by employing "soft" skills, such as collaboration and teamwork. Further, SHAs must demonstrate political savvy, acting as "empowered, but not confrontational" advocates for student health, and marketing their health programs to school principals. Key informants also suggested that the new Local Control Funding Formula for California schools – which provides more funding for low-income, high-need students – offers an opportunity for SHAs to advocate for increased funding for school health programs that explicitly focus on improving student attendance and behavior in school.

Implications: SHAs are uniquely positioned to ensure school health programs address the needs of both students and schools. Inadequate funding for school health programs in California may require SHAs to finesse internal relationships to secure funding. Their work not only demands technical competency in health, education, staff supervision, and fiscal management, but also the ability to speak to multiple stakeholders' diverse interests. Bridging health and education goals might be best expressed by aligning school health programs with efforts to improve attendance. Research on community health nursing and nurse leadership should include investigation into the important roles played by SHAs in ensuring the health and success of schoolchildren.

◀ ▶ go to PG.

Community Health Nursing Advocacy: A Concept Analysis

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Purpose: To present an in-depth analysis of the concept of community health nursing (CHN) advocacy.
Definition of the Concept: After careful review of the literature and identification of the defining attributes, CHN advocacy is defined as an intentional act of promoting and protecting the health of individuals, families and community members through education, facilitating access to health and social services, and actively engaging key decision makers to support and enact policies to improve community health outcomes.
Concept Analysis Approach: The eight-step concept analysis methodology by Walker and Avant (2010) was used. The steps are as follows: 1) Select a concept 2) Determine the purpose of the analysis 3) Identify all uses of the concept that you can discover 4) Determine the defining attributes 5) Identify a model case 6) Identify additional cases 7) Identify antecedents and consequences 8) Define empirical referents. A broad inquiry into the literature was undertaken using the search terms, "advocacy and community health nursing." Databases searched include PubMed, CINAHL, Scopus, and Psych INFO. Inclusion criteria were: 1) Articles were full texts 2) Articles were written in English 3) Articles were published between 1994 and 2014. 43 articles were used after crossing out duplicates. In addition, older classic articles and books, websites and gray literature were used to gather information on theories and broader uses of the concept.
Linking the Concept to Nursing Practice: CHN advocacy finds its theoretical base in nursing ethics, including the American Nurses Association and the International Council of Nurses' Code of Ethics, which emphasize promotion and protection of health and safety. The health care landscape in the U.S. is changing due to factors such as the changing demographic trends, implementation of the Affordable Care Act, and early discharges from hospitals to community settings. Community health nurses are encountering more complex health and social issues from high-risk vulnerable populations. Advocacy for upstream community-based interventions is therefore central to community health nursing roles. This analysis outlines the critical attributes of CHN advocacy and provides nurses with a clearer understanding of what the concept is or is not, and what actions lead to or do not lead to advocacy. The analysis is grounded in theory and provides nurse clinicians, educators and researchers with a framework to guide their advocacy work in communities. It also provides a template that could be used to challenge or critique advocacy within community health nursing practice and research.
Conclusion: This analysis contributes to the advancement of knowledge of the concept of CHN advocacy by articulating an operational definition that is derived from theoretical foundations. Furthermore, the analysis provides some conceptual clarity for nurses to improve their research and practice.

Reference:
Walker, L. O., & Avant, K. C. (2010). *Strategies for Theory Construction in Nursing,* 5th ed. Prentice Hall, Boston.

◀ ▶ go to PG.

COMMUNITY HEALTH NURSING

Giving Voice to Environmental Health through Community Arts

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Purposes: The explicit purpose of this innovative academic-community project was to collaborate to raise the consciousness of a low income Hispanic community about needed environmental health and climate change action as well as environmental stewardship through a community-based arts project developed by at risk minority youth who attend an environmental health workshop.

Rationale: An increasing number of scholars argue that current approaches to reducing climate change, such as encouraging people to recycle are good but not sufficient in creating a new culture of environmental stewardship and sustainability. However, given the complexity of climate change, moving a community from a culture of consumption into a culture of sustainability presents challenges. What is known is that youth have always been among the main agents for significant local and global cultural changes, and it is unlikely that the needed change can be created without them.

Methods: We engaged Hispanic at-risk minority youth to attend a week-long environmental health and stewardship workshop called the EcoFilm Camp. Information about climate change was given by interprofessional health science students in collaboration with a community-based organization, San Anto Cultural Arts whose mission is to foster human and community development through community-based arts**.** During the week-long workshop, San Anto staff taught and worked with the youth to develop their videography and writing skills in order to create community-based art that included public service announcements and newspaper articles to reflect their perceptions of environmental health and stewardship, including climate change.

Outcomes: Three public service announcements were created and shown to the community during a red carpet event at a local community theatre. The PSAs have since been posted on social media sites. In addition, pre and post test results demonstrate that there was a significant increase in knowledge about climate change among the youth.

Conclusions: The goal is to continue to increase capacity to engage with others to address community-specific negative impacts of climate change. Such capacity building initiatives are a first step toward decreasing community environmental health vulnerability.

Funding: Nursing Advisory Council.

◀ ▶ go to PG.

go to PG.

DIVERSITY IN HEALTH CARE

Moderator:
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CONCEPTS AND MODELS OF RESILIENT HEALTH IN A SOUTHWESTERN AMERICAN INDIAN TRIBE

Michelle Kahn-John, Paula Meek, Janette Beals

TRIBAL CRITICAL RACE THEORY IN NURSING

Jewel Bishop, Heather Gough

THE FEASIBIITY OF EDUCATING KOREAN AMERICAN WOMEN VIA WEB: BREAST CANCER SCREENING

Eunice E. Lee, Jongwon Lee, Natsanet Keleta

MORE THAN BEAUTY CARE: HEALTH-TALKS IN KOREAN AND VIETNAMESE ETHNIC BEAUTY SALONS IN NEW MEXICO

Jongwon Lee, Mauricio Carvallo, Eunice Lee, Rebekah Salt, Stephanie Lee

◀ ▶ go to PG.

Concepts and Models of Resilient Health in a Southwestern American Indian Tribe

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Purposes/Aims: American Indians (AI) have significant physical and mental health disparity challenges. The purpose of this study was to highlight concepts in American Indian (AI) culture to determine their relationships with two health assessments among members of a Southwest AI Tribe. The specific aims were: (1) to determine agreement and content validity between concepts and items selected from a pre-established database that reflected six concepts, (2) to discover the factor structure of the resulting items, (3) to determine if a relationship existed between the factors and outcomes of psychological distress, (4) to determine if a relationship existed between the factors and outcomes of health related quality of life.

Background: There are significant health disparities experienced by AIs. Health interventions available to AI populations have demonstrated limitations in addressing the AI health disparities as evidenced by ongoing reports of high rates of physical, mental, social, and environmental challenges including: diabetes, obesity, mental illness, trauma, suicide, substance abuse, and obesity.

Methods: This secondary analysis of data from the American Indian Service Utilization, Psychiatric Epidemiology, Risk and Protective Factors Project (AI-SUPERPFP) study (Beals, Manson, Mitchell, Spicer, and the AI-SUPERPFP Team, 2003) explored the factor structure of six cultural concepts (spirituality, respect, reciprocity, relationship, thinking, discipline) in a Southwestern AI Tribe. Structural equation modeling using exploratory factor analysis, confirmatory factor analysis, and path analysis was conducted on the original sample of 1446 Southwestern AI subjects. The health related quality of life measure included both the physical component summary (PCS) and the mental component summary (MCS). The psychological distress measure was the Kessler Distress (K6).

Results: A 3-factor structure provided the best model fit. The latent variables were labeled ***Harmony, Spirituality***, and ***Respect***. Significant relationships were discovered between *Respect* and MCS (β=0.382), *Respec*t and PCS (β=0.310), *Respect* and K6 (β=-0.392), *Spirituality* and PCS (β=-0.09). No significant relationships were found between *Harmony* and MCS, PCS, or K6. The study findings contributed to the development of a culturally congruent model of AI resilience while establishing the foundation for the development of culturally informed wellness and resilience measures.

Implications: Future research on AI cultural concepts is warranted to support the development of culturally relevant measures, wellness models, and health promotion interventions for AI populations.

go to PG.

Tribal Critical Race Theory in Nursing

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Purposes/Aims: American Indian people are often recognized solely as a racial group while their legal/ political status of is ignored. Tribal Critical Race Theory[1] (TribalCrit) recognizes the unique status of American Indians as both racialized and legal /political groups. TribalCrit addresses colonization and the ways that if affects the experiences of American Indian peoples. The purpose of this paper is to apply TribalCrit to nursing in the context of American Indian communities.

Description of Theory: The foundational tenant of TribalCrit is that colonization is endemic in society. Colonization is defined as European American thought, knowledge, and power structures taking dominance in all ways of life. The manifestation of colonization is the exclusion and marginalization of Indigenous ways of being, knowing, and living. Examples of colonization include the loss of languages and the dismissal of Indigenous knowledge systems. The focus on an exclusively Euro-centric world view has a debilitating effect upon the health and well-being of American Indian communities. Tribal sovereignty, autonomy, self-determination, and self-identification exemplify the legal and political status of American Indian people. TribalCrit embraces the epistemologies and ontologies of Indigenous people in the management of their health and health care.

Internal Consistency: The link between the ill effects of colonization and American Indian communities is specified. The foundational assumption is that colonization is endemic to society. Colonization is described as the supremacy of European American thought, knowledge, and power structures. Nursing is a discipline with strong roots in European American knowledge structures. The philosophy of nursing science did not traditionally include Indigenous knowledge systems such as tribal philosophies, beliefs, customs, or traditions. TribalCrit emphasizes the value of the ontologies and epistemologies contributing to the health and well-being of Indigenous people.

Linking the Theory to Nursing Practice/Research Problems: TribalCrit has been used in educational policy and social work education and practice. The application to the domain of nursing includes the acknowledgement of the ill effects of colonization upon American Indian communities. An example of colonization in society is the fixed image of American Indians from the past where tribes were not allowed to manage their own resources and institutions. Nursing practice with an appreciation of tribal sovereignty highlights the strengths of a community and focuses upon tribal philosophies, beliefs, customs, and traditions. Community needs assessments for the conduct of relevant research in American Indian communities. Community Based Participatory Research approaches are consistent with a TribalCrit framework. TribalCrit challenges nursing to consider a world view that is consistent with the care and respect for all people while working toward social change.

Conclusion: Nursing practice and research traditionally discuss culture and race. TribalCrit extends the conversation to the negative effects of colonization upon American Indian communities. This theory calls for an approach apart from Euro-centric models and honors the experiences and ways of knowing in American Indian nations.

Reference:

[1] Brayboy, M. J. B. (2006). Toward a Tribal Critical Race Theory in Education. *The Urban Review, 37*, 425-446.

◀ ▶ go to PG.

The Feasibiity of Educating Korean American Women via Web: Breast Cancer Screening

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Purpose/Aims: This pilot study was designed to test the feasibility and efficacy of delivering an established couple-based, theory-based culture-specific intervention designed to improve mammography uptake among Korean American (KA) women, Korean Immigrants & Mammography—Culture-Specific Health Intervention (KIM-CHI), via the WEB for its efficacy (mammography attainment and intention to get one between baseline and two-months follow-up), feasibility, and acceptability.

Rationale/Conceptual Basis/Background: Regular mammogram screening has proven to be effective in reducing breast cancer deaths. However, KA women's mammography screening rates are lower than other ethnic groups. Although the Web has proven to be an effective delivery medium of health related information and has economic and logistic advantages over printed materials, no studies have tested Web-based educational interventions to improve KA women's breast cancer screening uptakes.

Methods: A pre- and post-test randomized two group experimental design was used. Recruiting study participants, delivering the intervention, and collecting data were conducted via Web.

Results: Initially, a total of 198 women responded to a banner announcement posted on 3 Korean language Websites, but 16 women withdrew. The remaining 182 women and their husbands were randomized into either intervention (n = 88) or delayed control (n = 94) groups. A total of 136 women (75% completion rate) completed the baseline study. At 2 months post-baseline, a total of 75 women (75/136 = 55%, attrition rate of 45%) completed the survey. Women were on average 48 years old, with nearly 16 years of education. Although not statistically significant, a higher percentage of women in the intervention group had mammograms at follow-up than women in the control group (19.4% vs. 15.9%). At 2 months' follow-up, intention to have a mammogram within the subsequent 12 months increased significantly in the intervention group compared to the control group (p = .005). Women who had fewer barriers, perceived greater benefits, and higher self-efficacy were more likely to be screened at follow-up.

Implications: These findings suggest that Web-based delivery of the KIM-CHI program is feasible and could improve KA women's breast cancer screening intention and behavior. Combining off-line contact such as face-to-face or telephone contact for recruitment or data collection with online intervention material could successfully decrease attrition rate.

Funding: This work was supported by the UCLA School of Nursing Intramural Grant.

◀ ▶ go to PG.

DIVERSITY IN HEALTH CARE

More than Beauty Care:
Health-Talks in Korean and Vietnamese Ethnic Beauty Salons in New Mexico

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Background and Significance: Despite the fact that cervical cancer is a major cause of death among Vietnamese American women (VAW) and Korean American women (KAW), both groups consistently report much lower rates of cervical cancer screening than other major Asian American subgroups and non-Hispanic Whites. This disparity underscores the need for additional research on innovative interventions designed to help maximize cervical cancer screening in these populations. Ethnic beauty salons may constitute an optimal place to implement such interventions to VAW and KAW. To date, no studies have assessed whether ethnic beauty salons could be utilized as settings to deliver cervical cancer screening education for these groups.

Purpose: As an initial step to address this gap, we conducted a descriptive, qualitative study exploring the type of topics female cosmetologists and female customers discuss during regular beauty salon appointments, and whether health-related topics are included in these conversations.

Methods: A total of 62 Vietnamese and Korean cosmetologists (n = 18) and customers (n = 44) were conveniently recruited from ethnic beauty salons run by their same ethnic cosmetologists in Albuquerque, NM. Semistructured interviews with open-ended questions were applied.

Results: The study revealed that cosmetologists and customers talk to each other about daily life events (e.g., family issues, jobs, child education, beauty, cosmetics). Nearly 80% of the participants reported having talked to each other about health-related issues, including cancer. Four major health-related themes emerged from the interviews: (a) illnesses and diseases, (b) health management and maintenance, (c) healthcare systems and services, and (d) reproductive health.

Implication: The study findings suggest that health related information is commonly discussed in ethnic beauty salons, and ethnic beauty salons could be utilized as potential settings in which to implement education interventions designed to increase cervical cancer screening among VAW and KAW.

Funding: Support for this research was provided by the Oncology Nursing Society Foundation and University of New Mexico Clinical and Translational Science Center (DHHS/NIH/NCRR Grant #: UL1RR031977).

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END OF LIFE AND PALLIATIVE CARE

Moderator:
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EQUITY AND ACCESS TO PALLIATIVE CARE FOR MEXICAN AMERICAN FAMILIES

Bronwynne C. Evans, David W. Coon, Michael J. Belyea

DELIRIUM IN PALLIATIVE OUTPATIENTS AND ASSOCIATED CAREGIVER COPING

Sarah Livermore, Marin Xavier

CAREGIVER PERSPECTIVES OF END OF LIFE CHALLENGES WITH LIFE SUSTAINING TECHNOLOGY

Jacqueline Jones, Carolyn Nowels, Colleen McIlvennan, Daniel D. Matlock

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FACTORS AFFECTING ANTIBIOTIC DECISION MAKING IN HOSPICE CARE

Shigeko (Seiko) Izumi, Brie N. Noble, Rachel L. Novak, Erik K. Fromme, Jon P. Furuno

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MAINTAINING A SENSE OF CONTROL AT THE END OF LIFE

Rafael D. Romo, Carol S. Dawson-Rose, Ann M. Mayo, Margaret I. Wallhagen

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CAN PROSPECT THEORY EXPLAIN UNCERTAINTY IN DECISION MAKING AMONG OLDER ADULTS?

Rafael D. Romo, Carol S. Dawson-Rose, Ann M. Mayo, Margaret I. Wallhagen

◀ ▶ go to PG.

END OF LIFE AND PALLIATIVE CARE

Equity and Access to Palliative Care for Mexican American Families

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Purposes/Aims: The National Quality Forum and National Institute of Nursing Research both identify palliative care as a national priority, defining it as patient and family-centered care that optimizes quality of life by anticipating, preventing, and treating suffering. Palliative care should be culturally-responsive, begin with the diagnosis of life-limiting illness (LLI), and continue throughout the caregiving trajectory. This presentation (1) describes the point where 110 Mexican American (MA) caregiving families in our mixed methods study, *Momento Crucial,* recognized the beginning of caregiving for older parents and (2) posits it as an opportunity to initiate family decision-making and support through palliative care.

Rationale/Conceptual Basis/Background: MAs remain the largest ethnic minority in the U.S. and many older persons require ongoing family caregiving, about which little is known. Even less is known about their experiences with palliative care; few complete advanced directives but many do discuss such concerns with family. *Momento* used *life course perspective* to examine longitudinally cultural and contextual differences, timing of life events, adaptive strategies, transitions, and turning points in the caregiver trajectory. During this process, we uncovered a major turning point, called the "point of reckoning" by Clark & Huttlinger (1998), where caregivers' lives were changed forever with their recognition and acceptance of the caregiving role.

Methods: Case-oriented, qualitatively driven methods (Miles, Huberman &Saldana, 2014) facilitated exploration of the 110 families, who varied in acculturation, socioeconomic status, and education. We queried our ATLAS.ti data base for previously coded "reckoning points" across 6 visits comprised of semi-structured interviews and conducted every 10 weeks for 15 months. To assist in drawing inferences, we examined each case individually, entered them into matrices for comparison, scrutinized the matrices for themes and patterns of similarity/dissimilarity, and distinguished categories called "pathways".

Results/Findings: In *Momento,* the "reckoning point" formally marked the beginning of the caregiving trajectory, occurring in all but one of the 110 caregiving families. The descent into caregiving was gradual for only 9 families, but even those caregivers were able to report recognition of a time when caregiving duties became so demanding that their lives changed from that point forward. Caregivers came to the "point of reckoning" along five "pathways" (family dynamics, kinship obligations, spiritual connections, physical or mental health realities, and socioeconomic considerations) which often converged to create the undeniable need for caregiving.

Implications: Despite the call-to-action from the National Quality Forum and the National Institute of Nursing Research to improve culturally-responsive palliative care for LLI, few interventions address the needs of Hispanic/Latinos, and even fewer address MAs, in particular. Upstream palliative care, including family decision-making about the future, initiated when the "reckoning point" is reached, could improve MA caregivers' quality of life, mood, well-being, and satisfaction with care, as well as health resource utilization. Ideally, nurses could identify families proceeding down the five "pathways" to the "reckoning point" and be poised to initiate culturally-responsive palliative care, facilitate family decision making, and engage other family members in multidimensional support of caregiver and care recipient needs across the caregiving trajectory.

Funding: This study was funded by NINR, National Institutes of Health (5R01NR0101541).

◀ ▶ go to PG.

END OF LIFE AND PALLIATIVE CARE

Delirium in Palliative Outpatients and Associated Caregiver Coping

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Background: Delirium causes suffering and in terminal illness undermines important goals to die at home. Improved knowledge about delirium among palliative outpatients can lead to improved patient outcomes through early identification and treatment in the home. Conversely, a missed diagnosis leads to costly hospital admissions, and is the most common reason to seek long-term care placement (Breitbart & Alici, 2008). Medicare stresses the importance by listing it as a common cause of falls among non-reimbursed hospital events. Prior evaluation of outpatient delirium rate was 14% among demented community dwelling elders (Steis, Evans, et al., 2012a). It is hypothesized that frail, palliative care outpatients have high rates of missed delirium, and it is the most common neuropsychiatric disorder that terminally ill patients face, with prevalence as high as 88% (Breitbart & Alici, 2008).

Objectives: To identify the prevalence rate of delirium among palliative care outpatients and correlate patient factors associated with delirium. Caregiver coping strategies associated with the episode were also examined.

Methods: This study was a descriptive, correlational study conducted over a three-month period in late 2013. A convenience sample of patient/caregiver dyads were recruited at an urban cancer center. Patients with a life-limiting illness undergoing non-curative therapy consented to a chart review for demographic risk factors. Caregivers were asked to complete two survey instruments at the time of their usual visit. Caregivers were asked to reflect upon the patient's behavior over the past month using the 12 simple yes/no questions on the Family Administered Confusion Assessment Method (FAM-CAM) (Inouye et al., 2011). Risk factors such as age, gender, marital status, medications and diagnosis were correlated with delirium. The Folkman Lazarus Ways of Coping Questionnaire (1988) was also administered to caregivers comparing positive and negative coping techniques. Data was analyzed with ANOVA correlations.

Results: The rate of delirium among palliative care outpatients in this sample of 52 patient/caregiver dyads was 27%. The results suggested that opioid use slightly increases the odds for an episode of delirium, and approaches significance ($r(50) = .270$, $p = .052$). The majority of caregiver participants reported positive coping styles, however positive reappraisal and emotion-focused coping mechanism were more common in caregivers with a cognitively intact patient. When a patient screened positive for delirium, problem-focused coping was more common than emotional methods among caregivers ($m = .22$, $SD = .073$).

Implications: Clinicians caring for frail, vulnerable outpatients must promote increased awareness and screening for delirium. Knowledge and communication about these symptoms in the home can increase quality of care and lower costs by increasing safety, quality of life, and lower hospital readmissions. This feasibility study suggests that caregivers cope using an analytic approach during an episode of stress and delirium in the home, which may preclude healthy grief and coping mechanisms. Outpatient delirium screening can improve quality of care and safety by lowering costs and hospital admission rates.

Funding: This study was funded in part by the Research and Education Fund of Scripps Clinic Medical Group.

◀ ▶ go to PG.

END OF LIFE AND PALLIATIVE CARE

Caregiver Perspectives of End of Life Challenges with Life Sustaining Technology

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Specific Aims: The aim of this presentation is to describe bereaved caregiver perceptions of end of life challenges faced when a loved one has a Left Ventricular Assist Device as destination therapy (LVAD-DT) and surveillance for safety becomes seeing their loved one be allowed to die.

Rationale: The 2014 IOM report *Dying in America: Improving quality of life and honoring individual preferences near the end of life* [1]identifies that ‘no one really knows whether, in the end, the death of a loved one occurred with the dignity that was hoped for, or to what degree the dying experience was marred by pain, fear, and discomfort, emotional or physical.’ Patients who have received LVAD-DT, an increasingly mainstream treatment option for chronic heart failure, face the added burden of incomplete understanding of how death will occur, what to expect and the place of this technology. Caregivers play a vital role in ongoing surveillance for LVAD safety at home that subsequently morphs into understanding that death is near. While much attention is given to the implantation decision, very little is known about how to engage in end of life discussions and the place of this hope-filled life sustaining technology in death.

Methods: As part of a study on decision making to receive LVAD-DT intervention[2] we used an interpretive descriptive design to examine bearing witness to the death of a loved one. We conducted semi-structured interviews with a convenience sample of bereaved caregivers whose loved one opted for implantation yet subsequently died. Qualitative theme analysis was applied to the textual data about the experience of knowing when death was approaching, who provided assistance with the LVAD and where the death took place.

Interview Guide:
Tell me about the time your loved one died? Where did it take place, who was there? How did you know it was time? What was it like for you then? What would you do differently if you could?

Results: Bereaved caregivers (n=12) identified 1) Lack of preparation for death despite known issues; 2) Place of death influences caregiver role and confidence in care providers; 3) Lack of integration between LVAD team and hospice care; 4) Feeling abandoned by their ‘team’; 5) Death happened so fast.

Implications: The findings augment understandings of palliative care and the anticipatory guidance needed for end of life planning in the context of potentially life sustaining technology. The study offers new perspectives on how to approach specialized palliative care and how to transition from a focus of LVAD surveillance for safety to an emphasis on ensuring a comfortable death. It also highlights the need for greater integration between LVAD teams and hospice care providers for caregiver support and education.

References:
1. Institute of Medicine (IOM) 2014 *Dying in America: Improving quality of life and honoring individual preferences near the end of life.*
2. McIlvennan CK, Allen LA, Nowels C, Brieke A, Cleveland JC, Matlock DD 2014 Decision making for destination therapy left ventricular assist devices: “There was no choice vs I thought about it an awful lot”, *Circ Cardiovasc Qual Outcomes doi: 10.1161/CIRCOUTCOMES.113.000729.*

◀ ▶ go to PG.

END OF LIFE AND PALLIATIVE CARE

Factors Affecting Antibiotic Decision Making in Hospice Care

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Purpose: To describe factors affecting decisions regarding antibiotic use in hospice care.
Background: Despite limited evidence that antibiotics improve symptoms or quality of life in end-of-life care, antibiotic use is prevalent in hospice care. Concerns with antibiotic use in hospice include potential medication side effects, increased risk of subsequent opportunistic infections, prolonging the dying process, and potential financial burden for patient/family or the hospice programs. In addition, there is an increasing effort to reduce unnecessary or inappropriate antibiotic use to prevent development of antimicrobial–resistant organisms. To improve effective and appropriate antibiotic use in the hospice settings, it is important to understand how antibiotic decisions are made and what factors affect the decisions in current hospice practice.
Methods: In this qualitative study, nine nurses and one medical director from two hospice programs in Portland, Oregon, participated in individual interviews. Participants were asked to describe patients who were prescribed antibiotics in their hospice program and factors that they considered regarding antibiotic use in hospice settings. The factors identified in earlier interviews were member checked in later interviews. Three investigators independently read transcribed interviews and coded potential factors affecting antibiotic decisions using directed qualitative content analysis approach. The codes from three investigators were examined by the entire research team, and reiterative process of analyzing and merging codes to develop a list of factors was repeated until consensus was achieved.
Results: Participants identified *patient preference* as the most important factor influencing their antibiotic decisions. In some situations, the family preferences, which might be different from patients', became the most important factor in decision making. Although the participants considered potential benefits and harms of antibiotics (e.g., improving symptoms, side effects) during decision making, these factors often yielded to patient and family preferences. Other factors that emerged included different values and approaches of non-hospice healthcare providers who prescribed antibiotics for the patient.
Implications: Participants prioritized patient and/or family preferences over concerns of benefits or harms caused by antibiotics. This is likely based on the hospice philosophy to respect patient and family preference, but also uncertainty regarding benefits and harms of antibiotics for hospice patients and need to maintain a therapeutic alliance among patient, family and care providers. Stronger evidence to support best practices for antibiotic use in hospice patients and better understanding of effective shared decision making processes are needed for nurses to improve quality of care in hospice programs.

◀ ▶ go to PG.

END OF LIFE AND PALLIATIVE CARE

Maintaining a Sense of Control at the End of Life

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Purpose: The purpose of this qualitative study was to bring forth the voice of older adults with a limited life expectancy, to explore how they made healthcare decisions, and to explicate their decision-making processes.

Background: Supporting patient decision making is a central aspect of caring for older adults near death and ensuring patient autonomy. However, the variable and fluid nature of end-of-life choices makes providing this support challenging. Much is known about end-of-life decision making, but missing in this discourse are the voices of older adults in the midst of making actual end-of-life choices.

Methods: We used grounded theory methods to explore and understand the perspectives of older adults who are near the end of their lives and are in the midst of making significant healthcare. Participants were recruited through community-based geriatric clinics and were interviewed in their homes. Interviews were analyzed using constant comparative analysis and negative cases were sought to challenge emerging themes.

Results: Despite delegating decisions to others, participants stated they were comfortable with their choices. Rather than speak of decisions directly, participants talked around the decisions and focused on their context. From within this context, the theme of *maintaining a sense of control* emerged wherein participants used four different approaches to describe their values and priorities: *direct communication*, *third-party analogies*, *adaptive denial*, and *active avoidance*. Through these different approaches, participants achieved a sense of control without being in control and were able to maintain a sense of autonomy.

Implications: These findings challenge current constructions of personal autonomy that require patients to actively participant in decision making. Likewise, the current treatment focus of advance care planning may not be appropriate for older adults at the end of life. By understanding the approach patients take to decision making, providers can identify key values and priorities that can guide how they support patients' choices, including a willingness to take a more proactive role in patient decisions.

◀ ▶ go to PG.

END OF LIFE AND PALLIATIVE CARE

Can Prospect Theory Explain Uncertainty in Decision Making among Older Adults?

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Purpose: The purpose of this qualitative study was to explore how the perception of prognosis and health influenced decision making among older adults with a limited life expectancy and to explore how the findings inform and are informed by prospect theory.

Background: Researchers have found that older adults' decisions regarding the care they desire at the end of life change over time and these changes impact the nature of the care they receive, particularly hospice and palliative care. Many descriptive studies have been undertaken, but few explore the underlying process leading to different decisions. Likewise, many frameworks have been developed to support patients in making "better" decisions. Prospect theory is one framework that specifically aims to explicate decision-making processes and has been gaining increased use in healthcare decision making, including end-of-life decisions.

Methods: We used grounded theory methods to explore the perspectives of older adults who are near the end of their lives and are in the midst of making significant healthcare. Using situational analysis, we sought to understand participants' experiences within the context of their perceptions of health and prognosis. Participants were recruited through community-based geriatric clinics and were interviewed in their homes. Interviews were analyzed using constant comparative analysis and negative cases were sought to challenge emerging themes.

Results: Twenty participants were recruited. Thirteen participants were men and seven were women, ranging in age from 67 to 97. Seventeen were White and three were non-White. Four participants were married or in domestic partnerships. Despite their limited prognosis, participants saw end-of-life decisions as future decisions that would be made in a context they could not know a priori. An over arching theme of *decision making in the context of ambiguity* emerged that reflected the uncertainty and ambivalence participants felt with regards to these decisions. Participants used different approaches to balance competing goals of maximizing length of life and quality of life. Valuing choices against competing goals is a behavior not explained by prospect theory, and we propose an extended model that can illustrate the unique nature of end-of-life decisions.

Implications: Being aware of how patients balance competing goals will enable providers to support patients' decision making in a way that takes all priorities in account. Though prospect theory shows promise with many types of healthcare decisions, the contextual environment of decisions at the end of life is not easily captured in it and argues for a new model that can be used in both research and clinical practice. We propose a model that we hope will stimulate the dialog in both research and clinical practice.

◀ ▶ go to PG.

◀ ▶ go to PG.

HEALTH PROMOTION

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EDUCATION TO INCREASE OLDER AFRICAN AMERICANS' FRESH FRUIT AND VEGETABLE CONSUMPTION

Marcia E. Elliott, Diana Lynn Woods, Lina Badr

NARRATIVE EFFECTS ON EMOTIONAL PROCESSING IN HEALTH PROMOTION/THERAPEUTIC CONTEXTS

Linda Larkey, Sunny Kim, Dale Todicheeney, Angela Chia-Chen, Darya McClain

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FEASIBILITY TESTING OF SENSOR-BASED ACTIVITY MONITORING OF IMMIGRANT KOREAN ELDERS

Jane Chung, Hilaire Thompson, George Demiris

ENGAGING IN HIV EDUCATION AT THE INTERSECTION OF COGNITIVE & AFFECTIVE LEARNING

Jose Pares-Avila, Kupiri Ackerman-Barger

◀ ▶ go to PG.

HEALTH PROMOTION

Education to Increase Older African Americans' Fresh Fruit and Vegetable Consumption

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Problem and Significance: A paucity of fresh fruits and vegetables (FsVs) for older adults is associated with cardiovascular disease (CVD). The South Service Planning Area of Los Angeles County (SSPA-6); Watts Willow-brooks' black community has a dirth of available FsVs.

Purpose: To determine if a culturally sensitive nutrition/planting program results in an increase in FsVs consumption by older African Americans (OAA) aged 50 and over.

Methods: This quasi-experimental pre-intervention, post-intervention pilot study, using a convenience sample of 80 OAA, consisted of a two-hour interactive FsVs nutrient education session followed by a planting demonstration conducted in a local church. The post-intervention survey was conducted 1 week following the intervention. The National Cancer Institute "All Day" short food frequency screener was used pre-post to evaluate the effect of the intervention.

Data Analysis: Descriptive statistics and measures of central tendency were used to examine relationships between variables. Paired t tests were used to measure changes in consumption from pre-intervention to post-intervention.

Results: The 80 OAA who consented to participate in the Garden Based Education and Planting program completed the study in its entirety. The mean age of participants was 58.2 years (SD = 6.6) ranging between 50 and 82 years. Of the group, 36 participants were male (45%) and 44 were female (55%) educated beyond Grade 12. The pre-intervention survey indicated that a majority (87.5%) consumed fast foods at least 4.2 X/week. Statistical significance was achieved for the primary outcome of increased FsVs consumption. Paired t-tests showed an overall significant difference in the frequency [M= 3.64 (SD = 2.5) (t = 13.02, p = .000)] and quantity [M = 1.69 (SD = 2.29) (t = 6.61, p = .000)] of healthy FsVs consumption when pre-program was compared to post program. For example, the frequency of consumption of healthy foods such as 100% juice [mean difference = .55 (SD = 2.8; (t = 6.03, p < 0.000)], fruit [mean difference = .61 (SD = 1.23; (t = 4.41, p < 0.000)], lettuce salad [mean difference = .30 (SD = .58; (t = 4.65, p < 0.000)], dried beans [mean difference = .41 (SD = .73; (t = 4.96, p < 0.000)], other vegetables [mean difference = .68 (SD = .83; (t = 7.3, p < 0.000)], increased, while the frequency of unhealthy foods such as french fries decreased [mean difference = -.33 (SD = .46; (t = -6.36, p < 0.000)]. An independent t-test indicated a significant difference between females and males (t = 2.07, p = .041) with females having a higher mean consumption of FsVs. A Chi square for all other demographic variables indicated no significant association between these variables and the frequency or quantity of FsVs consumption.

Implications for Practice: This 2-hour culturally sensitive educational intervention successfully increased fresh FsVs consumption in OAA, indicating that these older adults will engage in an intervention with a potential to reduce the risk of CVD.

◀ ▶ go to PG.

HEALTH PROMOTION

Narrative Effects on Emotional Processing in Health Promotion/Therapeutic Contexts

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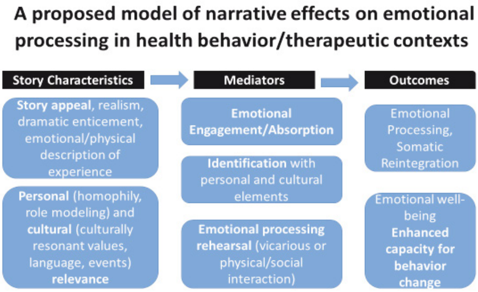
Purposes/Aims: We propose a model suggesting how narratives influence affective processing associated with health behavior change.

Background: Storytelling has been used increasingly in health promotion contexts, using narrative messaging based on naturalistic stories drawn from the target population. This method captures and delivers culturally relevant messages intended to affect health behavior, in contrast to the usual methods of messaging to address a variety of knowledge, beliefs, and attitudes toward behavior, including perceptions of social norms. Health behavior has been linked to cultural norms as well as to a number of prior, emotion-setting life events that interfere with attempts at behavior change and adherence. Rarely are the prior set-points of emotional interference with healthy behaviors addressed in models of health promotion, not even in the storytelling literature and models of how narratives might "work" to change behavior.



Internal Consistency of the Model Developed: We suggest that one of the most salient factors underlying the barriers to behavior change when presented with logical and motivational options for shifting to healthier lifestyle is pre-existing emotional distress. For example, addictive behaviors (e.g., substance or alcohol abuse), or emotionally charged experiences (e.g., emotional eating, somatic dissociation) may be at play in the barriers to achieving results in dietary or physical activity change. Emotional factors that may enhance or inhibit capacity for making changes may be an appropriate target for interventions in the health context. Storytelling may, in addition to the factors that affect attitudes and perceived norms for behavior change, also influence affective processing associated with emotional health and, subsequently, behavior change.

Logic Linking the Model: Research suggests that (a) story characteristics, including story appeal and personal/cultural relevance, work as moderators of how narrative messages impact (b) the mediators, or create emotional engagement, identification, and opportunities for emotional processing rehearsal. These mediators, in turn are seen as critical to (c) achieving changes in the individual's emotional processing (e.g., emotional expression and emotional acceptance) and in somatic reintegration, contributing to lifting the barriers to emotional well-being and enhanced capacity for behavior change.

Conclusion: Although health promotion messaging often addresses an important "top layer" of required informational and motivational needs, there may be important deeper layers of emotional distress that hold individuals back from activating inner resources to shift to healthy lifestyles. Health promotion messaging is critical to basic processes of change, but a deeper layer of conditioning may be an important first step to removing barriers to health behavior change. Storytelling, and the emotional content that is raised in narrative messaging, may serve to address this deeper layer of psycho-emotional challenges.

Feasibility Testing of Sensor-Based Activity Monitoring of Immigrant Korean Elders

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Aim: This study aimed to test feasibility of a multi-sensor monitoring platform designed to assess mobility and daily activity patterns among immigrant Korean elders.

Background: With the continuous growth of the older adult population and the ongoing health care workforce shortage, there is a need for innovative tools that can monitor health and deliver care in real-time, effective and minimally intrusive way. Home-based sensors, designed to record activities of individuals and health status in their living spaces, have the potential to intervene promptly to prevent adverse health events resulting from functional decline by detecting changes in activity patterns. Despite a growing interest in using home-based sensors for community-dwelling older adults, no documented attempts have been made to use this type of technology to explore activity patterns of Asian American older adults.

Methods: An exploratory multiple case-study methodology was used to investigate how the multi-sensor monitoring system is utilized within real-life context. The system, which consisted of a set of motion sensors, water consumption sensor, laptop, receiver, and wireless Internet router, was deployed in four homes of immigrant Korean elders (N = 6) living in the community. The monitoring period ranged from 8 to 12 weeks. These sensors capture various events in which a participant may be involved. Multiple data collection techniques were used: 1) data collection from the sensors, 2) administration of self-report instruments to measure mobility and health, and 3) activity logs over two weeks. Sensor data analysis was focused on characterizing participants' mobility and activity trends in each area of the home over 2-3 months of follow-up. For this aim, line graphs and sequence plots were applied to data obtained from motion and water consumption sensors.

Results: More than 6,000 home-hours of continuous activity data were collected during this study. All study participants were ambulatory and cognitively intact at baseline. By continuously monitoring older adults by using unobtrusive home-based sensor technologies, we have been able to observe multiple parameters of activity and mobility patterns of individuals, for example, 24-hour activity pattern or long-term changes in activity trends. The activity data obtained from the sensor system show the natural daily patterns in some individuals and also variability in others during the study period. In addition, the data indicate that no one experienced decline in their activity levels or mobility over the data collection period. Most people perceived the system was not obtrusive to their daily lives. Findings from this study demonstrated successful deployment of a home-based sensor system for monitoring mobility and daily activities among immigrant Korean elders.

Implications: Our study suggests that technology based interventions can be successfully delivered longitudinally to a minority population of older adults that is not often targeted as an end user group for the use of sensor technologies. Given the feasibility demonstrated in this study, future research needs to involve a greater number of participants in an extended period of time to assess the important role of home-based sensors on achieving proactive patient-centered health care for community-dwelling minority older adults.

Funding: This research was funded by NSF research grant (CDI-1028195), Hester McLaws Scholarship, and Dan David Foundation Scholarship.

◀ ▶ go to PG.

Engaging in HIV Education at the Intersection of Cognitive & Affective Learning

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Purpose: The purpose of this article is to report on grounded educational experiences and teaching techniques designed to meet students at the intersection of the cognitive and affective learning domains. This critical pedagogical examination attempts to address student engagement on the topic of HIV Care by outlining a dynamic view of how nursing educators can approach attitudinal change on a stigmatized topic.

Rationale/Background: A generation after the emergence of Human Immunodeficiency Virus (HIV) in the United States (U.S.) stigma and healthcare disparities related to HIV remain. For those who lived through and/or cared for patients during the emergence of HIV the salience of this disease is indisputable. However, a new generation of healthcare provider students poses challenges for educators because student engagement can vary from a deep emotional connection to the realities of people living with HIV (PLHIV) to resistance in learning or discussing HIV or even, at times, an apathetic response to the lived experiences of PLHIV.

Brief Description of Undertaking or Best Practice: Teaching/Learning Strategies: *Films:* Films can provide a medium that facilitates a human connection with the experience of HIV as well as an historical lesson, including the critical role activism played in fueling AIDS research and drug development. *Reflection Scenarios:* Students are asked to reflect and answer, "What if you were diagnosed with HIV." They are also asked to express this experience through a photograph or a piece of artwork. *Case Scenarios:* Examples include people from different environments that are newly diagnosed with HIV (a gay man, a sex worker, and a health care provider). This is followed with a person with advanced HIV disease so that students can see what it can look like when patients are not diagnosed and treated early. *Teaching as an Improvisational Art* is the ability to draw laughter and tears through storytelling, exemplars and, at times, with humor. Students need to feel what having HIV in their lives could feel like so they connect with patients who are diagnosed or living with HIV. *Sharing of Self* can be a crucial part of creating connections with students. The degree to which a faculty member does this is a careful balance of sharing one's own struggles and humanity while avoiding becoming self-centered and over-revealing. Specific examples of how this is done will be shared.

Outcomes Achieved/Documented: An email, quoted with permission, begins, "I just wanted to tell you about the experience I had at work this weekend and how thankful I was for having had your lecture." She goes on to describe a patient and family interaction where she applied her newly gained knowledge about HIV and made a difference. This and other outcomes will be shared in our presentation.

Conclusions for Clinical Education: Nurse educators can use dynamic teaching strategies that intersect the cognitive and affective domains to help students connect with the stigmatized topic of HIV. Understanding the lived experience of PLHIV will poise healthcare providers to decrease healthcare disparities and to provide quality care for this group.

◀ ▶ go to PG.

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IMPROVING HEALTH IN MIDDLE AND OLDER ADULTS

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EVIDENCE AND PRACTICE OF MALL WALKING PROGRAMS FOR MIDLIFE AND OLDER ADULTS

Basia Belza

FACTORS ASSOCIATED WITH IMPROVING PHYSICAL ACTIVITY IN OLDER ASIANS

Minhui Liu, Basia Belza

CORRELATES OF SELF-REPORTED FALLS AMONG MIDDLE AGE AND OLDER HOMELESS ADULTS

Benissa E. Salem

CAREGIVER BURDEN AND ITS EFFECT ON POSTOPERATIVE OUTCOMES IN THE OLDER SURGICAL PATIENT

JoAnn Coleman, Jasmine Javadi, Mark Katlic

◀ ▶ go to PG.

IMPROVING HEALTH IN MIDDLE AND OLDER ADULTS

Evidence and Practice of Mall Walking Programs for Midlife and Older Adults

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Purpose: To evaluate the evidence and practices of walking programs in malls and other public venues for mid-life and older adults.

Background: Older adults are the fastest growing and most physically inactive demographic. Walking is a preferred activity for older adults, however providing safe places to walk is often a challenge. Mall walking programs (MWP) can address that gap, although the elements for maximizing reach, effectiveness, adoption and sustainability of MWPs are less known. Given the abundance of malls, the potential for promoting more walking is immense. Because mall environments are variable, it is necessary to understand the environment and program characteristics that will draw more adults to shopping malls for walking and develop resources to maximize their use for walking as well as potentially spread the mall walking concept to other public venues.

Methods: We applied the RE-AIM framework and the socio-ecological model and conducted: 1) a systematic review of the MWP literature; 2) walking audits in 10 shopping malls and 6 public venues and systematic observations of 530 walkers; and 3) interviews of 50 walkers and managers in malls and public venues in 5 states.

Results: Thirty-seven articles were reviewed and abstracted. Programmatic features of MWPs included mileage logs, warm-up exercises, walking route maps, and blood pressure checks. Appealing MWP environments were described as safe, accessible to the local community, and well-lit. Partnerships were noted with hospitals, city governments, non-profits, and senior housing. MWPs were perceived as a benefit for both mall businesses and walkers by promoting the central role malls have in improving the health of local residents. Our systematic observations revealed that all 16 venues had public transit and accessible parking. Most had wayfinding aids, walking routes, even floor surfaces, and benches. Venues varied in hours of access, programming, tripping hazards, traffic control near entrances, and lighting adequacy. Despite diversity in location, size, and purpose, venues were consistent with regard to environmental features conducive to mid-life and older adult walking. Walkers reported health and social benefits from participating in MWP; liked being able to set their own time, distance and pace; and expressed feeling a strong sense of community with other walkers. Program providers reported walkers bring sales to the malls and provide "extra eyes" as security measures. All informants indicated satisfaction with their program and environmental features.

Implications: These findings have informed our *Evidence-informed MWP Resource Guide* which has the potential to inform policy makers, planners, mall/building managers, community coalitions, aging service providers, and public health professionals in the development and enhanced utilization of mall walking programs. MWPs have the potential to achieve the Healthy People 2020 objective to "reduce the proportion of adults who engage in no leisure-time physical activity" and to simultaneously increase the number of people who meet the Physical Activity Guidelines for Americans.

Funding: CDC Cooperative Agreement U48-DP001911.

◀ ▶ go to PG.

IMPROVING HEALTH IN MIDDLE AND OLDER ADULTS

Factors Associated with Improving Physical Activity in Older Asians

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Purpose: To explore the association between demographics with adherence to Enhance®Fitness (EF) and performance outcomes in Asian older adults.

Background: Regular physical activity has been demonstrated to have many benefits for older adults, such as prevention of cognitive and physiological decline, the promotion of independent functioning, and the decrease of risk of falls and of mortality. The majority of older Asians are inactive during their leisure time. However, less is known about whether older Asians' personal factors (e.g., age, gender, disability, etc.) affect their adherence to physical activity programs and impact their physical outcome. Therefore, the purpose of this study was to explore the association between factors of age, gender, disability, arthritis, immigration status, and adherence to EF among older Asians in Washington State and whether these factors can predict their physical performance outcome.

Methods: EF is an evidence-based physical activity program for older adults. Lead by trained instructors and offered in community settings, EF is ongoing and offered for one hour, three sessions per week. Participants were Asian older adults who had attended EF in Washington since 2002 and provided demographic data and completed a baseline Chair Stand test. Multiple Linear Regression (MLR) was used to explore whether EF adherence and lower-extremity strength could be explained by demographics (age, gender, disability, arthritis, and immigration status).

Results: The total sample was 549. Participants were, on average, 81 years old (*SD* = 9.76), mostly female (n=434, 78%) and almost half immigrants (n=221, 40%). Seventeen percent (n=93) reported a disability; of those 14% (n=80) reported arthritis. The MLR for average sessions that attended per month showed that age and immigration status did account for variation in the outcome, $R^2 = 0.13$, $F(5, 543) = 15.66$, $p < .001$, $R^2_{\text{adjusted}} = 0.12$. A significant interaction between participants' age and immigration status was found on average sessions: participants who were immigrants attended more EF classes compared to those who were not, yet the differences between immigrants and non-immigrants varied by age. However, none of the predictors (age, gender, disability, arthritis, and immigration status) accounted for the variation in the baseline Chair Stand test.

Implications: Evidence-based physical activity programs need to be disseminated to community-based sites used by Asians who are older and nonimmigrants. Health care providers need to refer this same population to physical activity programs. And research needs to be conducted that tests strategies to recruit and retain this population to physical activity programs.

◀ ▶ go to PG.

Correlates of Self-Reported Falls among Middle Age and Older Homeless Adults

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Purpose/Aims: The purpose of this study was to understand correlates of self-reported falls among middle aged and older homeless adults.

Background: The United States is home to a substantial aging and homeless population. In Los Angeles, close to 40% are over 51 years of age, while 11% are 62 years and older. Falls are a significant and preventable public health issue and are experienced by up to one-third of community-dwelling older adults over 65 years of age.

Methods: Guided by the Frailty Framework among Vulnerable Populations (FFVP), this study assessed 178 homeless men and women in Los Angeles, California, aged 40-73. These participants were recruited from four agencies which served homeless populations. A structured instrument measured sociodemographic data, comorbid conditions (i.e., hypertension, diabetes, arthritis, etc.), use of assistive devices, depressive symptomology, pain, frailty, drug and alcohol use , emergency department use, social support and falls in the past year. Unadjusted relationships between these variables and falls were examined using Pearson Chi-square tests. Characteristics significant in bivariate analysis were included as potential predictors in adjusted analyses. Adjusted relationships between potential predictors and falling were assessed using logistic regression.

Results: The mean age of participants was 52.8 (ages 40-73; SD 6.87) and the majority were female (57.9%) and primarily African American/Black (66.9%), White (11.8%), and Latino/Hispanic (9.0%). In unadjusted analyses, women were more likely to fall in the past year (57.3%, p=.023), along with those who were older (p=.035); moreover, those who had a comorbid condition (82.0%) were more likely to fall (p=.002). Further, those who used an assistive device (79.6%) were more likely to fall (p<.001). Those who met the criteria for depressive symptomology were more likely to fall (p<.001) as were those who self-reported back pain (p<.001). Homeless adults who were frail were also more likely to fall (p<.001). In terms of substances, those who had drug dependency (p=.024) were less likely to fall. Last, those who had low social support were more likely to fall (p<.001) and those who had used the emergency department were more likely to fall (p=.004). In the final logistic regression, significant predictors of falling included self-reported back pain (p=.005), using an assistive device (p<.001), and those with higher levels of social support had lower odds of falling (p=.003). Non-significant predictors included gender, age, depressive symptomology, emergency department use and drug dependency.

Implications: Given that half of the sample self-reported falling within the last year, multidisciplinary health promotion interventions with community partners should be targeted for middle age and older homeless adults to decrease fall risk which could encompass building social support networks among those who utilize assistive devices; client education for fall prevention and management, along with adapting evidence-based fall prevention interventions among this population.

Funding: This work was supported by the NIH/NINR T32 NR007077.

◀ ▶ go to PG.

Caregiver Burden and Its Effect on Postoperative Outcomes in the Older Surgical Patient

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Purpose: As the United States population continues to age, it will place greater demands on surgical services. Nurses are challenged by the perioperative management of the older surgical patient as well as the needs of those family/significant others providing care for these patients. The goal of the study was to better understand the relationship between caregiver burden and the postoperative outcomes of the older surgical patient.

Methods: Retrospective case review study of 209 older surgical patients (age 75 years and older) that underwent a geriatric preoperative assessment per the 2012 ACS NSQIP/AGS.

Best Practice Guidelines: Optimal Preoperative Assessment of the Geriatric Surgical Patient prior to an elective surgical intervention. Complications as defined by NSQIP standards were recorded as well as length of stay, rate of readmission and mortality. The Zarit Caregiver Burden Interview tool was completed by an individual that identified themselves as a caregiver when the patient was seen for preoperative evaluation. Statistical analysis identified correlations between increasing caregiver burden and those postoperative NSQIP complications identified in the study.

Results: In those patients with significant caregiver burden recorded preoperatively, several statistical correlations were identified including greater rates of unplanned intubation, development of deep vein thrombi, and development of postoperative acute renal injury. Patients whose caregiver burden score was elevated also experienced greater rates of mortality when compared to the general older surgical population.

Conclusion: This information helps assess physiological, psychological and social factors that may influence postoperative patient recovery in the older surgical population. Recognition of caregiver burden may allow early intervention and influence both patient and caregiver outcomes.

◀ ▶ go to PG.

go to PG.

ISSUES IN CARDIOVASCULAR NURSING

Moderator:
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AUTOMATIC THOUGHTS AND COGNITIVE CHANGE IN POST-CARDIAC SURGERY DEPRESSION

Anthony McGuire, Lynn V. Doering, Belinda Chen

FINANCIAL BURDEN AFTER HEMATOPOIETIC CELL TRANSPLANTATION

Sunny Kim, Julie McNulty, Nandita Khera, Mary Weise

SOUTHERN AFRICAN AMERICAN WOMEN AFTER MYOCARDIAL INFARCTION: PHENOMENOLOGICAL STUDY

Loretta Jones

◀ ▶ go to PG.

ISSUES IN CARDIOVASCULAR NURSING

Automatic Thoughts and Cognitive Change in Post-Cardiac Surgery Depression

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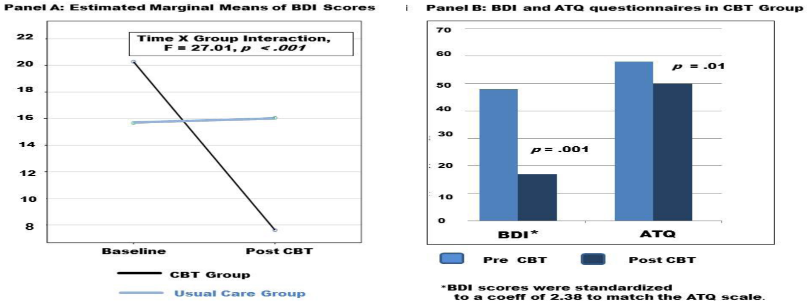
Purpose/Aims: To investigate the role of automatic thoughts in the cognitive change process during an eight-week course of Cognitive Behavioral Therapy (CBT) for depressed post-cardiac surgery (CS) patients.
Background: Cognitive theorists posit that depression results from cognitive distortions manifested by a propensity to experience the world in a negative way. Negative automatic thoughts (ATs) are believed provide a common pathway for cognitive distortions. In post-CS patients, CBT is known to improve depressive symptoms. However, in this population, there have been no reports of the role of ATs in the cognitive change process during CBT.
Methods: Thirty six depressed CS patients (mean age 64 ± 10 years, 83% male) were randomized to usual care (UC) or 8 weeks of CBT by trained nurses. For this report, patients in the UC group were matched for age and gender to those in the CBT group. At baseline and post-CBT, the intervention group (*n*=18) completed the Beck Depression Inventory (BDI) and the Automatic Thoughts questionnaire (ATQ), which includes four subscales (i.e. negative self-concepts and expectations [NSNE], personal maladjustment and desire for change [PMDA], helplessness, and low self-esteem [LSE]). The UC group (*n*=18) completed only the BDI at both points. Group comparisons of changes in BDI scores from baseline to 8 weeks were evaluated by general linear modeling. Changes in pre- and post-CBT ATQ scores were measured by independent t-tests. Correlations of total BDI scores and ATQ subscale scores were evaluated by Spearman's *rho*.
Results: Compared to UC, the CBT group showed a significant reduction (time x group interaction, $p < .001$) in BDI scores (Fig 1, Panel A). In the CBT group, there were significant decreases in both BDI (47.46 ± 17.8 vs 16.6 ± 18.9, $p = .001$) and ATQ (56 ± 20.7 vs 50.4 + 18.5, $p = .01$) in pre- vs post-CBT scores (Fig 1, Panel B). All ATQ subscale scores were significantly correlated with BDI scores (NSNE, $r_s = .57$, $p = .01$; PMDA, $r_s = .52$, $p = .03$; Helplessness, $r_s = .74$, $p < .01$; LSE $r_s = .53$, $p = .03$).
Implications: This study demonstrates a significant improvement in depressive symptoms and automatic thoughts in a small group of post-CS patients who received CBT. Helplessness was most strongly correlated with depressive symptoms at pre- and post-CBT. Further study in a large population is needed to investigate further the role of automatic thoughts in the CBT process and potentially improve depression outcomes.

Figure 1: Depressive Symptoms and Automatic Thoughts During CBT.



*BDI scores were standardized to a coeff of 2.38 to match the ATQ scale.

Funding: Supported by NINR R01NR009228.

go to PG.

Financial Burden after Hematopoietic Cell Transplantation

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Purposes/Aims: To describe patient perspectives concerning financial difficulties after hematopoietic cell transplantation (HCT) for a better understanding of the multiple facets of financial burden and the implications for recovery and quality of life**.**

Rationale/Conceptual Basis/Background: HCT is a commonly used treatment modality for many hematological malignancies. Improved survival due to advancements in transplantation techniques along with the increasing number of transplants being performed worldwide have increased the number of HCT survivors, with an estimated number of survivors around 250,000 by the year 2015. HCT is an intensive, medically complicated and life-threatening therapy with a prolonged trajectory of recovery. Similar to financial issues in other cancer treatments, adverse financial consequences of HCT are emerging as an important issue, and may be associated with poor quality of life (QOL) and increased distress in HCT survivors. Often the need to relocate near a transplant center and exorbitant out of pocket costs contribute to financial burden and can lead to bankruptcy,

Methods: A 25-item questionnaire was mailed to 482 HCT recipients transplanted from 1/2006 to 6/2012 at Mayo Clinic to collect socioeconomic and financial burden information. The questionnaire included the following open-ended question: "How has transplant made an impact on your financial situation? Please let us know if any particular information could have been provided to you before the transplant that would have helped you plan your finances better for your post-transplant care". The textual data obtained from this question from 46% of the 268 respondents (n=124) was used to understand the financial experiences of the patients. Textual data were analyzed with a constant comparative analysis obtained from the open-ended questions in the survey.

Results: 124 respondents provided a description about financial burden experiences after allogeneic HCT. Mean age was 50 years old and 44% of them were male. 43% of these patients had received their transplant for acute leukemia. 7 themes were emerged from HCT patient comments: (1) financial loss, (2) financial worry, (3) employment loss and transition, (4) healthcare and insurance barriers, (5) financial facilitators, (6) preparation for financial consequences of HCT, (7) impact on family/caregiver. Patients described specific concerns such as inadequate pre-HCT preparation for financial burden, caregiver stress, and the importance of support such as insurance and assistance from non-profit organizations. Some patients expressed worry about lifetime costs and loss of home or business.

Implications: Patients reported financial distress as a primary concern for HCT survivorship and identified barriers and supportive factors influencing their financial health. Healthcare providers need to be aware of these risks, and encourage survivors to be proactive in planning for their financial future, even amidst a life threatening crisis. Future research should focus on early identification of financial distress and develop interventions to improve both clinical and financial outcomes of HCT for patients.

◀ ▶ go to PG.

Southern African American Women after Myocardial Infarction: Phenomenological Study

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Introduction: The American Heart Association (AHA) reported that cardiovascular diseases kill nearly 50,000 African-American (AA) women annually. Only 52% of AA women are aware of the signs and symptoms of a heart attack and only 36% of AA women know that heart disease is their greatest health risk.

Purpose: The purpose of this phenomenological study was to explore the lived experience of African American women, 50 years and older, who had experienced a myocardial infarction within the past five years. This study was consistent with the goal to decrease health disparities of AA women post MI and the *Healthy People 2020* goal to improve cardiovascular health through prevention, detection, and treatment of risk.

Methods: The phenomenological method of research was used utilized to conduct the study. The primary data collection source were semi-structured interviews conducted using open-ended questions. The primary research questions addressed the women's knowledge of risk factors, and their perceptions of management, and lifestyle changes relevant to coronary artery disease post-MI. Participants were seven AA recruited from local cardiology offices with histories of myocardial infarction. The phenomenological data analysis involved the processes of coding, categorizing, and developing themes.

Results: The findings revealed six major themes: life before myocardial infarction, contributing risk factors, early warning signs, life after myocardial infarction, cardiac rehabilitation, and family support.

Conclusions: The majority of women reported unrecognized risk factors prior to MI but are now able to recognize and heed early warning signs, and made lifestyle changes post MI to prevent a recurrence. However, none of the women attended cardiac rehabilitation, and only one having been referred for rehabilitation. These findings provided a beginning foundation for the development of interventions that are predictably effective in prevention of MIs in AA women.

◀ ▶ go to PG.

ISSUES IN CHILD AND ADOLESCENT HEALTH

Moderator:
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HISPANIC CHILDREN WITH ASTHMA: VIEWS ON EXERCISE

Michele R. Shaw, Gail Oneal

PERCEPTIONS: SIBLINGS OF YOUTH WITH DISABILITIES/CHRONIC CONDITIONS

Holly Willardson Christensen, Barbara Mandleco

ADOLESCENT CONCUSSION: POST-INJURY ASSESSMENT RELATIONSHIPS

Traci R. Snedden

PROMOTORAS PROVIDING HEALTH EDUCATION TO PREVENT CHILDHOOD OBESITY

Elizabeth Reifsnider, David P. McCormick, Michael Moramarco, Martina R. Gallagher

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OBESE ADOLESCENT FEMALES RESPONSE TO A MINDFUL EATING INTERVENTION

Patricia Daly, Judith Berg

DEVELOPING SELF-EFFICACY AND RECALL QUESTIONNAIRES WITH AND FOR CHILDREN

Jane H. Lassetter, Gaye Ray, Martha Driessnack, Mary Williams

◀ ▶ go to PG.

Hispanic Children with Asthma: Views on Exercise

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Purpose: The purpose of this study was to explicate predominant concepts involved with exercise perceptions among Hispanic children with asthma. Aims included, 1) testing the previously developed grounded theory: "the process of creating perceptions of exercise", by explicating predominant concepts in exercise perceptions among an ethnically diverse population of Hispanic children with asthma in order to broaden previous findings and 2) to develop a new and/or modified explanatory grounded theory relevant to exercise perceptions of Hispanic children with asthma.

Background: Asthma is the most common chronic condition among children, currently effecting 9.6% of all U.S. children. The Burden of Asthma is particularly heavy among Hispanic children who face many barriers leading to inadequate diagnosis and treatment of the disease. Asthma prevalence among Hispanics varies from 3.4%- 16%. Hispanic children often receive less treatment for their asthma, leading to frequent hospital visits, causing stress and financial burdens for families and health care institutions. Hispanic children have the highest rate of obesity (43%) and this population participates less in physical activity when compared to Non-Hispanic Caucasian classmates. This is a critical concern because involvement in exercise plays a health promoting role among children with asthma by decreasing symptom severity and improving quality of life.

Theoretical Framework: The study was guided by the grounded theory: "the process of creating perceptions of exercise" (Shaw & Davis, 2011). Exercise perceptions can be described as the values, beliefs, and thoughts the participants form towards exercise. Perceptions may be created as a negative or positive outcome of the process dependent upon the various influencers involved in the lives of children with asthma.

Methods: Grounded theory (GT) was used as the methodological approach for the study. GT illuminated important components of exercise perceptions directly from the participants. Participants included Hispanic children, ages 8-14 years old, with asthma and their families. Professionals who work closely with Hispanic children with asthma were also interviewed as the study progressed. Fifteen participants were interviewed. As the children, families, and professionals shared their unique experiences, predominate concepts began to emerge. Theory was then developed through iterative analysis.

Results/Implications: The findings from this study supported the previously identified grounded theory, "the process of creating perceptions of exercise." The addition of input by Hispanic children with asthma further credited the four predominant categories: *perceived benefits*, *striving for normalcy*, *exercise influences*, and *asthma's influence*. The data clearly supported all previously identified categories and concepts. Although no new categories or concepts emerged from this study, the influence of parents was extremely evident among this population and should be considered when developing interventions. Although asthma has no current cure, if treated appropriately, the disease can be well controlled. National treatment guidelines include the prescription of exercise for children with asthma. This study adds the unique perspectives of Hispanic children with asthma to the previously identified grounded theory, "the process of creating perceptions of exercise." The theory can be utilized to assist in the development of nursing interventions aimed at increasing exercise participation among Hispanic children with asthma.

◀ ▶ go to PG.

ISSUES IN CHILD AND ADOLESCENT HEALTH

Perceptions: Siblings of Youth with Disabilities/Chronic Conditions

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Purpose: To explore sibling perceptions when living with a child/adolescent who has a disability/chronic condition (CWD).

Background: Research examining siblings living with a CWD from the sibling's perspectives is limited; most research examining these siblings uses parents and or teachers as informants instead of siblings themselves. In addition, most studies yield conflicting results. Some studies suggest these siblings are affected negatively and tend to have more problems at home, school, and with friends; whereas other research suggests these siblings seem to cope better with family stress and demonstrate increased maturation, sensitivity, and empathy. Indeed, it is critical to obtain additional research about these siblings, especially from their own perspectives.

Method: 15 siblings (8 sisters; 7 brothers; mean age: 11.2; SD: 2.66; range 7-18) from nine families living in the western United States participated in audio recorded semi structured interviews discussing experiences living with a CWD (mean age: 9.51; SD: 4.27; range 3-16). Nine siblings were younger; six were older than the CWD. Three CWD had disabilities/chronic conditions affecting speech and hearing; seven had disabilities/chronic conditions affecting behavior (traumatic brain injury, ADHD, autism, blindness, developmental delay). IRB approved questions included what it was like living with the CWD; what was difficult/easy about the experience; what would you change about the situation; how did you learn about the disabilities/chronic condition; anything else you would like to talk about. Interviews were transcribed verbatim and analyzed using appropriate qualitative methods. Direct quotations representing the themes and subthemes were identified through selective coding.

Results: Some siblings perceived their experience more positively whereas others perceived the experience more negatively. However, half identified both positive and negative aspects of the experience: "kind of hard and at the same time kind of fun". Positive aspects included interactions with the CWD and personal growth experienced by living with the CWD ("very exciting....we're always learning how to sign and help him"). Negative aspects included pain the CWD endured, disturbing/upsetting behaviors, and the effect the experience had on family interactions/functions ("always starts to yell and it embarrasses me"). Older siblings viewed the experience as having a positive influence in their lives ("this has helped me to develop into the person I am today"), and did not want to change anything about their sibling. Younger siblings discussed current interactions and wanted to change the CWD's disturbing/upsetting behaviors. Interestingly, three of the six siblings who wanted to change the CWD's condition/situation noted the CWD were typically developing before being injured in serious accidents; suggesting they remembered what the CWD was like before becoming disabled. Siblings learned about the CWD's condition from parents/physicians or from observing/interacting with the CWD.

Implications: Many siblings spoke of both positive and negative experiences living with a CWD; younger siblings focused on current behaviors while older siblings focused on how the experience influenced them positively, and did not want to change the situation. Therefore, practitioners should be aware of siblings' experiences and make sure they are afforded time and attention needed to positively cope with living with a CWD.

◀ ▶ go to PG.

ISSUES IN CHILD AND ADOLESCENT HEALTH

Adolescent Concussion: Post-Injury Assessment Relationships

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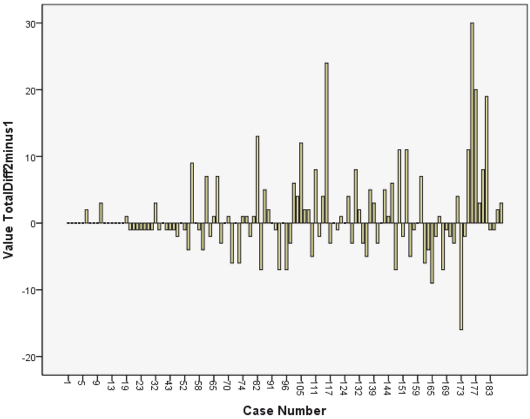
Purposes/Aims: The purpose of this analysis was to examine the relationship of post-concussion symptom scores and computer-based neurocognitive test results to theory-based factor clusters of age, gender, education level, BMI, sport played, identified cognitive risk factors, and number of previous concussions with and without loss of consciousness (LOC) in a sample of adolescent athletes.

Rationale/Conceptual Basis/Background: Post-injury symptom assessment and neurocognitive testing are important components of the multi-dimensional approach to concussion recognition and management prevalent in current concussion guidelines. Previous studies have found mixed results related to individual factors that may affect post-injury assessment and sequelae of this type of head injury.

Methods: Study Design and Protocol: This exploratory investigation is a secondary data analysis of an established post-injury dataset. High School athletes across the United States completed a computer-based assessment that included a self-report demographic and concussion history questionnaire, the Post-Concussion Symptom Score (PCSS) self-report symptom scale, and specific neurocognitive tests that comprise the post-concussion assessment battery known as ImPACT. A random sample of 1515 de-identified adolescents aged 14-18 years was extracted from an overall dataset of 6983 with 69.1% male, average age and grade level of 15.9 years and 9.34, respectively. BMI mean =36.8, concussion mean =1.2, with those resulting in LOC = 0.4. Sports most commonly represented included football (41.6%) and soccer (15.4%). Data Analysis: Hierarchical multiple regression was conducted to determine the relevant contribution of each independent variable (age, gender, BMI, sport played, identified cognitive risk factors, and number of previous concussions with or without LOC) to each dependent variable using 3 established symptom and 5 established neurocognitive composites. Block entry was performed with Cognitive Risk Factors as 1st block, Demographics as 2nd block and Concussion Specifics as the final block, order of entry supported by theory and previous research findings.



Results: Results of the Symptom regression resulted in an overall model that was statistically significant for the composites of Physical/Neural (p=.025) and Emotion (p<.001). The symptom composite, Sleep, was not statistically significant. Results of the Neurocognitive regression resulted in an overall model that was statistically significant for the composites of Verbal memory (p=.007), Visual Memory (p=.001], Visual Motor (p =.001) and Impulse Control (p<. 001). The neurocognitive composite, Reaction Time, was not statistically significant. Variance accounted for in addition to results of individual variables will be presented in greater detail.

Implications: This study sought to further examine factor relationships as theoretical blocks. Despite results that indicated significant relationships, they were few and those that were significant accounted for low variance. Although important findings for recognition and management of concussion, the findings likely represent the diversity of the dataset that contained post-injury adolescents with an average post-injury time of 21.88, representing athletes at various stages of recovery.

Acknowledgement: The author wishes to thank Dr. Mark Lovell for access to this data set and Dr. Paula Meek for guidance with this inquiry.

Promotoras Providing Health Education to Prevent Childhood Obesity

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Aims: The goal of the study presented in this paper (title blinded) is to examine the effect that confounding factors such as mode of delivery, length of time breastfeeding, maternal obesity, and pacifier use has on the outcomes of health teaching specifically on nutrition of infants by promotoras. Additional factors such as mothers' education, employment history as well as rates and types of food insecurity are also investigated to determine their influence on growth outcomes. Case studies of successful outcomes as well as unsuccessful outcomes will be presented with details about the processes that influence the outcomes.

Background: Among racial and ethnic groups, the Hispanic population has rates of 24.3% and 21.2%, for overweight and obesity respectively. The rate for the Hispanic populations was about one and a half times the rate for the white non-Hispanic population. The National Council of La Raza reports that one out of two Latino children born in the Year 2000 will develop diabetes. Early and rapid growth in infants, denoted by the upward crossing of growth centiles, is strongly associated with early development and persistence of obesity in young children. Substantial research has linked child obesity/overweight to increased risks for serious health outcomes, which include adverse physical, psychological/behavioral, or social consequences.

Methods: Data were extracted from clinical notes made by the promotoras after each visit to the family. The notes were organized in a Subjective, Objective, Assessment, Plan (SOAP) format along with clinical measures of weight, height, and 24 hour diet assessment. There were 279 clinical notes from 2-3 promotoras covering 12 months of visits to 66 subjects analyzed for this paper.

Results: There is a high rate of food insecurity among the sample with 100% using WIC, 50% receiving SNAP (food stamps), 15% using food banks, 5% skipping meals due to no food, and 89% running out of money to buy food weekly/biweekly. Rates of cesarean delivery are high at 44%, with 8% having gestational diabetes, and a mean postpartum BMI of 33. Normal weight infants have a longer duration of breastfeeding than do overweight or obese children.

Implications: Social issues frequently create a lot of stress in the families with interest in child feeding taking lesser importance than securing food for family. Overall, breastfeeding history was not associated with weight/L status at the most recent visit although prolonged breastfeeding in conjunction with counseling by promotoras *may* promote healthy weight status. Delivery status, C-section versus vaginal, did not appear to be associated with W/L status at most recent visit. In a subgroup of engaged mothers, targeted counseling appeared to reverse unhealthy weight gain trends. Further analysis needed to determine if the engagement is a result of the education provided only or if the positive outcome is a result of an effective working relationship established by the promotora with the families. Some families appear to be resistant to counseling on infant nutrition in spite of culturally appropriate education provided in a manner congruent with the education and language of the subjects.

◀ ▶ go to PG.

ISSUES IN CHILD AND ADOLESCENT HEALTH

Obese Adolescent Females Response to a Mindful Eating Intervention

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Purpose: With adolescent obesity tripling over the last three decades, the purpose of this study was to determine the effectiveness of a mindful eating as an anti-obesity intervention for obese female adolescents. Aims were to determine: 1.the effect of a mindful eating intervention compared to usual care of nutrition and physical activity information on BMI, 2 .if the effect of a mindful eating intervention on BMI of obese female adolescents is sustained over time

Background: Adolescent obesity is associated with an 80 percent risk of adult obesity, hypertension and diabetes. Left unchecked, this trend is anticipated to decrease U.S. life expectancy. Current adolescent obesity medical recommendations include bariatric surgery and appetite suppressants which lower BMI, but present serious health risks. Nutrition and exercise interventions promote health, however, meta-analyses reveal do not lower BMI. Practicing the behavioral skill of mindful eating (slow intentional eating focused on satiety) has potential for lowering BMI while promoting health. The Information, Motivation and Behavioral Skills (IMB) Theory with its crux concept purporting practicing a behavioral skill facilitates health behavior change, framed this study.

Methods: The study was conducted using a two-group, quasi-experimental, repeated measures design. Participants were recruited during school registration at an information booth set up by the PI. A total of 37 participants met the inclusion criteria of non-pregnant females, ages 14-19, with a BMI >90th percentile. Consenting participants were assigned to either an intervention group receiving a 6 week mindful eating intervention or a comparison group receiving the usual care of nutrition and physical activity information. Participants' BMI was measured at baseline, immediately post intervention and at 4 week follow up. Data were analyzed utilizing SPSS version 22. A repeated measures analysis of variance (ANOVA) was used to compare the outcome variable of BMI

Results: No statistically significant differences were found in age, education level, BMI or motivation at baseline between the intervention and comparison groups of students attending the same public high school in a southwest Arizona Latino community. The mindful eating experimental group sustained a lower BMI over six weeks which continued to decline at the 4 week post-intervention follow up. ANOVA results demonstrated a statistically significant difference in BMI between the experimental and comparison groups $F(1,2)=22.24$, $p<.001$ at 6 weeks; $F(2,14)=9.24$, $p<.05$ at 10 weeks. On average, the experimental group's BMI decreased 0.71, whereas the comparison group's BMI increased by 1.1.

Implications: This study demonstrates the feasibility and effectiveness of a mindful eating intervention in lowering BMI, holding great promise for combatting obesity in adolescents without utilizing costly pharmaceuticals or surgery. The value of applying the intervention in the school environment reduces barriers to participation. Nurses having backgrounds in both nutrition and health behavior theory, are uniquely qualified to teach mindful eating. Future study should include a school based intervention with a larger more diverse sample.

◀ ▶ go to PG.

Developing Self-Efficacy and Recall Questionnaires with and for Children

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Purpose/Aims: We will present our process and insights about incorporating children's input in the development of questionnaires to assess children's self-efficacy and recall related to healthy eating and physical activity.

Rationale/Conceptual Basis/Background: Many current health-related interventions and assessment tools were developed with and for adults and later adapted for children. However, children are not little adults. To improve their access to healthcare tailored for them, children need to be involved in the research process beginning with the development of child-centered questionnaires.

Method: We used qualitative design and held five one-hour focus groups at two elementary schools with 39 fourth to sixth grade children to discuss the evolving questionnaires. Initially we attempted to adapt a self-efficacy questionnaire for parents related to their children's nutrition and physical activity; this questionnaire had Likert-type response options. After two focus groups, we realized adapting this questionnaire would not work. The format and language were beyond the children's developmental skills. So, collaborating with a panel of children experienced in advising researchers, we drafted our own questionnaires focused on the same concepts as the modified questionnaire but reducing the wordiness, number of questions, and response options. Subsequently, we held three additional focus groups to refine our questionnaires.

Results: In the focus groups, children shared their concerns, confusion, insights, and suggestions for improvement. In a few instances, the problems we identified were readily solved by the children. As a result of the process, we have a nine-item self-efficacy questionnaire and a ten-item recall questionnaire written in simple, clear language that fifth-graders can complete in less than 5 minutes.

Implications: Whether assessing children in clinical practice or as research participants, nurses should use child-centered questionnaires that have been developed with children as consultants. Until children are directly engaged in questionnaire development, questionnaires might be developed and used that lack reliability and validity for child populations, which can result in faulty conclusions.

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ISSUES IN GRADUATE NURSING EDUCATION

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EVALUATING NP STUDENT COMPETENCIES USING ENTRUSTABLE PROFESSIONAL ACTIVITIES

Karen Macauley, Cheryl Butera, Mary Jo Clark

ADDRESSING GAPS IN A NURSING RESEARCH DOCTORAL PROGRAM CURRICULUM

Lisa Taylor-Swanson, Seungeun Park, Shih-Yin Lin, Sharee Squires, Hoang T. Dieu-Hien, Yuting Lin, Joachim Voss

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RESEARCH MENTOR AND MENTEE DEVELOPMENT: PUTTING THE "INDIVIDUAL" IN THE IDP

Kathryn A. Lee, Heather Coats, Holly Jones, Donald Mitchell,Anne Rosenfeld, Carmen Portillo

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PHD IN NURSING SCIENCE FOR NON-RNS: OPPORTUNITIES, CHALLENGES AND FUTURE DIRECTIONS

Lisa Taylor-Swanson, Alexa R. Meins, Shih-Yin Lin, Cynthia Price, Carolyn Chow, Helen "Trez" Buckland, Kristie Bjornson

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Evaluating NP Student Competencies Using Entrustable Professional Activities

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Purpose/Aims: To determine the utility of an Entrustable Professional Activities instrument as a basis for NP clinical competence-grading rubrics.

Background: Direct observation of nurse practitioner (NP) students in the clinical setting has been typically used to assess clinical competence. This method, however, is often discounted as not accurately reflecting true clinical competence due to uncontrolled variables such as: incongruous clinical placements, variation in case complexity, unpredictable patient presentation, faculty bias, and lack of agreement on indicators of acceptable clinical performance. Technological advances and innovations have expanded options for teaching and learning in NP education. Simulation, in the form of video-taped standardized patient (SP) encounters, provides the ability to create clinical experiences that encompass relevant data collection, generation of diagnostic hypotheses, and development of a management plan while simultaneously assessing embedded professional behaviors. These skills are essential to NP practice. SP encounters have enabled standardized evaluation of all students using consistent case scenarios under controlled simulation conditions. Investigation is needed to address the effectiveness of SP simulation methodology in nursing education and to develop instruments that measure development of clinical competence over the course of NP programs.

Entrustable Professional Activities (EPA) have been used in healthcare education to bridge the theory-practice gap. EPAs assist faculty to determine when it is clinically safe to make entrustment decisions, determinations that students are competent to assume specific clinical responsibilities without supervision. Clinical competence is translated into knowledge, skills, and attitudes that justify entrustment of specific activities to students. Competence-based education including EPAs can document transition milestones required before moving from supervised to independent clinical practice.

Methods: This study examines the relative effectiveness of using an existing grading rubric and an EPA-based instrument to measure clinical competencies. Data were retrieved from evaluative SP encounters involving 17 NP students in clinical management courses over one semester. Five expert clinical faculty members documented NP student competences using both instruments and outcomes were compared.

Results: There were significant, positive correlations between total scores on the existing rubric and EPA instrument as well as between all "SOAP" areas in each except "Assessment." The area of "Assessment" encompasses the synthesis of history and physical exam findings with critical reasoning skills to formulate differential diagnoses and a diagnosis. Discovering no correlation between these instruments in the "Assessment" area suggests the more specific, refined ability of the EPA instrument to evaluate this area for student competency.

Implications: The ability to identify student lack of progress in a specific area over the course of an NP program enables nursing faculty to intervene early and provide additional educational experiences needed to ensure complete clinical competence. Additional psychometric investigation is planned with a larger sample of NP students over an academic year and throughout the NP program.

◀ ▶ go to PG.

ISSUES IN GRADUATE NURSING EDUCATION

Addressing Gaps in a Nursing Research Doctoral Program Curriculum

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Purpose: To identify methodology courses or their equivalents in other disciplines to create a resources for students and advisors in selecting additional methodology and statistics courses.

Background: The University of Washington (UW) PhD program in Nursing Science is situated within a University, and the hallmark of a University is availability of learning across a broad range of disciplines. PhD students have consistently benefited from methods and statistics courses taken in other schools. The UW School of Nursing (SON) core curriculum includes courses in philosophy, theory, research methods, and analysis to provide the foundation for each student's individualized program of study. To explore the full range of methods courses available to students, a workgroup reviewed the availability and accessibility of elective nursing and campus-wide methods and statistics courses.

Methods: The workgroup started with a survey of PhD students about what additional research methods and statistics courses they believed they needed for their program of study. The workgroup reviewed courses offered through Nursing, Social Work, Public Health, Global Health, Statistics, Educational Psychology, Sociology, Geography, and the UW Center for Statistics and the Social Sciences. Inclusion criteria were graduate-level courses in statistics, qualitative methodology, quantitative methodology, or translational science offered at least once in the last three academic years. Exclusion criteria were courses that were not accessible to non-majors.

Results: The workgroup created three tables, one for each academic quarter: quantitative (49 courses), qualitative (7 courses), and translational methods (4 courses), with details of course number, description, quarter and time taught, and whether any prerequisites or instructor permission were required. Among all identified methods courses campus-wide (n=60), 13 were offered through the SON. The 13 nursing methods courses consisted of eight Doctor of Nursing Practice courses, three PhD core courses, and two PhD advanced methods courses.

Conclusions: Adequate courses are available campus-wide for PhD in Nursing Science students. A one-page-per-quarter summary of methods offerings was created for students and advisors. This one-page quarterly summary sheet will be updated by PhD Coordinating Committee student representatives twice a year. This summary will assist both students and advisors in better planning programs of study.

Research Mentor and Mentee Development: Putting the "Individual" in the IDP

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Purpose: This presentation addresses individualized qualitative experiences and best practices from nurse scientists active in mentoring the next generation of nurse researchers. We will highlight experiences in terms of benchmarks and timeframes for research productivity outcomes for predoctoral students and postdoctoral trainees based on opportunities for furthering their research portfolios and careers in nursing science and academia.

Background: The NIH has recently mandated the use of the Individual Development Plan (IDP) for trainees supported on any NIH training grant mechanism. Various forms and content have been in use for the past decade and the relationship between mentor and mentee is critical in how this IDP becomes operationalized and individualized.

Approach: IDP forms will be compared and contrasted by institutions as well as by level of trainee (predoctoral and postdoctoral). Further issues and confounding factors are also explored, such as sex (male and female), cultural expectations and learning styles, and type of program (on-line or traditional classroom).

Outcomes: The rewards and challenges of mentoring will be described from both the mentor and mentee perspectives. How IDPs can be modified for use with doctoral students and postdoctoral trainees will be demonstrated, and best practice experiences will be described and compared.

Conclusion: Senior Nurse Scientists are involved in mentoring at all levels, including students, postdoctoral trainees, and new assistant professors. Putting the individual's needs and goals at the center of an IDP is key to successful mentoring. There are rewards and challenges to the mentor/mentee relationship that need to be discussed at intervals along the way as an IDP changes course or goals over time. The benefits of sharing lessons learned and best practices for optimizing the IDP are important for career development for both the mentor and the mentee in an academic environment.

◀ ▶ go to PG.

ISSUES IN GRADUATE NURSING EDUCATION

PhD in Nursing Science for Non-RNs: Opportunities, Challenges and Future Directions

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Project Aims: (1) Describe numbers of non-RN PhD students accepted, enrolled and graduated in top School of Nursing Science (SON) programs. (2) Explore perceived challenges and benefits of being a non-RN PhD student in Nursing Science by SON faculty, current PhD students and alum of a nursing PhD program.

Background: Nursing values interdisciplinary collaboration. Enrollment of non-RNs into Nursing Science PhD programs has occurred since 1999. Because nursing is a practice-based discipline, accepting non-RN students into Nursing Science PhD programs is controversial. Systematic evaluation of this admissions practice has not been conducted. Therefore, this project is intended to guide future SON planning among educators and administrators. The long term goal is to facilitate alignment of recruitment, curriculum, funding, mentoring and post-graduate opportunities of non-RN PhD students in Nursing Science.

Methods: Administrators in top 20 US SON programs were contacted via email and asked specific questions regarding program requirements, enrollment and graduation information; descriptive statistics were used to analyze responses. For Aim 2, the sample consisted of School of Nursing faculty, current non-RN PhD students, and non-RN Nursing Science PhD alumni in a large urban university. An anonymous survey was sent out to 150 faculty to explore perceptions of the program, student opportunities and challenges; five current students and 25 alumni were contacted via email and offered a structured interview to explore experiences, perceived opportunities and challenges. Surveys and structured interviews were analyzed using descriptive statistics and content analysis. This project had IRB approval.

Results: Among the top 20 PhD programs in Nursing Science, four accept students who are non-RNs. Across these schools, 50 have enrolled (including current students) and 28 have graduated. In response to faculty survey, 34 completed the survey (60% had taught; 33% had been on committees of non-nurse students). Among faculty that had non-RNs in their classes, there was a split in perspective regarding the advantages and disadvantages of having non-RNs in the program. More faculty noted advantages than disadvantages. The advantages focused on increased interdisciplinary perspectives on clinical issues. The disadvantages focused on nursing as a practice-based discipline and the need to maintain it as such. Among current students and alumni contacted, four students and six alumni were interviewed. Perceived challenges included: limited opportunities for funding, committee/organizational membership, faculty positions, educational fellowships, professional awards; lack of acceptance/hostility from peers; expertise/input not valued; and knowledge of different literature/theories compared to their peers. Perceived benefits included: ability to offer diverse perspectives, supportive peers, opportunities for multi-disciplinary collaboration, expertise in multiple fields, and expansion of Nursing Science research topics.

Discussion/Implications: The number of Nursing Science PhD programs that accept non-RN students has increased over the past decade. There are now multiple non-RN Nurse Scientists in the workforce. A national discussion regarding Nursing Science is needed to guide the educational process, conceptualization of Nursing Science as a discipline, and the role of non-RNs within the field. This has implications for admissions, curriculum, funding, and employment.

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Abstracts of Podium Presentations

ISSUES IN NURSING PRACTICE

Moderator:
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RELATIONSHIPS AMONG NURSES' IDENTITIES, PRACTICE ENVIRONMENTS, BULLYING AND BURNOUT

Rachael Kay Eccles, Colleen Corte

EVALUATION OF A HOSPITAL STAFF TEAMWORK INTERVENTION

Mary Olivas, Diane Drake, Jacqueline Pinkowski

VIOLENCE, COMPASSION FATIGUE AND COMPASSION SATISFACTION IN THE EMERGENCY DEPARTMENT

Darcy Copeland

LIFTING OFF WITH MAGNETISM: TRANSFORMING AIR FORCE NURSING PRACTICE

Deedra L. Zabokrtsky

FULL PRACTICE AUTHORITY INITIATIVE: LESSONS LEARNED FROM NEVADA

Cameron Duncan, Kate G. Sheppard

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Relationships among Nurses' Identities, Practice Environments, Bullying and Burnout

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Background and Rationale: Burnout increases nurses' risk of anxiety, depression, and suicide. Stressful workplace environments and workplace bullying are associated with burnout, but it is unclear why some nurses are more likely to experience burnout than others who are exposed to similar environmental variables. Motivations about work and shared goals in the workplace are identified as important to the development of burnout in the Existential Model of Burnout. Through innovative application of the Social Identity Theory of Intergroup Behavior to the Existential Model of Burnout, we suggest that these goals and motivations are a result of identification with the nursing profession and with one's team of coworkers on the unit.

Purpose: The purpose of this study was to determine whether professional identification with nursing and team identification with coworkers were associated with the nursing practice environment, workplace bullying and burnout among Registered Nurses (RNs).

Methods: 1940 randomly selected RNs in a large American city received an invitation by mail to participate in an online survey that included the Practice Environment Subscale of the Nursing Work Index, the Workplace Bullying Measure, the Group Identification Scale, and the Burnout Measure.

Results: Of the 156 RNs who elected to participate, 72 met inclusion criteria of working in clinical staff RN roles in acute-care inpatient hospital settings. Being strongly identified with the profession and with one's team of coworkers were both significantly associated with lower burnout (r. -0.57 and r. -0.56, respectively). Professional identification and team identification were also significantly associated with less workplace bullying (r. -0.35 and r. -0.52, respectively) and many aspects of a healthy nursing practice environment [nurse manager leadership and support: r. 0.35, and r. 0.44, respectively; nursing as the foundation for care planning and delivery: r 0.40 and r. 0.36, respectively; collegial relationships with physicians: r. 0.37 and r. 0.38, respectively; and nurse participation in hospital affairs: r. 0.31 and r. 0.32, respectively)]. Nurses' professional identity and team identity were not significantly associated with nurse staffing and resources (r. 0.20 and 0.20, respectively, with $p>0.05$).

Implications: Among staff RNs working in urban acute-care inpatient hospital settings, strong professional identification and team identification are both associated with more positive perceptions of the workplace environment, with less frequent workplace bullying and with lower nurse burnout. These findings suggest that identification with the nursing profession and with one's team of co-workers may be protective against burnout. Further studies should determine whether professional and team identity mediate or moderate the effects of known predictors (workplace bullying and unhealthy practice environment) on burnout.

Funding: Provided by the 2012 Sigma Theta Tau International Nursing Honor Society Alpha Lambda Chapter Research Award and the 2014 MNRS/CANS Dissertation Grant.

◀ ▶ go to PG.

ISSUES IN NURSING PRACTICE

Evaluation of a Hospital Staff Teamwork Intervention

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Purposes: The purpose of this study was to evaluate the effects of teamwork training on hospital staff perceptions of teamwork.

Background: Teamwork is widely considered to contribute to patient safety and patient and staff satisfaction. Conversely, lack of teamwork has been identified as a frequent contributor to adverse events in healthcare. Healthcare workers are trained as individuals in their respective disciplines, but are expected upon graduation to practice in teams made up of many disciplines. The *TeamSTEPPS* teamwork training program developed by the Department of Defense and Agency for Healthcare Research and Quality has five core skills: 1) communication, 2) leadership, 3) situation monitoring, 4) mutual support and 5) team structure. Hospital wide teamwork training is an important method to improve teamwork skills. Evaluation of *TeamSTEPPS* training effect on staff perception of the five core teamwork skills is necessary to evaluate the effect of training however it is not often reported.

Methods: A pretest–posttest, quasi-experimental design from a convenience sample of hospital staff attending a teamwork-training program was conducted. Human subject approval was granted from the Hospital Institutional Review Board. All staff (nurses, physicians and support staff) was requested to voluntarily complete the *TeamSTEPPS* Team Perceptions Questionnaire (T-TPQ) immediately before and two to six month after the training program. The intervention was a four-hour teamwork-training program provided by certified *TeamSTEPPS* instructors. Training materials were obtained from the Agency for Healthcare Research and Quality. The training was customized for the hospital and focused on a culture of safety and improved communication. Statistical analysis was accomplished using the Statistical Package for Social Services (SPSS) for Mac version 21.0. A significance level of $p = .05$ was used to reduce the risk of Type I errors. Paired t-tests were used to measure the differences between pre and post survey scores.

Results: There were 495 completed pre-survey responses and 132 post-survey responses from the 512 trained participants. Only matched ($n = 61$) pre and post survey responses were used in data analysis. The 61 participants included in the analysis were: 48 nurses, 10 patient care technicians, 2 unit secretaries, and 1 physician. Statistically significant improvements were demonstrated in mutual support (t=2.33, p<0.023), and communication (t=2.53, p<0.014). Non-significant improvements were demonstrated in team structure (t=-7.03, p<0.09), leadership (t=1.83, p<.072), and situation monitoring (t=1.890, p<0.064).

Implications: Results from this study indicate that *TeamSTEPPS* was an effective teamwork-training program and resulted in improved perception of teamwork. Improved communication was an especially important finding because it is an integral component of teamwork behavior and supports leadership, situation monitoring and mutual support. Significant improvement in the perception of mutual support indicates a culture of trust and the promotion of patient safety. Future research approaches will include a longitudinal approach to survey six months and one-year changes in teamwork behaviors. Efforts to increase survey response and continuous evaluation of teamwork perceptions are needed. Training programs that improve teamwork perceptions are necessary to improve patient safety and patient and staff satisfaction.

◀ ▶ go to PG.

ISSUES IN NURSING PRACTICE

Violence, Compassion Fatigue and Compassion Satisfaction in the Emergency Department

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Purpose: The purpose of this study was to examine the relationships between perception of workplace violence and compassion satisfaction and compassion fatigue among staff members in a Level 1 Shock Trauma center.

Background: Workplace violence in healthcare settings is a significant problem, particularly in emergency departments. In addition to being exposed to violence in the workplace, emergency department workers can experience compassion fatigue. There is no research available investigating the relationships between compassion fatigue, compassion satisfaction, perceptions of and exposure to workplace violence among emergency department workers.

Methods: A cross-sectional design was used to survey all emergency department staff members. The survey included demographic questions, questions regarding workplace violence including perceptions of tolerance, types and frequency of violence experienced. The Professional Quality of Life: Compassion Satisfaction and Fatigue v. 5 tool was used with permission.

Results: A total of 153 people representing 13 disciplines completed the online survey. Females were more likely to report experiencing violence. Verbal abuse was the most frequently reported form of violence experienced. All forms of violence were perpetrated by patients more frequently than by family/visitors. RNs reported experiencing more violence than any other discipline. Most respondents (64%) agreed that violence is an expected part of the job. Tolerance to violence and expectation of violence were significantly correlated (r = -.198, p = .016). Significant differences in compassion satisfaction (F(10,135)=2.47, p=.010), secondary trauma (F(10,135)=1.97, p=.000) and burnout (F (10,135)=3.50, p=.042) were found between disciplines, however, only demonstrated significantly higher burnout among RNs as compared to unit secretaries (p=.048). Males reported significantly higher burnout than females (t(144 = -2.37, p=.019). There was a significant main effect in compassion satisfaction (F(4,141)=2.5, p=.045) and burnout (F(4,141)=2.82, p=.027) by age, however, no significant post hoc contrast differences were found. Compassion satisfaction was significantly lower among those working variable shifts than those working day shifts (F(3,142)=2.81, p=.050). Compassion satisfaction was significantly higher among those who reported their tolerance to violence as higher than their coworkers compared to those whose tolerance was about the same as their coworkers (F(2,143)=8.63, p=.000). Burnout was significantly lower among those who reported their tolerance to violence as higher than their coworkers compared to those whose tolerance was about the same as coworkers (F(2,143)=4.62, p=.018). Among RNs, those with 21 or more years of experience reported significantly lower burnout than any other group (F(3,53)=5.6, 0-4 years p=.006; 5-10 years p=.016; 11-20 years p=.006) and significantly higher compassion satisfaction than those with only 0-4 years of experience (F(3,53)=2.8, p=.001).

Implications: Emergency departments strive to maintain safety. They also want to retain satisfied employees. While these results represent only one study, the most experienced nurses had low burnout and high compassion satisfaction. Specific interventions addressing staff expectations of and tolerance to violence in the workplace might be effective in retaining staff members with low burnout and high compassion satisfaction. This presents an interesting paradox. Ideally violence in healthcare settings would be eliminated; however, having a high tolerance to violence might protect emergency department employees from burnout and promote compassion satisfaction.

◀ ▶ go to PG.

ISSUES IN NURSING PRACTICE

Lifting off with Magnetism: Transforming Air Force Nursing Practice

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Purposes/Aims: The aims of this evidence based project were to transform a global organization's practice culture and advance nursing excellence by infusing Magnet® characteristics into healthcare settings. The project satisfied academic requirements for an accredited Doctor of Nursing Practice program.

Rationale/Background: A call to action by the Air Force Medical Service senior nursing officer signaled a new strategic focus and triggered a review of evidence specific to magnet culture, nursing excellence, and patient outcomes. A gap analysis revealed three transformational opportunities: 1) lack of a defined model for professional practice; 2) a compliance-based organizational culture; and 3) limited understanding of performance-based outcome measures. The American Nurses Credentialing Center (ANCC) Magnet credential is synonymous with nursing excellence and quality patient care. Magnet®-designated facilities embody a culture that supports nurses. A robust body of literature links magnet hospitals to increased patient and staff satisfaction, positive clinical outcomes for patients, and higher ratings on nurse-sensitive indicators than non-magnet hospitals. A well-constructed practice model is a crucial structural element of magnet culture.

Overview of Approach, Methods, or Process: Change fusion fueled the appreciative inquiry (AI)-infused contemporary change theory developed for this project. At the heart of transformational change is an individual's reaction to change; thus, stakeholder engagement and consensus building factored into the selection of interventions. The merits of magnetism and a practice model prototype were presented to stakeholder focus groups during hour-long sessions. Targeted stakeholder groups were defined as direct care nurses (n=11), service line consultants (n=5), and senior nurse executives (n=21). Data were collected using a scholar-developed questionnaire that included scaled response and free-text fields. Plan-do-study-act cycles clarified project aims and signaled additional opportunities for advancing nursing excellence. This project was deemed research-exempt by an academic IRB.

Outcomes Achieved/Documented: The intervention strategy was designed to elicit consensus for change rather than to perform statistical analysis. Direct care and service line consultant stakeholders were united in their approval to use magnetism as the desired paradigm for nursing excellence. However, the practice model prototype did not garner united support. The consultant group rejected the model prototype, but endorsed the project for executive level consideration and continued study.

Conclusions: Consistent with elements of magnetism, a collaborative effort involving Air Force nurses at all levels of the organization produced benchmarks for transformation. Most significant was the insertion of this project's aims into the Air Force Total Nursing Force Strategic Plan. Curriculum revisions are also underway to integrate the magnet model and measures of nursing excellence into more than ten formal nursing courses. Early feedback from revised course evaluations indicate nurse participants support renewed focus on nursing practice and want to see leading practices incorporated into Air Force policies and guidance. Finally, a research proposal is being prepared for IRB consideration to leverage momentum in cultural transformation generated by this EBP project.

◀ ▶ go to PG.

ISSUES IN NURSING PRACTICE

Full Practice Authority Initiative: Lessons Learned from Nevada

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Purpose: Identify specific legislative barriers to full practice authority (FPA) legislation and describe how they were overcome during the 2013 legislative session in Nevada.
Background: Legislative restrictions in 31 states prevent nurse practitioners from practicing to the full extent of their education and training. FPA legislation is introduced, but not often signed into law. A comprehensive literature review revealed multiple barriers to autonomous practice: conflict between medical and nursing roles, lack of nurse practitioner role recognition, financial challenges, and a lack of business knowledge. Barriers caused by policy limitations were most frequently mentioned: limited scope of practice, limited prescriptive authority, limited clinical privileges, credentialing limitations and reduced reimbursement rates.
Methods: This study employed a qualitative, multiple case study design. Semi-structured interviews were conducted with four actively-involved contributors to the 2013 FPA initiative in Nevada. Homogeneous questions were used, guided by the use of a predetermined set of questions based on Kotter's (1995) Change Management Model. Each interview began with the question, "What prompted this movement and why was it introduced at this time?" Participants were asked to identify perceived barriers to FPA legislation, and how they were overcome. Recorded interviews were transcribed into text, which led to thematic analysis.
Results: Repetition of shared perceptions revealed eleven barriers separated into six main themes. 1.) *Vision* includes the barrier of lacking a clear and shared vision. 2.) *Physician Support* includes the barrier of lacking the support of physicians and Organized Medicine. 3.) *Addressing Stakeholders* includes the barriers of the inability to address stakeholders, lack of role recognition and community support, and social media. 4.) *Community Organization Support* includes the barriers of having a Board of Nursing with a poor reputation, and a lack of support from the Board of Pharmacy. 5.) *Leading Coalition* includes the barriers of lacking a strong, leading coalition lacking history of leadership and legislative experiences, and choosing a legislator without experience, authority, and respect in the legislature and the community. 6.) *Resources* includes the barrier of lacking necessary resources including time and preparation.
Implications: The findings of this study may be useful for those living in one of the 31 states without FPA legislation. This is one of the first published studies to identify the importance of literature identifying legislative barriers to FPA, and starts to fill the current gap in the literature surrounding this topic. This information may be invaluable in the preparation and introduction of FPA legislation in other states. The findings may also act as a stepping-stone to addressing the provider shortage in the U.S., and may be instrumental in improving access to care. Further research is needed to identify whether similar barriers found in this study are prevalent in other states with FPA legislation for nurse practitioners.

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◀ ▶ go to PG.

ISSUES IN TEACHING AND LEARNING

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DELIVERING QUALITY ONLINE: THE INSTRUCTIONAL DESIGNER-FACULTY PARTNERSHIP

Sheila M. Gephart, Adam Brokamp

THE E-BOOK AS AN ENDURING AND INNOVATIVE COURSE OUTCOME

Lauren Clark, Anne Morrow, Erin Wimmer, Alice Weber

TRANSFORMING TEACHING WITH TECHNOLOGY

Jeanette McNeill

STUDENTS' ATTITUDES AND KNOWLEDGE RESULTING FROM TRADITIONAL CASE-BASED LEARNING

Debra Bakerjian, Samantha Blackburn

USING NEUROSCIENCE LEARNING THEORY AND VISUAL STRATEGIES TO TEACH CONCEPTS

Suchawadee Yimmee, Joanna M. Rowe

◀ ▶ go to PG.

Delivering Quality Online: The Instructional Designer-Faculty Partnership

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Purposes/Aims: Academic nurses bring content knowledge that students expect, but increasingly students also expect technological acumen in the delivery of course content. Working with Instructional Designers, skilled in the design and delivery of education via technology, is one approach to meet both needs. This presentation will present multi-modal approaches and lessons learned working with instructional designers in an online graduate nursing program in the context of the Quality Matters framework.

Rationale/Background: Optimizing the student experience is a priority for academics and consumers alike. Students select their program of choice based on its academic ratings as well as its design appeal. Even so, as technology grows ubiquitous in everyday life, students expect both functionality and portability in how they engage with learning. Educators are eager to include variety in their delivery of important content while maintaining the veracity of their subjects. Advanced Practice Nurses of the future will need to be literate in technologies to span distance and many nurses are eliminating barriers to education that distance creates by pursuing online educational programs. Experiential learners naturally are drawn to nursing, and their need to experience the topic and engage with the faculty member are supported by online tools including you-tube, live webconferences, game-based learning and social connections in online communities. The suite of technologies available can be overwhelming, but Instructional Designers are experts in the delivery of online content and a valuable resource for faculty.

Undertaking/Process: Tips for working with Instructional Designers in the context of our experience will be presented including 1) recognizing their unique strengths, 2) setting schedules, 3) creating shared understandings, and 4) establishing shared recognition. How to find and use educational technologies available online will be demonstrated to add fun and interest to the online classroom. Key documents offering guidance to maintain privacy and professionalism in online communities will be presented.

Outcomes Achieved: Working with Instructional Designers has yielded more intuitively designed technology that fits user's expectations. Creating systematic approaches to integrating technologies has related to higher user engagement in graduate level courses in our experience, reflected by positive student evaluations.

Conclusions: Recognizing ways to work with design experts, Instructional Designers, in particular is the first step in meeting students' needs in the online environment. Their expertise is synergistic to the content expertise that faculty bring to support the student experience.

Funding: Dr. Gephart has received funding support from AHRQ (K08 HS22908-01A1) and the Robert Wood Johnson Nurse Faculty Scholars Program (ID 72114).

◀ ▶ go to PG.

The e-Book as an Enduring and Innovative Course Outcome

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Purpose: In a graduate-level interdisciplinary course, *Research with Diverse Populations,* an interdisciplinary faculty team helped students author an e-book. A pedagogical goal was to transform students from passive consumerism of authoritative writings to active production of research resources. A professional goal was to model professionalism in authorship and peer review. A scholarly goal was to contribute a durable resource that synthesized students' own work and that of others into a wiki e-book on the course topic.

Background: Definitive texts on research with diverse, vulnerable, marginalized, or stigmatized populations with health concerns have yet to be written. Even so, a patchwork of rich scholarly dialogue is abundant on topics of recruitment, retention, respect, research design, and rigor. Rather than purchase a collection of texts, students created the text.

Process and Project Description: Through a series of sequential individual and group assignments students produced various products published in the e-book. One assignment was a "positionality" statement reflecting on their relationship to a chosen population of interest. This was published as a 5 minute audio-recording. Another assignment required co-authored chapters on the following topics related to research with diverse or marginalized populations: recruitment and retention; benefits and drawbacks of established and emergent research designs; and historical and contemporary exemplars of respect and ethical conduct. Links to other research papers and podcasts were included in the e-book. WordPress was chosen as the platform for publication as it provided the ability to incorporate student work in innovative layouts. With support from the university libraries, the e-book has been published and will be maintained on a library server.

Outcomes: In addition to mastering course content, students were guided to exhibit professional conduct as they negotiated copyright, conducted peer review, and wrote authorship attributions for their shared work. The eBook served as a meaningful, lasting application of assignments required for the course, and is now available online as a reference for other students and researchers. The e-book format allows for updating as issues in the field change, and for expansion of content to include additional populations of interest to future students.

Conclusion and Implications: The wiki nature of course-based publishing promotes the aggregation of continuous contributions from students across semesters and the incorporation of review and response from colleagues and others in the field. The benefits to students and the discipline suggest e-books will become a more common innovation in graduate education.

◀ ▶ go to PG.

Transforming Teaching with Technology

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Purpose: To describe best practices in the use of technology for transformative nursing education.

Significance: Graduate nursing courses are increasingly offered online; educators of the future will need to be technologically adept to meet the needs of increasingly diverse learners. National organizations, including the National League for Nursing, the Institute of Medicine, and others recognize the need for future generations of nurses to be increasingly technologically competent which requires technological competence from current and future educators. Constructivist learning theory provides a relevant theoretical foundation for use of technology to transform teaching/learning.

Methods: Nursing education and core graduate courses were infused with assignments and expected outcomes related to technology. Already online courses, additional planned technology (virtual poster presentation, eRole play and eDebate) assisted students in gaining expertise and confidence in using technology. Second Life, a virtual reality, was used to develop presentation skills as students presented an electronic poster to classmates, faculty and invited guests. An e-Role Play involved participation in a simulated faculty meeting scenario discussing legal and interpersonal issues in education; e-Debate encouraged teamwork in exploration of ideas, developing arguments and debate responses, and critiquing others' arguments. Each of the three activities were conducted and evaluated using evidence based practices to ensure that they were student centered, accessible and promoted reflection.

Outcomes: Four different courses, over a two year period, involved 36 students each participating in at least two of three technological approaches. The e-role play and the virtual poster session occurred in nursing education courses preparing DNP and master's students for the educator role. eDebate was used in a DNP core course, Epidemiology. E-Role Play and eDebate occurred using discussion board with 16 and 15 students, respectively. The virtual poster session, n=8, occurred in the virtual environment, a university created Second Life setting. Formative evaluation of the strategies indicated that technology difficulties occurred but can be managed with technology support, and carefully designed guidelines for the projects. Summative evaluation, student satisfaction with teaching/learning strategies, revealed positive (> 4.5 on scale with 5 being extremely satisfied) evaluations with comments indicating a heightened appreciation of both the content of the course, e.g., the curricular planning or ethical issues facing faculty, as well as the use of the technology, e.g., presenting a virtual poster session, using a threaded discussion in a discussion board. Reflections included that students gained awareness of the faculty role dealing with student challenges, the importance of school policies, and the excitement of presenting to peers. Of note, most students commented that they enjoyed feeling more connected to classmates through the use of real time experiences for learning.

Recommendations: Modifying established teaching strategies for online and virtual environments result in accessible innovative technological strategies that can transform the educational experience for aspiring educators who will be the nursing faculty of the future. Further study of student outcomes, particularly knowledge and skill acquisition, are needed to enhance and refine technology use in the online and traditional course environment.

◀ ▶ go to PG.

ISSUES IN TEACHING AND LEARNING

Students' Attitudes and Knowledge Resulting from Traditional Case-Based Learning

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Purpose/Aims: The purpose of this project was to establish baseline data regarding the attitudes of nurse practitioner and physician assistant graduate students toward case-based learning (CBL). There were two aims: 1) to determine student's attitudes about the existing CBL program, and 2) to identify student's thoughts on the best ways to use CBL in the classroom and testing environments.

Rationale/Background: Case-based learning is a pedagogical method that is frequently used in health professional education. There is no consensus on how to define CBL and a wide variety of ways that CBL is employed in the classroom. The Harvard Business School was one of the first institutions to adopt CBL and has a long history of using this method in the classroom, but this has been focused on business cases. Subsequently, CBL has been increasingly used in healthcare education, although the literature in graduate nursing often focuses on specific skill acquisition and critical thinking skills. The literature on evaluation of CBL indicates that most studies assess student experiences, faculty satisfaction, and knowledge and attitudes of students. The NP/PA program is in the process of developing a novel model of CBL, designed to incorporate social determinants of health into a clinical graduate program. We wanted to evaluate NP/PA students' attitudes toward their previous experiences with CBL before implementing the novel model of CBL to establish baseline data and to inform how we implemented the new program.

Approach: We developed a survey that included 30 questions with a Likert scale of 1-5 (strongly disagree to strongly agree) and 5 open ended questions. Since this was baseline data, we were interested in student's experiences of CBL and whether they thought that CBL enhanced their learning. We specifically asked whether the existing method of CBL helped them to understand social determinants of health.

Outcomes Achieved: Students rated CBL highly overall. The highest ratings were in supporting problem-solving skills and differential diagnosis, applying knowledge and skills to new situations, identifying areas where they needed to improve knowledge. The lowest rankings were in recognition of how immigration status impacts health, identifying rural health resources, and providing care to patients of diverse cultural backgrounds. Students thought CBL was best used in the classroom versus in simulation and testing.

Conclusions: Students ratings of what they learned best from CBL supports that they gain knowledge on clinical decision making regarding individual patients. Given the importance of population health and understanding that social determinants of health and health inequities have a huge impact on overall health, educators must find a way to incorporate these issues into CBL in graduate clinical education.

Funding: The project was funded through U.S. Department of Health and Human Services, Human Resources Services Administration (HRSA) - Grant #: D57HP23248.

◀ ▶ go to PG.

ISSUES IN TEACHING AND LEARNING

Using Neuroscience Learning Theory and Visual Strategies to Teach Concepts

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Purpose/Aims: Nursing education is in a state of shifting from content driven curriculum to a concept based curriculum. This paradigm shift compliments the change from a teaching to a learning approach. A concept based curriculum, if taught in way that builds conceptual knowledge helps students develop conceptual thinking, be independent thinkers and become lifelong learners. This presentation demonstrates how faculty used neuroscience learning theory through the incorporation of teaching visual strategies to help students acquire conceptual knowledge in a *Foundations of Community-Based Nursing Practice* course.

Rationale/Background: Linfield-Good Samaritan School of Nursing implemented an integrated, concept based curriculum in 2011. A concept based curriculum promotes a deeper understanding of content and helps students acquire conceptual knowledge which can readily be applied in nursing practice. Teaching concepts requires faculty to use a conceptual way of teaching. The faculty in *a Foundations of Community-Based Nursing Practice* course use neuroscience learning theory and visual teaching strategies to promote conceptual knowledge acquisition in a way that matches how an individual's brain processes new information. Neuroscience learning theory suggests that faculty must understand how the learners' brain processes new information rather than other learning theories that purport pattern recognition and rule-based knowledge.

Description: Baccalaureate students are expected to be prepared to have broader perspective, and equipped with knowledge and skills to care for complex clients. The *Foundations of Community-Based Nursing Practice* course introduces and begins to integrate fundamental concepts for the nursing curriculum. Using neuroscience learning theory, concepts are presented starting with the whole concept which is then broken down into specific critical thinking questions about the concept and ends with interventions and evaluation. Students are taught to learn a concept through the following questions: 1) What is the concept described in your own words? 2) What do people who have this problem look like (objective) and what do they say (subjective)? 3) Why do they look that way and say that? 4) What do I do (nursing actions) when I see or hear these symptoms? 5) What do I expect collaborative care to include? 6) What evaluation criteria inform me the client is better, worse or the same? 7) What do I need to do next? This conceptual way of teaching combined with the use of visual strategies, such as drawing in real-time, connecting concepts together, and seeing how clients change over time results in students acquiring basic conceptual knowledge that they can build on across the curriculum of study.

Outcomes Achieved/Documented: Scores on HESI exams and comprehensive course tests improved since using these teaching/learning strategies, especially for English as Second Language students. Student feedback on course and teacher evaluations clearly support that they gained a deep level of understanding.

Conclusions: When shifting from a traditional curriculum focused on content to a concept based curriculum can be overwhelming. The purpose of this presentation is to show how to use a conceptual teaching/learning theory (neuroscience) to teach concepts in a concept-based curriculum. Using neuroscience learning theory helps students acquire conceptual knowledge.

◀ ▶ go to PG.

ISSUES IN UNDERGRADUATE NURSING EDUCATION

Moderator:
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THE RELATIONSHIP BETWEEN PSE, REMEDIATION, AND ACADEMIC PERFORMANCE IN BSN STUDENTS

Debra Wilson

HEALTH PROMOTING BEHAVIORS OF ENTERING RN-BSN STUDENTS

Kathleen Gilchrist, Cherie Rector

ADVANCING HEALTH EQUITY THROUGH STUDENT EMPOWERMENT AND PROFESSIONAL SUCCESS

Peggy Wros, Joanne Noone, Rana Najjar, Leela DaCosta, David Cortez

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INCREASING ACCESS TO GERONTOLOGY NURSING EDUCATION WITH AN HONORS SCHOLARSHIP PROGRAM

Ruth Tadesse, Juliana Cartwright

◀ ▶ go to PG.

ISSUES IN UNDERGRADUATE NURSING EDUCATION

The Relationship between PSE, Remediation, and Academic Performance in BSN Students

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Purpose/Aims: The purpose of this study was to identify the relationship between the use of structured remediation materials (available as part of a standardized testing package), perceived academic self-efficacy beliefs, and student success in pre-licensure, undergraduate nursing programs. The aim of the study was to test the relationship between academic self-efficacy beliefs and nursing student success.

Rationale/Background: Nurse educators are faced with the daunting task of preparing students for professional practice as registered nurses. Students who are academically underprepared are often at risk for nursing course failure. There is a lack of consensus in the literature about predictors of success in nursing education. Most nursing education research has focused on the nursing licensure examination as the outcome measure. This focus occurs late in the curriculum and fails to address at-risk students who don't make it to graduation.

Remediation research has also focused on student performance on the licensure examination and interventions are often poorly described, making replication and validation difficult. Standardized testing packages are widely used in nursing education; many have remediation plans embedded in them that allow students to develop an individualized remediation plan based on examination performance. This resource is often underutilized. It is not clear why some students who struggle academically seek out learning opportunities while others do not. In this study, motivation for student learning was evaluated using Bandura's concept of perceived self-efficacy.

Methods: This research explored the relationship between perceived academic self-efficacy beliefs, academic performance, and remediation of pre-licensure baccalaureate nursing students using a prospective, correlational design. Participants were recruited from six public, baccalaureate nursing programs. Data analysis included correlational analysis of the research variables using Pearson's r.

Results: There was not a statistically significant relationship between self-efficacy beliefs and examination preparation ($r= .181$; $p = .0804$) or between remediation and subsequent examination performance ($r=.243$; $p = .135$). There was a statistically significant relationship between Remediation and Perceived Academic Self-Efficacy beliefs ($r= .341$; $p= .034$).

Discussion/Implications: Limitations for this study include a small sample size and a high attrition rate. Participants also had difficulty in self reporting their study activities on the Examination Preparation Survey, which may have affected the trustworthiness of this measure. Further research is needed to evaluate the benefit of remediation in relation to student outcomes. There is an opportunity for collaborative research among nurse educators in an effort to ensure an adequate sample size for future research efforts. There is also a need to evaluate specific remediation activities to identify which activities provide the most benefit to at risk students.

◀ ▶ go to PG.

Health Promoting Behaviors of Entering RN-BSN Students

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Purpose: Assess the health promoting-behaviors of entering RN-BSN students utilizing Pender's Health-Promoting Lifestyle Profile II (HPLP II).

Background: Health promotion is a proactive, goal-directed behavior that improves health and wellbeing. Health promoting actions can be influenced by: a) perceived barriers that can hinder commitment, b) environmental influences including peers and situations that can either increase or decrease commitment, and c) competing and uncontrollable demands with loss of attention to commitment.

Methodology: A descriptive, cross-sectional, quantitative design was utilized. Health-promoting behaviors were measured using the HPLP II (Cronbach's alpha .943), a 52-item instrument that includes a total score and 6 subscale scores including health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations, and stress management. Demographic information was collected including age, ethnicity, educational level, years in nursing, height, and weight from a convenience sample of entering RN-BSN students at a public university system. Researchers provided a link to the HPLP II for entering RN-BSN students and invited them to participate in the research through Survey Monkey®.

Results: There were 30 respondents, ranging in age from 24-48, 57% were Hispanic, 90% female, 53% were married, 93% had an associate degree, and average years worked as a nurse was 3.12 years (range = <1 to 16); only one of the participants smoked. However, 63% stated they never or only sometimes left their unit for meals and 43% report being overweight (13% obese). Seventy percent never or only sometimes limit their use of sugar or sweets. Just over 46%, only sometimes reported any unusual signs or symptoms to a physician or other health professional (13% never do). Similarly, 43.33% sometimes followed a planned exercise program, and 26.67% never do. Over 73% either never or only sometimes get enough sleep. Thirty percent of the participants never took part in light to moderate activity, and 46.67% sometimes did. Over 57% sometimes used specific methods to control their stress, and almost 18% never did. Eighty percent never or only sometimes took time each day to relax. Over 83% either never or merely sometimes asked for information from health professionals about how to take good care of their health, and almost 57% never attended educational programs on personal health care. About half ate breakfast routinely or often.

Nursing Implications: Interestingly, entering RN-BSNs are not following guidelines that they teach patients each and every day. By not regularly eating breakfast, not getting sufficient sleep, not exercising, not taking time daily to relax, and not going to educational programs, RN-BSNs in this study exhibited problems with health-promoting behaviors. Nurses need to advocate health promotion for themselves, as well as patients. Further research should consider several potential areas of research. Why do RN-BSNs not take better care of their health? Does their employer offer health promotion programs at either no cost or low cost? Does the employees' health insurance offer health-promotion programs and how can RN-BSNs be encouraged to take part in these programs? Should there be time off (paid or not) for health promoting behaviors (e.g., exercise, relaxation)?

◀ ▶ go to PG.

Advancing Health Equity through Student Empowerment and Professional Success

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Purposes/Aims: The purpose of the *Advancing Health Equity through Student Empowerment & Professional Success* (HealthE STEPS) program is to address social determinants of health (SDH) to enroll, empower, and graduate nursing students from disadvantaged backgrounds, including underrepresented ethnic and racial minority populations and in particular Hispanics, to improve health equity within their communities through professional nursing practice.

Rationale/Background: There is a relative lack of diversity in the nursing workforce in the nation and in Oregon and this gap has been identified by state leaders as contributing to health inequity. Oregon Health & Science University School of Nursing (SON) is the only public nursing school in Oregon, and has baccalaureate programs on 5 campuses and partnerships with community colleges through the Oregon Consortium for Nursing Education. The SON is implementing HealthE STEPS, with long term goals of providing career opportunities in nursing for disadvantaged and underserved students and reducing health disparities statewide.

Brief Description of the Undertaking: This innovative model provides a comprehensive plan of evidence-based individual strategies to improve nursing workforce diversity and build capacity to advance health equity in the state of Oregon by focusing on the following social determinants contributing to student success: 1) educational opportunity; 2) economic stability; 3) socioeconomic opportunity; 4) social inclusion; and, 5) health equity. Specific strategies address academic socialization, financial resources, community and professional networking and mentoring, curriculum development, and campus culture. Recruitment activities are developed in partnership with local campus recruiters and community partners serving disadvantaged youth. Two bilingual diversity coordinators provide case management for trainees in pre-nursing, community college nursing, OHSU baccalaureate nursing, and RN-BS completion programs by partnering with students and their families to address identified academic and social barriers. Workshops are provided for faculty to expand teaching-learning strategies that support diverse students. In addition, trainees participate in focused clinical learning experiences in medically underserved communities.

Outcomes Achieved: HealthE STEPS program sites are located on rural and urban university and community college campuses throughout Oregon. Forty-four pre-nursing and nursing students from disadvantaged backgrounds enrolled in community colleges and colleges throughout Oregon have been enrolled annually in the program. In addition to financial support, students received individualized mentoring; case management; NCLEX preparation support; and workshops on financial planning, scholarship searching, essay writing, mock interviews for jobs or admission to school and graduate school opportunities.

Conclusions: The outcomes of HealthE STEPS specifically address increased enrollment and graduation of underrepresented and disadvantaged students in baccalaureate nursing programs; transition of community college graduates into baccalaureate completion programs; progression of graduates into masters/doctoral programs and professional roles as faculty and primary care practitioners; and commitment to nursing careers with underserved communities and populations. The goals and objectives of this program are incorporated into the SON's Diversity Action Plan with the overarching goal of "Creating a Climate of Diversity and Inclusion" and represent a comprehensive innovative plan of evidenced-based strategies to address health equity through developing a diverse professional nursing workforce to practice in medically underserved communities.

Funding: Health Resources and Services Administration Nursing Workforce Diversity Program Grant Number D19HP25901.

go to PG.

Increasing Access to Gerontology Nursing Education with an Honors Scholarship Program

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Purpose: This presentation describes how one undergraduate (UG) program has created access to focused gerontology nursing content for students interested in caring for older adults. Using distance technologies, the Gerontology Nursing Honors Program (GNHP) has been successfully implemented for students in a nursing school that has multiple campuses.

Background: Although older adults represent the fastest growing age cohort in the U.S., many undergraduate programs continue to offer limited education regarding best practices in their care. Older adults access the healthcare system more than any other age group, often have multiple chronic illnesses, and usually receive care from non-specialized providers. Between co-morbidities and age-related physiologic changes, they require more time to recover from acute illness exacerbations than other populations. With the rapidly expanding aged population, greatly needed are competent nurses who have the knowledge, skills, and attitudes to provide high quality, safe care to older adults with complex care needs. Yet, attracting a sizeable number of students to offer focused coursework in gerontology nursing can be difficult.

Description: The school spans five campuses throughout a rural northwest state. The GNHP uses multiple technologies to enable qualified students across all campuses to come together as a learning community. Eligible students are accepted into the competitive program during their junior year when they independently complete case-based, online modules on pathophysiology, pharmacology, acute care and chronic illness in older adults. Throughout the second year, students participate in a one-credit seminar to discuss research related to best care practices, gaps in existing gerontology knowledge, and ways to improve the quality and safety of care for older adults. Students also meet with gerontology nurse scientists and doctoral students during the seminar. Their clinical placements are in settings where older adults receive care. The students receive modest scholarship support during the second year. Faculty advisors and gerontology faculty support students throughout this process. On completion of the program, students submit individual theses and give oral presentations on their topics of interest.

Outcomes: The first cohort graduated from the GNHP in June, 2014. These students provided positive feedback on the experience and described a sense of camaraderie despite living hundreds of miles from each other. They obtained employment in a range of settings where older adults receive care. Several indicated an interest in advanced gerontology nursing education and all expressed new-found awareness of the need for gerontology nursing research across a range of issues. Interest in the program is growing as demonstrated by the increasing number of applicants to the program each year.

Implications: Distance technologies linked students and faculty across five campuses for a focused gerontology honors program. The students highly valued the skills and knowledge they developed both regarding best practices in gerontology nursing and in learning to critically review and critique the literature on gerontology nursing practice. Further, students and faculty perceived a robust learning community where they were supported in their practice interests.

Funding: Supported in part by the William Randolph Hearst Foundation and the Oregon Health & Science University School of Nursing Hartford Center for Geriatric Nursing Excellence.

◀ ▶ go to PG.

◀ ▶ go to PG.

Abstracts of Podium Presentations

LIFELONG LEARNING

Moderator:
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PROMOTING EVIDENCE-BASED PRACTICE AND RESEARCH WITH A HYBRID JOURNAL CLUB

Marian Wilson, Suzanna Ice, Cathy Y. Nakashima, L. Annette Cox, Elizabeth C. Morse, Ginu Philip, Ellen Vuong, Patricia Kelly

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IMPROVING QUALITY WITH EVIDENCE: EQUIPPING NURSES TO INTEGRATE RESEARCH INTO PRACTICE

Elizabeth A. Crabtree

TRAINING NURSES TO SCREEN FOR AND PREVENT SUBSTANCE ABUSE: *NURSES HELPING COLORADO*

Paul F. Cook, Mary Weber, Laurra Aagaard, Fara Bowler

"NEVER IN ALL MY YEARS": NURSES' EDUCATION ABOUT LGBT HEALTH

Rebecca M. Carabez, Megan B. Scott

AN INTERVENTION FOR NURSES' HEALTH LITERACY KNOWLEDGE AND EXPERIENCE

Cheryl Westlake, Diane Drake, June Melford

◀ ▶ go to PG.

Promoting Evidence-Based Practice and Research with a Hybrid Journal Club

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Purpose: This study analyzes outcomes of a nurse-led multi-disciplinary journal club that was designed to increase healthcare professionals' ability to integrate current research into clinical problem solving. A "hybrid" approach was created with options for in-person group sessions and/or online participation via message boards. We used the four steps of evidence-based practice (EBP), "Ask, Access, Appraise, and Apply" to develop journal club session content. The specific aims are: 1) determine whether significant improvements in EBP measurements could be detected after eight weeks of journal club participation; 2) establish reliability and validity of EBP measurement tools; and 3) determine feasibility and participation rates of an innovative journal club delivery mode.

Background: Journal clubs have been used as a method of teaching healthcare professionals how to access and critically review research articles. However, no consensus exists on the best formats for research education delivery or how to measure impacts. Testing new journal club models and establishing reliable measurement tools is needed to build on current knowledge and assure effective education reaches clinicians.

Methods: This is a pretest-posttest quasiexperimental study to test whether significant improvements in EBP abilities, behaviors, use, and reduction of barriers could be detected after eight weeks of journal club participation. Data were collected using online surveys including two validated measurements: (1) The Evidence-based Practice Capabilities Beliefs Scale to measure self-efficacy and EBP use; and (2) Information Literacy for Evidence-Based Nursing Practice tools to measure ability, desire, frequency of desired behaviors, and barriers to EBP.

Results: Results of paired t tests (pretest/post-test) showed significant improvements in EBP use ($p = .002$) and behaviors ($p = .007$) among 36 participants (72% registered nurses). Positive significant relationships were detected between improved EBP barrier-reduction scores and the total number of in-person journal club sessions ($r = .50$, $p = .02$). Strong significant relationships were observed between EBP self-efficacy and ability ($r = .86$, $p = .001$). Program evaluation data showed high satisfaction ratings and varied participation preferences.

Implications: Hybrid delivery methods using online and in-person sessions is feasible and adaptive for varying learning styles, preferences, and work schedules. Significant improvements on EBP practice use and behaviors support previous findings and desired outcomes from journal club participation. Low -burden instruments were identified that may be useful for trialing other research educational programs.

◀ ▶ go to PG.

Improving Quality with Evidence: Equipping Nurses to Integrate Research into Practice

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Purposes/Aims: To describe the development and implementation of an EBP Nurse Scholars course. The course was designed to teach EBP skills that enable staff to conduct extensive evaluations of existing literature to improve patient care. The program provides a comprehensive overview of EBP, and essential components necessary for implementation of EBP in a clinical setting. During the course, EBP Scholars choose a policy or nursing practice requiring EBP evaluation and focus on reviewing the evidence for the policy update or practice change.

Rationale/Background: Nurses serve on the front line of health are, and have a unique opportunity to improve patient care through evidence-based practice. Best practice only results when staff continually ask questions about treatment and care, and have the resources and skills necessary to search for and appraise research evidence, implement it in practice, and evaluate its effectiveness. The staff nurse is a critical link in bringing research-based changes into clinical practice. However, experience preparing practicing nurses for EBP is limited.

Undertaking/Best Practice/Approach/Methods/Process: Our hospital developed a 12-week project-based EBP Nurse Scholars course. The course provides nurses with a comprehensive overview of EBP, preparing them to frame clinical questions, perform literature searches, analyze and evaluate evidence, and translate that knowledge into something clinically meaningful. As a part of the course, nurses select a specific hospital policy, and apply their knowledge to evaluating the evidence-base for it, working to ensure the policy reflects best practice.

Outcomes Achieved/Documented: Over the last two years, over thirty nurses have completed EBP projects through the EBP Nurse Scholars course. These projects have resulted in the development of standing orders, revised protocols, and updated education materials for patients and families. Several nurses have presented their work at national and regional conferences. Nurses' attitudes toward, and use of EBP resources have also improved as evidenced by pre- and post- course evaluations.

Conclusions: This course taught nurses how to integrate evidence into practice at both an individual and systematic level. The EBP Nurse Scholars course has resulted in real changes in practice that have led to improvements in patient care. After participating, clinicians are better equipped to frame clinical questions, search for and analyze research evidence, and integrate it into practice. The conduit of the course also allows for practice changes to be integrated at a system level through the vehicle of our hospital's electronic medical record.

The project-based aspect of this courses is unique and innovative, and the success experienced, to-date, is worthy of sharing with other medical centers interested in equipping clinicians to engage in EBP, and integrating evidence into practice at a system level in a manner that promotes excellence in clinical care.

◀ ▶ go to PG.

LIFELONG LEARNING

Training Nurses to Screen for and Prevent Substance Abuse: *Nurses Helping Colorado*

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Purpose/Aims: *Nurses Helping Colorado* is a SAMHSA-funded training program, in which the University of Colorado College of Nursing aims to train 825 undergraduate (BS) and advanced practice nurses (APRN) on screening, brief intervention, and referral to treatment (SBIRT) for substance abuse prevention. This will increase the state's number of SBIRT-trained nurses by about 25%.

Background: SBIRT is an evidence-based package of public health interventions to address varying levels of risk for substance use disorders. However, health care professionals use these interventions rarely. Nurses play a critical role in fully integrating SBIRT services into a variety of healthcare settings. Nurses are well positioned to deliver SBIRT because of their extended patient contact and existing skills in health promotion, communication, and patient education, but additional training is necessary to give them the knowledge, attitudes, and skills needed for SBIRT. Evaluation data at the end of the first year of training suggest successes as well as gaps and areas for improvement.

Methods: In year 1, we trained 273 BS students and 196 APRN students in primary care specialties across the lifespan. Students were predominantly female and White, although there was some demographic diversity consistent with the population of Colorado. SBIRT training used a three-part approach, with didactic instruction threaded through multiple BS and APRN curriculum courses, simulation exercises linked to the course content, and supervised practicum experiences. Evaluation measures targeted each of these three components, and included trainee self-reports before and after training, behavioral observation measures of simulation exercises, and clinical chart documentation of APRN students' practicum experiences.

Outcomes: Students reported high levels of satisfaction with the training in both curriculum levels – BS (82%) and APRN (85%). They reported similarly high levels of knowledge gain and intention to use SBIRT after training. Observational data for the first cohort of BS students trained showed high rates of screening (86%-95%) and moderate use of brief intervention skills (58%) in simulated patient encounters. A discrepancy between assessment and intervention was also seen among clinical preceptors, who said that they screen for substance use 65% of the time but offer brief interventions only 6% of the time. To date, clinical practice documentation has shown very low levels of SBIRT in actual practicum settings (<5% for all APRN specialties). A crucial gap appears to be preceptors not using or modeling SBIRT skills in practice.

Conclusions: Although BS and APRN students have been very receptive to SBIRT training as part of their regular coursework for a nursing degree, and are able to demonstrate SBIRT skills in simulated patient encounters, these skills are not being successfully implemented in practice settings. Training clinical preceptors is a key focus in year 2 of the training program, so that they can more effectively mentor students. Additionally, we are focusing on communication skills training to help students make the transition from asking about substance use to successful brief intervention.

Funding: This study was supported by grant #1U79 T1025352-01 (PI: Weber) from the Center for Substance Abuse Treatment (CSAT), SAMHSA.

◀ ▶ go to PG.

"Never in All My Years": Nurses' Education about LGBT Health

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Purpose and Aims: To examine practicing nurses' prior education and current knowledge and attitudes about working with LGBT patients.

Background: In spite of recent calls for patient-centered care and greater attention to the needs of lesbian, gay, bisexual, and transgender (LGBT) patients, nurses still lack basic education about LGBT patient care, and as a result, may have negative attitudes, endorse stereotypes, and/or feel uncomfortable providing care. This study reports on education/training of practicing nurses and explores some of the reasons for nurses reporting feelings of discomfort with LGBT patient care.

Method: Nursing students enrolled in a Community/Public Health Nursing Theory Course conducted structured interviews of 268 nurses in the San Francisco Bay Area based on the Health Care Equality Index (HEI). Transcripts were analyzed for emerging key themes.

Results: Approximately 80% of the nurse key informants had no education or training on LGBT issues. Although most said they were comfortable with LGBT patient care, some of their comments indicated that they might not be providing culturally sensitive care.

Implications: The lack of information about LGBT health topics within nursing curricula and the lack of preparation of nursing educators to teach LGBT health issues, negatively impacts nursing care. Recommendations for schools of nursing, nursing continuing education, new employee orientation, and cultural diversity training to meet the needs of LGBT patients.

◀ ▶ go to PG.

An Intervention for Nurses' Health Literacy Knowledge and Experience

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Purposes/Aims: Test an online/educational intervention for hospital-based nurses' (RNs) health literacy (HL) knowledge and experience (HLKE).

Rationale/Conceptual Basis/Background: HL is a critical determinant of health status and mortality with low HL in ~50% of adults. Low HL is associated with poorer preventive services use and later entry to health-care (HC), decreased knowledge, self-care ability, and medication adherence, and increased rates of preventable ER/hospital admissions, and costs. A conceptual model describes HL and outcomes as being affected by providers' teaching ability. In a HL study of RNs accessed through the Georgia Board of Registered Nursing, RNs had poor HL knowledge suggesting that RNs may not be adequately prepared to provide effective HL intervention. No HLKE intervention studies for RNs were found. In a community-hospital-based, RN sample, what: 1) are the sociodemographic characteristics, HLKE and relationships; and 2) is the effect of an online/educational intervention on HLKE?

Methods: Following IRB approval, a prospective, pretest–posttest, quasi-experimental design and convenience sample (n=47) of all RNs over 18-years old working in a hospital, patient care role were used. Eligible RNs received nurse manager emails explaining the study, facilitating consent, and providing the link for surveys and intervention completion. RNs completed two on-line surveys (demographic/HL) using Qualtrics® at enrollment (n=263) and within two-weeks following self-reported intervention completion (n=104). The intervention was an on-line HL-education program created/made available by the Unites States Department of Health and Human Services, *Quick Guide to Health Literacy.* The module provides: a definition/information about HL prevalence, risk factors, and related outcomes; strategies; and resources. The minimum required per-group sample size for a one-tailed t-test with p=.05, Cohen's *d*=0.5, and power = 0.8 is 51.

Results: The majority of RNs were female (46, 97.9%), white (35, 74.5%), had an Associates or Bachelor's degree in Nursing (13, 27.7%; 17, 36.2%, respectively) with an average age of 46.3 (±11.4) years and 16.1 (±11.3) years of RN experience. At enrollment, RNs demonstrated low HL knowledge (19.3±2.8), and the majority had never used a HL screening tool (35, 74.5%) nor evaluated educational materials' reading level (23, 48.9%) although use of written material to provide HC information was frequent (20, 42.6%). Age, ethnicity, years worked as an RN and in HC, and the highest level of non-nursing education were related to HLKE. Using a paired-analysis, HL knowledge was improved generally, (t=-7.346, p<.001) and specifically regarding HL basic facts and guidelines for written HL materials (t=-7.03, p<.001; t=-2.36, p=.02). The frequency was increased with which a HL screening tool was used and illustrations used in written HC materials were evaluated (χ^2=23.0, p=.001; χ^2=49.2; p=<.001, respectively).

Implications: Findings demonstrate a readily available, online, educational intervention improved hospital-based RNs HL knowledge (basic facts/guidelines for written HL materials) and changed practice (frequency with which HL screening tool was used/ illustrations used in written HC materials were evaluated). The enhanced HL knowledge and practice of RNs may ultimately affect patient knowledge and outcomes.

◀ ▶ go to PG.

LIVING WITH CHRONIC HEALTH ISSUES

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HISPANIC LATINOS' PERSPECTIVES ON CANCER PAIN: BARRIERS TO RELIEF

Andra Davis

COLORECTAL CANCER SCREENING BEHAVIORS AMONG KOREAN AMERICANS

Moonju Lee, Terry A. Badger

ACCOMPLISHING POSITIVITY: DEPRESSION, ADT, AND COLLATERAL HEALTH RISKS FOR LATINO MEN WITH PROSTATE CANCER

Sally L. Maliski, Elisabeth M. Hicks, Stanley K. Frencher, Mark S. Litwin

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CAPTURING SELF MANAGEMENT OF CHRONIC DISEASE IN DAILY LIFE

Mustafa Ozkaynak, Jacqueline Jones, Alexandra L. Schneider

EFFECT OF SLEEP HYGIENE PRACTICES ON QUALITY OF SLEEP AMONG PATIENTS WITH PSORIASIS

Ramanathan Revathi, Avudayappan Seethalakshmi, Ardith Z. Doorenbos

go to PG.

LIVING WITH CHRONIC HEALTH ISSUES

Hispanic Latinos' Perspectives on Cancer Pain: Barriers to Relief

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Purpose/Aims: To describe how local, institutional, and provider-level factors influence the experience of cancer-related pain (CRP) among Hispanic/Latino adults in New Mexico.

Background and Rationale: In spite of expanding treatment options, increasing knowledge about pain physiology, professional educational efforts, and the dissemination of national and international professional treatment guidelines, many persons with cancer continue to experience unacceptable levels of pain. Under-treatment of CRP negatively impacts many domains of life, often affecting families, communities, and society. Forces at work at the individual, provider, institution and societal levels converge as they contribute to CRP. Additional contributing factors include the cultural context and beliefs about pain, meaning of pain, barriers to pain relief, and shared expectations about pain expression that are seldom acknowledged or explored in clinical encounters. Little research has looked at dimensions of CRP among New Mexican Hispanic/Latinos as a cultural group and external factors that intersect with these experiences.

Methods: Using a qualitative descriptive design, interviews with Hispanic/Latinos having CRP aimed to elicit perceptions of how external factors, such as interactions with the healthcare system and providers, contributed to their experience. Secondary data came from allopathic physicians, a traditional folk healer (curandera), and family caregivers. Interviews were digitally recorded and independently transcribed. To triangulate findings, medical records were reviewed for aspects of documentation of pain assessment and management. Data were analyzed using thematic analysis.

Results: Fourteen Hispanic/Latino adults with CRP participated in individual interviews, as did three family caregivers and three healthcare providers. The theme, *Hurdles and Hindrances*, largely described barriers to pain relief. Participants identified gaps in pain assessment and challenges related to accountability for who was managing their pain. Deficits in provider communication and being treated with respect and believed about their pain were also described. A final element to this theme reflected misconceptions and medication side effect management. Participants suggested that providers situate pain within the context of the whole person, treat them with respect, acknowledge the importance of family inclusion, and strive for better patient – provider communication. Medical record reviews found little use of evidence-based guidelines in assessment and treatment of CRP among these participants. Family members described a need to advocate on behalf of their loved ones, reinforcing the challenges with pain assessment and management described by the primary participants.

Implications: These findings align with past research and suggest a shift in the provider-centric paradigm, instead creating a patient/family centered model. Greater inclusivity supports development of a trusting provider/patient/family triad. Improving communication creates a platform for achieving a more complete understanding of the experience, thus informing management, improving patient/provider relationships, and the quality of care provided. Recommendations for professionals and institutions include developing clearer accountability for direct pain management as patients' transition between providers and specialties, as well as creating a stronger infrastructure to support communication and delivery of evidence-based practices and quality metrics to evaluate pain care.

◀ ▶ go to PG.

LIVING WITH CHRONIC HEALTH ISSUES

Colorectal Cancer Screening Behaviors among Korean Americans

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Background: Colorectal cancer is the third most common cancer and is the second leading cause of cancer deaths in the United States. Although the incidence of colorectal cancer has been decreasing with colorectal cancer screenings, disparities of colorectal cancer and screening prevalence exist for racial and ethnic groups. The colorectal cancer is the most commonly diagnosed cancer of Korean American men and the second most common cancer of Korean American women. The incidence of colorectal cancer has dramatically increased in Korean Americans, however, there is little known about their colorectal cancer screening behaviors and the factors that may predict screening behaviors have not been fully investigated.

Purposes: The purposes of this study were to: 1) describe colorectal cancer screening behaviors of Korean Americans, 2) identify predictors and barriers influencing colorectal cancer screening behaviors, 3) identify the differences in colorectal cancer screening behaviors between men and women, and 4) identify the differences in colorectal cancer screening behaviors between new immigrants who have lived in the United States less than 10 years and those who have lived in the United States more than 10 years.

Methods: The Health Belief Model was a theoretical framework and a cross-sectional descriptive design was used with a survey. A sample of 254 Korean Americans participated in this study. Correlation, Chi-square, and Multiple logistic regression were used to analyze data.

Results: In this study, Korean American had lower rates of colorectal cancer screenings compared to the United States general population. Only 20% of the sample had ever had a fecal occult blood test, 49% had ever had a colonoscopy, and 19% had ever had a sigmoidoscopy in their lifetime. Korean Americans had low rates of annual physical exam and periodic cancer screening, moderate colorectal cancer knowledge, low cancer fatalism, limited colorectal cancer literacy, lack of health care access, and a low rate of receiving the physician's recommendation of colorectal cancer screenings. The greatest predictors influencing colorectal cancer screening were annual physical exam and periodic cancer screening for a fecal occult blood test, and the physician's recommendation for a colonoscopy and a sigmoidoscopy. There were no significant differences by gender in colorectal cancer screening behaviors. However, significant differences were found between the two groups divided by length of United States residence. Although there were no significant differences in awareness, knowledge, and literacy of colorectal cancer and screening, and perceived benefits of screening, new immigrants had lower rates of all three colorectal cancer screenings, lower annual physical exam and periodic cancer screening, higher uninsured, less receiving physician's recommendation, and higher perceived barriers to colorectal cancer screening than those who have lived in the United States >10 years.

Implications: The findings of this study suggest that improved efforts are needed to increase colorectal cancer screenings among Korean Americans. Further research is needed to increase a physician's recommendation for colorectal cancer screenings and awareness for the importance of annual checkups and periodic cancer screening among Korean Americans.

◀ ▶ go to PG.

LIVING WITH CHRONIC HEALTH ISSUES

Accomplishing Positivity: Depression, Androgen Deprivation Therapy, and Collateral Health Risks for Latino Men with Prostate Cancer

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Purpose: In this study we elicited Latino men's perceptions of side effects linked to androgen deprivation therapy for prostate cancer. Androgen deprivation therapy for the treatment of prostate cancer may produce life-altering (and occasionally life–threatening) side effects, including depressive symptoms.

Background: Studies have resulted in contradictory findings about ADT's role in exacerbating depression or initiating depression. It could be that radical hormonal changes cause or worsen depression or it could be the overarching context of prostate cancer and the severe side effects ADT engenders. Regardless, men with prostate cancer receiving ADT are at risk of experiencing severe depression that may worsen over time. Men with pre-existing depression are especially at risk for worsening depression while on ADT. Another threat requiring further study is the link between cardiovascular risk, ADT, and depression. It is well documented that men treated with ADT are at increased risk for cardiovascular disease (CVD) and diabetes as a result of metabolic and endocrine changes that accompany ADT. Latino men are under diagnosed with depression and use fewer mental health services than their Caucasian counterparts. Depression is often stigmatized within Latino families.

Methods: We conducted 19 interviews with underserved Latino men taking androgen deprivation therapy to treat prostate cancer. We analyzed the data using grounded theory techniques in Atlas.ti 7. We reviewed clinical notes and quality of life measures for each participant to triangulate findings.

Results: Depressive symptoms emerged as an ongoing issue for the men. Men had poor awareness of what side effects were associated with ADT. Strategies for dealing with depression included controlling emotions, concealing depression, and "being positive" to avoid depression. In this sample, the juxtaposition between the accounts of depressive symptoms and the way the men encouraged themselves and other men to be positive brought to mind the phrase, "grin and bear it." Men were open to psychotherapy and peer-to-peer counseling. The men's coping processes and culturally based stigma also contribute to poor identification of serious depression.

Conclusion: These men's ongoing depressive symptoms and behaviors may be overlooked during treatment for prostate cancer. The links between depression and cardiovascular disease make this issue especially important to address in Latino men receiving ADT. The coping strategy "being positive" needs to be re-evaluated as it can be an avoidant technique. Consistent, accessible and culturally acceptable mental health resources are needed for Latino men with depression. Interventions that include cognitive behavioral therapy and peer-to-peer counseling are culturally acceptable methods to mitigate depression for Latino men with prostate cancer.

Implications for Nursing: Nurses can support men by allowing them to feel a variety of emotions and by being advocates for mental health support. Healthcare providers need to be trained to identify diverse ways of explaining depression to better screen Latino men. This is especially true for men who face cultural stigmas around mental health. The issues Latino men face discussing depression may not fit a checklist and may require a broader vocabulary.

Funding: This research was supported by the National Institutes of Health through the grant, Underserved Men's Understanding of Androgen Deprivation Therapy Related Risks 1R21NR012786-01, PI: Sally Maliski.

◀ ▶ go to PG.

LIVING WITH CHRONIC HEALTH ISSUES

Capturing Self Management of Chronic Disease in Daily Life

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Aim: The purpose of this study was to evaluate the feasibility and effectiveness of a novel approach for capturing self-management of chronic disease in daily life.

Background: Changes in the healthcare system are prompting more patients to manage their complex (mostly chronic) conditions in daily-living settings, transforming these informal settings into primary sites of care. However, understanding what activities patients conduct at daily living environments and how they manage their chronic conditions is a methodological challenge. To overcome this challenge, we used a novel data collection approach that involves innovative tablet, computer-based journaling.

Methods: We tested this approach with eight patients (ages 30 to 83 years) who received anticoagulation therapy with Warfarin. Patients used a tablet computer based data collection tool for a month, to journal their health activities related to their chronic condition. The tablet computers included special software that allowed patient voice entry. Two guiding questions were used to facilitate patients' journaling: (1) "What did you do for your anticoagulation treatment over the last two days?" and (2) "Did you experience any challenges over the last two days when following your provider's instructions and recommendations?" In order to assess the feasibility of using tablet computers to keep track of health activities we: 1) asked patients to call us if they encountered any problems with the tablet; 2) called the patients if data had not been entered for four days; and 3) asked patients about the usability of the tablet computers. Answers to usability questions and data entries were qualitative analyzed using content analysis.

Results: The eight patients entered a total of 125 entries regarding their health management. Three patients contacted the investigators due to technical issues (e.g. receiving weak cellular signal), while three were contacted due to lack of entry (Table 1). Those requiring contact also were those with the fewest entries. Patients stated that two features of the tablet were critical to usability of the computer: (1) small (7") size; and (2) ability to enter data via voice. Qualitative theme analysis of the patient entries revealed various health activities the patients needed to do at home (e.g. monitoring food and alcohol intake) and challenges they faced with social engagement and their daily routine.

Patient ID	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**Total**
Number of entries	15	13	10	15	31	21	5	15	125
Patients contacted investigators	√				√			√	3
We contacted patients		√	√				√		3

Table 1. Feasibility of the tablet application.

Implications: Journaling with tablet computers for one month is feasible and is effective in capturing some health activities conducted to manage their need for anticoagulation. Feedback on the challenges and usability of the tablet computer provides guidance to further exploration of this mode of data collection for research and communication between nurses and patients for patient care.

◀ ▶ go to PG.

Effect of Sleep Hygiene Practices on Quality of Sleep among Patients with Psoriasis

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Purpose/Aim: To evaluate the effect of sleep hygiene practices on quality of sleep among patients with psoriasis.

Rationale/Background: Psoriasis affects 2-3% of world population and 49.5% of patients with psoriasis reported sleep disturbance. Psoriasis patients experience sleep disturbance due to the active process of disease like pain and itching. Psoriasis negatively impacted their sleep at least once per month. Psoriasis is significantly associated with sleep disorders and insomnia. Sleep hygiene practices (SHP) are a set of simple practices incorporating importance of sleep, food selection, outfit selection, environment, napping tips, physical hygiene, regular exercise, follow-up of medications, habit formation, bed time rituals, sleeping posture and insistence on seeking help. The theoretical framework for this study was Weidenbach's prescriptive nursing practice theory.

Methods: Permission was obtained from University Institutional Ethics Committee to conduct a randomized controlled trial with 400 plaque type psoriasis patients with moderate severity (n = 200 intervention group, n = 200 control group). Psoriasis patients were inducted from a tertiary care university hospital in South India. Intervention group were given a 30 minute lesson on SHP along with routine dermatological care and the control group followed routine dermatological care alone. SHP was taught to small groups on day one through demonstrations by the researcher. Pamphlets were given as a reminder tool for regular practice of SHP. The researcher met participants after one month for direct re-enforcement of SHP there after weekly reinforcement was done through telephonic conversation. Data on participants' background variables and Pittsburgh sleep quality index (PSQI) were collected on the day of intervention and 30th, 90th and 180th day post intervention. During each visit study participants' sleep diary were checked for compliance. Data analysis was done using descriptive and inferential statistics.

Results: Significant improvement in sleep quality ($p < 0.0001$) was seen among intervention group when compared to the control group. Wilcoxon signed rank test revealed that the sleep quality improved across repeated tests over a period of time at $p<0.0001$

Implications: These results show strong implications that SHP can be applied as a measure for improving sleep quality among psoriasis patients. Nurses in the clinical and community setting play a vital role is disseminating evidence based CAM practices. Widespread use of SHP could improve the quality of sleep thereby reduce psychological impact of disease like depression and suicidal ideations.

◀ ▶ go to PG.

LIVING WITH CHRONIC INFECTIONS

Moderator:
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WOMEN'S EXPERIENCES HIV-RELATED STIGMA IN JAKARTA, INDONESIA

Rita Ismail, Joachim Voss, Nancy Fugate Woods, Grace John-Stewart, Sri Yona, Celia Lowe, Elly Nurrachmah, Toha Muhaimin, Doris Boutain

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LATINO PARENTS' KNOWLEDGE AND RECEIPT OF THE HPV VACCINE FOR CHILD IN A STATE WITH LOW UPTAKE

Deanna Kepka, Qian Ding, Julia Bodson, Echo L. Warner, Kathi Mooney

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NOVEL INHIBITORS OF HUMAN PAPILLOMAVIRUS

Tara Walhart, Erin Isaacson-Wechsler, Kean-Hooi Ang, Joel Palefsky

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PREVENTION OF INFECTIONS IN PATIENTS WITH HEMATOLOGICAL DISORDERS

Selva Titus Chacko

QUALITY OF LIFE AMONG SOUTHWEST AMERICAN INDIAN/ALASKA NATIVES LIVING WITH HEPATITIS C

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LIVING WITH CHRONIC INFECTIONS

Women's Experiences HIV-Related Stigma in Jakarta, Indonesia

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Background: The number of women living with HIV (WLWH) in Indonesia increased 344 times between 2008 and 2013, from 3,565 to 12,279. Housewives comprised the largest number of new AIDS cases reported in 2013. Although more women are being diagnoses with HIV, limited studies have been conducted to learn about the stigma experiences of WLWH in Indonesia.

Purpose: To explore women's accounts of how they were treated when their HIV status became known and to describe the women's recommendations for programs to support WLWH in Jakarta, Indonesia.

Method: 20 WLWH were recruited through a non-governmental organization. Data were collected from the participants using semi-structured in-depth interviews. The first interviews were conducted for 60 – 90 minutes. To confirm the initial findings, six participants were interviewed a second time. Interviews were recorded using a digital audio recorder, transcribed verbatim, and translated into English. Conventional content analysis was used to assess the women's experiences of HIV stigma.

Results: Three themes relating to the treatment from others emerged: being treated negatively, receiving acceptance and support, and impacting their children. Women experienced negative treatment from their families, health care providers (HCPs), and neighbors because these groups were misinformed about HIV, fearful of being infected with HIV, and felt that the women should have to live with the consequences of marrying an injection drug user. Seeing women as a victim and realizing nothing could change the reality caused women received acceptance and support. The women reported that their children often suffered from the same treatment in the community. HIV-focused education programs were identified as the most-needed step to eliminate the stigma of living with HIV. These programs were viewed as needed for societal education.

Implications: To positively impact the fears and misconceptions of family, HCPs, and community members, more information about HIV is critically needed in Indonesia. This can be delivered in a form of role plays, posters, and workshops designed specifically for communities and healthcare providers.

Funding: GO Health (Department of Global Health University of Washington) and Scholarships from School of Nursing University of Washington.

LIVING WITH CHRONIC INFECTIONS

Latino Parents' Knowledge and Receipt of the HPV Vaccine for Child in a State with Low Uptake

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Aims: Little is known about factors related to HPV vaccine uptake among Latinos in Utah. We surveyed Latino parents of adolescents eligible for the HPV vaccine in order to explore the demographic factors related to HPV vaccine knowledge, interest, and uptake among Latinos in a state with the lowest HPV vaccine completion in the United States. Our results may have implications for designing culturally tailored interventions to improve uptake of the HPV vaccine among Latinos in the Intermountain West.

Background: Latinos suffer a disproportionate burden of HPV-preventable cancers, yet uptake and completion of the HPV vaccine among Latinos is far below recommendations. Nationally, only 62.9% of Hispanic adolescents have received at least one dose of the HPV vaccine, and only 35.5% have completed all three doses. Reasons for low HPV vaccine uptake among Latinos in Utah are unknown.

Methods: We surveyed Latino parents of HPV vaccine age-eligible adolescents (N=118) to explore socio-demographic factors related to HPV vaccine knowledge, interest, and uptake. A purposive sample of Latino parents and guardians was recruited by two community organizations at local community events and health booths. Eligible participants had at least one child ages 11-17 years. The printed 38-item survey of close-ended questions included intrapersonal and interpersonal factors related to the HPV vaccination. Univariable analyses were performed to identify sociodemographic characteristics associated with knowledge and receipt of the HPV vaccine for daughter(s) and/or son(s). Comparisons of categorical variables were made using chi-square test or Fisher's exact test, as appropriate.

Results: Participants with a high school education or higher were more likely to know about the HPV vaccine than participants with less than high school education (86.7% vs 69.1%, p=0.03). Those born in Mexico were less likely to know about the HPV vaccine compared to those born in other places (73.1% vs 97.1%, p=0.003). Furthermore, participants whose parents were born in Mexico were also less likely to know about the HPV vaccine compared to those parents who were not born in Mexico (74.1% vs 96.7%, p=0.003). Lastly, acculturated parents were more likely to know about the HPV vaccine than those who were not acculturated (89.5% vs 71.4%, p=0.015).

Implications: Hispanics/Latinos bear a greater burden of cervical cancer mortality than do non-Hispanic Whites and would benefit from high HPV immunization coverage. However, Latinos in Utah with lower acculturation and educational attainment are less likely to know about the HPV vaccine than acculturated parents and those with higher levels of education. Efforts to improve access to culturally and linguistically appropriate educational materials on the HPV vaccine may improve Latino parents' self-efficacy for vaccinating their eligible adolescent children.

Funding: This research was supported by a University of Utah College of Nursing, the Huntsman Cancer Institute Foundation, the Primary Children's Hospital Foundation, the Beaumont Foundation, and the National Center for Advancing Translational Sciences of the National Institutes of Health under Award Number 1ULTR001067. Support was also provided by the University of Utah Study Design and Biostatistics Center, with funding in part from the National Center for Research Resources and the National Center for Advancing Translational Sciences, National Institutes of Health, through Grant 8UL1TR000105 (formerly UL1RR025764).

◀ ▶ go to PG.

Novel Inhibitors of Human Papillomavirus

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Purpose/Aims: The goal of this of study is to identify novel compound(s) that inhibit HPV from entering epithelial cells with an acceptable toxicity profile, using a high-throughput screening (HTS) assay. HTS enables researcher to quickly scan thousands of compounds in a compound library allowing for the rapid identification of compound(s) that prevent HPV infections.

Rationale/Conceptual Basics/Background: At least 75% of individuals in the general population will acquire a genital human papillomavirus (HPV) infection in their sexual lifetime. HPV infection is almost universal in HIV-infected men who have sex with men. However, HPV-associated cancers disproportionately affect individuals who are HIV-positive. Although a prophylactic vaccine against HPV has been introduced into the HIV-positive and general population it has several disadvantages including cost, lack of access in developing countries, administration before sexual debut, and limited coverage to other HPV types that cause cancer. At this time, the efficacy of the HPV-vaccine is still under investigation in the HIV-positive population. Therefore, a need remains to identify other treatment options for preventing HPV-associated infections and cancers.

Methods: We are currently developing a HTS assay in collaboration with the UCSF Small Molecule Discovery Center (SMDC). To develop this assay we optimized a HPV pseudovirion (PsV)-based platform where HPV PsVs are used to mimic HPV infection in a host cell. HPV PsV contains the native capsid that carries a plasmid that expresses renilla, a fluorescent protein that can be quantified following infection. Expression of the renilla protein indicates PsV entry into cells. To carry out the pilot screen we first determined the optimal ratio of host 293 FT cells infected with PsV. Next, the pilot screen was conducted using a small library of 2000 compounds at the SMDC. This allowed us to optimize an inhibitory signal defined as a "hit".

Results: Out of 2000 compounds the pilot screen produced 98 hits with a z-prime score of 0.67. Z-prime is a dimensionless unit with a statistically significant range of 0.5 to 1.

Implications: The results of the pilot screen indicate that the HTS assay we developed was successful at identifying "hits" when used with HTS automation in the compound library at SMDC. The next step of our study is to scan the entire 150,000 compound library at SMDC with our HTS assay to identify additional compounds able to prevent HPV infection.

Prevention of Infections in Patients with Hematological Disorders

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Aims: To identify and implement strategies that will reduce the incidence of health care associated infections in patients with hematological disorders

Background: Infections are common in patients with hematological disorders. Most of these infections are Health Care Associated (HAI) and occur because of the prolonged and repeated contact with the hospital environment. HAI presents a significant monetary burden on the current healthcare system.

Methods: Five aspects of nursing care related to preventing infections in patients with hematological diseases were studied. Prospective Randomized controlled trial of 1000 patients with two different methods of PICC dressings to assess the rate of infection and non-infectious complications. Prospective observational study to assess compliance with hand hygiene practices among health care personnel to a prescribed protocol. Descriptive observational study to evaluate adherence with established protocol in the administration of intravenous injections among nurses. Prospective Randomized controlled trial to compare the efficacy of perianal application of Betadine antiseptic ointment versus cleaning with soap and water in the reduction of perianal infections. Descriptive study to assess the knowledge, attitude and infection control practices of patients using a teaching module on general infection control measures.

Results: There was no difference in the exit site and catheter related blood stream infection rates (CLBSI) between the dressings - incidence per thousand catheters (days). There was no difference in the overall non- infectious complications between the groups ($P = 0.08$). 170 observations made on 49 registered nurses and 15 medical personnel, requiring 1925 opportunities requiring hand hygiene, the overall compliance was 75.2% to hand hygiene. The compliance of health personnel in Ward A and Ward B showed significant difference in the compliance. 134 observations made on injection practice for 6 months among 67 registered nurses, the mean practice score was 82.2 %. The incidence of perianal infections were very low in both the groups. The knowledge, attitude and practice scores did not differ with gender and educational background of the participants.

Implications: The high permeable transparent dressings and impermeable gauze dressings were equally effective in controlling PICC related sepsis. However, the transparent dressings needed to be performed less frequently reducing health care personnel time and reduced patient visits making these the preferred dressing on patients with hematological disorders. Povidone iodine (Betadine) antiseptic ointment applied to the perianal region after soap and water washing did not help in reducing perianal infections compared to the practice of washing with soap and water. Compliance to hand hygiene can be easily achieved with education and adequate provision of the necessary hand rubs and dispensers at every bedside in the clinical units. Adherence to universal infection control practices can be measured. Findings from this study have clearly demonstrated that education and monitoring of these practices can increase adherence among nurses and adherence to established protocols does not necessarily depend on the experience of the nurse. The survey of patients in this study showed good attitude and eagerness to acquire knowledge and good practice of infection control and prevention practices.

◀ ▶ go to PG.

LIVING WITH CHRONIC INFECTIONS

Quality of Life among Southwest American Indian/Alaska Natives Living with Hepatitis C

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Objectives: Research aims: (**a**) characterize depression, alcohol consumption, stigma, and quality of life (QOL), and; (**b**) examine relationships among these factors, selected demographics, and QOL; and (**c**) identify factors that explain the greatest amount of variance in QOL among a sample of Southwest American Indian / Alaska Natives (AI/ANs) living with the hepatitis c virus (HCV).

Background: HCV is considered to be a global public health threat because seventy-five percent of infected persons have no symptoms and are unaware of their infection. AI/ANs commonly contend with issues that prevent them from receiving or seeking medical care, including cultural barriers, geographic isolation, educational level, and low income.

Design: A descriptive, cross-sectional, correlational design with purposive sampling of 101 (54.5 % male) AI/AN adults with HCV living in the Southwestern U.S.

Method: Questionnaires were administered via oral interview. Measures included the Center for Epidemiological Studies Depression Scale (CES-D), the Alcohol Use Disorders Identification Test (AUDIT) to examine patterns of alcohol consumption, the HCV Stigma Scale (modified) to assess the emotional and social aspects of having HCV, and the MOS SF-12v2 survey is a 12-item instrument assessing the Physical and Mental Component Scores (PCS, MCS) aspects of quality of life.

Results: Of 101 responders, 38.6% reported no depressive symptomatology; 18.8% mild to moderate depression, and 42.6%, scored in the major depression range. Half of all women in this sample (n = 22) had a score indicating the possibility of having major depression, significantly higher than men's scores. AUDIT scores indicated no association or implication of harmful or hazardous drinking for this sample. Correlational analysis indicated a statistically significant positive relationship between Depression and Alcohol Use (r = .400, p = .000); Depression and Stigma (r = .485, p = .000). Regression analysis indicated a significant overall model of factors with: Depression significantly contributing to QOL - Physical Health, $R^2 = .252$, $R^2_{\text{adj}} = .195$, $F(7, 92) = 4.429$, $p = .000$; and Depression and Alcohol Use significantly contributing to QOL – Mental Health, $R^2 = .569$, $R^2_{\text{adj}} = .536$, $F(7, 92) = 17.352$, $p = .000$.

Implications: The factors that influence QOL in AI/AN persons living with HCV has potential in further development of interventions or culturally based models of HCV care that may improve life quality. These findings have important implications for HCV education, treatment, AI/AN health care policy and practice improvements. Specifically, understanding the role of depression impacting quality of life among AI/AN persons living with HCV suggests important targets for screening and intervention.

◀ ▶ go to PG.

NEUROLOGICAL HEALTH

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DEVELOPMENT OF A SELF-REPORTED HEALTH MEASURE FOR PERSONS WITH INTELLECTUAL DISABILITY

Marjorie A. Pett, Lauren Clark, Beth Cardell, Erin Johnson, Jia-Wen Guo,

SPORTS-RELATED CONCUSSIONS RESULT IN REDUCED EXPRESSION OF INFLAMMATORY CYTOKINES

Jessica Gill, Hyunhwa Lee

NEGATIVE EFFECTS OF ABERRANT BODY TEMPERATURE AFTER TRAUMATIC BRAIN INJURY

Lori Kennedy Madden, Shelley A. Blozis, Ava Puccio, Deborah Ward, Holli DeVon

EPILEPSY EDUCATION PROGRAMME ON QUALITY OF LIFE AMONG PATIENTS WITH EPILEPSY

Avudaiappan Seethalakshmi, Ramanathan Revathi, Ardith Z. Doorenbos

◀ ▶ go to PG.

NEUROLOGICAL HEALTH

Development of a Self-Reported Health Measure for Persons with Intellectual Disability

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Purpose: This presentation's purpose is to examine best practices in instrument development of self-reported health measures for persons with intellectual disability (ID). The exemplar used to illustrate this process is a Health Related Quality of Life (HRQoL) self-report measure developed in collaboration with persons with ID, their caregivers, and health care providers.

Background: Addressing the health and wellness needs of persons with intellectual disability (ID) is a critical area of health service deficiency. Providers, researchers, and policymakers need to develop more effective health services that reflect the principles of empowerment, self-determination and choice, issues critical to improving needed access to health care. To facilitate this process, appropriate research-based reliable and valid health measures are needed that accurately reflect the lived experiences of persons with disabilities, including those with ID.

When faced with a paucity of reliable and valid measures to assess health constructs of interest in a given population, the temptation is to use measures previously developed for a different cohort but untested in the target population. Alternatively, we might decide to change a word or two or to create a set of items that may have face validity but which have not undergone the careful scrutiny required of best practices in instrument development.[2] For example, many assessments used to evaluate HRQoL in persons with ID are inadequate; many have been developed for the general population and are not sufficiently validated for persons with ID. Even self-report measures specifically created for this population have challenges regarding construct complexity and comprehension. As a result, self-report measures are often ignored in favor of using proxies to answer questions for disabled individuals. The use of proxies, while well-intentioned, can distort the tool's validity and negate the goals of self-determination and empowerment.

Methods: Utilizing best practices as it relates to instrument development,[1] a mixed method qualitative/quantitative community-based participatory research (CBPR) approach was used to develop our HRQoL self-assessment tool. The guiding principles were self-determination and the need for items to reflect the 8 theory-based QoL domains identified by Schalock[2] for persons with ID. Existing HRQoL measures (n=7) for persons with ID were critically evaluated for their content, presentation, and understanding. After collaboration with 17 persons with ID, 4 focus groups of parents/caregivers (n=16), and 4 partner community-based agencies serving people with ID, several iterations of the measure resulted in 38 HRQoL items that reflect Schalock's 8 QoL domains. The groups also critiqued the use of a 5-point Likert graphic rating scale using words and pictorial gradients of fluid-filled cups ("none" to "full") that enabled persons with ID to self-identify their experiences and satisfaction with a given HRQoL experience.

Results/Implications: The product of this initial instrument development study is a theory-based self-report HRQoL measure developed through the step-by-step CBPR involvement of our community-based collaborators. Our community partners have gained a HRQoL self-report measure suited to the abilities of community-based persons with ID, which can be used for clinical assessment and program evaluation. In addition, the HRQoL-38 is now ready for full psychometric testing.

Funding: The University of Utah Community-Based Research Grant Program.

References:

[1] Pett, M. A., Lackey, N., & Sullivan, J. (2003). *Making sense of factor analysis*: The use of factor analysis for instrument development in health care research Newbury Park, CA: Sage.

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◀ ▶ go to PG.

NEUROLOGICAL HEALTH

Sports-Related Concussions Result in Reduced Expression of Inflammatory Cytokines

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Purpose: To determine changes in global gene expression in peripheral leukocytes in the baseline, acute and sub-acute periods following a sports related concussion (SRC) in athletes.

Background: SRCs are common in athletes and can result in neurological symptoms and long-lasting deficits; however, there is a great degree of heterogeneity in recovery and outcome. To better determine mechanisms related to recovery, we examined gene expression changes prior to and during the acute and sub-acute periods following a SRC in a sample of athletes who reported a good recovery.

Methods: Using a prospective design, blood samples were collected from 256 collegiate contact sport athletes prior to the start of the sports season (baseline); in the 15 athletes who subsequently sustained a SRC, blood samples were obtained within 6 hours of injury (acute) and at 7 days (sub-acute) post-injury. Within subject differential expression of whole genome analyses was determined by comparing acute and sub-acute transcriptome profiles obtained from microarray data using the Partek Genomics Suite analysis program.

Results: Of the 174 genes that were differentially expressed at either time point compared to pre-season samples, 97.7% were shared among both time points. Reduced expression was observed in 159 genes, and over-expression was found in 17 genes. Genes with the greatest magnitude of down-regulation were inflammatory-related and included IL-8, which was reduced by -6.94-fold in the acute and -13.80-fold in the sub-acute period, and chemokine (C-X-C motif) ligand 2 (CXCL2), which had fold changes of -4.67 and -7.71 in the acute and sub-acute periods, respectively. Although the expressions changes in general was reduced from the acute to the sub-acute period, 22 genes out of 159 down-regulated genes were up-regulated to a higher degree during the sub-acute period, including the CD69 molecule, which changed from -5.28 to -3.34, and interferon gamma (INF-g), which changed from -3.49 to -2.53. One of the more prominently up-regulated genes was the chemokine (C-C motif) receptor 2 (CCR2), with fold changes of 2.88 and 1.90 in the acute and sub-acute periods, respectively.

Implications: Our findings suggest that recovery from a SRC is associated with modulation of inflammation through cytokine and chemokine gene-pathways. Future work is required to identify individual variability in recovery from SRC, which can contribute to development of personalized therapeutic agents.

◀ ▶ go to PG.

Negative Effects of Aberrant Body Temperature after Traumatic Brain Injury

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Purpose: To examine the association between body temperature and neurologic outcome (6-month Extended Glasgow Outcome Scale [GOS-E]) after traumatic brain injury (TBI).
Background: Over 1.7 million individuals sustain TBIs in the U.S. every year. Despite best-care practices based on published guidelines, many patients have poor outcomes. Prevention of secondary injury is one key strategy in which nurses can impact the severity of injury-related disability and death. Published guidelines provide limited evidence regarding prevention of secondary injury. Fever has been identified as a mechanism of secondary injury. Therefore, temperature management, a key responsibility of nurses, is one method to reduce this type injury. The optimal goal for body temperature following TBI has not yet been identified.
Methods: Adult patients ($\geq$ 16 years) that suffered moderate or severe blunt TBI (GCS < 13) over a four-year period (2008 – 2012) were included (n=340) in this single-site, secondary data analysis. Aberrant temperatures were identified as values outside of normal range (< 36.5°C [hypothermia] or > 37.5°C [fever]). Characteristics of temperature in the 96 hours after injury were evaluated. Regression analysis was used to assess relationships with 6-month survival, favorable outcome, and GOS-E.
Results: Eighty-six percent of patients with any temperature < 36.5°C and 79% with any temperature > 37.5°C in the first 24 hours died. Fever during any of the time periods resulted in unfavorable outcome or death for 57.6%-73.6% of patients. Hypothermia (p=0.018) or fever in the first 24 hours (p=0.012) and fever 24-48-hours (p=0.006) after injury were significantly associated with GOS-E.
Implications: Body temperature in the 96 hours after moderate to severe TBI significantly influences neurologic outcome. Controlled normothermia is one approach that may address these findings. Further research is necessary to assess these findings in a prospective, randomized multi-center clinical trial.

Funding: Grant #F31NR013813, NINR; Grant #UL1TR000002, NCATS; and the Gordon and Betty Moore Foundation.

◀ ▶ go to PG.

Epilepsy Education Programme on Quality of Life among Patients with Epilepsy

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Purpose/Aim: Determine the effectiveness of a nurse executed **Epilepsy Education Program** on **Quality of Life** (QOL) among patients with epilepsy.

Rationale/Background: Epilepsy is a chronic condition that affects individuals irrespective of age, sex, education and occupational status. Worldwide 50 million people have epilepsy. The prevalence of epilepsy in South India identified by Bangalore Urban Rural Neuroepidemiological Survey was 8.8 per 1,000 population, with a rural prevalence of 11.9 and in the urban areas it was 5.7. Epilepsy accounts for 0.5% of global disease burden. Information needs of individuals with epilepsy varies at different points of time, however, there is little known about the impact of an education programme on the subjective feelings of the patients with epilepsy that may affect their QoL.

Methods: A randomized controlled trial was undertaken at the neurology outpatient department of a selected tertiary care center in south India. Ethical permission and informed written consent were obtained from the patients with epilepsy. On the first day, 175 samples were selected for the study and control groups and assessed for their Quality of Life using the QoLIE 31 (Rand.org.). On the 15th day 3 to 5 patients of the study group received the **Epilepsy Education Program** for 25 minutes using the epilepsy **information booklet**. The control group received the routine care. The **first reinforcement** was given on the 45th day along with clarification, following which the posttest I was done on the 90th day. After the first posttest the **second reinforcement** was given on the 135th day Follow-up was encouraged by telephonic reminders. The posttest II was carried out on the 180th day for both the study and control groups. Independent t test and RMANOVA were used for data analysis.

Results: The study group and the control group did not have any difference at pretest for all the domains of QoL but the study group had significantly improved in all aspects in the posttest II at $p = 0.0005$. The study group had a significant improvement in the Total Quality of Life from 37.67 at pretest to 62.09 at posttest II, compared to the control group had TQoL of 37.46 at pretest and it was 34.39 at posttest II. The RMANOVA showed that the study group had a marked increase in energy, and decrease in medication effects and seizure worry, whereas the control group showed a consistent increase in seizure worry and showed a decrease in the mean for emotional well-being, Quality of Life, energy, cognitive functioning, medication effects and social functioning. There was a statistical significance at $p = 0.0005$ for all aspects of Quality of Life and the Total Quality of Life.

Implications: The findings of the study support the need for an educational intervention. Nursing personnel can identify the information needs and provide specific patient education and counseling.

◀ ▶ go to PG.

◀ ▶ go to PG.

NURSING IN POST-ACUTE SETTINGS

Moderator:
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POST STROKE EXPERIENCES OF THE FIRST FOUR WEEKS AFTER TRANSITION HOME FROM THE HOSPITAL

Teresa Connolly

PILOT TEST OF A PERSON-CENTERED PLANNING INTERVENTION DURING TRANSITION

Roberta S. Rehm, Lucille T. Fisher, Juno Duenas

RELATIONSHIP BETWEEN MISSED CARE AND URINARY TRACT INFECTIONS IN NURSING HOMES

September T. Nelson, Linda Flynn

EXPLORING PERSONAL GROWTH IN COMMUNITY-RESIDING ADULTS WITH HEART FAILURE

Kristen J. Overbaugh, Mark B. Parshall, Emily A. Haozous,
Blake Boursaw, Ilene M. Decker

USING A SOCIAL ECOLOGICAL MODEL TO DEVELOP DEMENTIA-FRIENDLY COMMUNITIES

Shih-Yin Lin, Basia Belza

REASONS RESIDENTS WITH DEMENTIA TRANSFER TO ACUTE CARE FROM ASSISTED LIVING

Tara Sharpp

◀ ▶ go to PG.

Post Stroke Experiences of the First Four Weeks after Transition Home from the Hospital

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Purpose: The purpose of this qualitative descriptive study was to investigate the experiences of post stroke survivors (PSSs) during transition from hospital discharge home during the first four weeks.

Background: PSSs describe the transition from hospital to home as an important time in recovery and stress various physical and cognitive concerns early within the recovery period. Research to date fails to adequately reflect PSSs' experiences early after discharge home. This gap in research limits the ability to create interventions for PSSs during this critical time period.

Methods: Semi-structured telephone interviews were conducted with 31 participants, recruited from a large metropolitan hospital in the northeastern United States. The use of in-vivo codes lead to the development of themes that described PSSs' experiences during the four week transitional period. Credibility and transferability of findings were strengthened through memoing, field notes, reflexivity of analysis, member checking, and peer review throughout the analysis process by qualitative experts.

Results: The five major themes were: (a) the shock of a stroke interrupting a normal day, (b) transition to an unfamiliar home, (c) experiencing a life riddled with uncertainty, (d) a journey to a new sense of self, and (e) adjusting to a new sense of self. Throughout their journey all PSSs had to cope with uncertainty and adjust to a new sense of self. PSSs that experienced less uncertainty were able to return to their prior daily routine, knew how to prevent another stroke, had a helpful support system, and had frequent follow-up and communication with health care professionals.

Implications: All PSSs are at risk for complications regardless of stroke severity. To address PSSs complex needs, nurses can provide care beyond symptom management by fostering a dynamic intentional relationship to support recovery. The framework resulting from this study can provide the platform for advanced neuroscience nurses to engage with PSSs to improve their recovery and adjustment to a new sense of self as they transition from hospital to home.

Learning Objective: Participants will be able to identify strategies to aid with post stroke survivors' transition from hospital to home.

Key Words: Adult health & illness, Chronic illness, symptom management

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Funding: Neuroscience Nurses Foundation.

go to PG.

NURSING IN POST-ACUTE SETTINGS

Pilot Test of a Person-Centered Planning Intervention during Transition

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Purposes: The purpose of this pilot study was to assess feasibility, acceptability, and preliminary efficacy of a person-centered planning intervention during the transition to adulthood for youth with physical and developmental chronic conditions.

Background: In an earlier ethnographic study we learned that youth with physical and developmental chronic conditions fall along a wide spectrum of abilities and needs, and their parents often struggled with setting achievable goals and gathering necessary information and resources in multiple domains, including health, education, employment, financial planning, residential planning, and recreation. Person-centered planning has shown promise as a strategy for individualized goal setting and achievement in health and education settings.

Methods: Using Community-based Participatory Research strategies, we formed a partnership with a parent-run community agency that provides information and support to families raising children with chronic conditions. We developed an intervention to facilitate goal setting for the youth and family, and offered education sessions and follow-up referrals through the agency. This was coordinated by a Registered Nurse from the research team and a Community Resource Parent from the agency. Thirty families were enrolled, using a wait-list control group design. Feasibility and acceptability were assessed with interviews and surveys. We hypothesized that parents receiving the intervention would have improvements in confidence and competence in their abilities to access and use services and that they would have decreased worries and increased rewards of parenting compared to parents receiving usual services. Standardized and original instruments were used before and after the intervention.

Results: The intervention was feasible and acceptable to parents and youth. Parents stated that they found it helpful to systematically consider planning for transition. Compared to parents who had not received the intervention, those who received it showed statistically significant improvements ($p<.05$) in confidence and competence to access and use services, a more positive future orientation, and increased knowledge and understanding of health care and educational services, financial planning, and recreation. There were no improvements in overall burden of care, or knowledge of employment or residential options.

Implications: This intervention shows promise for use in assisting youth and families during the transition to adulthood to set and accomplish individualized goals to facilitate a high quality of life in adulthood for youth with chronic physical and developmental chronic conditions. Results indicate areas in which the intervention can be strengthened to further benefit families in the future. Person-centered planning strategies were acceptable and beneficial for youth and their parents.

Funding: CTSI-SOS Grant, UCSF and School of Nursing, UCSF.

◀ ▶ go to PG.

Relationship between Missed Care and Urinary Tract Infections in Nursing Homes

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Purposes/Aims: The aims of this study, informed by the Nursing Organization and Outcomes Model, were to describe the frequencies and types of missed nursing care in nursing homes, and to determine the relationship between missed care and the incidence of UTI among nursing home residents.

Rationale/Conceptual Basis/Background: A majority of adverse events, including urinary tract infections (UTI), occurring in nursing homes are likely preventable and are attributed to substandard treatment, inadequate monitoring, or delay or failure to provide necessary care. Necessary but uncompleted nursing care activities, commonly labeled care left undone or missed care, is an indicator of impaired nursing processes and poor care quality.

Methods: A secondary data analysis was conducted including survey data from 340 RNs from 63 nursing homes, which was merged with CMS outcome data extracted from the federal dataset Nursing Home Compare (NHC). A total of 12 categories of missed care and a metric of total missed care were measured with reliable and valid survey items used in previously published research conducted in U.S. and international settings. Descriptive statistics for missed care were examined in the nurse-level data set prior to aggregation to the nursing home level. Following examination of bivariate correlations, unadjusted and adjusted regression models were estimated to determine predictors of UTI prevalence among nursing home residents.

Results: A total of 48.2% of nurse respondents reported that they had missed at least one necessary care activity by leaving it undone during their last shift. Seven of the 12 categories of missed care, as well as a measure of total missed care, were significant predictors of UTI. Nursing system factors such as measures of practice environment, staffing levels and reported nurse workload did not significantly predict UTI in adjusted models.

Implications: Missed nursing care may be an operant mechanism and metric that links substandard nursing care and adverse outcomes in nursing homes. Nursing home administrators should consider assessing the frequency and types of missed care in their facility in order to adequately evaluate the quality of the care provided to their residents. In order to improve resident outcomes, further research is needed to identify the predictors of missed care. With this understanding, strategies can be developed and implemented that supports the necessary processes of care and reduces missed nursing care in the nursing home environment.

◀ ▶ go to PG.

NURSING IN POST-ACUTE SETTINGS

Exploring Personal Growth in Community-Residing Adults with Heart Failure

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Purpose: This study described levels of personal growth in adults with heart failure (HF) and explored relationships among personal growth and demographic, clinical, and cognitive variables.
Background: HF is a chronic, progressive disease affecting over five million Americans and is associated with significant mortality, symptom burden, and uncertainty due to an unpredictable disease trajectory. Personal growth defined as the ability to perceive positive psychosocial change as a result of significant adversity has been associated with beneficial clinical and patient-centered outcomes in other illnesses, but has been little studied in HF. This research was guided by Tedeschi and Calhoun's post-traumatic growth model and Mishel's reconceptualized uncertainty in illness theory.
Methods: A convenience sample of 103 adults with New York Heart Association (NYHA) class II-IV HF participated in this descriptive, exploratory study. All participants were recruited from an outpatient cardiology clinic. Participants completed a demographic and clinical survey, the Posttraumatic Growth Inventory (PTGI), the Mishel Uncertainty in Illness Scale-Community Version (MUIS-C), and the Memorial Symptom Assessment Scale-Heart Failure (MSAS-HF). Descriptive statistics depicted demographic and clinical characteristics. Bivariate correlations among age, time since diagnosis, and PTGI, MUIS-C, and MSAS-HF scores were examined using Pearson product-moment correlation coefficients. Independent t-tests were used to assess differences in PTGI scores by sex, ethnicity, and disease severity. Multiple regression was used to assess the extent to which these variables made independent contributions to predicting PTGI scores. The sample size was sufficient to achieve 80% power to detect a medium effect size ($f^2 = .15 \approx R^2 = .13$) for a regression model with up to 7 predictors at an alpha level of .05.
Results: Participants reported moderate levels of personal growth (M = 48.6, SD = 28.6). There were no significant differences in personal growth by sex, ethnicity, or disease severity. Personal growth had a weak, negative correlation with age ($r = -.20$, $p < .05$) and a weak, positive correlation with symptom burden ($r = .20$, $p < .05$). Uncertainty was positively correlated with symptom burden ($r = .49$, $p < .01$) and disease severity ($r = .28$, $p < .01$), but was not significantly correlated with PTGI scores. A hierarchical regression model that included age, sex, ethnicity, NYHA classification, years since diagnosis, uncertainty, and symptom burden did not account for significant variance in PTGI scores.
Implications: Community-residing adults with stable HF report personal growth that is not explained by demographics, time since diagnosis, disease stage, uncertainty, or symptom burden. Assessment in more diverse samples and clinical settings is needed to understand the factors that contribute to personal growth in HF, and longitudinal assessment would be needed to understand the trajectory of personal growth over time. Enhanced understanding of personal growth would be useful for informing supportive care models and to clarify how nurses and other health care providers facilitate or hinder personal growth for patients with HF.

◀ ▶ go to PG.

NURSING IN POST-ACUTE SETTINGS

Using a Social Ecological Model to Develop Dementia-Friendly Communities

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Purposes/Aims: The purposes of this study were to: 1) understand the meaning of "dementia-friendly" from the perspectives of persons with dementia (PWDs) and their caregivers; and 2) elicit recommendations for promoting dementia-friendliness in communities.

Rationale/Background: In response to the upcoming dementia crisis, WHO urges governments worldwide to set dementia as a public health priority and promote building a dementia-friendly society globally. Nevertheless, there are gaps in the existing dementia-friendly literature: 1) no agreed-upon definition for the term dementia-friendly; and 2) scant research conducted on the concept of dementia-friendly or building dementia-friendly communities in the U.S.

Methods: Focus groups were held with PWDs who met the following criteria: age 55 years and older, speak English, have a diagnosis of dementia made by a healthcare provider, and are aware of their diagnosis of dementia. Additionally, caregivers also participated who met the following criteria: age 18 years and older, have experience taking care of PWDs, and speak English. Participants were recruited from senior centers, adult day health facilities, retirement communities, Alzheimer's Services Coalition email subscribers, and snowball sampling. All interviews were audio recorded, transcribed, and analyzed thematically. Recommendations for building dementia-friendly communities were organized using a social ecological model (SEM). The SEM consists of 5 concentric circles representing 5 levels of social ecological environments: (from innermost to outermost) intrapersonal, interpersonal, institutional, community, and public policy (McLeroy et al, 1988).

Results: We conducted 6 focus groups, 1 couple interview, and 1 individual interview. Among 23 eligible participants: 8 were PWDs (6 females) and 15 were caregivers (8 females); and 19 were Caucasian, 3 were Hispanic and 1 was African American. Mean age of PWDs was 71.9 years (range 60-85). Mean age of caregivers was 75 years (range 62-92). Definition of "dementia-friendly" themes included *compassion and understanding*, *a helping attitude*, *tolerance of differences*, *supportive environments*, *being friends with PWDs*, and *"It's OK"/living a normal life*. Recommendations made by PWDs and their caregivers included: increased dementia awareness (intrapersonal), more people who are willing to and able to provide help (interpersonal), the provision of all-inclusive programs and services (institutional), reduced sigma (community), culture changes in the neighborhood (community), better dementia education for the public (public policy), better accessibility to social services and health insurance (public policy), as well as accommodations in transportation systems and physical environments (public policy).

Implications: The SEM serves as a framework to organize recommendations for building dementia-friendly communities. The recommendations made by participants indicate that they recognized the need for changes at all levels of the SEM to create dementia-friendly communities.

Reference:
McLeroy, K. R., Bibeau, D., Steckler, A. & Glanza, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly*, *15*(4), 351-377.

Funding: NCATS Grant TL1 TR000422; University of Washington Retirement Association-University House Scholarship in Aging; de Tornyay Center for Healthy Aging: Healthy Aging PhD Research Scholarship, NINR T32 NR014833 (Lin).

◀ ▶ go to PG.

NURSING IN POST-ACUTE SETTINGS

Reasons Residents with Dementia Transfer to Acute Care from Assisted Living

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Purpose: The purpose of this presentation is to describe the results of a six-month mixed-methods research study examining the transfers of residents with dementia from assisted living (AL) to the emergency department and acute care.

Rationale: AL communities are a growing source of housing for older adults in the United States. It is estimated that over 50% of the residents in AL have some form of cognitive impairment. Many AL communities do not employ registered nurses who can assess residents who have an acute health care need. As a result, residents may be transferred to the emergency department if they suffer a minor injury or change in condition. Emergency departments are frequently overcrowded and can be a disruptive and confusing place for residents with dementia.

Methods: The setting for this mixed-methods research study was two dementia-only AL communities in California. Incident data on the number and reason of resident falls, illnesses, changes in condition, and emergency department or acute care visits were collected over six months. Participant observation and interviews were conducted with employees and family members. The qualitative data were analyzed for themes regarding how employees in AL provide for residents' transitions to and from acute care.

Results: The 63 residents experienced a total of 206 incidents resulting in 77 visits to the emergency department over six months. Only 32% of the emergency department visits resulted in admission to acute care. 60% of the visits were because of falls, followed by infections (25%). Of the 63 residents, eight were responsible for about half of the acute care visits (52%) and falls (47%), who were readmitted an average of six times in six months. Qualitative data were also analyzed, and the prominent themes expressed by the employees and family members included helplessness, frustration, and confusion about their frequent transitions to and from the hospital.

Implications: Over two-thirds (68%) of the emergency department visits were unnecessary as the residents were discharged back to the AL communities without a change in treatment. The difficulties in transitions from acute care observed in these facilities demonstrate the need for improved supervision and education for the employees. Studies using registered nurses to supervise transitional care in other settings showed improved patient outcomes which warrants further investigation in assisted living.

Funding: Study funded by the John A. Hartford Foundation through the Claire M. Fagin Postdoctoral Fellowship.

◀ ▶ go to PG.

◀ ▶ go to PG.

PERINATAL NURSING

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PSYCHOSOCIAL DOSE RESPONSE AND MATERNAL/NEWBORN OUTCOMES

Gwen Latendresse, Bob Wong, Jane Dyer, Barbara Wilson,
Laurie Baksh, Carol Hogue

ANTEPARTUM, INTRAPARTUM, POSTPARTUM PREDICTORS AND OUTCOMES OF DISCHARGE READINESS

Gabriella Malagon-Maldonado, Cynthia Connelly

PRE-PREGNANCY OBESITY AND POSTPARTUM DEPRESSION: A PSYCHONEUROIMMUNOLOGICAL PERSPECTIVE

Sharon L. Ruyak

MEASUREMENT OF SUSPECTED OXYTOCIN DYSREGULATION: INDEX DEVELOPMENT AND TESTING

Melissa Moore, Meghan Eagen-Torkko, Julia, Seng

PREDICTORS OF MATERNAL STATE ANXIETY ONE MONTH AFTER A LATE-PRETERM DELIVERY

Haifa A. Samra

go to PG.

PERINATAL NURSING

Psychosocial Dose Response and Maternal/Newborn Outcomes

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Purpose/Aims: The purpose of this population-based study was to use hierarchical stepwise regression and complex survey design to evaluate the effects of increasing levels of psychosocial stress on maternal/newborn outcomes, specifically gestational age, birth weight, newborn admission to ICU, and postpartum depression. We hypothesized that increasing levels of maternal stress, depression and abuse would predict increasing risk for adverse maternal/newborn outcomes, in a dose response fashion.

Background: It is well documented that maternal psychosocial factors contribute to adverse pregnancy outcomes, but no studies have analyzed the dose response effects of stress, depression and abuse on maternal/newborn outcomes using population-based data.

Methods: We analyzed data previously collected by the Utah Department of Health Pregnancy Risk Assessment and Monitoring System (PRAMS) and linked birth certificates for 4682 live births, reflecting a total population size of 143,373 live births between 2009-2011. Exposures of interest were self-reported experiences of maternal stress, depression and abuse before and during pregnancy. Outcomes were gestational age, birth weight, newborn admission to the intensive care unit and postpartum depression.

Analysis: Three sets of predictor variables (demographic/behavior, psychosocial, SES/history) were explored for each outcome variable in a hierarchical fashion. We used a forward stepwise approach at each hierarchy with a p-value < .05 as criteria for entry into the model. To deal with the complex survey design of data collection a SAS macro was implemented within SAS 9.3 to obtain corrected p-values. The complex survey design PRAMS weight statements accounted for oversampling of women with lower education and low birth weight in Utah, as well as response rate.

Results: After controlling for maternal demographics, body mass index and smoking, and in a dose-response fashion, women with increasing levels of depression prior to and during pregnancy demonstrated a corresponding increase in newborn admissions to NBICU (OR 1.66 to 2.48; $p < .001$), postpartum depression symptoms (OR: 3.94 to 9.13; $p < .001$) and postpartum depression diagnosis (OR: 7.72 to 59.60; $p < .001$). Maternal stress was associated with increased odds of postpartum depression symptoms (OR 1.34 to 5.51; $p < .001$), but not postpartum depression diagnosis or NBICU admissions.

Implications: Increasing maternal depression and stress are associated with an increasing risk for newborn NBICU admission and/or postpartum depression. These findings suggest that screening for maternal stress and depression as early as the first trimester of pregnancy can identify a group of women who may be at greatest risk for postpartum depression and their babies who may be more vulnerable at the time of birth. Identification of at risk women in early pregnancy could open a greater window of opportunity for initiating interventions with potential for reducing adverse maternal/newborn outcomes. Future prospective studies could evaluate the usefulness of early prenatal risk identification and introduction of psychosocial interventions for improving maternal/newborn outcomes for high risk women.

◀ ▶ go to PG.

PERINATAL NURSING

Antepartum, Intrapartum, Postpartum Predictors and Outcomes of Discharge Readiness

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Purpose: The purpose of this study was to explore the antepartum, intrapartum, and postpartum predictors of readiness for hospital discharge and post-discharge outcomes.
Background/Conceptual Framework: Pregnancy and childbirth are significant events in the lives of women and their families where the discharge decision-making process involves careful judgment in projecting the mom's ability to cope with family care needs after discharge. Research examining the impact of discharge teaching to improve discharge readiness and maternal outcomes, taking into consideration transition factors that may influence a mother's ability to apply discharge information, has not been previously conducted. The Adaptation to Transitions conceptual framework composed of conceptually-related variables was used to study factors associated with transition processes that influence discharge readiness in the antepartum, intrapartum, and postpartum periods and the results of care.
Methods: Descriptive correlational repeated measure design. A purposive sample of English and Spanish-speaking postpartum mothers who experienced a vaginal or cesarean birth of a healthy infant (N = 185) completed demographic, quality of discharge teaching, and readiness for hospital discharge questionnaires prior to discharge. Items were related to the nature of transition and transition conditions effecting patterns of response during labor and postpartum. Discharge teaching was the nursing therapeutic process under investigation during hospital transitions to home. Four weeks post-discharge, participants completed a coping difficulty questionnaire consistent with postpartum patterns of responses and modes of adaptation, and the quality of discharge teaching questionnaire, to compare pre- and post- hospital discharge perceptions of teaching.
Results: A final model was computed with all significant predictors for readiness for hospital discharge and post-discharge coping difficulty. Delivery of education was the only significant independent predictor, accounting for 33% of the variance in readiness for hospital discharge ($R^2 = 0.33$, $R^2_{adj} = 0.32$, F (8,185) =88.08, p=0.01). Readiness of hospital discharge was the only significant independent predictor accounting for 27% of the variance in post-discharge coping difficulty ($R^2 = 0.27$, $R^2_{adj} = 0.26$, F (5, 67) =62.89, p=0.01). A statistically significant difference in the quality of discharge teaching between pre- and post- hospital discharge was noted (t (66) = 2.60, p=0.01) where the quality of discharge teaching mean score decreased from pre-hospital discharge to post-hospital discharge (mean change = -0.485, 95% CI=0.857-0.113).
Implications: The relationship between quality of discharge teaching and the antepartum, intrapartum, postpartum factors, readiness for discharge, and post-discharge coping, provides evidence of nurses' critical role in educating patients in caring for themselves and their baby. Patient perception of discharge readiness may be both a process measure, to identify patients in need of additional interventions before and after discharge, and a nurse-sensitive outcome measure of the postpartum hospitalization experience. Building systems of care that routinely assess quality of discharge teaching and discharge readiness will promote optimal outcomes of the post-childbirth experience.

◀ ▶ go to PG.

PERINATAL NURSING

Pre-Pregnancy Obesity and Postpartum Depression: A Psychoneuroimmunological Perspective

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Purpose/Aims: The purpose of this study was to test a biobehavioral model of the relationship between pre-pregnancy body mass index (BMI) and symptoms of depression at four weeks postpartum. It was hypothesized that pre-pregnancy BMI is positively associated with symptoms of depression at four weeks postpartum and mediated by third trimester pro-inflammatory markers (IL-6, TNF-α, and leptin) and biobehavioral markers of stress (symptoms of depression, perceived stress, and cortisol).

Rationale/Conceptual Basis/Background: Thirteen percent of new mothers suffer from postpartum depression (PPD) making it the most common complication of childbirth. In the nonpregnant population there is a positive relationship between obesity and symptoms of depression. Additionally, prenatal stress and prenatal depression are significant risk factors for PPD. An integrated model of the Psychoneuroimmunological Framework and the Transactional Model of Stress and Coping guided the study.

Methods: A secondary analysis of data from a longitudinal, biobehavioral repeated measures study of women during the third trimester of pregnancy through six months postpartum was conducted. Descriptive statistics, correlations using Pearson's *r*, principal component analysis, and path analysis with principal component (PC) variables were used to iteratively test the model.

Results: Correlation analysis findings included a small correlation between pre-pregnancy BMI and IL-6 (r=0.22, p=0.018), a medium correlation between pre-pregnancy BMI and leptin (r=0.43, p=0.000), a high medium correlation between third trimester Edinburg Postnatal Depression Scale (EPDS) scores and EPDS scores at four weeks postpartum (r=0.48, p=0.000) as well as between third trimester Perceived Stress Scale (PSS) scores and EPDS scores at four weeks postpartum (r=0.49, p=0.000). Path analysis findings included a medium effect from pre-pregnancy BMI to the inflammation PC (standardized coefficient = .29, p = 0.001), the path from pre-pregnancy BMI to the stress PC had a significant small effect (standardized Coefficient = .19, p< 0.001), and there was a significant strong effect from the stress PC to EPDS scores at four weeks postpartum (standardized coefficient = .53, p<0.001). There was a very small, statistically insignificant total effect of pre-pregnancy BMI on EPDS scores at four weeks postpartum (standardized coefficient = .058).

Implications: These findings add to the scientific knowledge regarding the association between pre-pregnancy BMI and increased levels of pro-inflammatory markers during pregnancy. This knowledge is important as there is also a growing body of evidence that increased levels of pro-inflammatory molecules are associated with adverse pregnancy outcomes. These findings also emphasize the need for a paradigm shift in perinatal care from reactionary care to preventative care with risk screening for PPD beginning in the preconceptual period or the first trimester of pregnancy. Future research is indicated to investigate the feasibility of perceived stress as measured by the PSS as a predictor of symptoms of PPD.

Funding: In part by an award from the National Institutes of Health (RO1NR011278).

Measurement of Suspected Oxytocin Dysregulation: Index Development and Testing

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Purpose: Functional disorders of the gastrointestinal and genitourinary systems, such as irritable bowel syndrome and chronic pelvic pain affect millions of women and represent a significant proportion of annual health care costs, both in the US and abroad. They are also difficult to treat and lead to diminished quality of life in their sufferers. Therefore, innovative approaches to their conceptualization and treatment should be a research priority. Previous research has found a correlation between these conditions, grouped here under the umbrella of pelvic visceral disorders (PVDs), and post-traumatic stress disorder, especially the dissociative subtype of PTSD. This project builds off previous theoretical and pilot work positing oxytocin dysregulation as a mechanism for both the dissociative and PVD symptoms in female trauma survivors. Testing this theoretical mechanism is difficult, because there are a number of barriers to measuring oxytocin directly, and the interpretation of those values is similarly difficult. Therefore, development of a reliable proxy for plasma oxytocin level is a priority for further research. The primary aim of this project was to develop such a proxy.

Background: This project builds off of Seng's Post Traumatic Oxytocin Dysregulation Disorders (PODD) theory. Oxytocin plays a role in attachment, social engagement, feelings of safety, security and belonging, as well as, PODD theory suggests, pelvic and visceral smooth muscle function. In survivors of early relational trauma, PODD theory posits that early disruption of this oxytocin system leads to peripheral and central alterations in oxytocin function, which leads to both physical PVD symptoms and psychiatric symptoms such as PTSD and dissociation.

Methods: Using the above theoretical framework, we developed an index of physical symptoms in tissues thought to be regulated by oxytocin, the Oxytocin Dysregulation Suspicion Index (ODysSI). We first performed a literature review to look for any documented link between pain or functional symptoms in these tissues and oxytocin. We then tested some of the index items through secondary analysis of an NIH-funded pilot study that evaluated possible links between hyperemesis gravidarum, trauma and oxytocin dysregulation using regression-based statistical analysis.

Results: In a series of regression models exploring the associations of childhood maltreatment, dissociation, and ODysSI score in relation to oxytocin level, all of the relationships were significant and in the expected direction. The association between ODysSI score and oxytocin level was moderately strong (beta = .539, p = .025).

Conclusions: Because the secondary analysis was limited by small sample size and limited number of variables, this index must first be validated with further investigation. However, these limited results both validate the major tenants of PODD theory and the ODysSI as a promising proxy for oxytocin in further research.

Funding: This study was supported by the National Institutes of Health, National Institute for Nursing Research grant NR008767 (Seng, P.I.), and by 5T32NR007073-20 (Villarruel, P.I.).

go to PG.

PERINATAL NURSING

Predictors of Maternal State Anxiety One Month after a Late-Preterm Delivery

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Purpose and Background: Preterm birth is associated with high state anxiety post discharge. The purpose of this study was to identify early predictors of state anxiety in mothers of infants born late-preterm (LPI) and cared for in the intensive care unit (NICU). Identification of such predictors will allow for early and targeted interventions.
Design and Methods: This was a longitudinal observational study of 41 infant/mother dyads recruited from a level 3 NICU. Mothers completed the self-administered 20-item 4-point Likert S-Anxiety scale (STAI Form Y-1) one month post NICU discharge. The STAI provides information on how the participant may have felt at a defined time in the recent past, how he or she anticipates feeling if a hypothetical situation occurs in the future, and evaluates feelings of apprehension, tension, nervousness, and worry that the participant experiences " right now." Higher scores are associated with increased psychological stress. Participants rated each item-statement that best describes the intensity of their feelings: (1) not at all, (2) somewhat, (3), moderately, (4) very much so. The range of possible scores is 20-80. A score between 40 and 59 is defined as moderate anxiety and a score between 60 and 80 is defined as severe anxiety. Demographic and other mother and infant covariates were extracted from medical records. We used the Vulnerable Baby Scale (VBS), the Pictorial Assessment of Temperament (PAT), and the Maternal Attitude Questionnaire to measure maternal perception of infant vulnerability, maternal perception of infant temperament, and maternal expectations and attitudes towards motherhood.
The Stability of the Cardiorespiratory System in Preterm Infants (SCRIP) score was used to measure infant physiological stability.
Results: Anxiety scores were in the moderate range. The lowest score was 21 and the highest score was 57 [Mean (34.2), SD (9.7)]. In bivariate analysis STAI scores negatively correlated with the 5-minutes Apgar scores (r=0.009, r=-0.63), availability of family support (p=0.02, r=-0.53) and SCRIP score (p=0.03, r=-0.55) and positively correlated with length of stay (p=0.05, r=47) and parent role alteration (p=0.02, r=0.51). Apgar and MAQ scores were the most significant predictors of maternal anxiety one month post hospital discharge when adjusting for significant infant and mother covariates in multiple regression models.
Implications: The stress associated with an eventful pregnancy that has ended with a LP birth may persist beyond the NICU period. Infant's severity of illness and maternal cognitions concerning expectations of her infant and expectations of herself as a mother present significant vulnerability for increased anxiety during transition to motherhood. Screening for moderate to severe anxiety prior to NICU discharge could identify those at increased risk. Future studies are needed to evaluate the relationship between the identified risk factors and whether early identification and intervention in the NICU reduces the risk and duration of state anxiety.

Funding: This study was supported by a foundation grant from the investigator's institution.

◀ ▶ go to PG.

PROMOTING HEALTH ACROSS DIVERSE POPULATIONS

Moderator:
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REIMAGING HEALTHY AGING: VIEWS OF OLDER BLACK AFRICAN IMMIGRANT WOMEN

Sharon G. McRae, Barbara B. Cochrane

SELF-MANAGEMENT GENDER DIFFERENCES IN HISPANICS WITH TYPE 2 DIABETES

Marylyn McEwen, Alice Pasvogel, Carolyn Murdaugh, Joe Hepworth

RACIAL/ETHNIC DISPARITY IN THE DELAY OF CARE AND TREATMENT FOR DIABETICS IN CALIFORNIA

Shirley Evers Manly, Magda Shaheen, Patricia Bridewell

LEVELS OF SELF-REPORTED PHYSICAL ACTIVITY AMONG OVERWEIGHT MEXICAN AMERICAN WOMEN

Neomie C. Congello, Deborah Koniak-Griffin

APPLYING THE TRANSTHEORETICAL MODEL: ASSESSING EXERCISE BEHAVIOR IN BLACKS IN A CHURCH SETTING

Robin M. White

◀ ▶ go to PG.

Reimaging Healthy Aging: Views of Older Black African Immigrant Women

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Purpose: The purpose of this study was to develop a grounded theory of healthy aging for older Black African immigrant women.

Background: Older Black African immigrant women are among the fastest growing immigrant group in the United States. Although U.S. and international research reveals functional status, independence, and cognitive functioning as major concepts of aging in older non-African and African American populations, absent from empirical studies is what is known about health and aging among Black African immigrants, particularly older women. We do not know to what extent their experience of aging might be unique and defy generalization as older adult women, African Americans, or immigrants. Older Black African immigrant women's perspectives and experiences are particularly important because of their central role in addressing family health care needs, as well as identifying possible perspectives and health practices from their home country that may differ markedly from those in the U.S.

Methods: Given the lack of knowledge about older Black African immigrant women, particularly their views of health and aging, changes they might experience as a result of their transition to the U.S., and the importance of self-identify, social interactions, and contexts in life, grounded theory was deemed an appropriate approach for addressing the study purpose. Participants were recruited based on established relationships with churches and other social groups that include older Black African immigrant women, theoretical sampling, and snowballing techniques. Women were eligible if they were born in Africa, age 45 years or older, immigrated to the U.S. as an adult, spoke and understood English, and provided informed consent to participate. Data for analysis included in-depth interviews that were recorded and transcribed verbatim, methodological memos, and questionnaires. Constant comparative analysis was used throughout the study. Theoretical sampling and data collection continued until there was saturation of the emerging theory. Atlas.ti was used to facilitate management of the data, codes and categories, and evolving themes.

Results: This original research disaggregated theory derived from older Black African immigrant women, as a sub-group that is distinct from the larger African American population. Based on interviews with sixteen participants, the analysis and substantive theory indicated the core phenomenon experienced by the women to be "re-imaging healthy aging." This core phenomenon was informed by two categories: "acknowledging images of aging in Africa" and "new images of aging". Accepting loss, adapting to their environment, and managing ways to maintain health helped these women re-image healthy aging while living in the U.S.

Implications: The findings of this study reveal how at the intersections of cultures, attitudes, and beliefs, Black African immigrant women imaged and re-imaged healthy aging for themselves. This research can inform clinical practice by enhancing awareness of the meaning of health and the experiences of older Black African immigrant women. The findings can be used in future research to guide instrument development and interventions to support healthy aging for these women.

◀ ▶ go to PG.

Self-Management Gender Differences in Hispanics with Type 2 Diabetes

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Purposes/Aims: The purpose is to explore gender differences in self-management activities in Hispanics with type 2 diabetes mellitus (T2DM).

Rationale/Background: There is a paucity of literature that demonstrates that differences exist in T2DM management activities between men and women, especially among Hispanics. Understanding of gender differences in management of T2DM activities is critical to be able to tailor interventions to optimize self-management outcomes.

Methods: A total of 93 females and 50 males with T2DM completed base line data collection as part of an intervention study. Independent samples t-test was used to test for differences in self-management activities between females and males.

Results: Age ranged from 35 to75 years (mean 53.27, SD 9.0), time with diabetes ranged from 1 to 40 years (mean 11.09, SD 7.3), the majority were married (73.1%), had less than a high school education (68.6%), and had a family income less than $25,000 (85.3%). There were no differences between males and females on age, time with diabetes, marital status, education, or income. Significant gender differences were reported in diet self-management (p=.03; Females: Mean 3.52, SD 1.4; Males: Mean 2.94, SD 1.6), foot care self-management (p=.01; Females: Mean 5.18, SD 1.8; Males: Mean 4.11, SD 2.5) and total self-management activities (p=.02; Females: Mean 4.02, SD 1.1; Males: Mean 3.44, SD 1.5). Females performed self-management activities with greater frequency than males. Both genders performed most self-management activities on average 4 or fewer days a week.

Implications: The results indicate that self-management activities need to be increased for both males and females with increased attention directed to males with T2DM. Future research needs to explore tailoring interventions to gender as well as culture.

Funding: R01MD005837 NIH/Institute for Minority Health and Health Disparities.

go to PG.

PROMOTING HEALTH ACROSS DIVERSE POPULATIONS

Racial/Ethnic Disparity in the Delay of Care and Treatment for Diabetics in California

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Associate Dean

Magda Shaheen, PhD, MPH, MS
Associate Professor

Patricia Bridewell, MSN, RN, PHN
Instructor

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Purpose: To determine the racial/ethnic disparity in the delay of health care, receiving treatment plan and prescription medication among adults with diabetes in California.

Background: Hispanics are at high risk for type 2 diabetes. Projections indicate that by 2050, Hispanics will make up 30% of the U.S. population. The age-adjusted prevalence of type 2 diabetes mellitus in Hispanic Americans is twice that in non-Hispanic white Americans. Currently, 10.4% of Hispanics in the U.S. are diagnosed as having diabetes mellitus. Physicians may be hesitant to start insulin because of a belief about patient risk, including risks in people with comorbidities, excess weight gain, hypoglycemia, impaired quality of life, beliefs about patient competence, and resource issues. Patient factors, in delays include fear of hypoglycemia or weight gain, and lack of finances to pay for medication and supplies.

Methods: We analyzed data from the 2011-2012 California Health Interview Survey (CHIS). The survey is a cross-sectional survey telephone interview of adult population. Diabetes status and race/ethnicity were self-reported. Information related to diabetes care and delay in service and medication were collected by questionnaire. We analyzed the data using the survey module in STATA 11 taking into consideration the sample design and the sample weight.

Results: of the 4,701 diabetic participants, 8% were African American (AA), 41% Hispanics, and 12% were Asian/Pacific Islanders (PI). Overall, 9% did not have usual source of care [15% in Hispanics, 7% in AA and 5% in Asian/PI compared to 5% in whites ($p<0.05$)] and 11% were uninsured [18% in Hispanics, 11 in Asian/PI, 10% in AA compared to 4% among white ($p<0.05$)].

Overall, 77% percent had a diabetic care plan developed by a health care provider, while only 46% had a copy of this plan. Fewer Asian/PI and Hispanics their providers developed their diabetes care plan (66% and 69% respectively) compared to 87% in white ($p<0.05$). There was no racial difference in the percent who had written diabetes care plan (48% in AA, 47% in Hispanics, 46% in Asian/PI and 43% in white, $p>0.05$).

Delay in needed care for diabetes was reported by 19%, with highest report being among Hispanics (24%) and Asian (21%) compared to white (13%) ($p<0.05$). Of those with delay in care, 53% was due to cost/no insurance [68% in Hispanics and 55% in other race compared to 45% in whites ($p=0.02$)].

Delay in prescription medication was reported by 18% overall and was highest among other race (30%), AA (21%) and Hispanics (20%) compared to white (17%) ($p=0.001$). Of those with delay getting medication, 60% was due to cost/no insurance [78% in Hispanics and 55% in AA compared to 46% in whites ($p=0.001$)].

Implications: Delays in treatment is prevalent in the U.S. Understanding the factors associated with delayed care and treatment of diabetes is important as the failure to receive care can lead to poorer outcomes, costly treatment and death. Possible approaches to help overcome delays include the development of guidelines, motivation and support of patient self-management, and education for both physicians and diabetics.

◀ ▶ go to PG.

PROMOTING HEALTH ACROSS DIVERSE POPULATIONS

Levels of Self-Reported Physical Activity among Overweight Mexican American Women

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Purpose: The well-established link between decreased physical activity (PA) and Cardiovascular Disease (CVD) underscores the importance of examining PA levels in populations with high risk factors. This study investigated the following research questions: (1) What are the levels of PA among overweight Mexican American Women (MAW) living in Ventura County, California (CA)? (2) What are the relationships between levels of PA, Body Mass Index (BMI), self-reported health conditions and selected background characteristics (age, acculturation, and employment status)?

Background: MAW, identified as the fastest growing subgroup of Latino/Hispanic populations in CA, show rapidly rising obesity rates and sedentary lifestyles that can potentially lead to chronic health conditions (i.e. CVD and diabetes). Reported low levels of leisure time PA and discrepancies found in reports showing mixed results on levels of PA among MAW accentuate the need to further examine PA in this population.

Methods: Using community-based participatory research methods, community leaders from recruitment sites assisted in selecting six women of Mexican descent with community work experience to form a Community Advisory Board (CAB). The CAB guided in recruitment procedures done by two trained bilingual Research Assistants (RAs). Following screening and informed consent procedures, the Principal Investigator and RAs conducted face-to-face interviews on measures of PA (Short International Physical Activity Questionnaire), acculturation level (General Acculturation Index) and sociodemographic data (i.e. age, health conditions, employment status). BMI was calculated from measured height and weight. Data analysis was performed using SPSS-V22 to compute frequencies and descriptive. A test of correlations and ordinal regression analyses were performed to examine relationships among variables.

Results: Study sample consisted of 117 self-identified MAW who were married or single and living with a partner. Women ranged in age from19 to 64 (mean=38.9 years; SD =11.08) and most were obese based on BMI (mean=31.1; SD=7.05). Total number of self-reported health conditions ranged from 1 to 2 (n=32, 27.4%; n=14, 12%, respectively) to 8 conditions (n=1, .9%). Sixty five percent of women (n=76) were unemployed and acculturation level was low (mean=1.8, SD=.77; (possible range 1 [low] to 5 [high]), indicating most participants spoke Spanish only or had limited English. Self-reported PA was categorized with 23% (n=24) low, 34% (n=35) as moderate and 43% (n=44) as high. Although Spearman Correlations between PA and predictors: BMI, health conditions, age, acculturation and employment were .046, .069, -.059, .263, and -.158, respectively, none were shown to be significant. However, further analysis using an ordinal regression, controlling for other factors, showed that acculturation (p=.025) was significant in predicting levels of PA. There was a 2.1 increase in the ratio of the odds from lower to higher PA for each unit increase in GAI. This ratio stayed the same for all categories.

Implications: Contrary to popular beliefs, a large percent of overweight/obese MAW in this study were found to be physically active. Future interventions are needed to address weight management and loss. Culturally-focused lifestyle behavior programs should support maintenance of this behavior in physically active MAW and include strategies to promote PA in those who are more sedentary.

◀ ▶ go to PG.

Applying the Transtheoretical Model: Assessing Exercise Behavior in Blacks in a Church Setting

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Purpose/Aims: This descriptive, cross-sectional study used components of the Transtheoretical Model (TTM) to assess whether any associations exist between TTM constructs and exercise in African Americans. This exercise assessment included some environmental and cultural factors.

Rationale/Background: Sedentary behavior is higher among African-American men and women than other ethnicities, placing them at greater risk for chronic illness. Routine physical activity reduces the risk of chronic health problems such as: (a) overweight and obesity, (b) type 2 diabetes, (c) hypertension, (d) coronary artery disease, (e) stroke, (f) congestive heart failure, and (g) cancers. Assessment of African-Americans' exercise attitudes in a church-based setting may provide information with which to develop effective interventions to improve physical activity. Participant surveys included: (a) demographics, (b) exercise stage of change, (c) exercise decisional balance, (d) exercise self-efficacy, and (e) current physical activity.

Project/Approach/Methods/Process: Two hundred participants completed surveys, ranging from 18 to 85 years ($M = 53.17$), with 69% female. The most frequent stage of change was the preparation stage (34%). Hours of total physical activity were 1.45 per week of combined vigorous activity, moderate activity, and walking. ANOVAs showed statistical significance in decisional balance across stages of change, but no statistical significance in self-efficacy by stage of change. ANOVA results conducted to determine any differences in IPAQ total by stage of change showed statistical significance, suggesting a difference in the weekly amount of exercise by stage of change. Correlational analyses and ANOVAs showed correlations between stage of change and age, age and self-efficacy, education and stage of change, income and self-efficacy, IPAQ and employment, and self-efficacy and IPAQ. Chi square tests showed "I don't have time" and "I am too tired" as statistically significant exercise deterrents associated with exercise stage of change. Chi square tests also determined associations between exercise stage of change and exercise promoters. Both "I am in a better mood if I exercise" and "I sleep better if I exercise" showed statistically significant associations.

Outcomes Achieved/Documented: Tailoring interventions focused at increasing physical activity in African Americans by including the use of cultural norms and multiple aspects of the TTM (stages of change, self-efficacy, and decisional balance) may help increase weekly physical activity participation. Community-based participatory research may also be beneficial for intervention development in order to create a supportive environment for behavior change. Sole use of the stages of change without consideration to other aspects of the model in population assessment and intervention development is cautioned, as the combination of these with other TTM dimensions give more explanatory power.

Conclusions: Health care professionals, especially nurses, are in an optimal position to assess at-risk populations and assist them to initiate and maintain routine physical activity by developing effective interventions. Traditional exercise surveys such as the decisional balance and self-efficacy in the TTM may need to be revised to include psychobehavioral and environmental factors to provide a more comprehensive assessment of attitudes of African Americans toward physical activity.

◀ ▶ go to PG.

PROMOTING INTERPROFESSIONAL RELATIONSHIPS

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THE "RULES OF ENGAGEMENT": NURSES' STRATEGIES FOR MANAGING INDUSTRY RELATIONS

Quinn Grundy

DEVELOPMENT OF INTERPROFESSIONAL EDUCATION CURRICULUM

Nassrine Noureddine, Darla Hagge, Debra Brady

ESTABLISHMENT OF AN INTERDISCIPLINARY ACADEMIC HEALTH SCIENCES CENTER EBP PROGRAM

Susan Childress, Barbara Wilson, Margaret Pearce, Linda S. Edelman

EVALUATION OF AN ACADEMIC-SERVICE PARTNERSHIP USING KIRKPATRICK'S EVALUATION MODEL

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◀ ▶ go to PG.

PROMOTING INTERPROFESSIONAL RELATIONSHIPS

The “Rules of Engagement”: Nurses’ Strategies for Managing Industry Relations

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Purpose: This multi-sited, qualitative study sought to understand whether and how hospital clinical nurses interact with medical related industry representatives and to explore the strategies by which they manage these relationships.

Background: Recently passed legislation that brings transparency to the relationships between physicians and industry adds to a series of policy developments that aim to address conflicts of interest and to curb rising costs and threats to safety resulting from biased decision-making. Many of these policies, however, fail to include or recognize the roles of nurses. With nursing’s growing scope of practice and emphasis on multidisciplinary care models, nurses’ power and influence is increasingly recognized, and they are subject to conflicts of interest similar to those addressed for physicians. Nursing, consistently rated as one of society’s most trusted professions, should be especially concerned with both actual and perceived conflicts of interest as they can threaten public trust.

Methods: An ethnographic approach was used to explore this issue within a purposive sample (n=4) of hospitals selected to represent different types of institutions. Participants (n=72) included staff nurses, nurse managers, Clinical Nurse Specialists, administrators, industry representatives and supply chain professionals. Four data collection strategies were triangulated: targeted observation of nurse-industry interactions; focus groups with RNs; individual interviews with key informants; and documents analysis. Data were analyzed using an interpretive approach in which key themes were inductively derived from the data and described in relation to policy and institutional contexts.

Results: Participants reported “interacting heavily” on a day-to-day basis with industry representatives. Nurses reported developing ad-hoc, personalized strategies for interacting with sales representatives and other forms of marketing on the basis of experience. These “rules of engagement” represented a spectrum of orientations toward industry, ranging from treating sales representatives as essential colleagues to approaching industry interactions with deep mistrust. While some participants had adopted an attitude of vigilance, policing practices in their interactions with industry, others felt strongly bound by a social code that mandated they “not be rude” and strove to maintain friendly collaborations. However, all these strategies were invisible to administrators, who largely maintained that interactions between nurses and vendors did not occur. Although some nurses characterized themselves as patients’ “last line of defense”, their strategies were not always effective in safeguarding patient care or their institutions from industry-promulgated influences that could create bias. Industry representatives were attuned to these personalized strategies and exploited differences among colleagues.

Implications: Due to the absence of inclusive policy and a lack of recognition on part of administrators, nurses were left to navigate interactions with industry on an individual basis. Within institutions, a diverse patchwork of strategies resulted in inconsistent policy implementation, and a lack of clarity around professional and ethical standards. Nurses’ work with industry vendors should be recognized institutionally to ensure ethical, effective collaboration, and nurses should receive formal preparation for this work, including skills for critical appraisal of industry-funded research.

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◀ ▶ go to PG.

PROMOTING INTERPROFESSIONAL RELATIONSHIPS

Development of Interprofessional Education Curriculum

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Background: Students in health profession programs are traditionally educated in silos. Upon graduation, they are expected to function as part of a health care team, collaborating with professionals from other disciplines to care for patients from admission to discharge. It is hard to imagine a winning team composed of individuals with complementary and essential skills who have not practiced working together. Communication problems among health care personnel have been implicated as a cause of most patient errors by the Institute of Medicine, and the American Association of Critical Care Nurses (AACN). Further, Joint Commission reported that breakdowns in communication were the leading cause of sentinel events between 1995 and 2006. To resolve this situation, the Joint Commission has issued National Patient Safety Goals to improve the effectiveness of communication among healthcare professionals and recommends creating a culture that encourages interprofessional education. The AACN also recommends that team members receive training in educational and/or professional development programs that develop critical communication skills.

Purpose: The purpose of this mixed methods study was to prepare Nursing students and Speech Language Pathology (SLP) students to become part of the interprofessional (IP) collaborative-ready health workforce. This was accomplished through creating interprofessional education (IPE) simulation curriculum that promotes the development of IP healthcare team communication, and enhances patient safety.

Sample: Purposeful sampling was used to recruit participants. First semester nursing students and third semester graduate SLP students enrolled in California State University, Sacramento were invited via email to participate in the study. A total of 45 invitees agreed to participant, 29 nursing and 16 SLP. The majority of participants were females (80%) with only 20% males.

Methods: Quantitative data were collected using Likert scale surveys to evaluate students' experience at the end of the IPE Simulation. Qualitative data were collected using reflective questions on the students' experience during the simulation debriefing sessions. The debriefing sessions were videotaped, transcribed, and analyzed in search for emerging common themes. The internal consistency of each of the instruments was determined using Cronbach's alpha with the following results: Simulation Design Scale (SD), SD ($\alpha = .911$); Student Satisfaction and Self Confidence in Learning (SSSC) instrument, SSSC ($\alpha = .841$).

Results: *Simulation Design (SD):* Spearman's rho correlation coefficient was employed to determine the relationships between the simulation design and the degree of importance for the students. *SD Correlation was significant at the 0.01 level. Student Satisfaction/ Self Confidence (SSSD):* Spearman's rho correlation coefficient was employed to determine the relationships between the students' satisfaction with simulation and their self confidence in obtaining the instructions they needed. *SSSD Correlation was significant at the 0.01 level.* Two themes emerged from analyzing participants' qualitative comments: *Theme I: Valuing the Simulation learning experience; Theme II: Importance of Interprofessional communication and team work.*

Implications: There is a pressing need to prepare Nursing and SLP students with interprofessional communication skills to work effectively in a collaborative health workforce.

◀ ▶ go to PG.

Establishment of an Interdisciplinary Academic Health Sciences Center EBP Program

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Purpose: To describe the development of an academic partnership to facilitate hospital based interdisciplinary evidence-based practice (EBP)
Rationale: There is an increased focus on health care being evidence and team-based. A mission of our academic health sciences center is to promote innovation in clinical practice through research. Promoting education and collaborations can be challenging in large academic centers where hospitals, clinics and academic disciplines often work in silos with competing goals. In our academic health center, there was a need to coordinate EBP resources and utilization.
Project Description: Nursing administration from Health Sciences and the College of Nursing created a University of Utah hospitals and clinics-based nursing research committee charged to develop an environment that supports grass-roots EBP and quality improvement projects. The initial committee was comprised of hospital and unit-based nursing administration, nursing faculty, nursing staff members, and representatives from the health sciences library, quality improvement, value engineering, clinical education and the institutional review board. The committee identified three goals: 1) provide staff mentorship, 2) communicate projects organization-wide and 3) share resources. Committee members received EBP education and resource training and support. Initial organization wide efforts included establishing a quarterly EBP newsletter, mentoring clinical staff interested in conducting projects and presenting outcomes at professional conferences, partnering with the Daisy Foundation to recognize nurse EBP champions who excel in implementing EBP to improve care, and working with Masters of Nursing Education students to review and evaluate other hospital-based EBP programs.
Outcomes: The initial work of the EBP committee resulted in other disciplines asking to participate in EBP committee to support team-based EBP projects. As a result, the committee transitioned into an interdisciplinary EBP council. An interdisciplinary EBP poster fair was hosted with broad transdisciplinary participation. A needs assessment conducted in conjunction with the poster fair identified EBP training needs (online EBP training modules, computer availability, literature search and citation management training, and communication of of available resources) and barriers (lack of management support, identifying collaborators, lack of knowledge, isolation of community clinics). Interestingly, time was listed as both a need and barrier to conducting EBP.
Conclusions: We have successfully built a core interdisciplinary EBP council. Our next steps will be to broaden our EBP efforts and develop a sustainable EBP education plan that can be shared across disciplines and our large academic health sciences center, including community clinics. A future goal is to support organizational partners across the Intermountain West by utilizing distance learning technologies to provide EBP mentoring and collaborations.

Funding: Supported by funding from University of Utah Hospitals and Clinics Nursing Administration.

◀ ▶ go to PG.

PROMOTING INTERPROFESSIONAL RELATIONSHIPS

Evaluation of an Academic-Service Partnership Using Kirkpatrick's Evaluation Model

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Program Description: This program addresses the strategy and demonstrated benefits and outcomes of developing an academic-service partnership between a local university-based school of nursing and a Magnet designated community hospital to influence the enculturation of research and EBP among clinical nurses, nurse leaders and other interprofessional colleagues. Outcomes of the partnership are reported using Kirkpatrick's Evaluation Model.

Abstract: Purpose/Background: The benefits of faculty embedded in community hospitals has been previously described including knowledge sharing, enhancing lifelong learning, and potentiating the professional practice of clinical nurses (Everett et al., 2012). The most successful academic/service partnerships include synergistic relationships with reciprocal exchanges of knowledge and competencies where faculty partners assist clinicians in developing research protocol to address clinical questions and EBP projects for real situations occurring in the hospital setting (Newhouse, 2007). The American Association of Colleges of Nursing and American Organization of Nurse Executives have recognized the importance of academic/service partnerships and have developed guidelines for such partnerships.

Conceptual Framework: Knowles adult learning theory (Lieb, 1991) and Kirkpatrick's Evaluation Model (Kirkpatrick & Kirkpatrick, 2006) were used as the conceptual frameworks to guide the case study experience.

Description of Best Process/Methods: A mixed-method model was used to teach, support, coach, and encourage nurses in research projects and EBP change projects to change the research-adverse culture to a culture of inquiry. The faculty partner was embedded in the organizations' collaborative governance councils, presented 15 minute "educational snip-its", and facilitated workshops in Writing for Publication (dissemination of new knowledge).

Outcomes Achieved: Kirkpatrick's Evaluation Model is a sequence of methods to objectively evaluate the effectiveness of educational programs. Level 1 "reaction" and Level 2 "learning" are evaluated at the time of teaching and coaching events. Outcomes of the academic-service partnership were evaluated using the higher evaluation levels of Kirkpatrick's model - Level 3 "behavior change" and Level 4 "results". Level 3, behavior change was demonstrated by clinicians through application of knowledge, skills and attitudes related to conducting research studies or EBP projects, developing poster and podium presentations and writing manuscripts for publication. Level 4 outcomes included the number of nursing research studies, completed EBP projects, poster and podium presentations, and manuscripts submitted for publication. These scholarly activities have increased substantially during the 7 year academic partnership with the embedded professor. Feedback from nursing leaders, clinicians and interprofessional colleagues indicate the benefits of an academic-service partnership in building and sustaining a culture of inquiry.

Conclusions: Academic-service partnerships can be an effective method to facilitate an appreciation of nursing research and evidence-based practice and demonstrate an increase in the quantity and quality of scholarly activities.

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◀ ▶ go to PG.

go to PG.

RESPONDING TO ABUSE

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PARENT-CHILD RELATIONSHIPS AMONG YOUTH EVALUATED FOR EXTRA-FAMILIAL ABUSE

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RESILIENT MOTHERS: PREVALENCE AND PREDICTORS OF BREASTFEEDING IN SURVIVORS OF ABUSE

Meghan Eagen-Torkko, Julia Seng

APN RESPONSE TO INTIMATE PARTNER VIOLENCE: PROFESSIONAL, WORK AND PERSONAL FACTORS

Marla McCall, Pamela G. Reed

"TALKSTORY": AN ACCESSIBLE INTERVENTION FOR IPV

Lois Magnussen, Jan Shoultz

◀ ▶ go to PG.

RESPONDING TO ABUSE

Parent-Child Relationships among Youth Evaluated for Extra-Familial Abuse

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Purpose: We examined potential discrepancies in perceived parental support and control between parents and adolescent runaways being evaluated for abuse at a hospital-based Child Advocacy Center (CAC). We also explored characteristics of abuse experiences, trauma responses, and risk behaviors might help predict any discrepancies in perception of the relationship.

Background: There has been limited research into how parents and adolescents appraise their relationship after youth experience extra-familial sexual assault, yet research has shown that supportive parental relationships can improve clinical outcomes for abused youth.

Methods: A secondary analysis of data from initial abuse assessments conducted at a Midwestern CAC between 2007-2013 (N=632 dyads). Adolescents completed the Child's Report of Parent Behavior Inventory (CRPBI) 18-item subscales for support and control (9 items each for mom and dad), and parents completed the 8-item parent version for themselves. Subscales were scored 1-5 (higher score=higher support or higher control). We tested the congruence in appraisal across parent and adolescent scores using paired t-tests, then linear regressions and ANOVAs to explore potential explanatory variables linked to discrepancy in both the support and control subscale scores. These included: demographic characteristics; abuse severity; family problem substance use; current emotional distress; mental health problems such as suicidality, self-harm, PTSD; and problem substance use.

Results: Scores on the parent and child inventories were normally distributed and generally congruent in their respective assessments of the relationship, although adolescents rated parental support slightly lower and parental control slightly higher on average than their parents did (mean difference -.17, t=3.96, $p<.001$; for control, .39, t=6.43, $p<.001$). Few variables predicted discrepancy between youth's and parents' support scores. However, for control score discrepancy, youth exposed to family violence or more severe sexual abuse (prostitution/multiple perpetrators) significantly rated parents more controlling/distrustful than parents did (all $p<.01$), more than youth not abused or youth victims of incest or single extra-familial assaults (all $p<.001$). Youth with high levels of emotional distress or substance use problems, Youth who reported strong connections to school, other caring adults, and who felt parents cared about them rated parents less controlling than parents self-rated.

Implications: Our study notes the diversity of parent-child relationships among youth assessed for abuse in a CAC, though perceptions are relatively consistent in each parent-child dyad. Overall, parents tended to rate the relationship slightly more positively than their child, which may be due to social desirability bias. There were more factors explaining discrepancies in perceived control than in perceived supportiveness; both aspects of relationships and their effects on recovery from abuse deserve further exploration. Researchers and clinicians may consider using the CRPBI as a tool to evaluate supportive and controlling behaviors of parents of abused youth. Clinically, parents of severely sexually abused youth may need help establishing developmentally appropriate expectations and discipline and improve their strategies to demonstrate support for their adolescent victim.

Key Words: vulnerable youth, parent-child connectedness, instrumentation

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Funding: Ramsey County Attorney's Office.

◀ ▶ go to PG.

RESPONDING TO ABUSE

Resilient Mothers: Prevalence and Predictors of Breastfeeding in Survivors of Abuse

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Specific Aims: To describe the breastfeeding intent and success in primiparous women with a history of childhood maltreatment/trauma (CMT) in the context of a trauma-informed model of perinatal outcomes.

Background: Breastfeeding has been designated a research priority by the Centers for Disease Control and the National Institutes of Health, and is known to reduce risks for significant maternal and infant morbidities. However, only 16% of infants are currently breastfed at one year, and extensive intervention efforts have had only modest success at increasing this rate. A history of trauma or abuse is a common experience for women, affecting an estimated 55%, and early quantitative and qualitative work suggests that women with a history of childhood abuse have lower breastfeeding rates than other women. However, no current research has examined the relationship of trauma and post-traumatic stress disorder (PTSD) to breastfeeding outcomes. Previous research has shown that PTSD mediates the effect of trauma on perinatal outcomes, and that it is this psychophysiologic response to the trauma, rather than the trauma itself, that predicts outcomes such as lowered birth weight and shorter gestation. This study specifically addresses the role of PTSD in breastfeeding outcomes for survivors of CMT.

Methods: This is a secondary analysis of a subset (n=519) of a large (n=1581) prospective cohort study conducted between 2006-2008 in the Midwest. We compared the variables known in the literature to affect breastfeeding (e.g., education, maternal age, race, cesarean birth, etc.) across three groups (trauma-exposed resilient, PTSD-positive, and non-exposed). The significant variables were then entered into a stepwise logistic regression analysis to identify the relationships between these variables.

Results: The three groups differed significantly in their intent to breastfeed (x^2=6.338,df=2,p=.042), initiation of breastfeeding (x^2=9.677, df=2, p=.008), and continuation of breastfeeding at 6 weeks postpartum (x^2=10.408, df=2, p=.005). Compared to women with PTSD, women in the non-exposed group were 16% more likely to breastfeed at 6 weeks, and women in the trauma-exposed resilient group were 30% more likely to be breastfeeding at 6 weeks. The stepwise logistic regression model, organized according to the Seng theoretical framework of effects of early trauma on perinatal outcomes, explained 68% of the variance in breastfeeding rates at 6 weeks postpartum.

Implications: These preliminary findings empirically support the use of the existing theoretical framework previously used for perinatal research in survivors of CMT to describe and predict breastfeeding rates for these women. Additionally, this study suggests that interventions specifically targeting PTSD may be effective in improving breastfeeding rates for women who have survived CMT. Because abuse/trauma are common experiences for women in the US, and because the disclosure rates are very low, universal use of trauma-informed interventions may increase the success of breastfeeding-promotion efforts. However, because of the inherent limitations of secondary analysis, more research is needed to confirm and expand findings.

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◀ ▶ go to PG.

RESPONDING TO ABUSE

APN Response to Intimate Partner Violence: Professional, Work and Personal Factors

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Purposes/Aims: The purpose of this study was to determine the professional, work environment, and personal factors that significantly relate to APN's self-efficacy to treat intimate partner violence (IPV).

Rationale/Conceptual Basis/Background: Intimate partner violence affects one in four women in the US and is the leading cause of maternal death during the prenatal and first year post-partum periods. Older women victims suffer earlier death from all causes. IPV is under diagnosed and undertreated based on large surveys from multiple treatment settings. APNs are now providing health care to large numbers of potential victims as their primary access to medical care, thus they are important as diagnosticians and treating clinicians.

Methods: A national quantitative survey of APNs was performed with the aim of obtaining APNs from diverse specialties, geographic areas, and demographics within the U.S. Participants completed an electronic survey using modifications of standardized questionnaires on *professional factors* of hours of previous IPV education, IPV knowledge, years in practice, current practices, role belief, and self-efficacy to treat IPV. A new scale was developed to test *workplace factors* of screening tools and protocols, institutional, and community supports. *Personal factors* of age, gender, past IPV experience, vicarious trauma (VT), resilience, and general self-efficacy were tested using previously validated tools.

Results: A sample of 494 APNs was obtained. Respondents were demographically representative of U.S. practicing APN population. Findings from this study indicate that APNs' current self-reported practice behaviors regarding IPV, total hours of IPV education, age in years, role belief, resilience, absence of VT and IPV knowledge are the most significant contributors to APNs' self-efficacy to treat IPV.

Implications: APNs with strong clinical experience with IPV, more hours of IPV education, older age, belief that it is their role to treat IPV, and greater IPV knowledge, reported the best self-efficacy to treat IPV. Educational institutions should provide more formal and ongoing education in IPV. VT in APNs who treat IPV should be further explored. Health care organizations should provide continuing IPV education and provide work environments that promote the treatment of IPV for APNs to effectively identify and engage in treatment those patients who may be victims.

Acknowledgement: I gratefully acknowledge the statistical assistance of Alice Pasvogel, PhD, RN, University of Arizona, College of Nursing.

◀ ▶ go to PG.

“Talkstory”: An Accessible Intervention for IPV

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Purposes/Aims: The purpose of “Talkstory” as a culturally accessible intervention was to determine if community owned, community led “talkstory” groups lead to an increased awareness of the gender based crime of Intimate Partner Violence (IPV) and increased community leadership to prevent and address IPV.

Rationale/Conceptual Basis/Background: Violence between intimate partners results in significant health consequences that are both physical and psychological and impact individuals within households and across communities. In Hawaii murders from IPV are highest among Native Hawaiian and Pilipina women. Past practice has focused on Western concepts of professional intervention. Yet in previous studies women in these communities did not rely on traditional services, but sought support and safety from their families, friends and other community members to prevent and intervene early when relationships were difficult. Critical Social Theory (CST) serves as the theoretical framework that guides this gender based intervention. The intent of this theory is to “challenge conventional assumptions and social arrangements and to move beyond the ‘what is’ to the ‘what could be. Community based participatory research (CBPR), the approach used in this study, is consistent with the perspective of CST and combines research and community capacity-building strategies. This presentation focuses on results of the intervention .

Methods: The quasi experimental intervention includes 5 “talkstory” sessions over 7 months. Pre and post testing was conducted to determine changes in between group means on the following measures: 1) Perceptions of the Acceptability of Violence; 2) Awareness, Knowledge, and Confidence regarding IPV; 3) Perception of the Capacity to Address IPV in the community; and 4) Utilization/Outcomes. The research study has been completed in 8 groups testing the intervention and 6 control groups matched for age, gender and ethnicity.

Results: In the intervention group changes between pre and post testing of the measures showed a statistically significant change on measures of the acceptability of violence (p .001) and awareness (.001) and confidence (.001; .001; .001; .001) in their ability to prevent and address IPV. In the control group changes between pre and post testing of the measures did not show a statistically significant change on measures of the acceptability of violence but did on confidence (.01; .001) in their ability to prevent and address IPV.

Implications: The change in the intervention group regarding the acceptability of violence demonstrates the potential of “talkstory” as an accessible intervention, using a culturally acceptable strategy to change social norms. Traditional assumptions regarding gender have guided perceptions of IPV and resulting attitudes in the communities. Increased awareness and confidence among the participants has led to identification of leaders who are engaged in further training to conduct the community intervention. Consistent with CST, capacity building and empowerment develop via questioning taken-for-granteds, reflective participatory dialogue, consciousness-raising, and, ultimately, action in the community.

Funding: USDHHS, Office of Women’s Health, 1CCEWH101006-01-00 & 1 CCEWH111025-01-00.

go to PG.

◀ ▶ go to PG.

TOOLS AND SCALES

Moderator:
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CULTURAL ADAPTATION OF THE COMMUNITY COHESION AND HEALTH INSTRUMENT

Hoàng t. Diệu-Hiền

ASK ME 3™: A USEFUL HEALTH LITERACY PROMOTION TOOL FOR MINORITY POPULATIONS

M. Danet Lapiz-Bluhm, Glenise Lynn Sanchez Perez, Rachel Weems, Rene Rendon

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COMPARISON OF THE BRIEF ARSMA AND MACVS IN HISPANIC MOTHERS

Elizabeth Reifsnider, Cha-Nam Shin, Darya McClain, Michael Moramarco

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COGNITIVE INTERVIEW TESTING: A MORE RIGOROUS METHOD THAN PILOT TESTING

Nuhad Yazbik Dumit, Souha Fares, Marie Therese Sabbagh, Vicky Gebran

go to PG.

TOOLS AND SCALES

Cultural Adaptation of the Community Cohesion and Health Instrument

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Aims: To develop and determine the qualitative cultural validity of the Community Cohesion and Health Instrument for Vietnamese Americans.

Rationales: Evidence is growing on the protective nature of community cohesion on the health of individuals and populations. Many health promotion studies focus on refugee and immigrant communities, including Vietnamese Americans, among whom many health disparities exist. Yet there is no culturally appropriate instrument to measure community cohesion and health for Vietnamese Americans.

Methods: This study adapted existing validated instruments to measure the identity-based community cohesion and health of Vietnamese Americans. Three measures were selected and combined to create two language versions of the Community Cohesion and Health Instrument (CCHI) for the Vietnamese American communities: the place-based Neighborhood Cohesion Instrument, 3-item social isolation questionnaire, and self-rated general health question. The first step was a modification of the Neighborhood Cohesion Instrument to an ethnic-based Community Cohesion Instrument. The Community Cohesion Instrument was then combined with measures of social isolation and self-rated general health to create the Community Cohesion and Health Instrument. Second, using content validity index, two expert panels in community work and community health reviewed the contents of the English version of CCHI. One panel consisted of English speakers only. To get Vietnamese American experts' perspectives, the other panel consisted of bi-cultural, bi-lingual experts in community work. Each panel gave CCHI a 0.80 validation, an acceptable validation score. Third, a revision was made to the English version based on comments by the expert panels. This revision was translated by a certified translator into Vietnamese. A committee of qualified translators reviewed the Vietnamese version and provided their feedback. Fourth, both language versions were revised based on input from the review committee of translators. Fifth, both language versions underwent cognitive interviews with selected members of the community. The feedback from cognitive reviews resulted in further revision. Finally, the latest versions of the CCHI in both languages were field tested in focus group discussions with community members at large to establish linguistic and cultural validity of the CCHI.

Results: In general, community members of different genders and age groups rated the CCHI as linguistically and culturally appropriate to measure the sense of community cohesion, social isolation, and general self-rated health. They provided further input to improve the meaning, clarity, relevance, and simplicity of the instrument for Vietnamese Americans.

Implications: The process followed by this project is appropriate in producing a culturally relevant Community Cohesion and Health Instrument for Vietnamese Americans. Although time-consuming, the process may be cost-effective in the long run because the instruments that result are likely to capture the true essence of the phenomena they intend to measure. Hence, the process can be helpful to adapt for other language pairs as well. A quantitative reliability test is underway to ascertain the reliability of the instrument.

Funding: Research reported in this abstract was supported in part by the National Center for Advancing Translational Sciences of the National Institutes of Health under award number TL1TR000422.

go to PG.

Ask Me 3™: A Useful Health Literacy Promotion Tool for Minority Populations

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Purposes/Aims: The project assessed the knowledge of community health screening participants of the Ask Me 3™ program. The program uses a simple communication tool that encourages patients to ask their healthcare provider three simple questions: *1) What is my main problem?; 2) What do I need to do?; and 3) Why is it important for me to do this?* The project also assessed the comfort level of community participants to use the Ask Me 3™ questions at their next healthcare provider visit. Where used, participants were asked to reflect and share their experience

Rationale/Background: Low health literacy is a significant community health problem associated with poor health outcomes. Approximately 80 million American adults have limited health literacy, with rates higher among vulnerable populations. To improve health literacy, the National Patient Safety Foundation (NPSF) developed the "Ask Me 3™" program. The program uses a simple communication tool where patients are encouraged to ask their healthcare provider three simple questions: *1) What is my main problem?; 2) What do I need to do?; and 3) Why is it important for me to do this?*

Description of Undertaking: This project was part of health surveillance activities that provided diabetes and cardiovascular health screenings at community events targeting minority populations in South Texas. Community participants of the health screenings (N= 280) were surveyed on their knowledge of the Ask Me 3™ program and level of comfort in using the questions. They were also provided a copy of the Ask Me 3™ questions to use at their next healthcare provider visit. Three months after health screening, participants who agreed to be followed up were asked if they used the Ask Me 3 questions at their healthcare visit and to share their experience.

Outcomes Achieved/Documented: The participants were mostly female and married, with a mean age of 45. They were Hispanics (37%), Caucasians (24%), Asians (20%), African Americans (8%) and Native Americans (2%). Majority of the participants (95%) were unaware of the Ask Me 3™ program. However, more than 97% reported comfort in using these questions. At follow-up, those who used the tool considered it as a helpful reminder and facilitator of communication between themselves and the healthcare provider.

Conclusions: Despite national support for the Ask Me™ program, the results suggest that the program is not known in the community. Where used, the Ask Me 3™ questions improved communication between patients and healthcare providers. The participants who used the Ask Me 3™ questions appreciated how the tool reminded them of aspects to ask the healthcare provider thus facilitating communication. The Ask Me 3™ program should be disseminated in avenues where healthcare interactions take place especially invulnerable populations. Nationwide dissemination of this program must be supported at all levels of the healthcare system.

Funding: Dr. Lapiz-Bluhm has funding from the Robert Wood Johnson Foundation Nurse Faculty Scholars Program. Ms. Weems and Mr. Rendon received funding from the Voelcker Scholars Program and the Ambassador Program of the City of San Antonio, TX, respectively. Ms. Perez received funding from the Center for Medical Humanities and Ethics at UTHSCSA.

◀ ▶ go to PG.

Comparison of the Brief ARSMA and MACVS in Hispanic Mothers

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Aims: The aim of this paper is to present a comparison between two instruments used in a current research study examining growth of Mexican American infants from birth to age 3. One instrument measures acculturation and the other instrument measures cultural values. We want to determine if acculturation and cultural values are the same construct, a similar construct, or different constructs.

Background: Acculturation is an extremely important factor to consider when assessing the behavioral choices of any foreign or migrant population in the U.S. Often; these groups face the challenge of adapting to mainstream U.S. culture while also maintaining ties with their own culture. They frequently experience social pressures to conform to traditional standards at home while simultaneously experiencing pressure to conform to standards in the broader community. When considering Mexican American groups, the Brief Acculturation Rating Scale for Mexican Americans II (ARSMA-II) and the Mexican American Cultural Values Scale (MACVS) are both ideal instruments for measuring acculturation or importance of retaining cultural values. The Brief ARSMA-II measures acculturation using variables of language, ethnic identity, and ethnic interaction. The MACVS examines culturally related values, which is extremely important for our population because values are a primary mechanism by which culture is transmitted.

Methods: The data were collected one time when the women in the study were enrolled in their third trimester. All subjects stated they were of Mexican American origin as an enrollment criteria. The women are from ages 18-40 and are low-income and using food assistance. Data from the two scales were first analyzed through exploratory and confirmatory factor analysis and then compared.

Results: The Brief ARSMA-II (Acculturation Rating Scale for Mexican Americans) demonstrated acceptable reliability with Cronbach's alphas of .92 for AOS (Anglo Orientation Subscale) and .90 for MOS (Mexican Orientation Subscale). All 12 items loaded appropriately on their respective factors (AOS and MOS) with factor loadings ranged .74-.93 and two subscales demonstrated negative correlations (r=-.59, p<.01). MACVS (Mexican American Cultural Values Scale) provided evidence of reliability and validity: the expected factor structures with 9 factors and factor loadings .34-.78; and acceptable Cronbach's alphas for 3 subscales (α=.71 for familism, α=.81 for Mexican American values, α=.73 for Mainstream values). Mexican American values and Mainstream values on the MACVS were negatively related (r=-.53, p<.01). Additionally, convergent and divergent validity was supported: the Anglo Orientation on the Brief ARSMA-II was positively related to the Mainstream values on the MACVS (r=.23, p<.01); Mexican Orientation on the Brief ARSMA-II was negatively related to the Mainstream values on the MACVS (r=-.21, p<.05); familism on the MACVS was negatively related to MACVS Mainstream values (r=-.42, p<.01).

Implications: The Brief ARSMA and the MACVS focus on different aspects of adapting to a new culture, but are congruent for the values of cultural orientation and familism. The MACVS is an additional instrument for researchers to consider when working with Mexican American populations to determine the impact of cultural values on health outcomes.

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◀ ▶ go to PG.

Cognitive Interview Testing: A More Rigorous Method than Pilot Testing

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Traditionally, researchers use pilot testing of instruments with a small sample similar to the study participants to assure content validity. However, this method is not as rigorous as other methods such as cognitive interviews. Cognitive interviews are used in pre-testing questionnaires to detect items not understood by respondents, to assess the conceptual adequacy of the instrument, and to assess cultural fitness of the questionnaire.

In crafting an instrument to assess basic and continuing education learning needs of bedside nurses in Lebanon, cognitive interviews were used to improve questionnaire design and inform revisions by identifying sources of response errors in the study questionnaire.

The **purpose** of this paper is to illustrate the use of cognitive interviews in ensuring the quality and accuracy of the survey instrument.

Method: Prior to conducting the cognitive interviews, the questionnaire was developed in the English language based on literature review and the objectives of the study guided by Morrel-Samuels' guidelines for designing surveys; ; it was formed of 60 items/questions. Next, a panel of experts scrutinized the questionnaire from theoretical and practice perspectives. Thirdly, the English version questionnaire was translated into Arabic and French by a nursing director and a nursing faculty member respectively who are fluent in English, French and Arabic. Fourthly, back translation was done by two other members who were blind to the original questionnaire and translations. A fifth step included a panel of nursing faculty members fluent in the three languages do simultaneous translation from English into Arabic and French. Then, the research team collected all the versions and revised the instrument accordingly. Institutional review board approval was granted to conduct the cognitive interview testing.

After that, cognitive interviews were used to test the questionnaire on a sample of bedside nurses who will be excluded from the main study. The sample of nurses included two nurses per language version per district. There are five districts in Lebanon, so the test sample was 30 nurses. The cognitive interview entailed four steps that each participant performed when answering the survey questions: demonstrate understanding of each question and interpret it, show ability to retrieve information accordingly, judge the relevance and accuracy of each question, and respond to the questions. The interviews were conducted by four members of the research team trained in conducting cognitive interviews.

Results: Some problems with questionnaire items were identified; necessary changes were made in the survey instruments based on the cognitive interviews. The changes included re-writing 5 items in the best way respondents understand them. Others included re-formatting 3 questions in an easier way for the respondents to answer such as organizing response in a table form rather than on simple lines. Yet other changes included removing or adding responses in 6 questions.

Conclusion: Cognitive interviews were used to identify errors and problems in the instrument "assessment of basic and continuing education learning needs of bedside nurses" and to make necessary changes to improve the quality and accuracy of the tool.

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go to PG.

go to PG.

USE OF SIMULATION

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USE OF SIMULATION IN STUDENT NURSE STRESS MANAGEMENT: PILOT OF THE NURSE INTERVENTION

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AMERICAN RED CROSS SIMULATION AND STUDENT NURSE DISASTER PREPAREDNESS

Patricia Frohock Hanes, Anna Marie Hefner

POVERTY SIMULATION IMPROVES UNDERSTANDING OF ACCESS BARRIERS FOR THE IMPOVERISHED

Gaye Ray, Debra Wing, Colleen Tingey

IN THEIR SHOES: A COMMUNITY-BASED POVERTY SIMULATION EXERCISE

Karen E. Johnson, Nancy Guillet, Linda Murphy, Shalonda E. B. Horton, Ana T. Todd

◀ ▶ go to PG.

Use of Simulation in Student Nurse Stress Management: Pilot of the NURSE Intervention

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Aim: The aim of this experimental pilot study was to evaluate a simulation-based educational program, termed NURSE (**N**urture nurse, **U**se resources, **R**esilience, **S**tress and **E**nvironment management) that assists nursing students to develop stress management plans.

Background: Student nurses experience significant stress during their education which may contribute to illness and alterations in health, poor academic performance, and program attrition. Given the global shortage of nurses and high dropout rates among students, the importance for developing stress management programs for student nurses is becoming paramount.

Methods: A mixed-methods, randomized pilot design with 3 data collection points (baseline, immediately post-treatment, and 4 months post treatment) was used for the study. Forty junior nursing were randomly assigned to NURSE intervention (n= 20) or Attention Control Condition (n= 20). Intervention group participants received the 2-sessions of the 4-hour NURSE intervention. Attention control group participants received a case study simulation on therapeutic communication and general stress information. Outcome measures evaluated were: Stress using the Perceived Stress Scale, *Resilience* using the Brief Resilience Scale, *Program Attrition Rates* and *Grade Point Averages* (GPA). Qualitative data were collected at 4 months following the intervention, and used Colaizzi's method of analysis to explore and describe nursing students' experiences with, and application of, the NURSE intervention.

Results: Thirty-seven students completed the study (18 in the intervention group and 19 in the control group). Ages ranged from 18-46 with a mean of 21.6. There were no significant differences found in stress, resilience, GPA, or attrition rates between intervention and control group participants. A subgroup of 7 intervention students participated in a follow-up interview to describe their experiences in the NURSE program. Interview data were analyzed using Colaizzi's (1978) phenomenological method. Five themes emerged from the data: (1) Stressed and Out of Balance, (2) Remembering to Hit the Pause Button, (3) Individualizing Techniques and Strategies, (4) The Power of Group Sharing, and (5) Integrating New Ways of Doing and Being.

Conclusions & Implications: Results from this study provide evidence that the NURSE intervention is highly feasible and support further testing to examine the effect of the intervention in improving stress management in nursing students.

◀ ▶ go to PG.

USE OF SIMULATION

American Red Cross Simulation and Student Nurse Disaster Preparedness

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Background: Disasters, natural and man-made, are increasing world-wide. Student nurses are an under-utilized resource in disaster response. As pre-professionals with some training, they have the ability to increase response capacity during disasters. Organizations such as the National Student Nurses' Association (NSNA) and California League for Nursing (CALN) advocate the training and use of student nurses during disasters.

Purpose/Aims: This presentation will describe the conduction of a low-fidelity disaster simulation and the results of an evaluative survey administered after a disaster preparedness course with student nurses. Aim 1: Simulation will provide a supportive learning process in disaster preparedness. Aim 2: Disaster simulation will increase self-confidence in students in disaster situations. Aim 3: Low-fidelity disaster simulations are an effective way to teach disaster preparedness skills/concepts.

Conceptual Frameworks: Theories of learning styles, social cognitive learning, self-efficacy, volunteerism and human behavior theories, Bloom's taxonomy and composite cognition were utilized.

Methods: The American Red Cross (ARC) developed a disaster course to enable student nurses to increase awareness of their roles in disaster preparedness and how to function during disasters. This six-hour, non-credit certificate course was held on a Saturday morning; 100 nursing students participated. Prior to this, the course had only been held once in the Los Angeles region. In part one, prior to the simulation, students completed an online segment where they gained basic knowledge of disaster phases and the role of the American Red Cross. In part two, students were provided scenarios through technology-enhanced, interactive web-based scenarios. Simulations were conducted in groups as in real-life disasters. Evaluative survey data was collected in four areas: demographics, simulation design, educational practices, and student satisfaction and self-confidence.

Results: There were 94 participants in this descriptive study. Aim 1: Eighty-eight percent of the participants agreed that the simulation design for disaster preparedness provided an opportunity for them to think critically about the scenarios and globally about their roles in disasters; Ninety-four percent felt the simulation design supported their gaining knowledge in disaster preparedness. Aim 2: Eighty-seven percent of participants became more confident in their ability to provide care. They found the simulation challenged their comfort level allowing for learning from mistakes and holistically viewing the individual and the community. Aim 3: The simulation provided a hands-on directive to see the classroom learning/skills gained brought to fruition. Eighty-four percent found the variety of scenarios and content delivery via simulation increased both their knowledge and interest in, as well as response to, disasters. Upon completion, students (enthusiastically) received a certificate allowing them to be registered as trained volunteers who could respond in a disaster.

Implications/Conclusions: Student nurses are a valid asset in disaster preparedness and response. Nursing organizations and the Institute of Medicine (IOM) have mandated students have preparation in disaster preparedness. Students are excited about having the opportunity to respond to disasters and are willing to go "above and beyond" their regular duties to participate in disaster-related learning activities. Further opportunities for nursing disaster education and research are needed in this evolving field.

◀ ▶ go to PG.

USE OF SIMULATION

Poverty Simulation Improves Understanding of Access Barriers for the Impoverished

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Purpose: Our purposes were (1) to sensitize nursing students to the influence of socioeconomic status on healthcare access and the barriers and frustrations impoverished people experience, (2) encourage students' commitment to reducing these barriers, and (3) prepare students to advocate for people who are impoverished.

Background: As a nation, 6 million more people are living in poverty now than in 2004. Poverty is the single largest contributor to poor health. As poverty becomes more severe, health outcomes worsen. Many diseases are more common and progress faster among poor people regardless of age.

Brief Description of Project: During the 3.5-hour simulation, students are assigned identities as members of diversely configured low-income families. Students develop strategies to meet their family's basic needs, including food, shelter, living expenses, school, employment, and healthcare. Activities occur in the face of realistic life challenges, including emergencies, illnesses, and job loss. Faculty volunteer to staff simulated community sites where students interact to attempt to meet their family's needs. Sites include grocery stores, banks, employment and social services, schools, police stations, childcare, and healthcare facilities. Facilitators debrief students after the simulation. Students respond to an empathy tool pre- and post-simulation and write a reflective paper.

Outcomes Achieved: At the debriefing sessions and in reflective papers, students report increased understanding of the challenges and frustrations impoverished people experience as they attempt to access social programs and other resources. Students express surprise by how quickly priorities change and healthy behaviors decline when faced with poverty. After the simulation, many students identify experiencing a lack of time necessary to accomplish the tasks required for daily living and report feeling that poor people work much harder than simulation participants had previously thought. To help improve healthcare access, students assert they will educate families about social services, target resources to those with greatest needs, and initiate community and legislative discussion about how poverty affects child and family health. Additionally, they suggest resources should be more user friendly and commit to help make resources available at convenient locations and times. Students' empathy scores increase significantly from pre- to post-simulation ($t = 2.4$, $p = .02$).

Conclusions: Simulation has extraordinary influence on nursing students in helping them understand health disparities, access barriers, and social determinants of health. Poverty simulations serve to enlighten students about the plight of impoverished people and motivate them to become involved with efforts to reduce poverty, the related health disparities, and barriers to healthcare for this vulnerable population. We recommend poverty simulation be used in nursing school curriculums.

Funding: Brigham Young University's Myrtie Fulton Mentoring Grant.

◀ ▶ go to PG.

USE OF SIMULATION

In Their Shoes: A Community-Based Poverty Simulation Exercise

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Purpose/Aims: To describe a community-based poverty simulation exercise, *In Their Shoes*, developed by a team of undergraduate public health nursing faculty.
Rationale/Background: Public health nurses work intimately with issues related to poverty and health; for example, providing referrals and complex case management for low-income clients enrolled in multiple social welfare programs (e.g., Medicaid, Temporary Assistance to Needy Families, food stamps, Section 8 housing). Concerned that traditional lecture-style teaching methods alone were not helping undergraduate students understand the social determinants of health, social justice, and challenges faced by underserved populations in accessing health and social services, didactic and practicum faculty worked together to develop a poverty simulation exercise.
Approach/Methods/Process Used: We developed scenarios—based off of our own clinical experience— of clients in need of community resources (e.g., low income family in need of healthy food, adolescent mother who was abused by parent and kicked out of house after becoming pregnant, elderly woman who is legally blind and living in a rural area). We first introduce students to concepts related to poverty, income inequality and health, social mobility, and critical social theory during a three-hour interactive didactic session. The next day, practicum groups are assigned one of six scenarios and use public transportation to travel to agencies and collect information (e.g., flyers, application forms) about how to access these resources. The next week, students return to their didactic class and reflect on the experience, including the potential for the clients in their scenarios to achieve social mobility.
Outcomes Achieved: We have conducted *In Their Shoes* for three semesters, and the activity has received positive feedback from students each semester. They express surprise at the number of community resources, frustration by the various challenges encountered in accessing these resources (particularly how time-consuming it is to use public transportation), and dedication to being more aware and compassionate advocates for underserved clients. As one student reflected, "By the end of this activity, I was so frustrated because I felt like I accomplished nothing and in reality I didn't if this was my actual situation. This individual would have lost their income for the day and would have struggled to feed their family. I was able to have an insight of what this population feels on an everyday basis. It helped me gain a new perspective and respect for the underserved population."
Conclusions: Our collaboration for the *In Their Shoes* was recognized by our school with the Innovations in Teaching Award. We will continue to refine, implement, and evaluate it in future semesters. Future directions include a quantitative evaluation of the exercise using pre- and post-test questionnaires and organizing materials collected by students each semester into a "resource book" that can be used by nursing students throughout their program to increase awareness of community resources to which they can refer clients.

◀ ▶ go to PG.

go to PG.

USE OF TECHNOLOGY IN RESEARCH, EDUCATION, AND PRACTICE

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THE USE OF INTERNET TO ACCESS HEALTH INFORMATION AMONG ADULTS WITH ASTHMA IN CALIFORNIA

Shirley Evers Manly, Magda Shaheen

META-ANALYSIS: THE EFFECT OF TEXT MESSAGE REMINDERS ON RETENTION TO CARE AMONG HIV/STI OUTPATIENTS

SoSon Jong, Lisa Thompson

DATA COLLECTION VIA IN-DEPTH EMAIL INTERVIEWS

Roschelle L. Fritz, Roxanne Vandermause

INTERNET USE TO ACCESS HEALTH INFORMATION IN DIABETICS AND PRE-DIABETICS IN CALIFORNIA

Jack Azad, Maria Recanita Jhocson, Mariles Rosario, Magda Shaheen

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ACCESS TO AND USE OF CELL PHONES FOR HEALTH INFORMATION BY TRIBAL COLLEGE STUDENTS IN MT

Jo Ann Walsh Dotson, Lonnie Nelson, Sara Young

MIDLIFE WOMEN'S SYMPTOM CLUSTER HEURISTICS: EVALUATION OF AN IPAD APPLICATION

Nancy Fugate Woods, Rita Ismail, Catherine Fiona Macpherson, Lauri A. Linder

◀ ▶ go to PG.

USE OF TECHNOLOGY IN RESEARCH, EDUCATION, AND PRACTICE

The Use of Internet to Access Health Information among Adults with Asthma in California

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Purpose: To explore the variation in the use of internet to for health information among adults with asthma in California.

Background: The internet is widely used to locate health care information worldwide. The internet has limited health care information, providing a new means of communicating and facilitating interaction between patients and their healthcare providers. The knowledge gained through the internet can help patients with self-management of acute and chronic conditions as well as provide them with prevention and health promotion guidelines. Little is known however, about the variation in the access to the internet, its use for health information, and the effect of having a regular source of health care information via the internet among the asthmatic population in California.

Methods: We analyzed data from the 2011-2012 California Health Interview Survey (CHIS). The survey is a cross-sectional survey using telephone interview of adult population. Asthma status and internet use for health information were self-reported. We analyzed the data using the survey module in STATA 11 taking into consideration the sample design and the sample weight.

Results: of the 42,935 participants, 14% were asthmatic. Ever used the internet were reported by 82% and varied by asthma status where it was 88% in asthmatics compared to 81% in non-asthmatics ($p=0.01$). Overall, 65% of the participants used the internet last year to access health information. It was 70% among asthmatics compared to 64% in non-asthmatics ($p<0.01$). In the adjusted multivariate model, adjusting for socio-demographics, access to care, behavioral variables and co-morbidities, asthmatics had higher odds of having access to the internet relative to non-asthmatics (adjusted Odds Ratio [AOR]=1.3; 95% Confidence level (CI)=1.1-1.5); $p<0.003$). In addition, asthmatics had higher odds of using the internet for health information relative to non-asthmatics (AOR=1.2; 95% CI=1.1-1.3; $p<0.001$). White, young married females, with high income and high education, who self-perceived their health as fair/poor, had co-morbidities and had regular source of health care had higher odds of using the internet for health information compared to the other groups ($p<0.05$).

Implications: Access and use of internet for health information was high among adult with asthma living in California relative to non-asthmatics. Those with a regular source of care had higher use of internet to locate health information compared to the other groups. Locating culturally and linguistically appropriate health promotion on the internet easily assessable and accurate for the patients, the health care providers, as well as the community might benefit asthmatic population. Dissemination of health education to patients through the internet can be an effective and cost efficient way for health care providers to have direct contact with the patients regarding asthma.

◀ ▶ go to PG.

USE OF TECHNOLOGY IN RESEARCH, EDUCATION, AND PRACTICE

Meta-Analysis—The Effect of Text Message Reminders on Retention to Care among HIV/STI Outpatients

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Purposes/Aims: The purpose of this research is to systematically review the current clinical evidence of the effectiveness of text message reminders on retention to care among people with, or at high risk of, HIV. This study also seeks to determine an effect size of the intervention and presents implications for future studies.

Rationale/Conceptual Basis/Background: Use of mobile technologies is an innovative and affordable approach to HIV prevention and care, particularly in resource limited settings. Approximately two thirds of people who are initially diagnosed with HIV are lost to follow-up before starting HIV treatment in low and middle-income countries, posing serious global health concerns. While text message reminders for HIV medication adherence have shown positive health outcomes, it is not well understood whether the reminders can also improve patients' retention to care.

Methods: The author, assisted by two librarians, conducted a meta-analysis of literature in the following databases: PubMed, CINAHL, Proquest, Web of Science and Embase. Search terms were 'HIV AND mobile phone, cellular phone, text message OR SMS (short message service)'. Of the 469 peer-reviewed research articles reviewed, eight studies met the inclusion criteria and were included in the final analysis. Inclusion criteria for the final reviewed papers were 1) clinical research employing SMS reminders to improve retention to care and 2) Inclusion of HIV patients or individuals at high risk of acquisition of HIV. The author extracted data and scored the quality of the studies based on Agency for Healthcare Research and Quality (AHRQ) scores. SPSS version 20 was used to generate forest plots and calculated pooled effect sizes and confidence intervals.

Results: Eight studies (3 randomized controlled and 5 before and after controlled studies) from 6 countries included 6,853 participants. The most commonly represented participant profile in the sample was a 34 year-old man having sex with men (MSM). HIV and sexually transmitted infection (STI) clinics sent automated text message reminders to clients prior to follow-up appointments for routine STI screenings. People who received text message reminders were 18% more likely to return to the care compared to people who did not receive the messages (pooled RR=1.18, 95% CI: 1.05-1.33). However, sub-group analysis of people who had HIV revealed that the intervention had no effect on their return to care (pooled RR=1.01, 95% CI: 0.89-1.17).

Implications: This meta-analysis of text message reminders among HIV/STI clinic users found that there is a moderate effect of the reminders on retention to care, but the effect is attenuated when solely examining the population with HIV. Despites several limitations, this review found that SMS reminders are feasible and effective in most settings, including limited resource setting in Africa, and text message reminders may improve retention to care, although this was not consistent for patients with HIV alone. Future studies that use SMS reminders should allow for bidirectional conversations, and be tailored for individual needs to bridge to other resources, with the ultimate goal of improving retention to HIV care.

◀ ▶ go to PG.

USE OF TECHNOLOGY IN RESEARCH, EDUCATION, AND PRACTICE

Data Collection via In-Depth Email Interviews

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Purpose/Aim: The purpose of this presentation is to explore the use of in-depth email interviews as a quality method of data collection in qualitative research. This methodological discussion stems from the analysis of the interviewing technique used in a study involving in-depth interviews via email with older adults and offers "lessons learned" from this process.

Rationale/Conceptual Basis/Background: Email surveys are a popular method of data collection for research performed across many social science disciplines; however, the use of in-depth interviews via multiple email exchanges in qualitative studies is uncommon. This method of data collection may be a good fit for a variety of qualitative approaches, including phenomenology, discourse analysis, and qualitative descriptive. As Internet exchanges in society have become more common, research interviews via email should no longer be considered novel. Nevertheless, but for a few excellent articles on email interviewing, there is a significant gap in extant literature regarding the use of this method of data collection.

Methods: In-depth email interviews were used with older adults (65 years or older) in a study exploring perceptions of Smart Home technology. These interviews were text-based, asynchronous, time-lapsed, and focused conversations, eliciting extensive conversational text. Transcripts were prepared by copying email text into a word processing document, which was chronologically ordered, line numbered, and de-identified. The content (related to Smart Home technology) was analyzed using a qualitative descriptive approach. Additionally, and for purposes of this presentation, these texts were analyzed for interview style, using a generic interpretive process that included reading the interrogatives and evaluating the responses with regard to depth of description, quality of personal disclosure, and synchrony and time between questions and answers. An interpretation of the strengths and weaknesses of the email interview process, along with recommendations for quality data collection using email interviews was generated.

Results: In-depth interviews via multiple email exchanges are an efficient and low-cost method of data collection that produces high quality, discriminative, and concise data for representation. Email interviews offer many benefits such as convenience, well thought-out participant responses, and immediately available text-based data that is ready for analysis. Skillful email interviewing requires attention to a variety of influences for best results.

Implications: Recognition of email interviewing as a method of data collection may help nurse researchers perform low cost and efficient interviews that can be performed from any location where Internet is available. Nurse researchers using email interviews for topics requiring methodical and deep participant responses may obtain high levels of discriminative data. Convenience without sacrificing quality may encourage more nurses to give nursing research a try.

◀ ▶ go to PG.

USE OF TECHNOLOGY IN RESEARCH, EDUCATION, AND PRACTICE

Internet Use to Access Health Information in Diabetics and Pre-Diabetics in California

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Purpose: To explore the variation in the use of internet to access health information among diabetic and pre-diabetic adults in California.

Background: Internet use has been widely used by about 2.4 billion population. It has provided limitless sources of information and wide areas of communication. This medium has facilitated the interaction between patients and their healthcare providers and with the knowledge gained, patients may have been guided in the care of their health. Little is known about the variation of the use of the internet for health information among diabetics and pre-diabetics in California.

Methods: We analyzed data from the 2011-2012 California Health Interview Survey (CHIS) which is a cross-sectional survey using telephone interview of adult sample in California. Diabetes and pre-diabetes status and internet use for health information were self-reported. We analyzed the data using the survey module in STATA 11 taking into consideration the sample design and the sample weight.

Results: Of the 42,935 participants, 8.4% were diabetics and 2% were pre-diabetics. Eighty two percent reported using the internet and it was lowest among diabetics (58%) compared to pre-diabetics (66%) and non-diabetics (84%) ($p<0.01$). Overall, 65% of the participants used the internet last year to find health information and it varied by diabetes status where it was 60% among diabetics compared to 62% in pre-diabetics and 65% in non-diabetics ($p<0.01$). In the adjusted multivariate model, adjusting for socio-demographics, access to care, behavioral variables and co-morbidities, diabetics had lower odds of using the internet relative to non-diabetics (adjusted Odds Ratio [AOR]=0.80; 95% Confidence level (CI)=0.7-0.9); $p<0.001$). Adjusting for the confounders, diabetes status was not associated with using internet for health information ($p>0.05$). White, young married male, with high income and high education, who self-perceived their health as fair/poor, had co-morbidities and had regular source of care had higher odds of using the internet for health information compared to the other groups ($p<0.05$). Stratified analysis by urban/rural status reveal no relationship between use of internet for health information and diabetes status among the urban population ($p>0.05$), but for diabetics living in the rural areas, they had lower odds relative to non-diabetics ((AOR=0.60; 95% CI=0.4-0.9); $p=0.03$). Diabetics who had regular source of health care were more likely to use the internet for health information relative to non-diabetics ($p<0.05$).

Implications: Although the use of internet for health information was low among adult diabetics and pre-diabetics especially those in rural areas, those who has regular source of care had higher use of internet for health information than the other groups. Culturally appropriate health promotion involving health care providers and using internet might benefit the population with co-morbidities and those with fair/poor health status. Dissemination of information to patients can be achieved by using the internet and nurses have direct contact with the patients and are in a position to explore reasons for not using internet for health information among the diabetic/pre-diabetic population. More research is needed to determine barriers to the use of internet for health information among diabetics living in rural areas.

◀ ▶ go to PG.

USE OF TECHNOLOGY IN RESEARCH, EDUCATION, AND PRACTICE

Access to and Use of Cell Phones for Health Information by Tribal College Students in MT

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Sara Young, MS

Purposes/Aims: The purpose of this descriptive study was to assess the availability and use of cell phones for health education and promotion purposes in two tribal college communities in Montana.
The study examined:

- Variability of access and use by rurality & age
- Tobacco use characteristics of the population.

Rationale/Conceptual Basis/Background: Mobile communications technology is increasingly used for health education and promotion and as a mechanism to support healthy activities. In 2014 it was reported that 90% of the population in the U.S. have cell phones (Pew, 2014). Undergraduate college students in the U.S. are among the most "connected", with 92% owning personal laptops and/or cell phones and 98% having internet access (Smith, Rainie, & Zickuhr, 2011). A Cochrane review of mobile phone messaging reported high quality evidence that mobile phone messaging programs intended to enhance tobacco cessation were significantly associated with higher likelihood of quitting smoking than control groups. Successful tobacco cessation was documented with the indigenous Maoris in New Zealand - 28% of the intervention groups compared to 13% of control group successfully stopped smoking (Rodgers et al., 2005). The Behavioral Health Collaborative for Rural American Indian Communities included a modification of this successful study to focus on students at tribal colleges and universities (TCUs) in the US.

There is limited data about the availability of cell phones and networks in Indian Country and the acceptability of electronic media for health promotion purposes by American Indian college students.

Methods: This project was designed as a descriptive study. The research universities and tribal colleges' IRBs determined to study to be exempt. The inclusion criteria were that participants had to be self-reported American Indian, at least a part time student at the TCU and 18 years of age or greater. The twenty two multiple choice questions queried respondents regarding their access to, use of, and preferences regarding cell phone use for health education and promotion purposes. Participants were recruited at the tribal college by student workers and researchers. Participants were given $10 after completion of the survey. 200 paper pencil surveys were gathered from two tribal college sites in December of 2013.

Results: Approximately 36% of tribal college students reported smoking. The mean age for tobacco use initiation was 15.7 years, with a range of 8 – 30 years. 98% of students had access to a computer, although less than 60% had access every day. 91% had a cell phone, but not all had unlimited text. Half of the respondents stated they would be interested in participating in a smoking cessation study using cell phones. Variations in characteristics of students and responses was assessed by RUCA code and statistically significant differences identified. Results of the surveys were shared with tribal college presidents.

Implications: This study will help address a deficit in the literature regarding cell phone and internet access for tribal and younger populations in rural communities. Effective development and deployment of health education and promotion requires knowledge of the access to and acceptability of content by priority users.

Funding: NIMHD Behavioral Health Collaborative for Rural American Indian Communities J. Dotson (Co-I) - 2011-2016.

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◀ ▶ go to PG.

USE OF TECHNOLOGY IN RESEARCH, EDUCATION, AND PRACTICE

Midlife Women's Symptom Cluster Heuristics: Evaluation of an iPad Application

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Aim: To elicit midlife women's heuristics about symptom clusters they were experiencing as identified by the Computerized Symptom Capture Tool for menopause (C-SCAT M).

Methods: Women aged 40-60 years experiencing symptoms they associated with menopause were recruited through flyers posted on campus and in clinics. Women completed the C-SCAT M app using an iPad by identifying and drawing the symptom clusters they experienced during the last 24 hours, indicating relationships among symptoms, prioritizing the clusters and symptoms within them, and describing their causal attributions, and exacerbating and ameliorating factors. While completing the app, women were asked to "think aloud" about their experience using the app. Data from the C-SCAT M application were downloaded from Amazon Web Services account and saved as screen images in order to preserve the graphical images and text elicited from the application. Qualitative data were saved in verbatim phrases. Conventional content analysis was used to analyze qualitative data.

Results: Thirty women completed the application. Most women (77%) stated that the final diagrams were very/extremely accurate as they showed their symptoms and their connections. Women reported between 1 and 22 symptoms (median 11). Hot flashes, waking up during the night, night sweats, and early morning awakening were the most commonly reported symptoms. Women rated the hot flash as their most bothersome symptom, followed by waking up during the night and fatigue. They reported over 300 different bivariate relationships among their symptoms and over 150 unique causal paths. They believed that hot flashes caused several symptoms, especially sleep disruption, and most could describe the time order of their symptoms. Women reported clusters consisting of 2 to 18 symptoms. Women also named each cluster based on their response to their symptoms ("really annoying"), the time of occurrence ("night problem"), and symptoms in the cluster ("hot flash"). They attributed their clusters to menopause, life demands, and other symptoms, among other causes. Management strategies that women used included: use of over the counter preparations, sleep, rest, and other lifestyle changes. Some women requested a copy of their final symptom cluster diagram to discuss with their health care providers.

Conclusion: Using the C-SCAT M afforded women an opportunity to depict their symptoms and clusters and relationships among them, as well as to provide narrative data about their heuristics. Women's unsolicited comments about using the cluster diagram to facilitate conversation about their symptoms with their health care providers suggest the potential value of modifying the C-SCAT M and evaluating its use in a health care setting.

Funding: University of Washington School of Nursing, Research Intramural Funding Program.

◀ ▶ go to PG.

◀ ▶ go to PG.

WOMEN ACROSS CARE SETTINGS

Moderator:
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MEASUREMENT OF SWANSON'S THEORY OF CARING WITH PRIMIPAROUS MOTHERS

Barbara Mott

EXPERIENCES AND PERCEPTIONS OF IRAQI MUSLIM WOMEN AND PRIMARY HEALTH CARE PROVIDERS

Debra Penney

THE MEANING OF MORAL DISTRESS AMONG SOUTH KOREAN ICU NURSES IN GENERAL HOSPITALS

Eunice E. Lee, Su Jeong Yu, Mi Yu

SPIRITUAL CARE: A MIXED METHOD STUDY AMONG NORWEGIAN NURSES

Pamela Cone, Tove Giske

◀ ▶ go to PG.

Measurement of Swanson's Theory of Caring with Primiparous Mothers

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Background: Transitioning into the role of motherhood is associated with increased anxiety, maternal depression, and maternal stress threatening mother's confidence resulting in negatively impacting mother-infant bonding and maternal empowerment. There are no studies which tested Swanson's Theory of Caring in evaluating the relationship between the nurse caring behaviors and first-time mother's maternal confidence.

Objective: Identify predictors of maternal confidence and measure the relationship between the nurse caring behaviors, selected maternal factors (postpartum stress, lack of social support, depression, and perception of difficult infant temperament) and maternal confidence.

Methods: In a convenience sample, 104 first-time mothers were recruited from prenatal education classes and hospital tours of two participating hospitals within the mid-Atlantic region. In addition, a snowball sampling was utilized. Survey instruments were completed by the first-time mothers 1-2 weeks postpartum. Analyses of descriptive statistics and multiple regressions were conducted to determine the relationship between nurse caring behaviors, selected maternal factors (postpartum stress, lack of social support, depression, and infant temperament), and maternal confidence.

Results: This study supports Swanson's Theory of Caring. Nurses caring behaviors had a weak to moderate relationship ($r = .248, p < .05$) with maternal confidence. The selected maternal factors, postpartum stress ($r = -.593, p < .001$), lack of social support ($r = -.577, p < .001$), depression ($r = -.541, p < .001$), and difficult infant temperament ($r = -.407, p < .001$), had moderate inverse relationships with maternal confidence. The caring behaviors of respect ($r = .258, p < .05$), connectedness ($r = .277$, p < .01), and assurance ($r = .202$, p < .05) had weak to moderate relationships with maternal confidence. Respect ($\beta = .618, p < .05$), depression ($\beta = -.291, p < .05$), and difficult infant temperament ($\beta = -2.481, p < .05$) significantly predicted maternal confidence. Maternal confidence demonstrated a negative weak to moderate relationship ($r = .249$, $p < .05$) with maternal age.

Implications: Applying Swanson's Theory of Caring, especially the enabling behaviors, promotes maternal confidence. Older first-time mothers perceive themselves as less confident. Difficult infant temperament negatively affects maternal confidence. However, mothers who received excellent nurse caring behaviors perceived their infants as less temperamental, thus promoting mother-infant bonding. Depression cognitively distorts mother's perception of the caring of the nurses, social support, postpartum stress, and maternal confidence. Further study is needed to test different population groups, and understand the inverse relationship between maternal confidence and age.

◀ ▶ go to PG.

Experiences and Perceptions of Iraqi Muslim Women and Primary Health Care Providers

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Purpose and Aims: This qualitative study explored perceptions and experiences between Iraqi Muslim women with refugee backgrounds and primary health care providers in the context of the health encounter. The intersection of difference in gender, religion, language and race/ethnicity was explored.

Rationale and Background: Research indicates that health disparities persist for minorities in the U.S. Sources of health disparities may stem from differences (linguistic, cultural, religious, gender, education) between health provider and patient. Research to date has not identified direct reasons for health disparities between patient and providers. There is a lack of research addressing the interpersonal relationships between Muslim women and health care providers which could reveal reasons for health disparities.

Methods: Critical ethnography and post-colonial feminism guided semi-structured interviews in order to explore the significance of difference between patients and health providers. The purposefully selected sample of 15 Iraqi Muslim women and 10 primary health care providers from 4 urban clinics supplied the primary data. Supportive methods included field notes, and key informants. The data were inductively coded and categories were formed from repetition of main ideas. Through analysis and interpretation of the data, themes emerged from the categories for each participant group. It was the assumption of this study that differences between Iraqi Muslim women and primary health care providers were embedded in each participant's social, cultural and political context which informed experiences and perceptions. Personal accounts of health encounter experiences offers rich data about the personal interaction between health providers and patients.

Results: This research revealed that Iraqi Muslim women with refugee backgrounds face many barriers in seeking health care which are both health system and health provider based. Likewise, health providers are limited in their ability to bridge differences and function with knowledge deficits about patients as individuals including their culturally-based perceptions and expectations.

Clinical Implications: The health encounter is limited by time, inadequate interpretive services and expectations which open an avenue for misinterpretation, misdiagnosis and stereotyping. Recommendations are suggested for comprehensive changes to the usual confines of the health encounter and for the means of increasing awareness and education of state agencies, health administration, and nurses as health providers about the barriers faced by Iraqi Muslim women.

◀ ▶ go to PG.

WOMEN ACROSS CARE SETTINGS

The Meaning of Moral Distress among South Korean ICU Nurses in General Hospitals

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Purpose/Aims: The aim of this research was to understand the meaning and experience of moral distress among Intensive Care Unit (ICU) nurses from their own perspectives and in light of their socio-cultural context. The main questions of this research were, *In which socio-cultural context do ICU nurses experience moral distress*? and *What is the meaning of their moral distress*?

Rationale/Conceptual Basis/Background: As professionals, nurses experience high levels of stress and emotional disturbance related to their moral responsibilities. This stress does not arise from insufficient knowledge and education on ethical issues, but much more from performing duties related to patient care. In South Korea, even if patient is at the end of life, discussion of death is taboo, and the South Korean healthcare environment is family-centered. Doctors primarily make clinical decisions about medical treatment for dying patients. Previous studies show that South Korean nurses experience a great deal of moral distress but lack taking any behavioral approaches to find and solve the problems related to end-of-life care. We sought to articulate South Korean nurses' moral distress within their socio-cultural context and systematically analyze how nurses feel, think, and respond are greatly needed. Moral distress of ICU nurses is most severe when caring for patients receiving aggressive life-sustaining treatment even with an uncertain or unstated prognosis.

Methods: This study analyzed through qualitative content analysis data collected by in-depth interviews of 29 ICU nurses in 6 groups, including 2 groups of new nurses, 2 groups of experienced nurses, and 2 groups of head nurses. Data collection and analysis were conducted simultaneously. For data analysis, all of the group interviews were recorded and transcribed. A critical ethnography strategy was to used to analyze the data.

Results: This study found practicing as a nurse with limitations to be a major source of moral distress experienced by ICU nurses in South Korea. According to the findings of this study, ICU nurses accepted nursing roles while having experiences of moral distress throughout their clinical experiences. Themes that emerged were feeling limitation as a nurse (for new nurses), expressing limitation as a nurse (for experienced nurses), and acting on the limitation as a nurse for head nurses. In addition, 6 descriptive categories were derived from the qualitative content analysis: personal characteristics, clinical situation, relation, perception, behavior, and outcomes.

Implications: ICU nurses in South Korea are experiencing considerable moral conflicts around their patients' best interest between their clinical experience and cultural taboos. Therefore, it would be beneficial to develop systematic customized empowerment, support, and ethical education programs grounded in nurses' clinical experience.

◀ ▶ go to PG.

Spiritual Care: A Mixed Method Study among Norwegian Nurses

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Aim/Purpose: This purpose of this Mixed Method study on spiritual care, with phase one among nurses, is to understand Norwegian nurses' perspective of spirituality and spiritual care and how comfortable they are providing it to patients in the hospital setting. The long-term goal is to inform nursing education and clinical practice relating to spiritual care.

Background/Conceptual Basis/Rationale: Providing or facilitating spiritual care to patients is part of holistic nursing care, but nurses around the world report that caring for the body is their primary focus (McSherry et al., 2008; Ross, 2006). Evidence reveals that providing care that strengthens the spirit also enhances healing of the body and mind (Koenig et al., 2012; Koenig, 2007). While nurses globally believe that they should provide spiritual care, they report varying comfort levels with addressing this area with patients, and most do not include the spiritual in regular care of hospitalized patients (Cone & Giske, 2013; Fowler et al., 2012; van Leeuwen et al., 2006).

Method: This Mixed Method two-phase study includes a quantitative approach using a questionnaire developed by E.J. Taylor (2012) and a qualitative approach using the Classical Grounded Theory methodology (Glaser, 1978; Glaser, 2005). Taylor's survey instruments, both the nurse and the patient versions, were translated by permission into Norse for use in a Norwegian private hospital. The quantitative aspect of the first phase, which has been completed and is being reported here, was conducted through the collection of survey data from nurses (n=172) with subsequent focus group interviews (n=20). The second phase followed with the same survey for patients and individual patient interviews to determine the perspective of hospitalized patients regarding spiritual care. The focus of this presentation is the quantitative aspect of the nurse phase. These data were entered into a SPSS statistical program and analyzed using t-tests and ANOVA to examine differences as well as Chi Square and Correlations to examine relationships between the variables.

Results: Nurses stated that education was the most significant factor in their preparation for spiritual care. Other factors include life experience and experience in the clinical setting related to spirituality as well as maturity, both in age and in professional practice. Moreover, nurses state that the work setting and the time of day influence the facilitating of spiritual care. Barriers to spiritual care include the work setting, busy schedules and limited time, and a lack of emotional "room" or a closed attitude on the part of leadership toward caring for the spirit of the patient.

Implications: Findings from this mixed method study confirmed previous findings about spiritual care among nursing students and teachers that have informed educational practices in teaching and learning spiritual care giving. They are also being used to inform the preparation of a handbook on spiritual care for nurses that will assist them in caring more effectively for the spiritual needs and concerns of patients. Nurses who are better informed will be able to recognize the cues for spiritual concerns and intervene to promote health and improve patient outcomes.

Key Words: Spiritual care, quantitative, cross-cultural research, health promotion and illness prevention

◀ ▶ go to PG.

◀ ▶ go to PG.

Abstracts of Podium Presentations

WOMEN'S HEALTH ISSUES

Moderator:
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HOT FLASHES, MENOPAUSAL TRANSITION AND EARLY POSTMENOPAUSE: BEYOND HORMONES

Ellen Sullivan Mitchell, Nancy Fugate Woods

ACUTE CORONARY SYMPTOMS DO NOT DIFFER IN WOMEN WITH DIABETES MELLITUS

Laura Bassi, Anne Rosenfeld, Marylyn McEwen,
Elizabeth Knight, Melissa Goldsmith, Holli DeVon

WOMENSTORIES FOR WOMEN WITH BREAST CANCER MAY ATTENUATE EMOTIONAL DISTRESS

Linda Larkey

SLEEP DISTURBANCE DUE TO URINARY FREQUENCY IN MIDLIFE WOMEN

Holly J. Jones, Kathryn A. Lee

SUPPORT GROUP: MODEL FOR INCREASING ADHERENCE TO TREATMENT IN HYPERTENSIVE BLACK WOMEN

Marie N. Fongwa, Ron D. Hays

◀ ▶ go to PG.

WOMEN'S HEALTH ISSUES

Hot Flashes, Menopausal Transition and Early Postmenopause: Beyond Hormones

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Background: Understanding factors promoting symptom severity is essential to developing innovative symptom management models. To date research about hot flashes emphasizes the role of hormones to the exclusion of the role of personal, behavioral and environmental factors.

Purpose: To investigate patterns of hot flash severity during the menopausal transition (MT) and early postmenopause (PM) and associated factors, we studied effects of: age, MT factors (MT stages, age at stages and final menstrual period (FMP), estrogen, FSH), stress-related factors (cortisol, catecholamines, perceived stress), health-related factors (BMI, smoking, alcohol use, exercise, sleep, number of live births), and personal factors (depressed mood, education, anxiety).

Methods: A subset of Seattle Midlife Women's Health Study participants (n= 291 with up to 6973 observations) provided data during the late reproductive, early, and late MT stages and early PM, including menstrual calendars, annual health updates 1990, and symptom diaries and urine specimens assayed for hormones several times per year. Multilevel modeling with an r program was used to test models accounting for hot flash severity. Separate models of endocrine factors and stress-related, health-related, and personal factors were tested using $p<.05$.

Results: Hot flash severity persisted through the MT stages and peaked during the late MT stage, diminishing after the first year PM. In individual analyses hot flash severity was associated with being older, being in the late MT stage or early PM, beginning the late MT stage at a younger age, having less education, and reporting greater anxiety. In a model including only endocrine factors, hot flash severity was significantly associated with higher FSH, lower estrone and lower cortisol levels. An integrated model revealed dominant effects of menopause-related factors with anxiety contributing to hot flash severity.

Conclusions and Implications: Hot flash severity was affected largely by factors related to reproductive aging and anxiety. These findings are consistent with prior research linking hot flash severity to stress exposure, anxiety, and accelerated reproductive aging attributable to adverse experiences over the lifespan. Taken together, these findings suggest symptom management models that affect anxiety and may, in turn, enhance women's experience of menopause.

◀ ▶ go to PG.

Acute Coronary Symptoms Do Not Differ in Women with Diabetes Mellitus

Laura Bassi
BSN Honors Student

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Purpose: To determine the differences in symptoms of Acute Coronary Syndrome (ACS) in women with and without diabetes mellitus (DM) presenting to the Emergency Department (ED) with symptoms of possible ACS.
Background: Research has shown that women have different symptoms of ACS than men. However, research has been inconclusive as to whether or not DM has an effect on ACS symptoms in women. Some studies have found that people with DM experience less chest pain or have different symptoms than people without DM. However, there are few studies on how women with DM experience ACS and the majority of the studies do not have adequate sample sizes or diverse populations.
Methods: This was a secondary data analysis of quantitative data from the study entitled, *The influence of gender on symptom characteristics during acute coronary syndromes*. The de-identified data set included information from the Acute Coronary Syndrome Symptom Checklist (a validated 13-item symptom checklist) and the Patient Information Questionnaire (clinical and demographic data). T-tests were run on continuous variables, Chi square analyses were used to compare each of the 13 symptoms, and logistic regression was used to determine if diabetic status predicted ACS symptoms. These tests were done using SPSS software version 20.0.
Results: The sample consisted of 112 women (mean age =65); 84 women without DM and 28 with DM. No significant difference was found in the number of symptoms (M = 6 in both groups; t=0.44, p= 0.65). Additionally, no significant differences were found between women with and without DM in any of the individual 13 symptoms. DM was not found to be a predictor of individual ACS symptoms or of number of ACS symptoms.
Implications: More research with a larger sample size is needed to confirm these findings. Nurses should continue to educate all women about the full spectrum of symptoms of ACS, regardless of whether or not they have diabetes. In addition, when assessing women in the ED, nurses do not need to differentiate between symptoms of ACS in women with and without DM.

Funding: Supported by NIH/NINR R01 NR012012, DeVon, PI.

go to PG.

WomenStories for Women with Breast Cancer May Attenuate Emotional Distress

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Purpose/Aims: This study was designed to pilot test a video intervention comprised of stories drawn from women with breast cancer to examine potential for addressing emotional distress.
Background: Many women with breast cancer suffer substantial **emotional distress** during and after treatment which, in turn. impacts treatment outcomes and quality of life. **WomenStories (WS)** is a series of videos presenting narratives captured from a multicultural panel of breast cancer survivors, covering a wide range of topics relevant to coping with emotions throughout the trajectory of experience.
Method: We assessed short-term effects (pre-to-post measured) of viewing a WS module on women who were within 2-24 months of a Stage I-III breast cancer diagnosis and compared to a convenience sample control group. Women were recruited from community settings and/or participants in a couples' longitudinal study, and asked to complete measures on anxiety, depression (Profile of Mood States subscales), emotional expression and emotional processing (subscales of Emotion Approach Coping) before, and 24-48 hours after, viewing a WS module on emotional distress. Identification and Engagement with the stories were collected after viewing the WS module.
A randomly selected matched control group (age, stage, time since diagnosis, and ethnicity) was drawn from the longitudinal study. POMS measures taken from two visits, 3 months apart, were used to assess changes for those not exposed to the WS intervention. Baseline and final scores were tested for changes within each group using t-tests (95% confidence intervals).
Results: For the 28 participants exposed to WS, the mean time since diagnosis was 11 months, mean age, 53.89. Seven of the 28 were Latina women (with Dx, age and ethnicity profiles for 28 matched controls). WS intervention participants significantly decreased in anxiety and depression subscales measures (0-4)of POMS pre-to post, and slightly improved (in predicted direction, but not significantly) in Emotional Processing (EmProc) and Emotional Expression (EmExp). Matched controls did not improve on POMS. (Emotion measures not available from this group).

Table 1	***Responses to WomenStories***			*Matched Control*		
	Pre Mean	***Post Mean***	***P value***	*Pre Mean*	*Post Mean*	*P value*
Anxiety (POMS)	***1.05***	***.48***	***.001*****	*.79*	*.67*	*.239*
Depression (POMS)	***.68***	***.35***	***.029*****	*.99*	*.43*	*.327*
EmProc (EAC)	***3.15***	***3.26***	***.355***	*n/a*	*n/a*	-
EmExp (EAC)	***3.05***	***3.35***	***.067***	*n/a*	*n/a*	-

Reduced anxiety and depression ratings were associated with higher WS scores on Identification (R^2=.214 , p = .063) and Engagement (R^2=.226 , p = .053) with the videos.
Conclusion: Although not a significant finding, the trend provides support for the potential of these factors to be explanatory in the model in our proposed study of WS. More generally, this pilot study supports the premise that a narrative-based presentation of women sharing their coping stories shows promise for making a difference in emotional well-being. Even women later in their trajectory of treatment, many of them past treatment and typically more stable in mood state, responded to WS with improvements in mood, and possibly emotional expression.

◀ ▶ go to PG.

WOMEN'S HEALTH ISSUES

Sleep Disturbance Due to Urinary Frequency in Midlife Women

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Background: Over half of peri-menopausal women experience sleep disturbance and nocturia is reported as a common cause. Nocturia is defined as awakening one or more times from sleep to void. Severity is associated with frequency of awakenings. While most studies focus on differences in nocturia before and after menopause, few have explored nocturia that occurs prior to menopause. The literature remains unclear as to whether nocturia in midlife is due to aging or menopause. However the morbidity linked to this common sleep disturbance is evident in healthcare costs and quality of life.

Purpose: The purpose of this secondary analysis is to describe factors associated with nocturia-related sleep disturbance in late pre-menopause and peri-menopause.

Methods: We conducted a secondary analysis of longitudinal data collected every 6 months (Time 1-8). A multiethnic sample of 158 women with a mean age of 48 (SD 2.20) remained in the study at 5 years (Time 8). Data extracted for this analysis include demographics, menopause status (determined by cycle regularity and urine FSH levels using STRAW criteria – a staging system for ovarian aging) anthropometrics (height and weight). Self-report data used for this analysis included: 1) Pittsburgh Sleep Quality Index (PSQI), 2) perceived general health status (1 = excellent; 5 = poor) and 3) urinary symptoms checklist.

Results: The women were similar in demographics (age, parity, education, income) despite the racial diversity. At Time 8, urinary leakage was the most frequently reported urinary symptom (50%) with significant race differences ($\chi^2 = 12.87$, $p = 0.001$). Over 33% reported waking from sleep three or more times per week regardless of race. Nighttime urinary frequency was correlated with PSQI interrupted sleep ($r = 0.53$). The overall sample had poor sleep quality (mean PSQI > 5.0). Repeated Measures Analysis of Variance indicated that women consistently reported 'having to get up to use the bathroom' and 'waking up in the middle of the night or early in the morning' over time. A linear regression model was developed to account for the variance in nighttime awakenings. Menopause status (pre-menopausal rather than peri- or post-menopausal) was a significant contributor to frequent nighttime awakenings at Time 8. General health status and body mass index (BMI) were also significant contributors. Interestingly, race and age were not significant contributors to nighttime awakenings due to nocturia.

Implications: Nocturia and sleep disturbance are significant problems for women in midlife and these symptoms precede menopause. Findings suggested that menopause stage is a significant factor in the occurrence of nocturia in late pre-menopause. Causation cannot be implied due to the nature of these analyses. Further research is needed to explore the relationship between menopause stage, nocturia and other, less frequent, reasons for nighttime awakenings. Urinary symptoms may be more relevant for women who experience menopause transition at an earlier age. Further research on this phenomenon may help to defray future healthcare costs and morbidity associated with nocturia as a cause of sleep disturbance in pre-menopausal women.

Funding: This research was supported by NINR (#RO1NR04259) and T32 (NR007088).

◀ ▶ go to PG.

WOMEN'S HEALTH ISSUES

Support Group: Model for Increasing Adherence to Treatment in Hypertensive Black Women

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Background: Hypertension (HBP) is a major risk factor for cardiovascular disease, including heart and kidney disease and stroke. About 43% of African American (AA) adult men and 47% of women have hypertension. Only 30% of AAs have controlled of blood pressure (BP). Lack of adherence to recommended treatment is a major cause of uncontrolled BP among African/black American (AA) women. There is a paucity of approaches to BP control in inner-city underserved communities that have been found to be effective, but group behavior modification approaches have been shown to reduce BP. Inner-city hypertensive AA women identified support groups as a desirable strategy for enhancing their adherence to treatment, but the specific aspects of support groups that AA women find beneficial are not well understood.

Purpose: Guided by the Orem's self-care framework, this study explored the perceived value of support groups using focus groups with AA women who are receiving treatment for HBP.

Methods: Four focus groups were conducted with 26 hypertensive AA women in South Los Angeles (mean age of 67). Eligibility criteria included (a) self-identified as AA woman, (b) diagnosed with and receiving at least one type of antihypertensive medication, (c) 21 years or older, (d) speaks and writes at least 6th grade level English, and (e) did not have a serious medical condition, cognitive impairment or psychiatric condition according to their care provider. The focus group interview guide was designed to capture: (a) perceptions of the meaning and content of support groups, (b) how support groups can help in the management of HBP, (c) what facilitates or prevents attending a support group, (d) what motivates one to participate in a support group discussion, and (e) the desired frequency and timing of support group meetings. Socio-demographic information and BP were collected.

Results: Analyses yielded four component categories/themes: (a) information giving or knowledge sharing, (b) emotional or psychological support, (c) instrumental support, and (d) coaching. These themes indicate that support groups aimed at improving adherence to hypertensive treatment for AA women should (a) provide an information resource, (b) provide instrumental support, (c) provides emotional/psychological support, and (d) allow members to coach one another.

Conclusion: Support groups for AA women with hypertension can increase adherence to treatment by encouraging and facilitating behavior modification and lifestyle changes. The support group model provides ground work for testing the effectiveness of support group in increasing adherence to HBP treatment regimens with subsequent BP reduction or improve BP control in AA women.

Keywords: hypertension, blood pressure control, adherence to treatment regimens, hypertensive African American women

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◀ ▶ go to PG.

YOUTH AND ADOLESCENCE

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IDENTITY DEVELOPMENT IN UGANDAN IMMIGRANT ADOLESCENTS

Emily Green, Susan Kools, Catherine Chesla

ENGAGING LATINO YOUTH IN HEALTH EQUITY RESEARCH

Joanne Noone, Maggie Sullivan, Nancy Castillo,
Tiffany L. Allen, Carolina Regalado, Teresa Esqueda

ENGAGING ELEMENTARY/MIDDLE SCHOOL YOUTH IN IMPROVING THEIR SCHOOL FOOD ENVIRONMENT

Nancy E. Findholt, Carole A. Smith, Betty T. Izumi, Jackilen Shannon, Thuan Nguyen

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USING HEALTH TECHNOLOGY TO ENGAGE AND EMPOWER YOUTH IN SELF-CARE MANAGEMENT

Michelle T. Dang, Maria Catrina Diestro Jaime, Melissa M. Akers,
Rebecca N. Dick, Elizabeth Miller

◀ ▶ go to PG.

Identity Development in Ugandan Immigrant Adolescents

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Purpose: The purpose of this study is to explore how first-generation female Ugandan immigrant youth experience and understand their health and development and how factors such as community, school, family, peer groups and individual characteristics affect their health behaviors and self-development.

Background: Adolescence represents a crucial period for developmental processes including identity formation, role development, interpersonal relationships and the development of health beliefs and behaviors. Immigrant youth are often exposed to new and conflicting norms regarding these aspects of development resulting in unique challenges and opportunities for growth. Identifying and understanding the factors that contribute to the healthy development of immigrant female youth is essential to promoting healthy behaviors.

Methods: This qualitative study employed Grounded Theory methods. Multiple interviews with 20 participants and 100 hours of community observation were the primary data collection strategies. Participants were recruited through St. Mark's Episcopal Church in Van Nuys, CA. Community leaders initially assisted in recruitment, followed by snowball sampling and included English speaking Ugandan females who were aged 17-25 years and who immigrated to the US at the age of 8 years or later. Dimensional analysis, an approach to the generation of grounded theory, was used as a primary analytic strategy. In addition to coding, memo-writing was used to track the developing conceptualizations and emerging areas of salience were then integrated into future interviews for further development and verification. A matrix was used to consider which dimensions and concepts had the greatest explanatory power.

Results: The dimension with the greatest explanatory power and therefore the central process of this sample was that of identity development. This process encompassed participants' ethnic and racial identities, as well as their gender and role identities. Self-descriptions were structured as contestations to the perceived stereotypes of Africans, African Americans, and black Americans. Participants adopted ethnic labels and defined selves in terms of group membership primarily identifying as African, Ugandan, and black. Participants reflected on their racial and ethnic identity in terms of how it impacted their social status and opportunities, and described various internal and external practices of embodying and/or rejecting different racial/ethnic identities. In terms of gender and role identities, participants reflect on the differences and similarities in their trajectory as a young adult based on their move from a patriarchal society where women have "less life" to the United States where "everything is possible for me". Factors in various social contexts including family structure, degree of community involvement, racial diversity of school setting, and language proficiency served to impact the transitions in this sample's identity development.

Implications: For Ugandan adolescents, self-development is impacted by the understandings, choices, and tensions surrounding identity, identity labeling, and the challenging dynamics of gender/role stereotypes. This study captured not the mean experience of African immigrant youth, but starts to describe the range and variation of experiences affecting self-development and the impact of various social contexts. Awareness of and open dialogue of these factors can serve to bolster future promotion and prevention programs with culturally competent, developmentally appropriate, feasible, and effective interventions.

Funding: National Institute of Nursing Research (5F31NR013326-03).

◀ ▶ go to PG.

YOUTH AND ADOLESCENCE

Engaging Latino Youth in Health Equity Research

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Purposes/Aims: The purpose of this presentation is to describe a community-based coalition's partnership with Latino youth throughout the research process addressing unintended teen pregnancy and lessons learned of the direct and indirect benefits and challenges of engaging youth in the research process.
Rationale/Background: Israel and colleagues' (2013) components of Community Based Participatory Research provide a framework to highlight youth participation throughout the research process. These components are 1) partnership formation and maintenance; 2) community assessment and diagnosis; 3) definition of the issue and design and conduct of research; 4) feedback interpretation, dissemination, and application/translation of results. Individual empowerment that results from participating in the research process can occur for youth, which is especially important for Latino youth who have been reported to be less civically engaged than others. Factors that can be barriers to community engagement include educational level, poverty, lack of role models, and immigration status.
Brief Description of the Undertaking: During partnership formation, Latino youth participated in a logo design contest for the coalition and four youth from local communities were invited to join the coalition. During the community assessment phase, youth members participated in the community assessments of focus groups and a Photovoice project on youth perspectives on teen pregnancy. During the design and conduct of research, youth participated in a study to evaluate the acceptability of a culturally-relevant parenting intervention using interactive youth theater to facilitate Latino parent-adolescent communication about sexuality and pregnancy prevention. A youth coalition member for her college capstone participated as a research assistant to recruit participants and collect and analyze data. During the dissemination and application/translation of results phase, youth participated in presentations and publications to the community via local magazines and newsletters and presented at health care conferences. They participated in the creation of a calendar of photos from the Photovoice project.
Outcomes Achieved: The logo contest helped to begin to engage youth and raise community awareness of the issue and presence of the coalition. Educational stipends were provided to youth coalition members. Youth members participated in design and the format of the focus groups. They presented the issue of teen pregnancy to the community and reported findings from the Photovoice project to the community. The youth brought inside knowledge of their community to the coalition; participation in coalition activities further increased their understanding of issues in the community. The youth reported increased ability to speak publicly and enhanced focus on career directions from participation.
Conclusions: There were multiple benefits in engaging youth in CBPR. Their input provided increased relevance and context to understanding the issue. They increased the integrity and validity of the research design through contributing to the design of the community assessments and to the intervention design for the theater research study. There were also multiple individual benefits to the youth. Careful planning can help to mitigate the challenges of working with youth. Community-based partnerships working with youth should consider documenting the individual and collective impact of community engagement for the youth from the onset of participation.

Funding: By Northwest Health Foundation and Oregon Clinical and Translational Research Institute.

◀ ▶ go to PG.

YOUTH AND ADOLESCENCE

Engaging Elementary/Middle School Youth in Improving Their School Food Environment

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Purpose: This presentation will describe the methods used to prepare and engage rural elementary/middle school students in improving their school food environment, with a focus on the ways in which youth were involved rather than the findings from the research. Youth perceptions of the experience, challenges encountered, and recommendations for further efforts to engage youth in school-based interventions will also be discussed.

Background: Youth engagement is likely crucial to the success of school-based interventions for healthy eating and childhood obesity prevention. However, methods to effectively engage youth, particularly pre-teens, as advocates and leaders for a healthier school environment are required. SNACZ is quasi-experimental trial that trained rural elementary/middle school students to plan, implement, and evaluate interventions to improve school policies and practices relevant to snacking. The study was developed in partnership with 4-H faculty in Union County, Oregon. 4-H is a youth development program administered through County Extension Service offices throughout the U.S.

Methods: New 4-H clubs, called SNACZ clubs, were established in 5 rural school districts. Students in grades 4-8 were invited to be club members. Clubs met for 90 minutes every 2 weeks throughout the school year over a 3-year period. Adult mentorship was provided by volunteer club leaders with support from project staff. Youth received training in nutrition, research, and advocacy, and participated in a photovoice assessment to increase their awareness of barriers to healthy snacking within their schools. With adult guidance, youth planned outreach projects to promote healthy snacking; used survey methods to assess foods used for school celebrations, fundraisers, and student rewards; and drafted guidelines for healthier alternatives to current food-related practices.

Results: Thirty-six youth, on average, participated in the SNACZ clubs. During the 3-year period, club members implemented several creative outreach projects within their schools, including a “water drinkers’ hall of fame”, “healthy tailgate snack contest”, and a YouTube music video. In addition, the youth presented the results of their survey to school boards and requested adoption of the guidelines for healthier snack practices. Most youth were highly satisfied with the experience (88%) and believed they had the freedom to develop and use their own ideas (82%), but fewer reported having real responsibilities (65%). Challenges included the youth’s busy lives and competing commitments (especially sports), time constraints for accomplishing project goals, and making the program goals appealing to youth. Recommendations include: provide incentives (including service-learning credit) and recognition to youth for participation and for assuming greater responsibility in club activities, make participation fun (include games in club meetings; link club projects with popular activities, including sports), and integrate clubs into the structure of the school (meet during school hours, involve teachers as club leaders).

Implications: With attention to the developmental level of elementary/middle school youth and cooperation from their schools, young students can effectively engage in efforts to improve school food environments.

Funding: Agriculture and Food Research Initiative Grant # 2012-68001-19702 from the USDA National Institute of Food and Agriculture, Childhood Obesity Prevention: Integrated Research, Education, and Extension to Prevent Childhood Obesity, A2102.

go to PG.

YOUTH AND ADOLESCENCE

Using Health Technology to Engage and Empower Youth in Self-Care Management

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Purpose: Disconnected youth (i.e., homeless, foster, and system-based youth) face multiple challenges to health care access such as not having a medical home, health insurance, and a safe place to store health information. The purpose of this project was to determine the feasibility and acceptability of an electronic personal health record (PHR) called *HealthShack* that utilized registered nurses to assist youth in establishing a PHR and navigating the health care system.

Methods: In a community-academic partnership and using a youth-participatory action research framework, *HealthShack* was developed with input from homeless youth, health professionals, and youth advocates. The project was piloted at a drop-in community center for disconnected youth. Former homeless youth served as "health ambassadors" by informing youth who accessed the center about the project. Youth who wanted to enroll in the project met privately with a nurse to create an electronic PHR and address their health needs. Descriptive surveys were administered with a convenience sample of 110 enrolled youth on demographics, health care access, and health records. Follow-up semi-structured interviews were also conducted with 40 youth about their experiences with *HealthShack*.

Results: Ninety percent of participants were 14 to 22 years old with 67% of the sample reporting being homeless or in unstable housing situations. Main reasons for wanting to enroll in *HealthShack* were having a place to store health records (69%), being able to talk with a nurse about health issues (29%), and finding health information on the *HealthShack* website; 94% reported that they felt comfortable talking with the *HealthShack* nurse about their health needs. Prior to enrollment in *HealthShack*, 48% reported that they did not have access to a doctor or nurse to address their health needs, 45% experienced foregone care, and 49% did not have health insurance or did not know their insurance status. The majority agreed or strongly agreed with the statement that having a PHR was important to their health and that a PHR would improve their ability to organize their health records (70% and 71% respectively). Qualitative data revealed that youth found *HealthShack* to be a useful portal to store important health information. This electronic PHR also permitted them to go back and find information such as insurance identification numbers and past appointments. The youth also reported nursing services as being a valuable aspect of the enrollment process; nurses connected them to health services and helped them obtain health insurance.

Conclusions: *HealthShack* is the first known electronic PHR designed for disconnected youth. Results indicate that this PHR is an important tool for disconnected youth to safely store and organize their health information. A key finding regarding acceptability of the project was having youth as peer educators about how to use this PHR and registered nurses as health coaches. An electronic PHR could serve as a conduit in addressing the health needs of disconnected youth, particularly if embedded within a community-based program that permits social connections with trained peers and health professionals.

Funding: This project was supported with funding from Sierra Health Foundation, United Healthcare/Pacificare, and Kaiser Permanente Community Benefit Program.

◀ ▶ go to PG.

◀ ▶ go to PG.

ADOLESCENT HEALTH

ADOLESCENT STRESS REDUCTION

Linda C. Summers, Wanda Borges, Conni DeBlieck, Anita C. Reinhardt, Stephanie Lynch, Pamela Schultz

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A BIG WAY OF LIFE FOR RURAL MEXICAN AMERICAN ADOLESCENT MEN AND CAREGIVERS

Jennifer L. Collins, Donna C. Owen, Jane Dimmitt Champion

HUMAN PAPILLOMAVIRUS AWARENESS AND ADOLESCENT HEALTH: ACCOUNTING FOR VACCINE DEPRIVATION AMONG SUBURBAN HIGH SCHOOL STUDENTS

Carolina Sandoval, Lina Badr, David Colachico

MENTAL HEALTH OF AFRICAN AMERICAN ADOLESCENTS (AAA'S): A THEORETICAL REVIEW

Lindsay Williams

LIFE SATISFACTION IN CHILDREN AND ADOLESCENTS AS A POSITIVE INDICATOR OF MENTAL HEALTH

Patricia Barfield

WECAN! IMPLEMENTATION FOR PARENTS OF AT RISK HISPANIC ADOLESCENTS IN MIDDLE SCHOOL

Shannon DeVita, Kathy James, Mary Jo Clark, Jill Milton

EVALUATION OF EFFICACY OF PHYSICAL THERAPY FOR THE ADOLESCENT PATIENT WITH LOW BACK PAIN

Kelly Gonzales, Mary Lou Scott, Susan Bonnell

ADOLESCENTS WITH CONGENITAL HEART DISEASE TRANSITION PROGRAM: SELF-MANAGEMENT FOCUS

Elizabeth A. Hartman Valles, Kathleen Sweeney

EMERGENCY PROTOCOLS FOR SELECTED HEALTH CONDITIONS IN HIGH SCHOOL ATHLETES

Casandra Moyer, Kathleen Sweeney, Mary Jo Clark, Dee Cannon

◀ ▶ go to PG.

ADOLESCENT HEALTH

Adolescent Stress Reduction

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Significance: Schools are now the primary providers of mental health services for many adolescents. School nurses are often the onsite providers of behavioral health emergencies management. Behavioral health emergency management is defined as the initial action undertaken by the school nurse, which triaged, assesses, stabilizes and treats an urgent or emergent behavioral health problem.
Purpose: The purpose of the study was to compare the efficacy of the SleepWing^{TM} to the EnergyPod^{TM} for decreasing stress and agitation in adolescents in the School Based Health Centers (SBHC). The EnergyPod^{TM} is a device that provides a semi private acoustical and visual environment for rest, stress reduction and sleep. The SleepWing^{TM} is a smaller device, which claimed to offer the same benefits at much reduced cost.
Procedures: The study design was a quasi-experimental randomized controlled research of a convenience sample of adolescent students who were offered a technical intervention for agitation, anxiety, fatigue, irritability, and/or stress. A randomized convenience sample of 100 students between the ages of 14 to 19 was asked to participate in the study. The students were seen in the school based health clinics (SBHC) of four high schools in border communities of a southwest state of the United States. The students were screened by a healthcare provider in the SBHC based on inclusion criteria of agitation, anxiety, fatigue, irritability, and/or stress then if agreeable, were referred to the clinic coordinator for random assignment to the study intervention, the EnergyPod™ or SleepWing™. The participants were asked to complete the pre and post Profile of Mood States-Short Form (POMS-SF). The POMS-SF™ investigations has shown it is a "predictive and construct validity of the 6 POMS™ subscales measuring anxiety, depression, anger, confusion, vigor, and fatigue, and the POMS^{TM} Total Mood Disturbance (TMD) score in different patient and subject populations.
Findings: There was no significant difference between the four high schools by sex, ethnicity, and/or age or Post-intervention Total Mood Disturbance TMD scores or any of the TMD subscales by on the POMS 30 short form. No significant difference Pre-intervention TMD score (t = -.0288, df 83, p = 0.77) or TMD subscales between participants who used the EnergyPod™ or the SleepWing™. No significance difference in Post-intervention TMD scores between participants in the EnergyPod^{TM} or the SleepWing^{TM} (t= -0.568, df 87, p = 0.57). There was a statistically significant improvement in mood after being in the EnergyPod™ or SleepWing™ (t =10.24 (75), p < .0001). The significant difference in the scores was the improvement between pre and post POMS-SF™ scale scores and TMD scales after using either stress reducing device and all were significantly different.
Conclusions: The study suggests preventive benefits in high school students, and psychosocial well-being. All participants in the study improved their mood after being in either therapeutic intervention. The lower cost intervention provided preventive benefits in high school students and improved psychosocial well-being. The objective evidence shows a lowers stress and agitation in adolescents and they were able to return to class.

◀ ▶ go to PG.

ADOLESCENT HEALTH

A Big Way of Life for Rural Mexican American Adolescent Men and Caregivers

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Purpose/Aim: Almost half (49.5%) of a primarily Mexican American adolescent population who sought care at a rural health clinic were identified as overweight or obese in a retrospective data analysis. More males than females were classified as overweight or obese. A follow-up pilot study was conducted to explore conceptualization of weight for rural Mexican American adolescent males and a person they named as influencing their health. The research question is: What is the meaning of body weight for Mexican American male adolescents who live in a rural area?

Background: Evidence consistently suggests that the prevalence of obesity has increased among Mexican American adolescents, with higher rates observed in rural versus urban populations. Efficacious interventions to reduce BMI and inclusion of environmental influence in minorities and in males are lacking.

Methods: A convenience sample was recruited during routine visits of participants to a rural health clinic. Participants were asked open-ended questions about what body weight meant to them during 1 hour interviews. Interviews were recorded, transcribed and compared to audio-tapes for accuracy and clarification of context clues. Three investigators experienced in qualitative analysis used content analysis as described by Hsieh and Shannon (2005) to retrospectively analyze transcripts. Data management and integration of analysis was facilitated by use of NVivo. Rigor was addressed by developing consensus between investigators in initial and re-examination of codes and categories and inclusion of memos to create a decision trail.

Results: Fifteen Mexican American adolescent males (12 to 18 years of age) and fourteen individuals these young men identified as influential people (IP) in their lives (32 to 63 years of age; 12 mothers, one father, and one grandmother) were recruited. Participants expressed one meaning of weight to them through sharing norms around being 'big'.
Young men and IPs reported having a big family, protecting family members from feeling bad in being named 'big as in overweight' and feeling powerful in being 'big' or having 'nice, big biceps'.

Being big was described within the context of understanding expected dietary and activity practices with limited resources to implement these practices. Males dropped out of sports due to cost or poor school performance, IPs reported being limited to join training programs or eat 'healthy foods' due to cost, geographic distance, and limited amounts of time. Participants shared expectations of how patterns of being big were a way of life for them.

Implications: Interventions targeted at individuals in this rural, Mexican American community are not effective in addressing expected cultural norms. Family support and community support is evident and must be considered with regards to food intake, exercise, norms and scripts. These are community assets that must form the basis of interventions.

Funding: National Institute on Drug Abuse R01DA19180; F. Marie Hall Fund, TTUHSC School of Nursing.

Reference:

Hsieh, H., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. Qualitative Health Research, 15(9), 1277-1288. doi: 10.1177/1049732305276687.

◀ ▶ go to PG.

ADOLESCENT HEALTH

Human Papillomavirus Awareness and Adolescent Health: Accounting for Vaccine Deprivation among Suburban High School Students

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Problem and Significance: The human papillomavirus (HPV) vaccine represents one of the most important mechanisms in the prevention of cervical cancer prevention yet, recent data suggest that female adolescents especially those from minority backgrounds, are not receiving the recommended immunizations .In the United States, although HPV vaccine can prevent up to 70% of cervical cancer, it remains the sixth most common cancer among African American and Hispanic women and the 13th most common among Caucasian women.

Purpose: The objective of this pilot study was to increase awareness about HPV disease, prevention, and vaccination opportunities and programs among a group of Hispanic parents at a large suburban high school and to answer one Research question: Will the participants demographic characteristics of gender, education, age, internet use, church attendance, employment, insurance enrollment, and parental status, influence knowledge or change opinions after conducting an HPV educational intervention?

Methods: A quasi-experimental design pilot study, using a convenience sample of 30 participants, consisted of a two 40 minutes educational classes about HPV disease, prevention, and vaccination. Starting with a pre-test and the demographic information and ending with a post-test. The Center for Disease Control (CDC) HPV 21 item true and false questionnaire was used pre-post to evaluate the effect of the intervention.

Data Analysis: Paired t test were used to measure difference between scores before and after intervention. Chi-square to measure the existence of a relationship between total scores before intervention and each variable.

Results: The 30 Hispanic who consented to participate in the HPV educational intervention completed the pilot study. The mean age of the participants was 41years (SD= 5.43) with a range of 33 to 66 years old. Of the group 20 were female (67%) and 10 (33%) were males. Almost half (57%) reported having medical insurance and 40% reported having a 10th grade level education. Only 5 (17%) reported having 12th grade education. A paired t-test found that there was a significant increase in parent's knowledge after the intervention (M=11.73, SD = 3.61versus M=15.53, SD=3.19), t -431=, P = < .05. The only parental characteristics that were related to knowledge after the intervention were education and the child's gender.

Implications for Practice: This 2- 40 minutes culturally sensitive educational intervention about Awareness and knowledge regarding HPV disease, prevention, and vaccination was successful in improving parents' knowledge with intention to vaccinate their adolescents.

◀ ▶ go to PG.

ADOLESCENT HEALTH

Mental Health of African American Adolescents (AAA's): A Theoretical Review

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Rationale/Conceptual Basis/Background: African-American adolescents (AAA's) are more likely to suffer from untreated mental health conditions than their counterparts in the general population (Lindsey, Barksdale, Lambert, & Ialongo, 2010). Besides the aspects of urban neighborhoods that can influence mental health in AAA's, such as community violence and poverty, recent criminal justice issues such as the Trayvon Martin and Jordan Davis shootings raise the question of the psychological impact of racial bias and interracial violence on the mental health of AAA's (Lindsey et al., 2010; Mays, Johnson, Coles, Gellene, & Cochran, 2013; Thompson et al., 2013). Although utilization of mental health services by AAA's and their families have been explored, the factors that determine the mental health service use of AAA's are poorly understood (Thompson et al., 2013).

Purposes/Aims: Therefore, the purpose of this theoretical and literature review is to create a theoretical model of the factors shaping mental health of AAA's and the subsequent effects on mental health services utilization. This poster will address the following objectives:

1. To describe the existing literature on the state of mental health in AAA's
2. To describe the impact of racially based acts of violence on the mental health of AAA's
3. To describe the theoretical frameworks that may explain the mental health service use of AAA's
4. To identify the role media plays in disseminating racial stereotypes, biases and its role in mental health.
5. To propose a framework linking the mental health need and mental health utilization among AAA's

Methods: The psychological science framework will be used to shape the review of the literature. The tools offered by psychological science can reveal the embedded nature of the pervasive negative cultural/racial bias and stereotypes (Dhont, Roets & Van Hiel, 2011; Flaskerund, 2011; Paluck & Green, 2009) that destroy the lives of AAA's. These models will be used to shape the review of the literature that will inform this analysis the psychological role of bias and racism.

Results: Contributing factors to the unique mental statuses of diverse young African Americans may include discrimination, poverty, or lack of a role model. The literature indicates the size and quality of social networks are a potential mediator of services use. Racism and media influences influence how those social networks are formed and maintained. Racism, as presented through media contributes to an internalized poor self-image, which may be especially harmful during the adolescent transition.

Implications: While avoiding potentially harmful and limiting biases, nurses must be aware of such behavioral and physical signs for such emotional distress. Nurses must also realize that this diverse population calls for the creation of multifaceted therapeutic approaches. These may include not just emotional counseling but economic, judicial, and social guidance.

◀ ▶ go to PG.

ADOLESCENT HEALTH

Life Satisfaction in Children and Adolescents as a Positive Indicator of Mental Health

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Purpose: To examine the construct of life satisfaction as a positive indicator of mental health in children and adolescents

Background: One in five children experience a serious mental health disorder and fifty percent of all mental health disorders onset before age fourteen, making mental health disorders a chronic disease of childhood and adolescence. Children and adolescents with mental health disorders are at greater risk for academic failure, impaired relationships, legal problems, and substance abuse. In contemporary clinical practice far more attention is given to psychopathology or negative indicators of mental health compared to life satisfaction or positive indicators of mental health. Yet studies involving mental health report that negative and positive indicators are not opposing ends of a single continuum, but are instead different co-occurring constructs. In essence, mental well-being does not equate with the absence of psychopathology and the absence of psychopathology does not equal mental well-being.

Method: A systematic review of the literature was conducted using *life satisfaction, mental health* and *child/adolescent* as combined key words in PsycInfo, MEDLINE, Psychology and Behavioral Science Collection, and SocIndex with Full Text. The search was limited to English language from1980 to 2014. A total of 383 articles were initially obtained. Only articles with life satisfaction in the title (n=74) were accepted for initial content review. A reverse citation search of references from key studies was also completed. The final sample (n=30) included research studies measuring life satisfaction in children and/or adolescent participants age 8 to 18 years. Priority was given to integrated studies measuring both negative (psychopathology) and positive (life satisfaction) indicators.

Outcomes: The outcomes of examining life satisfaction as a positive indicator of mental health are organized into three categories: 1) the differentiation of overlapping concepts including subjective well-being, quality of life, and life satisfaction, 2) correlates of life satisfaction, and 3) an introduction to measures of life satisfaction, while emphasizing one measure – *the Multidimensional Student's Life Satisfaction Scale (MSLSS)* - that may be ideally suited for assessment of positive indicators in child/adolescent mental health for both clinical and research practice.

Conclusion: Life satisfaction may be a positive indicator for assessing mental health in children and adolescents. In particular, the *MSLSS* can be used to identify areas of potential psychosocial vulnerability and risk, as well as areas of current strength and resilience – thus facilitating early identification and prevention strategies.

◀ ▶ go to PG.

WeCan! Implementaiton for Parents of At Risk Hispanic Adolescents in Middle School

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Project Aim: The purpose of this evidence-based project is to determine the effectiveness of the *WeCan!* program, developed by the National Heart, Lung, and Blood Institute (NHLBI, 2007), in increasing knowledge of ways to increase activity and improve nutrition habits in at-risk middle-school-age Hispanic adolescents and their parents.

Background: In the United States childhood obesity continues to be a growing health concern. The Centers for Disease Control and Prevention (CDC, 2012) reported that childhood obesity rates have tripled in the past three years. Obese children are at greater risk for complicated health problems such as cardiovascular disease and diabetes mellitus. Nearly 33% of adults in San Diego are overweight and 26% are obese. Among children in grades five, seven and nine, nearly 30% are overweight or obese, and Hispanic students are more likely to be overweight than White students (CDC, 2013). The *WeCan!* program has been shown to be effective in decreasing obesity in multicultural populations.

Project Approach: The *WeCan!* program was chosen due to its focus on parental involvement, feasibility, and successful outcomes in similar population groups. Face-to-face education is provided regarding healthy lifestyle choices is provided in small groups.

Outcomes: In progress. Expected outcomes include: increased knowledge about nutrition and physical activity, increased consumption of fruits and vegetables, decreased screen time and increased physical activity.

Conclusions: To be determined following data analysis, but if successful, this program could lead to decreased obesity and incidence of consequent health problems as well as decreased societal health care costs. Similar programs could be implemented; implemented in other school settings. Ultimately, working to reduce the number of overweight and obese children will develop a healthier, well informed younger generation.

go to PG.

Evaluation of Efficacy of Physical Therapy for the Adolescent Patient with Low Back Pain

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Purpose: The purpose of this project was to evaluate the efficacy of physical therapy and provide patient education on various care modalities that are available in the treatment of low back pain in the adolescent patient population.

Background: Low back pain is a condition affecting many people worldwide. The age of onset is variable, affecting all patient populations from childhood throughout the lifespan. The World Health Organization (WHO) estimated the disability associated with low back pain to be among the top ten-diseases/ injuries to affect daily living. According to the WHO, back pain is the second most common cause of years lost to disability (YDL) globally. This has remained unchanged from 2000-2011 (WHO, 2013).

Overall national statistics for the adolescent back pain prevalence are not available; however many studies have been preformed to identify back pain in this patient population. A meta-analysis to identify the prevalence of low back pain in the pediatric population indicated an increased prevalence in this patient population. Recent studies reveal higher prevalence rates; these rates are consistent with rates of low back pain demonstrated in adults with a mean 36% lifetime prevalence for low back pain (Calvo-Munoz, Gomez-Conesa & Sanchez-Meca, 2013).

Project Approach: The efficacy of physical therapy for the adolescent patient with back pain currently seen in a pediatric orthopedic clinic was evaluated through comparison of pre and post intervention pain scores. Patient compliance with physical therapy was monitored and evaluated against outcomes. A patient education brochure to decrease the recurrence of low back pain and disability was provided and included strength training for core abdominal muscles as well as integrative care options including yoga, healing touch and meditation.

Results/Outcome: Data collection is currently in progress; however it is expected there will be a decrease in reported pain scores for the patients who are compliant with prescribed physical therapy.

Conclusions: Conclusion will be determined following analysis of project results. The addition of patient education and treatment modalities to decrease future recurrence and disability associated with low back pain is expected to have successful positive long-term results within the adolescent patient population.

◀ ▶ go to PG.

ADOLESCENT HEALTH

Adolescents with Congenital Heart Disease Transition Program: Self-Management Focus

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Purpose: Develop and implement a formal transition education program to prepare adolescents with congenital heart defects (CHD) to self manage their health condition as they enter adulthood. The transition program includes interactive individualized written material and a single educational visit with the Cardiac Transition Coordinator, who will be a Nurse Practitioner.

Background: Healthy People 2020 set a goal of 45.3% for adolescents with special health care needs to participate in transition planning yet only 40% reported having done so. These patients have been in a pediatric health care environment that traditionally does not require them to self-manage their condition. This is demonstrated by a lack of knowledge by adolescents with CHD regarding the name and basic physiology of their heart defect, symptoms of deterioration of their condition, and risk factors for endocarditis. In addition, they lack the knowledge on how often they should have follow-up appointments, the indication for their medications as well as the consequences of non-compliance. Use of written material including a "health passport" is recommended and has been successfully used as an educational tool.

Methods: This project involves the integration of an educational session with adolescents with CHD who are being seen in an outpatient cardiology clinic. The foundation of the interaction is assessing the adolescent's current knowledge and providing an interactive "health passport" designed by the Adult Congenital Heart Association. Elements of education focus on self-management and meet the guidelines set by the American Heart Association and American Academy of Pediatrics Consensus Statement. The knowledge scores of patients using the Leuven Knowledge Questionnaire for Congenital Heart Disease (LKQCHD) before and after the patient received purposeful education is used to evaluate the change in knowledge following the educational interaction. The EBPI San Diego Consortium Model – "The Eight A's" assesses the problem, asks a question, acquires evidence, appraises the evidence, applies a practice change, analyzes the change, advances the results and adopts the new change is used for this project. This project is informed by Dorothea Orem's Self-Care theory. Self-care practice with the patient making decisions for the benefit of their own health and health deviation self-care with patients that have illness or disease make decisions to manage their disease including recognition of deterioration and following prescribed treatment.

Outcomes: The outcomes of this project are currently pending. It is anticipated that the following objectives will be met: 1) 50% of identified eligible patients will participate in the transition program education. 2) 90% of participants will complete the LKQCHD pre and posttest. 3) 100% of the participants tested will score greater than 50% on the LKQCHD posttest.

Conclusions: Nurse Practitioners are uniquely qualified to implement a transition education program focused on adolescents with CHD. Advantages and challenges related to transition programs will be examined, with further implications for clinical practice identified and optimal time to begin transition education with this population. The process used for this project can be applied to other chronic health conditions to assist those adolescents in preparing to self-manage their specific health care condition.

◀ ▶ go to PG.

Emergency Protocols for Selected Health Conditions in High School Athletes

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Project Aim: The purpose of this project was to develop and implement an emergency protocol educational program for local high school coaches and athletes related to asthma, severe allergy (anaphylaxis), diabetes, and heat illness.

Background: About 7.6 million high school students in the United States participate in athletics. In high school students, activity in athletics implies some risks to participants secondary to illnesses or injuries or, rarely, potentially life-threatening conditions. Among high school athletes, heat illness and asthma exacerbation are relatively common and fatalities related to each have been documented. Less common health conditions in adolescents include diabetes (types 1 and 2) and anaphylaxis, but they have well-known and potentially profound consequences such as long-term disability and/or death if not identified and managed in a timely manner. In addition, in more recent years, food allergy and concomitant anaphylaxis has been increasing for unknown reasons. Finally, diabetes resulting from childhood obesity has also increased in prevalence.

Project Approach: A student Nurse Practitioner (sNP) performed a detailed needs assessment of a local high school's emergency protocols for asthma, severe allergy (anaphylaxis), diabetes, and heat illness in high school athletes in collaboration with the health care providers at the institution. An evidence-based emergency protocol individualized to the athletes of this particular program was created. High school athletes and coaches participated in a 30-minute presentation regarding the emergency protocol to increase knowledge of coach and peer recognition of emergency situations. All participants completed knowledge based tests directly before and after the presentation and approximately one month later. Mean knowledge scores for coaches and athletes were compared before and after. Information on the occurrence of specific emergencies and treatment provided was also collected.

Outcomes: Data collection is currently in progress, however it is expected there will be an increase in participants' knowledge scores for the emergency protocols regarding asthma, severe allergy (anaphylaxis), diabetes, and heat illness. Possible increases in incidence might also occur since participants might more easily identify instances of these conditions.

Conclusions: To be determined following review and analysis of results. It is expected the creation and presentation of the emergency protocol to coaches and high school athletes will result in increased knowledge in each population of how to identify and respond to these emergencies and increased recognition of these emergencies as they occur.

◀ ▶ go to PG.

ADVANCED PRACTICE NURSING

VOLUNTEER NPS' SCREENING PRACTICES FOR HISPANIC WOMEN IN FAITH CLINICS

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Teresa Keller, Sue Forster-Cox

ADAPTING MSN CURRICULA BASED ON COMMUNITY PARTNER CONSENSUS: A DELPHI STUDY

Kathleen N. Dunemn, Carol Roehrs

ADVANCED PRACTICE NURSES AS PRIMARY CARE PROVIDERS: A SYSTEMATIC REVIEW

Melanie Swan, Sacha Ferguson, Alice Chang,
Elaine Larson, Arlene Smaldone

PUBLIC HEALTH NURSES' PERCEPTIONS OF GRADUATE EDUCATION

Denise Drevdahl, Mary K. Canales

UTILIZATION OF ADVANCED PRACTICE REGISTERED NURSES IN RURAL HEALTHCARE SETTINGS

Polly Petersen, Sandra Way

EFFECTIVENESS OF INR PATIENT SELF-TESTING IN ADULTS ON WARFARIN IN PRIMARY CARE

Anisa Munshi, Karen Macauley

◀ ▶ go to PG.

ADVANCED PRACTICE NURSING

Volunteer NPs' Screening Practices for Hispanic Women in Faith Clinics

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Purpose/Aims: The purpose of this study was to examine the relationship between volunteer health care providers' characteristics and cervical cancer screening recommendations and practices in faith-based clinics who serve low-income Hispanic women.

Rationale/Background: Hispanic women residing in the state of Arizona have a risk profile for cervical cancer that is above the state mean despite the fact that low-income clinics are available for obtaining cervical cancer screenings. Of the studies that have explored the barriers and enablers for Hispanic women in receiving cervical cancer screening, the lack of provider recommendation is a predominant factor. In addition, studies have revealed that providers inconsistently follow standard screening guidelines. Clinics using volunteer providers, recognize that the volunteers have varied educational backgrounds and practice specialties, which could affect performance of preventive health counseling. No studies were found that examined volunteer nurse practitioners screening practices serving in faith-based clinics. Pender's Health Promotion Model guided the study.

Methods: This study was a quantitative descriptive correlation design. The setting included two low-income faith-based clinics. The sample consisted of volunteer health care providers who participated in an online survey. In addition a chart audit was completed. Data analysis included descriptive statistics, chi-square, logistic regression and trend analysis.

Results: Logistic regression revealed that nurse practitioner (NP)/physician assistant (PA) providers were 4.589 times more likely to recommend screening than physicians at a client's first clinic visit (OR = 4.589; 1.161, 18.139). Chi-Square provided a comparison of documented guideline consistent recommendations to providers' self-reports. The findings were significant, revealing provider documentation was more guideline consistent than provider self-report $X^2(1, N = 36) = 7.034, p < .05, V = 0.44$. Chi-square with chart audit data from 2008 to 2013 revealed that there was a significant difference in guideline consistent recommendation for screening at the initial visit before and after the 2009 and 2012 guideline changes $X^2(2, N = 27) = 7.855, p < .05, V = .539$. Trend analysis confirmed that there was evidence of an increasing positive trend for providers to be guideline consistent in recommendations.

Implications: Perceived benefits of action for screening effectiveness, self-efficacy through recent training, interpersonal and situational influences appear to have a direct influence on the recommendations practices of providers. Given that 62.5% of NPs/PAs and 55.6% of physicians reported attending training on cervical cancer screenings within the last two years, further studies should explore how recent training may have impacted the findings for an increasing trend in guideline consistent recommendations. In addition, examining what underlying characteristics of NPs/PAs contributed to this type of provider being more likely than physicians to recommend screenings could lead to interventions that increase the number screenings that the Hispanic population receives. Since only 50% of providers indicated they were aware of screening guidelines at their clinic, having current guidelines available to providers in the clinic at a designated location may be another way to continue to improve the rate of recommendations given to the Hispanic population seeking care at the clinics.

go to PG.

Adapting MSN Curricula Based on Community Partner Consensus: A Delphi Study

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Purpose: To obtain information from a panel of community clinical nursing experts to advise the update and adaptation of the School of Nursing's non-advanced practice Master's of Science programs.

Background: The ways in which nurses were educated during the last century are no longer adequate for dealing with the realities of healthcare today (IOM, 2011). In a recent report, the IOM stated that nursing curricula needed to be reexamined, updated, and adaptive enough to evolve with patients' changing needs and improvements in science and technology (IOM, 2010). Initiatives with the goal of updating and improving the relevance of the nursing curricula must be based not only on national organization guidance but also on current credible information from community clinical nursing experts. Often curriculum updates and adaptations are based on anecdotal and incomplete information. Very few studies are done, a priori seeking the expert opinions of community clinical nursing experts prior to curricula update and adaptations.

Methods: *This study is in progress*. A non-experimental field study approach is being used to conduct this study. The Delphi survey data collection technique is being used. This study is prospective, iterative, and the data will be both quantitative and qualitative in nature. For this study, clinical nurse experts have been recruited from of variety of healthcare agencies located primarily in the western region of the US. The goal is a minimum of 10 participants per round of the Delphi Study. The systematic steps of the Delphi survey methodology are being followed to reach the goal of an informed agreement and consensus among the experts on the specific issues.

Results: The analysis (and study) will be complete and results will be available by the date of the conference. It is anticipated from an early review of the data from round 3 of this Delphi Study, that consensus on the Delphi Study items will be reached at the conclusion of round 3 (October 2014). Final analysis and interpretation of the study data will occur November – December 2014. This study will be complete January 2015.

Implications: It is hoped that the results of this Delphi Study will provide the needed information, based on the expert opinions of community clinical nursing experts, to guide curricula update and adaptations of the Master's in Nursing Program.

Funding: Supported by the University of Northern Colorado Faculty Research and Publication Board Grant.

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◀ ▶ go to PG.

ADVANCED PRACTICE NURSING

Advanced Practice Nurses as Primary Care Providers: A Systematic Review

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Purpose: To conduct a systematic review of randomized controlled trials (RCTs) of care provided by advanced practice nurses (APNs) in the primary care provider role.

Background: Full deployment of APNs presents one promising strategy to alleviate the increasing United States primary care shortage but research is needed to demonstrate safety and effectiveness of primary care provided by APNs.

Methods: Three databases were systematically searched to identify RCTs and their follow up reports that compared outcomes of care provided to adults by APNs and physicians in equivalent primary care provider roles.

Results: Ten studies (7 RCTs, 2 economic evaluations, and 1 two year follow-up study of an included RCT) were included in the systematic review. These studies represented data for 10,911 patients who presented for ongoing care (4 RCTs) or same-day consultations (3 RCTs) in the primary care setting. Study follow-up ranged from 1 day to 2 years. APN groups demonstrated equal or better outcomes than physician groups for physiologic measures, patient satisfaction, and cost. In healthcare resource utilization, APNs generally had longer consultations compared to physicians; however two studies reported that APN patients required fewer consultations over time.

Implications: There were few differences in primary care provided by APNs and physicians; for some measures APN care was reported to be superior. While studies are needed to assess longer term outcomes, these data suggest that the APN workforce is well-positioned to provide safe and effective primary care.

◀ ▶ go to PG.

Public Health Nurses' Perceptions of Graduate Education

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Aim: The aim of this qualitative study was to examine nurses' perceptions about graduate education, pursuit of an advanced degree, and influences on decisions for obtaining a graduate degree in community/public health nursing (C/PHN) compared to a degree in related fields such as public health.

Background: Numerous sources, including the Robert Wood Johnson Foundation (RWJF), the U. S. *Healthy People 2020* (2011), and the Quad Council of Public Health Nursing Organizations (2007) strongly support the need for a well-educated C/PHN workforce to meet the health challenges facing the nation, including implementation of the Affordable Healthcare Act. Additionally, AACN DNP Essentials require attention on population health. However, results of the RWJF's 2012 "Public health nursing workforce survey" estimated that only 11% of survey respondents employed in local health departments held a master's or doctoral degree in nursing. While a recent review of U.S. master's degree programs in C/PHN pointed to a decrease in these program offerings, there has been exponential growth in Masters of Public Health (MPH) programs.

Methods: Digitally-recorded individual interviews are being conducted with C/PHNs (n=30) working in local and state health departments, private consulting businesses, and occupational health settings. The range of educational experiences being pursued include those who have obtained graduate degrees, those currently pursuing graduate degrees, and BSN graduates who have decided not to pursue a graduate degree. Multiple recruitment strategies are being employed including snowball, network, and theoretical sampling techniques. Grounded theory processes are guiding data analysis of transcribed interviews.

Results: Preliminary analysis of interview data indicates that for nurses who completed graduate programs, C/PHN often was not considered because nurses were unaware of C/PHN as a graduate option or C/PHN graduate programs were unavailable geographically; the MPH was seen as a more credible degree; or there were few if any opportunities for career advancement with a graduate nursing degree compared to a graduate business or administration degree. Barriers to graduate education in general include high tuition costs, limited tuition support from employer, and lack of monetary compensation once the degree was completed.

Implications: Findings will be useful in directing nursing education efforts to maintain and strengthen the academic preparation of nurses who are focused on community/public health. It is important that nursing support advanced education for nurses engaged in community, public and/or population health to ensure that nurses, including DNP graduates, learn important population health content, are exposed to various population health roles and opportunities, and meet the health needs of priority populations.

◀ ▶ go to PG.

ADVANCED PRACTICE NURSING

Utilization of Advanced Practice Registered Nurses in Rural Healthcare Settings

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Purpose/Aim: As rural states implement the Affordable Care Act (ACA), newly insured participants may not have access to timely, affordable healthcare due to a shortage of providers. Potential providers, particularly advanced practice registered nurses (APRNs), face barriers that may contribute to this shortage. Understanding these barriers for APRNs is essential as well as understanding the characteristics of APRN practice and their role within the healthcare team.

Cross-sectional surveys were conducted in two rural states with APRNs to determine autonomous and empowerment characteristics and influencing variables practice setting, geographical location, and physician oversight. The hypothesis is that APRNs, practicing in a rural, clinic setting have less physician oversight and are more empowered and autonomous than other APRNs.

Rationale/Background: Following the ACA's first open enrollment period, an estimated 9.5 million U.S. adults were newly insured (Commonwealth Fund, 2014). As of June 2014, data indicated there are approximately 6,100 designated Primary Care Health Professional Shortage Areas (HPSAs) nationally. Primary Care HPSAs are based on a physician to population ratio of 1:3,500. Using this formula, it would take approximately 8,200 additional primary care physicians (PCPs) to eliminate the current primary care HPSA designations. We speculate that with this growing shortage of PCPs, APRNs will be required to practice to their fullest capacity (Fairman, Rowe, Hassmiller & Shalala, 2011), to augment the number of care providers. However, barriers exist that could hinder implementation (Brooten, Youngblut, Hannan & Guido-Sanz, 2012).

Methods: Using survey methodology with a descriptive, correlational design, data was collected from APRNs regarding autonomy and empowerment in their professional workplace setting in 2 predominantly rural states. The Dempster Practice Behavior Scale (DPBS) was used to measure autonomy, defined as the ability to function independently (Dempster, 1990). The Conditions of Work Effectiveness Questionnaire-II (CWEQ-II) was used to measure empowerment or power to make decisions (Laschinger, Finegan, Shamian & Wilk, 2001). Descriptive statistics were used for analyzing demographic data. Relationships between autonomy and empowerment, predictor variables and demographics were examined using t-tests and chi-square analysis.

Results: Responding APRNs scored high as autonomous and empowered. Statistically significant were APRNs practicing in a rural setting who had higher autonomy scores than those in an urban setting ($p = 0.023$) and those who practiced with physician oversight scored higher in empowerment than those who identified no physician oversight ($p = 0.001$). Physician oversight was positively related to empowerment but inversely related to autonomy. While not significant, other results include APRNs as more empowered in a hospital setting, but scored higher in autonomy when practicing in a clinic. Fifty-two percent (52%) identified practicing with physician oversight.

Implications: Because there is more opportunity to work within a team of healthcare providers in the urban setting, these results may indicate that APRNs are more confident in a situation where members are working in a collaborative effort. Rural APRNs and other healthcare providers have an opportunity to mimic this collaborative effort, requiring all providers to practice at optimum levels of education and experience, understanding of each other's roles that support these characteristics.

◀ ▶ go to PG.

ADVANCED PRACTICE NURSING

Effectiveness of INR Patient Self-Testing in Adults on Warfarin in Primary Care

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Background: Warfarin is the most commonly prescribed oral anticoagulant for the prevention and treatment of venous thromboembolism. Due to its narrow therapeutic index, warfarin requires close monitoring of the international normalized ratio (INR) to ensure proper anticoagulation control and safety. INRs outside of this range are strongly associated with an increased risk of major bleeding, thromboembolic events and even death. Patient self-testing (PST) using a point-of-care device allows patients to monitor their INR results from home. Evidence shows that PST improves the clinical outcomes of warfarin therapy compared to usual care, which includes standard laboratory INR monitoring.

Methods: Patient data, including age, gender, insurance provider, INR results and method of INR testing, were retrieved from electronic medical records, contracted laboratories, and the PST vendor website from January 2010 to September 2014. Eligible patients, adults on warfarin therapy for more than 6 months, were offered to participate in PST using a point-of-care device to monitor their INR levels at home. The Nurse Practitioner of the primary care setting provided meter set-up and hands-on training to participants individually. Participants monitored their INR levels at least twice a month and the results were communicated to the providers through a secure website. The percentage of time spent within therapeutic INR range (TTR) using PST was calculated and compared to the TTR using usual care.

Outcomes: Pending.

Conclusions: Pending.

◀ ▶ go to PG.

◀ ▶ go to PG.

CARING FOR OUR VETERANS AND SERVICE MEMBERS

OVERVIEW: CARING FOR OUR VETERANS AND MILITARY SERVICE MEMBERS

Mona Pearl

THEORY OF RELATIONAL CERTAINTY FOR MILITARY VETERANS

Michael J. Rice, Cheryl A. Krause-Parello

SLEEP DISTURBANCE IN VETERANS WITH A HISTORY OF MODERATE/SEVERE TRAUMATIC BRAIN INJURY

Ellyn Matthews, Lisa Brenner, Gina Signoracci

UNIQUE CHALLENGES OF AGING IN PLACE FOR VETERANS

Jacqueline Jones, Mary Weber, Evelyn Hutt

VETERAN AND MILITARY HEALTH CARE: AN EMERGING NURSING SPECIALTY

Mona Pearl

◀ ▶ go to PG.

CARING FOR OUR VETERANS AND SERVICE MEMBERS

Overview: Caring for Our Veterans and Military Service Members

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Veterans and military service members comprise a unique population with specific health care considerations and nursing care. This symposium will address a spectrum of issues that illustrate the myriad of concerns for this population. The first presentation of Sleep-wake Disturbance in Veterans with Moderate to Severe Traumatic Brain Injury (TBI) highlights the somatic consequences of TBI, one of the hallmark injuries of the current war. TBI can result in both short- and long-term physical, cognitive and neurobehavioural impairments. Complaints of disturbed sleep, excessive daytime sleepiness and disorders of arousal are among the most pervasive, enduring and common sequelae of TBI. The second presentation of a theory of relational certainty for military veterans explores the adaptive stress responses veterans' display reintegrating into society. The theory attempts to explain how veterans internally construct meaning related to their stable relationships, with the level of relational certainty indicating a balance of biological and social links. These first two presentations illustrate the visible and invisible consequences of war. The third presentation explores the unique challenges of aging for veterans, identifying issues related to continuity of care, isolation and a lack of advance care planning for veterans who are often unable or reluctant to access Veterans Administration (VA) health care services. The study offers new perspectives on how to approach palliative care when uncertainty and flux is inevitable. The last presentation highlights a new programmatic initiative creating academic programs for veteran and military health care as an emerging nursing specialty, exploring the facets of scholarly grounding for this nursing practice. With over 22 million beneficiaries in the Veterans Administration (VA) and 9.6 million in the Military Health System (MHS), this new specialty is based on the complex systems of care in the VA and MHS, advances in combat casualty care, the large influx of veterans and service members into the health care system post an extended period of conflict, and the growing health care needs of service members, veterans and their families. Overall, caring for our military service members and veterans is relevant, timely, and an extraordinarily important area of nursing research for a population who have endured personal sacrifice on behalf of others, and who live daily with the health effects from their service.

◀ ▶ go to PG.

Theory of Relational Certainty for Military Veterans

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Purposes/Aims: The purpose of this presentation is to describe a middle-range theory on the role of relational certainty in human interactions. The theory of relational certainty was drawn from the adaptive stress responses military veterans' display reintegrating into society. The significance of the theory rests in the attempt to explain how veterans internally construct meaning of stable relationships, with the level of relational certainty indicating a balance of biological and social links. A model of relational certainty demonstrating the concepts and associations form the foundation of the theoretical and empirical postulates. Discussion of the theory is systematized based on two main strands: nature and social nurture.

Internal Consistency of the Theory Developed; Concept Analysis Approach or Process Used: The process used to develop this theory included derivation, synthesis, and analysis. The development began with an in-depth review of existing literature on stress responses in the military veteran population. The information gathered was separated and blended to form two main foundational strands: nature and social nurture.

Logic Linking the Theory or Concept to Nursing Practice or Research Problem: The foundational strands are linked by pairs of predetermined genetically expressed responses and externally nurtured responses, or relagens. The relagens are comprised of varying amounts of partial genetic links and partial nurture links. If the genetic and nurture links are not balanced, or unduly affected by stress, then the opposing link compensates and becomes the dominant link altering the expression of relational activity. This then, without intervention, becomes the basis for replication and creates cycles of similar relationships expressions. Weiss Social Provision Theory (1974) defined some of the key relational intervention strategies: guidance (advice or information), reliable alliance (assurance that others can be counted on in times of stress), reassurance of worth (recognition of one's competence), attachment (emotional closeness), social integration (a sense of belonging to a group of friends), and opportunity for nurturance (providing assistance to others). The basic nature of any human being is based on three antecedents of relational certainty: 1) The level of stress associated with any recurring experience that affects the veteran's emotional response and cognitive responses colored by prior experiences and perception; 2) Relagens expression capacity of the appraisal of relational certainty- the process of placing a value on the certainty of the relationship within any given situation; 3) Relagens expression of the relational certainty- for or in coping with uncertain events.

Conclusions, Including a Statement about the Utility of the Theory or Concept for Nursing Practice or Research: This theory is comprised of knowledge resulting from nursing and related disciplines, addresses a utility for research, and suggests a balance of epigenetic and social links for explaining the process of determining meaning to the certainty of relationships within the military veteran population.

CARING FOR OUR VETERANS AND SERVICE MEMBERS

Sleep Disturbance in Veterans with a History of Moderate/Severe Traumatic Brain Injury

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Purpose/Aims: 1) To determine the feasibility and acceptability of collecting actigraphy and sleep diary data for one week from male Veterans with a history of moderate to severe traumatic brain injury (m/sTBI), 2) to characterize sleep-wake disturbances, and 3) to explore relationships among sleep disturbance and daytime functioning and mood.

Rationale/Background: TBI can result in long-term physical, cognitive and neurobehavioural impairments. Complaints of disturbed sleep, excessive daytime sleepiness and disorders of arousal are among the most pervasive, enduring and common sequelae of TBI. TBI is a common occurrence for military personnel returning from deployment, Veterans in general, and across all levels of TBI severity and the continuum of recovery, often evolving over time. Understanding the nature of sleep-wake disturbances is critical from the perspective of recovery from TBI because adequate sleep is essential for overall health and functioning even in the general public.

Methods: In this prospective, descriptive study, we evaluated detailed data about sleep habits and daytime consequences of impaired sleep. Veterans wore an actigraphy watch and completed a sleep diary for one week. An extensive clinical sleep interview was conducted and Veterans completed the Insomnia Severity Index, Epworth Sleepiness Scale, Functional Outcomes of Sleep Questionnaire and a qualitative interview about sleep during two study visits.

Results: The mean age of the 20 male Veteran participants was 50.6 (SD = 8.4), 60% were Caucasian; 50% reported an annual income between $15,000-34,999, 60% served in the army, and 65% were unemployed. Enrollment, attendance, and data collection was feasible and acceptable to Veterans. Moderate to severe insomnia was reported by 68% of the Veterans, and 55% experienced excessive daytime sleepiness depending on the situation. Usual bedtime was 10 PM and wake up time was 7 AM, however there was a wide range of sleep patterns, and great variability from night to night. Nearly 70% napped 1-2 times per day, 60% used sleep aids in the past month, and only half exercised at least once per week. Additional symptoms and relationships with other outcomes will be presented.

Implications: Knowledge of factors that contribute to sleep-wake disturbance in Veterans will help nurses address this significant public health issue. Based on the specific sleep problems, Veterans may benefit from nonpharmacological interventions and education.

Funding: This project was supported by the VISN 19 Mental Illness Research, Education and Training (MIRECC). Results are responsibility of the authors and do not necessarily represent the official views of the Veterans Administration.

◀ ▶ go to PG.

CARING FOR OUR VETERANS AND SERVICE MEMBERS

Unique Challenges of Aging in Place for Veterans

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Specific Aims: The aim of this presentation is to describe some of the unique challenges related to aging in place for Veterans as they face the end of life.

Rationale: The 2014 IOM report *Dying in America: Improving quality of life and honoring individual preferences near the end of life* [1]identifies that 'no one really knows whether, in the end, the death of a loved one occurred with the dignity that was hoped for, or to what degree the dying experience was marred by pain, fear, and discomfort, emotional or physical.' Veterans can be very vulnerable as they progress to the end of life, due to a disproportionate presence of mental disorders, particularly if they are homeless.[2] Continuity of care, isolation and a lack of advance care planning are just a tip of the iceberg for this population as they age in place and who are often unable or reluctant to access Veterans Administration (VA) health care services.

Methods: As part of a national study to define excellent palliative care for homeless veterans, individual semi structured qualitative interviews lasting 60-90 minutes were conducted with homeless veterans and key program stakeholders in Denver, CO and Providence, RI to explore barriers and facilitators to care provision (see text box). Using a snowball sampling approach participants were identified from a variety of VA homeless and palliative care contexts. Veterans self-identified as being 'homeless' also volunteered for interview from outreach settings. Qualitative theme analysis was applied to the textual data about the anticipated challenges of care provision and self-management related to aging in place at the end of life.

Results: Homeless Veterans (n=8) and key program stakeholders (n=8) identified 1) A safe and reliable place to be, food to eat; 2) Primacy of shelter where services can be delivered; 3) Reduction in stigma of Homelessness; 4) Adequate and effective program resources; 5) Flexible approach to determining veteran needs are key elements to improving palliative care delivery to homeless veterans.

Interview schedule:

- What are the issues in providing (receiving) health services to homeless veterans?
- What aspects work particularly well? When does the system not work well?
- How effective is the VA in providing end of life care?
- What do you think the goal should be in providing end of life care to homeless veterans?
- In an ideal world what would a program of end of life care for homeless veterans look like?

Implications: The findings augment understandings of palliative care and the aspiration of aging in place when one's place is 'of no fixed, regular and adequate nighttime residence'.[2] The study offers new perspectives on how to approach palliative care when uncertainty and flux are inevitable. Next steps include validation of these initial findings through field studies at six VA locations across the US and the development of policy, education and pilot program initiatives with key stakeholders.

References:
1. Institute of Medicine (IOM) 2014 *Dying in America : Improving quality of life and honoring individual preferences near the end of life*
2. Department of Veterans Affairs 2012 *Homeless Incidence and Risk Factors for Becoming Homeless in Veterans*

◀ ▶ go to PG.

Veteran and Military Health Care: An Emerging Nursing Specialty

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Purpose: Veteran and military health care is an emerging nursing specialty based on the unique attributes of the veteran and military service member population and health care delivery systems. With over 22 million beneficiaries in the Veterans Administration (VA)[1] and 9.6 million in the Military Health System (MHS)[2], this new specialty is emerging based on the complex systems of care in the VA[3] and MHS[2], advances in combat casualty care, the large influx of veterans and service members into the health care system post an extended period of conflict, and the growing health care needs of service members, veterans and their families.

Background: The MHS is fundamentally different than any other health system as its mission is to provide medical support to military operations worldwide. The MHS includes combat medical services, force readiness, health care delivery, public health, education and training, and research and development.[2] The VA is also unique in its mission to ensure veterans receive medical care, benefits, social support, and lasting memorials in recognition of their service.[3]

Process: To determine the need for grounding in an academic nursing specialty, a combination of ten focus groups, interviews, and brown bag sessions were conducted with key personnel in veteran and military health care and in academia in Colorado and the National Capitol Region of Washington, DC. There was overwhelming support for a specialty area of practice in veteran and military health care.

Outcomes: Specific needs of this population that were identified include maintaining a ready force, care during military operations, invisible and visible consequences of war, the effects of military service on health and aging, veteran and military culture, and veteran and military family dynamics. Additionally, there were many systems specific issues that cross between the VA and MHS related to health care, access to care, benefits based on disability, and policies/regulations at the federal level.

Conclusions: At the University of Colorado, College of Nursing, there is strong support for helping those who care for our military and veterans. To that end, new graduate academic programs are being proposed with the first course, *Veteran and Military Health Care Systems,* launching January 2015. Based on responses from the sampling, the next courses to be developed will be *Resiliency in Veteran and Military Families, Behavioral Health for Veterans and Service Members, and Current Issues in Veteran and Military Health Care*. Initially, courses can be taken for either credit or contact hours through Professional Development/Extended Studies. Graduate credits can be applied as electives in the PhD and DNP programs and in the future to a Graduate Certificate in Military and Veteran Health Care.

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◀ ▶ go to PG.

CHILD GROWTH

CORRELATES OF PHYSICAL STATUS AND LENGTH OF TIME IN FOSTER CARE AMONG FORMER FOSTER YOUTH

Angela L. Hudson

EAT, PLAY, GROW: PARENT CHILD EDUCATION TO COMBAT CHILDHOOD OBESITY

Ana J. Reyes, Susan Instone

THE RELATIONSHIP AMONG SCHOOL PLAYGROUND CONDITIONS AND PHYSICAL ACTIVITY LEVELS IN CHILDREN

Ipuna Black

HOW HAVE THEY GROWN? SIX MONTH OUTCOMES ON PREVENTING OBESITY THROUGH HOME VISITS

Elizabeth Reifsnider, David McCormick, Karen Cullen, Martina Gallagher, Michael Moramarco, Darya McClain, Lucy Reyna, Irma Pecina, Maribell Guzman

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THE IMPACT OF A HIT INTERVENTION ON HISPANIC PARENTAL PERCEPTION OF PRESCHOOLER WEIGHT

Kristine I. Gauthier, Bonnie Gance-Cleveland

SLEEP PATTERNS AND OBESITY IN A POPULATION OF HIGH RISK SCHOOL-AGE CHILDREN

Jessica Olson, Ellyn Matthews, Tiffany Callahan,
Heather Aldrich, Bonnie Gance-Cleveland

◀ ▶ go to PG.

Correlates of Physical Status and Length of Time in Foster Care among Former Foster Youth

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Aim: The aim of this pilot study was to describe correlates of physical and mental health status with length of time in the foster care system, among former foster youth, ages 18-25

Background: Young adults who are former foster youth (FFY) experienced early life adversity through physical or sexual abuse, or through physical neglect. Although research highlights the link between early life adversity and morbidity/mortality, little is known about correlates of mental/physical health status and length of time in foster care among former foster youth.

Methods: This was a descriptive, cross-sectional pilot study where physical and mental health status data were collected at baseline and three months later. Data collected were perceived health, systolic and diastolic blood pressures, BMI, depression symptoms, and length of time in foster care, as well as socio-demographic data.

Results: A total of 18 men and women, ages 18 to 25, participated. Mean age was 19.4 (SD=1.04); participants were primarily Hispanic (50%) and African American (43%). Average length of time in foster care was 8.7 years (SD=6.25); perceived health at baseline and three months later was reported as “very good.” Mean BMI, depression symptoms and systolic blood pressure, however, were not within normal limits according to adult health maintenance guidelines. Using spearman correlation, years in the foster care system was significantly associated with BMI at .45 and depression symptoms at .52. Baseline depression symptoms and BMI also were significantly associated with a correlation of .69. There also was a significant negative correlation at .70 between perceived health and diastolic blood pressure at baseline. Significant correlates at three months, after baseline data collection, also will be presented.

Implications: Based on Heart, Lung, and Blood Institute guidelines as well as US Prevention Services Task Force guidelines for adult health maintenance, former foster youth participants scored out of normal range on blood pressure, BMI, and depression symptoms. These preliminary findings are consistent with literature documenting the association between early life adversity and poor health outcomes and highlight the need for health maintenance interventions targeted to former foster youth.

go to PG.

Eat, Play, Grow: Parent Child Education to Combat Childhood Obesity

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Project Aim: The purpose of this evidence-based project was to implement the National Institute of Health's Eat, Play, Grow program in San Diego North County Head Start Centers. The program educates parents and children on nutrition, exercise and sleep to address childhood obesity. The goal is for parents and children to use this knowledge to make healthier lifestyle choices.

Project Background: Childhood obesity continues to be a life-long health problem that may lead to complications such as Type II Diabetes and cardiovascular disease. The Center for Disease Control and Prevention (CDC) estimates that obesity affects 17% of children and adolescents in the United States; triple the rate from one generation ago. Providing parents and children education on how to make healthy choices can have long lasting effects that may prevent poor health choices later in life.

Project Approach: Parents and children between the ages of two and five years of age were recruited to participate in an 11-week lesson plan that included hands-on educational activities focused on nutrition, physical activity and sleep. Parents were Spanish speaking only therefore lessons were translated to provide linguistically relevant material to the participants. Sessions lasted 90 minutes; a pre and post test given to the parents to measure improvements in knowledge. Each session incorporated the children into the lessons through play, reading and physical activities such as dancing and other age appropriate activities.

Outcomes: The desired outcome of this program was to improve knowledge about nutrition, exercise and sleep among parents and children enrolled in a Head Start Program. The project is currently underway; outcome data are pending. Factors influencing the feasibility of the project will also be reported.

Implications: The World Health Organization confirms the need for early and effective interventions geared towards reversing the high rates of obesity around the world. The education provided by this comprehensive program provides parents with the tools they need to make better nutritional choices and an understanding about the importance of physical activity and sleep for children and adults alike. Understanding how to successfully educate young families about making healthy choices with programs that are effective is imperative to decrease the number of obese children in the nation.

◀ ▶ go to PG.

CHILD GROWTH

The Relationship among School Playground Conditions and Physical Activity Levels in Children

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Purpose: The purpose of this study was to determine how Target Area conditions [i.e., supervision, loose equipment, offering an organized physical activity (PA) program] are associated with PA levels in elementary school children.

Background: Almost 20% of children aged 6 to 11 years are obese in the United States, tripling over the last ten years. The rise in childhood obesity challenges nurses in their efforts to improve community health and sustainability. A decrease in physical activity (PA) levels has been associated with an increase in obesity. Increasing PA levels in children while at school can help them reach the recommended 60 minutes of daily moderate to vigorous physical activity (MVPA). A playground environment is one place where children can have the opportunity to increase MVPA outside of physical education (PE).

Methods: The sample consisted of two Henderson, Nevada elementary school playgrounds which were divided into 35 Target Areas (a predetermined observation area in which students could potentially engage in PA) that were each observed once in the morning for two weeks before school hours using System for Observing Play and Leisure Activity in Youth and Recreation in Communities. School B offered a Jog and Walk Stars (JAWS) PA program every day but Wednesdays, and school K offered free play and loose equipment every morning. Each school had approximately 660 students (total of 1320 students). Descriptive statistics was used to analyze the data using SPSS version 22.

Results: At School K, 44% of the Target Areas were supervised and offered loose equipment. At School B, 33% of the Target Areas were supervised and 11% offered loose equipment. At both schools, children participated in MVPA in areas that were supervised compared to areas that were not. Only School B offered an organized PA program in one area, and 99% of the children in this area participated in MVPA, regardless of gender, compared to 57% in other areas. At school K, a higher percentage of children were found to participate in MVPA with loose equipment (44%) compared to areas without loose equipment (39%). Both genders used the jump ropes, tetherballs, and balls for four-square. Boys also used loose balls to play soccer, kickball, and basketball. At School B, minimal loose equipment was offered, which resulted in children participating in the JAWS program.

Implications: When loose equipment is offered on the playground, it may increase PA in children, especially in boys. It is imperative to offer various types of loose equipment that can attract both genders. When an organized PA program is offered, such as JAWS, this can increase MVPA in children. Offering an organized PA program may decrease the need for supervision over large playground spaces because the children are condensed into a smaller area space. A playground environment assessment to identify conditions that promote MVPA may be one avenue to address the need for increasing MVPA levels in children in general, in addition to organized PE classes.

◀ ▶ go to PG.

CHILD GROWTH

How Have They Grown? Six Month Outcomes on Preventing Obesity through Home Visits

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Purpose/Aims: The goal of **Preventing Obesity though Early Feeding and Parenting Guidance** is to see if home visits by promotoras can prevent obesity from developing in a sample of infants in a population of low-income WIC participants of Mexican descent in a southern state. Child obesity (weight for length among children less than 2 years of age) has not been widely documented in low-income Latino children. However, older Latino children are among those with the highest rates of obesity. Home visits by para-professionals (promotoras/community health workers) have not been investigated for their efficacy in addressing a national problem within the Latino population.

Methods: Pregnant women of Mexican descent whose pre-pregnancy BMIs were 25 or greater were recruited during their last trimester of pregnancy to participate in the study. After baseline data were collected, the mothers were randomly assigned to receive educational promotora home visits or only data-collection home visits by a blinded data collector. At the home visits, the promotoras provided breastfeeding support and teaching on appropriate child nutrition, positive parenting behaviors, infant sleep hygiene, physical activity for infants. The data presented here are for 6 months after the child's birth. Anthropometric data was collected at each visit. Food stamp use data is based on a yes/no question regarding the participant's involvement with the program. Breastfeeding data was obtained from a questionnaire about growth and nutrition. The question, "Are you using breast, bottle, or cup" allowed for up to three responses. Those selecting breast or bottle were prompted to provide, in number of weeks, how long they had been using those methods.

Results: When the infant was six months old the measures were obtained from a sample of 119 mother/infant pairs (intervention=63; control = 56) to examine differences between the intervention and control groups. Although not statistically significant at this time, the intervention group has a lower weight for height Z score and percentile than does the control group at six months of age. Neither group shows a prevalence of weight for length percentile approaching 85%.

Implications: Contrary to our expectations, home-based breastfeeding support did not result in significant increase in the breastfeeding prevalence among the intervention group nor did it lessen the amount of bottle-feeding that occurred along with breastfeeding. The control group actually had lower rates of bottle-feeding and supplementing breastfeeding with bottle-feeding. No statistically significant differences were seen in the mothers' sensitivity to infant feeding cues. Many overwhelming social issues have emerged during the course of the home visits to the extent that child feeding is a lesser issue than finding stable housing, employment, weekly food, etc. The rate of food insecurity is high among the sample.

Funding: NIH/NIDDK 5R01DK096488-03 awarded to research team.

◀ ▶ go to PG.

The Impact of a Hit Intervention on Hispanic Parental Perception of Preschooler Weight

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Purpose/Aim: This pilot study was undertaken to examine the impact of a HIT tool on Hispanic parental perception of their preschooler's weight status.

Rationale/Background: The prevalence of overweight and obesity in preschoolers has increased significantly over recent decades, with some of the highest rates in Hispanic preschoolers. Weight related health problems and cardiovascular risk factors often present during early childhood making early identification and interventions essential for prevention of future health problems in this population. Parental perceptions regarding their child's weight status are key in obesity prevention; research examining Hispanic parental perceptions in preschoolers has found parents frequently underestimate excess weight in their children. Previous research is limited and has not examined whether it is possible to influence parental perceptions. Health Information Technology (HIT) is an innovative approach to providing parents with personalized tailored education about their preschooler's weight status. This pilot study was undertaken to examine the impact of a HIT tool on Hispanic parental perception of their preschooler's weight status.

Methods: A quasi-experimental one-group pre-test, post-test design was used to examine the impact of a bilingual HIT tool, HeartSmartKids^{TM}, on Hispanic parental perception of preschooler weight status. HSK™ was adapted to ascertain parental perception of preschooler's weight status and was used to implement the tailored educational intervention in the study. The intervention included discussing the child's actual weight status with the parent's perceived weight status of their child based on parental response to the three perception (word, linear and circular silhouette) presentations.

Results: Pre-intervention, about half of parents underestimated their child's weight status. Parents of overweight/obese children were more likely to have inaccurate perceptions of their child's actual weight, regardless of assessment presentation (word ($p = .0001$), linear silhouette ($p = .0001$), circular ($p = .0001$)). Accuracy of parental perception did not differ between circular and linear silhouette presentation. Modest improvements in accuracy were seen post intervention on all three measures, with statistically significant findings on word perception presentation ($p = 0.039$). Parental BMI was associated with perception accuracy (word, $p = .009$; linear silhouette, $p = .022$), suggesting parents with normal BMIs are less able to see excess weight in their preschoolers.

Implications: Findings from this study suggest individualized educational interventions using HIT may be a viable means by which to impact parental perceptions. This research highlights HIT as a promising tool for influencing parental perceptions through tailored educational interventions. Assessment of the accuracy of parental perceptions, coupled with a deeper understanding of those perceptions will inform clinicians and researchers regarding recognition, prevention, and treatment of preschooler overweight. HIT offers a unique, customizable, and contemporary approach (and opportunity) to better understand and influence parental perceptions to ultimately address pediatric obesity.

◀ ▶ go to PG.

Sleep Patterns and Obesity in a Population of High Risk School-Age Children

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Purposes/Aims: To characterize the relationship between childhood obesity and sleep duration in a high-risk population of school-age children. Data was gathered from two school-based health centers in Michigan, one urban and one rural.

Rationale/Conceptual Basis/Background: Despite a public health focus on childhood obesity, the prevalence remains alarming, with 34.2% of 6-11 year olds in the overweight or obese categories (body mass index [BMI] ≥ 85th percentile) nationwide. The Centers for Disease Control and Prevention (CDC) recommends at least ten hours of sleep per day for school-age children. Research demonstrates a potential link between insufficient sleep and obesity in both children and adults.

Methods: In this secondary data analysis, we will evaluate data about sleep habits collected in a study that trained school-based health center providers on childhood obesity guidelines. The HeartSmartKids™ survey was completed by 5- to 12-year-old children with the assistance of their parents during well-child or sports physical visits to the school-based health center. Hours of sleep nightly was calculated from child or parent-reported "normal" bed time and wake-up time. BMI percentile was calculated from standardized measurements of height and weight using the sex-specific CDC BMI-for-age growth charts. A chi-squared test was performed to compare the rates of overweight and obesity in urban and rural students who reported ten or more hours of sleep versus those who slept less than ten hours per night.

Results: Forty-seven rural and 62 urban HeartSmartKids™ surveys were completed. In this sample, 31.8% of rural youth and 50% of urban youth were obese (≥95th percentile on CDC BMI-for-age growth charts) ($p=0.08$). An additional 14.9% of rural youth and 17.2% of urban youth were overweight (≥85th to <95th percentile on CDC BMI-for-age growth charts) ($p=0.079$). Mean age was 9.5 years in the rural group and 11.8 years in the urban group ($p<0.001$). The race/ethnicity of the rural group was 100% non-Hispanic white, while the urban group was 100% non-Hispanic black. Gender differences were nonsignificant ($p=0.802$). Bedtimes and wake-up times were variable across the sample, ranging from 8:00 PM to 11:00 PM, and 5:00 AM to 9:00 AM, respectively. Nocturnal sleep times range from 6 to 12 hours. Results characterizing sleep patterns and the relationships among weight, sleep duration/patterns and other factors are pending. It is expected that nocturnal sleep duration < 10 hours will be associated with higher rates of obesity, based upon a review of the literature.

Implications: Knowledge of factors that contribute to childhood obesity will help nurses in multiple settings address this significant public health issue. Parents and children may benefit from education about the importance of adequate sleep duration and regular sleep patterns in maintaining a healthy body weight.

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◀ ▶ go to PG.

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CHILD HEALTH

INTEGRATING INTERPROFESSIONAL TEAM TRAINING IN THE PEDIATRIC LIFE SUPPORT PROGRAM

Mary J. Fagan

SELF-REPORT MEASUREMENT OF STATE ANXIETY IN CHILDREN

Jan Sampson

PARENTAL BARRIERS TO CHILDHOOD IMMUNIZATIONS

Catherine A. Ferris

A PEDIATRIC MULTIMEDIA APPROACH IN INHALED BRONCHODILATOR MEDICATION EDUCATION

Sophia Vanhkham, Amanda Wells, Carol J. Stevens, Rene C. Moya, Kimberly D. Vana

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REDUCING ANTIPYRETIC USE FOR LOWGRADE FEVERS IN OTHERWISE HEALTHY CHILDREN

Tricia A. Templet, Susan Instone

MANNITOL VS. 3% NACL IN MANAGEMENT OF PEDIATRIC SEVERE TRAUMATIC BRAIN INJURY

Asma A. Taha

PEDIATRIC LEAD SCREENING IN THE UNITED STATES: A COMPARATIVE ANALYSIS

Genevieve Sykes, Angelia Trujillo, Bethany Buchanan

VALIDATION OF THE PEDIATRIC EARLY WARNING SCORE IN THE PEDIATRIC SPECIALTY POPULATION

Carolyn Montoya, Terri L. Young

FACTORS ASSOCIATED WITH HIGH RISK INFANT FOLLOW-UP COMPLIANCE

Martha Grant Fuller, Mary Barger, Lois Howland, Susan Hintz

◀ ▶ go to PG.

CHILD HEALTH

Integrating Interprofessional Team Training in the Pediatric Life Support Program

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Background/Rationale: Empirical evidence supports health care delivered by well-functioning teams leads to better outcomes. Effective teamwork behaviors between healthcare team members have been linked to improved outcomes including mortality rates, cardiac arrests, nosocomial infections, and complications. Organizations including the Institute of Medicine, the Joint Commission, and the Agency of Healthcare Research and Quality have advocated for team training to improve communication and support an organizational culture supportive of patient safety. The methods and related expenses of team training initiatives vary considerably, with programs lasting from several hours to days. This disparity has raised concern from those who seek to implement the IOM recommendations in a manner that will achieve the most return on investment.

In a unique and cost effective approach, Thomas et al (2010) conducted a randomized, controlled study incorporating team training into an existing Neonatal Resuscitation Program (NRP). More frequent teamwork behaviors and shortened duration of simulated resuscitations were demonstrated after two-hour team training was added to the standard NRP curriculum. The proposed study is to extend the work of Thomas et al in the pediatric environment.

Study Purpose/Aim: The specific aim is to evaluate the effectiveness of a two-hour team training program incorporated into an established Pediatric Advanced Life Support (PALS) curriculum relative to resuscitation performance and the presence of specific teamwork behaviors compared to control groups using the standard PALS curriculum alone.

Methods: A randomized, controlled trial will be conducted. Participants will be randomly assigned to either intervention or control groups. The independent variable will be a standardized two hour teamwork curriculum that will include didactic presentations and simulation. Teamwork observers, blinded to intervention status and tested for inter-rater reliability, will view Megacode resuscitation videos and score PALS performance based on established criteria. A sample size of 120 participants (60 intervention and 60 control) will permit finding a moderate effect size of 0.80 (S.D. units) on a continuous variable at 80% power, and a one tailed alpha level of 0.05.

Expected Outcomes/Implications: The primary outcome will be the resuscitation performance score in the two groups, which will be examined using a difference in means. Based on descriptive analysis of associated variables, a linear regression model may be fitted to look at the multivariate nature of the contribution of factors such as communication style, years in position, etc. Additional outcomes include the presence of specific teamwork behaviors.

The results of this study will be used to determine whether team training should be incorporated in current PALS, BLS and NRP courses on a regular basis. If the two-hour training demonstrates a positive impact on PALS performance and/or teamwork behaviors and/or it could become a standard component of all interprofessional resuscitation curricula.

References:
Thomas, E.J., Williams, A.L., Reichman, E.F., Lasky, R.E., Crandell, S. & Taggert, W.R. (2010). Team training in the neonatal resuscitation program for interns. *Pediatrics, 125,* 539-546.

◀ ▶ go to PG.

CHILD HEALTH

Self-Report Measurement of State Anxiety in Children

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Purpose/Aims: This purpose of this study was to examine the concurrent validity and reliability of a 0-10 state anxiety scale to provide a valid and reliable children's self-report state anxiety scale.

Rationale/Conceptual Basis/Background: Anxiety is one of the most common reactions experienced by children when confronted with most healthcare encounters. This can have both immediate and delayed adverse effects. Often assessment and subsequent management of state anxiety is not performed because of the lack of a clinically useful state anxiety scales.

Methods: A descriptive correlation survey design was used to determine reliability and concurrent validity. A convenience sample of 88 children, 7-13 years, was recruited from the pre-operative setting at the University of California Davis Medical Center, Children' Surgery Center. Pearson's correlation and Spearmen's rank correlation were used to assess the association of the state portion of the State-Trait Anxiety for Children (STAIC) with the Numeric 0-10 State Anxiety Scale and analyze the scale test-retest reliability. Statistical significance was declared at the 0.05 level. The Spielberger anxiety score and the anxiety scale were highly correlated with Pearson $r=0.86$ ($p<0.0001$) and 95% confidence interval 0.79–0.91; this was confirmed using the Spearman ρ. Test and retest values for the anxiety scale were also highly correlated with Spearman $\rho=0.95$ ($p<0.001$). Cohen's inter-rater agreement score was $\kappa=0.868$ ($p<0.001$).

Results: The findings from this study show strong correlations between the Numeric 0-10 State Anxiety Scale and the state portion of the State-Trait Anxiety Inventory for Children. These findings provide continuing support for the 0-10 scale's concurrent validity. In addition, the strong correlations reported for the 0-10 scale's test, retest provides new evidence for the scale.

Implications: This study supports the validity and reliability of the Numeric 0-10 State Anxiety Scale to assess state anxiety in children as young as 7 year old. A clinically relevant anxiety scale can help clinicians identify children at risk for adverse consequences; therefore, appropriate healthcare interventions may be provided to the most vulnerable children.

Funding: This research was supported in part by a National Institutes of Health (NIH) grant (number 2G11 HD043594-07).

◀ ▶ go to PG.

Parental Barriers to Childhood Immunizations

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Rationale/Background/Purpose: Childhood immunization is one of the most successful primary preventive services, resulting in a 98-100% decrease in morbidity for most childhood vaccine-preventable diseases. Childhood immunization coverage levels are at all time highs; however, there is a growing trend toward parental refusal of vaccines through personal beliefs exemptions (PBEs) resulting in multiple vaccine-preventable disease outbreaks. From 1978 to 2013, overall California PBE rates for children entering kindergarten have increased, on average, by almost six-fold. During the same time period, San Diego County PBE rates were consistently, at least 20% above state averages. Moreover, research contributing to examination of influential factors to childhood immunization uptake is paramount to the continued control and eradication of childhood vaccine-preventable diseases. When health care providers and health policy experts develop childhood vaccine education materials and immunization laws they need to obtain sound knowledge of the populations they serve. The purpose of this descriptive, correlational cross-sectional survey study is to investigate multiple factors that influence parents' childhood vaccination decisions.

Conceptual Basis/Aims: The social-ecological model (SEM) will guide the study. The SEM describes multiple levels of factors, i.e., intrapersonal, interpersonal, institutional, community and policy, influencing parental barriers and uptake of childhood immunizations. The study has two specific aims: 1) to describe parental barriers to childhood immunizations, and 2) to describe the relationships among parental barriers, demographic, and socio-ecological factors, parental health literacy, child's immunization status, and parent's intent to immunize.

Methods: The study will use a descriptive, correlational, cross-sectional survey design to examine data from study participants' completion of postal service or Internet-delivered standardized instruments, and a socio-demographic survey. Study participants will be parents with children birth to 6 years of age, living in San Diego County, California, presenting to a pediatric, family practice or community health clinic for a well-child visit with the ability to read and write English or Spanish. Participants will be recruited using advertisements via pre-survey postcards, flyers, posters, emails, and clinic newsletters. Based on a power analysis, the sample size was set at 220 study participants.

Pending Results: Descriptive and inferential statistics will be used to analyze the results. Bivariate and multiple regression analysis will be used to determine relationships between the Searching for Hardships and Obstacles To Shots (SHOTS) instrument's three subscale scores and total SHOTS score, the Parental Health Literacy and Activities Test (PHLAT-8) scores, demographic factors, and socio-ecological factors.

Implications: The results are pending. The results of this study will enhance existing knowledge regarding barriers to childhood immunization allowing health care professionals and health policy makers to develop and tailor educational information and to inform the development of immunization policies.

◀ ▶ go to PG.

A Pediatric Multimedia Approach in Inhaled Bronchodilator Medication Education

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Purposes/Aims: The purpose of our project is to apply a multimedia approach regarding proper asthma prevention methods for educating school-aged children with asthma. The aim is to increase rates of daily, long-term, inhaled, bronchodilator medication use and increase understanding of correct administration of inhaled, rescue inhalers among school-age children.

Rationale/Background: In the United States, asthma affects 7.1 million children, making asthma one of the most common chronic diseases in childhood (American Lung Association [ALA], 2014). Asthma is the third-leading cause of hospitalization for children. In 2011, 169 children died due to complications from asthma. Annual costs to healthcare, both directly and indirectly, amount to $56 billion dollars. Research shows that asthma education both promotes self-management and improves patient outcomes. The use of multimedia education, in particular, has a potential to produce positive results in pediatric patients.

Undertaking/Best Practice/Approach/Methods/Process: Baccalaureate and doctoral nursing students and a film & media studies student collaborated to develop a multimedia approach to prevent asthma exacerbations in school-aged children. An educational video was created by nursing and film students in the Barrett Honors program at Arizona State University. The video depicted a school-aged child experiencing an asthmatic crisis while playing soccer and shows how the effective use of a bronchodilator inhaler may prevent an exacerbation. A pilot test was conducted by a doctoral student at a family care clinic in northern New Mexico. The Asthma Usage Questionnaire and the Asthma Control Test were provided to 12 asthmatic children, ages 8-11. Pilot test data were analyzed using a Wilcoxon signed-ranked test to compare each child's scores on the Asthma Control Tests, before and after the multimodal approach. The multimedia approach included both the video and a children's picture book that reminded pediatric patients of asthma prevention methods and the importance of taking their daily medications. The children's book provided additional educational content on asthma management in a creative and age-appropriate way.

Outcomes Achieved/Documented: The pilot test of the video showed that there was a statistically significant increase in parents' reports of medication adherence (z = -2.47, p = .01, n = 12) with a medium effect size (0.5) and also in asthma control (z = -0.749, p = 0.454, n = 12) with a small effect size (0.1). The addition of the children's book to the multimedia approach has not yet been evaluated.

Conclusions: A multimedia approach to client education should be considered by primary care providers as a method to improve children's and parents' understanding of asthma and encourage open dialogue between provider, parent, and child. A multimedia approach to education has the potential to improve a child's self-management of asthma, and ultimately, reduce the rate of hospitalizations related to asthma complications. Retrieved from http://www.lung.org/lung-disease/asthma/resources/facts-and-figures/asthma-children-fact-sheet.html

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Funding: American Lung Association (ALA). (2014, September). *Asthma & children fact sheet*. Retrieved from http://www.lung.org/lung-disease/asthma/resources/facts-and-figures/asthma-children-fact-sheet.html

go to PG.

CHILD HEALTH

Reducing Antipyretic Use for Lowgrade Fevers in Otherwise Healthy Children

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Project Aim: The purpose of this evidence-based practice project was to identify knowledge among pediatric emergency nurses about the benefits and myths of fever in otherwise healthy children and to decrease the use of antipyretics to allow for normal physiologic response in lowgrade fevers.

Background: Fever phobia remains a prominent issue in the pediatric population, with fever being the primary chief complaint for after-hours calls, sick office visits, and urgent care and emergency department utilization. Fever phobia exists in both parents and healthcare providers, as evidenced by the quest to return the child to a state of normothermia. While most infants and children will experience fever at some point, fevers under 38.5ºC (101.3ºF) are considered benign in those who are healthy. Therefore, no pharmaceutical intervention is typically needed. However, research consistently demonstrates pediatric nurses often medicate patients for such lowgrade fevers.

Project Approach: Participants in an educational intervention to reduce inappropriate antipyretic use included 54 registered nurses employed in a major metropolitan pediatric emergency care center.

Pretesting evaluation was conducted prior to a didactic presentation on the pathophysiology, physiologic benefits, and common myths regarding fever. Immediate posttest results were evaluated. A 3-month follow-up survey will be administered to evaluate retained knowledge. Evaluation of antipyretic administration rates for a three month period after the education intervention will be compared to the same time period immediately before to evaluate reduction in use of antipyretics based on standardized procedures for fevers less than 38.5ºC (101.3ºF).

Outcomes: Analysis of the change between the pre- and posteducational intervention demonstrated only an 8% increase in knowledge among pediatric emergency nurses. Data regarding retention of knowledge and change in the use of antipyretics is pending.

Implications: Given the persistent lack of knowledge and tendency to over-treat lowgrade fevers in infants and children among the pediatric nurses in this setting, fever phobia may persist and continue to drain resources from an already overextended area of pediatric primary care. Presenting nurses with additional education to strengthen their knowledge of the physiologic benefits of fever and to dispel myths surrounding its dangers may help to bring about change in the culture of fever phobia.

◀ ▶ go to PG.

CHILD HEALTH

Mannitol vs. 3% NaCl in Management of Pediatric Severe Traumatic Brain Injury

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Objective: To investigate the relationship between the type of hyperosmolar therapy used in treating elevated intracranial pressure and the outcome of children with severe traumatic brain injury (TBI). Two outcomes were measured, length of stay in ICU (ICU LOS) and disposition status at discharge.

Design: A retrospective, descriptive correlation design.

Setting: Level 1 pediatric trauma center in Southern California.

Patients: Children 8 to 18 years old admitted with isolated severe TBI (Glasgow Coma Scale score on admission 3-8) between January 2003 and January 2009. All these children had a documented abnormal head computed tomography scan (CT scan) on admission. Children with increase intracranial pressure were treated with either Mannitol, 3% NaCl, or combined therapy of Mannitol and 3% NaCL.

Interventions: None.

Measurements: Children (n=96) admitted with isolated severe TBI had a median age of 13 years and documented brain injury on CT scan. The median GCS was 3 (range 3-8) on arrival to the Emergency room as well as at the time of ICU admission. Children were divided into 4 groups depending on the type of treatment used. Study outcome were neurological disposition status on discharge as measured using a modified Pediatric Cerebral Performance Category scale (PCPC) and Length of stay (LOS) in ICU.

Results: Significant relationship was documented between the type of hyperosmolar therapy used and LOS in ICU. Children who received Mannitol had the shortest LOS and the highest mortality rate of 80% while the group who received 3% NaCl had the longest LOS in ICU. The group who received combined therapy of Mannitol and 3% NaCl had the lowest mortality rate which may suggest of better modalities to manage increased ICP's.

◀ ▶ go to PG.

Pediatric Lead Screening in the United States: A Comparative Analysis

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Purposes/Aims: The purpose of this project is to identify how pediatric lead screening is currently being performed in the United States. Data will be obtained from publicly available state based websites. The data will then be compared and contrasted between each of the 50 states and against current screening recommendations from the CDC (Centers for Disease Control and Prevention). This will be done in order to identify whether pediatric lead screening is uniform or varied in the United States and if screening is meeting current recommendations. The analysis, synthesis and practice implications of pediatric lead screening will included in the final project. The aim of this project is to policy makers and health care providers insight into how pediatric lead screening is being approached currently and whether these approaches meet current CDC recommendations.

Rationale/Background: A state-by-state comparison of pediatric lead screening approached does not exist, nor does a comparison of whether each state's recommendations meet the CDC's current recommendations. The hypothesis for this project is that there is much variation between states on how they approach lead screening and many are not screening using the CDC's current recommendations.

Undertaking/Best Practice/Approach/Methods/Process: The research design is a comparative analysis. The goal is to systematically identify emerging trends and disparities in data. In this project the methods being analyzed are defined as each state's approach to pediatric lead screening. The researcher obtained data from publically available state run websites. This data included information from each state regarding their pediatric lead screening reporting and practices.

Outcomes Achieved/Documented: Data analysis is still in process.

Conclusions: Will be dependent on data analysis.

go to PG.

Validation of the Pediatric Early Warning Score in the Pediatric Specialty Population

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Introduction: Up to 3% of pediatric inpatients experience a code event with high mortality (Tucker, Brewer, Baker, Demeritt, & Vossmeyer, 2009). Up to 14% of these arrests happen outside the intensive care unit (Demmel, Williams, & Flesch, 2010). Up to 73% of codes or other serious adverse events are frequently preceded by a period of clinical deterioration and physiological instability that if noted, provides opportunity for intervention, with improved patient outcomes. This is known as failure to rescue, with rates of 703/1000 (Miller & Zhan, 2004). Focus shifted towards early recognition of clinical deterioration (Demmel, Williams, & Flesch, 2010). Monaghan (2005) developed an objective Pediatric Early Warning Scoring (PEWS) Tool, which scores the three clinical dimensions of behavior, cardiovascular, and respiratory. Each dimension is scored from 0-3, with a possible total score of 9. A critical PEWS score is a score of 3 in any one dimension or a total score of ≥ 4 and is suggestive of clinical deterioration. An action algorithm with escalating interventions was developed for use in combination with the scoring tool (Demmel, Williams, & Flesch, 2010). This study used a modified version of the PEWS tool. The modified PEWS tool has been validated in the general pediatric population with a sensitivity of 62% and specificity of 89% (Skaletzky, Raszynski, & Totapally, 2011), but never validated in the pediatric specialty population. The purpose of this study was to validate the tool in this population.

Methods: Data was gathered via retrospective chart review using the modified PEWS. Inclusion criteria: charts of any renal, oncology, or hematology patient ages 1 month - 18 years admitted to the Pediatric Special Care Unit with a code, rapid response team (RRT) call, or transfer to the Pediatric Intensive Care Unit. Charts were identified through review of admission logs from the PICU, code logs, and RRT logs from January 1, 2011 - December 31, 2013. Chart reviews conducted via single investigator. The charts were scored every 4 hours using the PEWS tool for 24 hours preceding the code, RRT, or transfer. Inter-rater reliability of the PEWS tool established through having 3 expert pediatric nurses score 10% of the charts. Data points included age, medical service, type of event, reason for event, whether or not there was a critical PEWS, the mean PEWS score, time from first critical PEWS to event, time from first documented intervention to event, and difference between these two times. The study is currently in the data analysis phase.

Implications for Practice: The original PEWS tool was shown to identify clinical deterioration in patients over 11 hours prior to a code event (Akre et al., 2010). When surveyed, staff and providers agreed the original PEWS tool and action algorithm enhanced communication among team members, with intervention less dependent on level of experience (Demmel, Williams, & Flesch, 2010). Use of the tool and action algorithm also increased the number of days between code events, from 299 to 1,053. This improvement in patient outcomes was sustained.

◀ ▶ go to PG.

CHILD HEALTH

Factors Associated with High Risk Infant Follow-Up Compliance

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For The CPQCC-CCS HRIF Executive committee

Purpose: The purpose of this study is to determine factors associated with compliance with the second recommended High Risk Infant Follow-up (HRIF) clinic visit. This is part of an ongoing quality of care improvement project performed in partnership with California Children's Services and the California Perinatal Quality Care Collaborative-CCS HRIF Quality of Care Initiative.

Background: Premature, high risk infants, have well described risks of adverse neurodevelopmental outcome. Systematic follow-up of these infants allows for timely identification of neurodevelopmental deficits and referral for services to improve long-term outcomes. California Children's Services (CCS) mandates CCS licensed neonatal intensive care units (NICUs) in California to provide high-risk infant follow-up (HRIF) services to eligible infants. Referral and outcome data from the three recommended visits are reported in a mandatory web based quality improvement data system, the High Risk Infant Follow-up Quality of Care Initiative (HRIF-QCI). This system enables quality improvement activities for NICUs and HRIF programs. Compliance with recommended follow-up is low, limiting the ability of HRIF programs to provide comprehensive services and decreasing the ability or NICUs to address quality of care measures in light of long term morbidity.

Methods: This will be a descriptive correlational study of prospectively collected aggregate, de-identified data from the HRIF-CQI data system.

Inclusion Criteria: birth year 2010, very low birth weight (< 1500 grams), seen for the first recommended HRIF visit.

Exclusion Criteria: infant deceased, residence in a pediatric sub-acute facility, infant discharged at time of first visit because the family withdrew. Subgroup analysis will be performed on this population to identify factors associated with withdrawal from the program at the time of the first visit.

Statistical analysis will include descriptive statistics comparing those compliant with the second visit and those noncompliant, looking at important factors known or postulated to be important.

The pattern and distribution of missing data will be examined to determine how to manage missing data in the analysis.

Crude and adjusted odds ratios will be calculated for completion of the second HRIF visit. Multivariate logistic regression will be used to account for confounding variables available in the data system. Confounders will be left in the model if they have been defined by the literature or if they change the effect estimate by 10%. Established confounders include psychosocial factors: public insurance, caregiver level of education, race, distance from home to HRIF clinic (using zip code); medical factors: chronic lung disease, intracranial hemorrhage or PVL, and gestational age. We will assess first visit factors as possible confounders: outcome at first visit, caregiver employment, or enrollment in early intervention services at the first visit.

This project has been certified as exempt from IRB review under 45 CFR 46.101(b) category 4 by the institutional review boards of the University of San Diego and UC San Diego.

Results: Pending.

Implications: Results of this project will inform clinical practice by identifying factors associated with poor follow-up. This information can be used to develop focused efforts to increase compliance and improve care to high risk infants.

◀ ▶ go to PG.

CHILDREN WITH SPECIAL HEALTH CARE NEEDS

INPATIENT FAMILY CENTERED CARE FOR CHILDREN WITH SPECIAL HEALTH CARE NEEDS

Kristy Schmidt, Cara Gallegos

PARENTING A CHILD WITH AUTISM: FILIPINO AMERICAN BELIEFS AND PERCEPTIONS

Sharee B. Anzaldo

RELIGIOSITY, SPIRITUALITY, AND HARDINESS IN PARENTS RAISING A CHILD WITH A DISABILITY

Brittni Carr, Susanne Roper, Barbara Mandleco,
Donna Freeborn, Tina Dyches

go to PG.

CHILDREN WITH SPECIAL HEALTH CARE NEEDS

Inpatient Family Centered Care for Children with Special Health Care Needs

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Purpose and Problem Statement: Children with special health care needs (CSHCN) represent approximately one in seven children under the age of 18 in the United States. This population utilizes health care resources more frequently and represents significant portion of hospitalized children. Involving parents in the process of being a part of their child's health care team may allow them to better care for their child while in the hospital and upon discharge home. Family centered care (FCC) serves as the standard of care in pediatric institutions to reach improved levels of care and outcomes. The purpose of this project was to review the current evidence pertaining to the effects of family centered care in parents of CSHCN while hospitalized. The PICOT format was used to develop the following question: In parents (P) of children with special healthcare needs, does family centered care (I) during inpatient hospitalization (T) improve child and family outcomes (O)?

Methodology: Databases including CINAHL, Academic Search Premier, Psych Info, and Medline, were searched (2003 to present) using the following keywords: children with special healthcare needs, CSHCN, families, parents, family centered care, FCC, outcomes, experiences, pediatric, hospitalization. An ancestry search was also performed. The titles and/or abstracts from 44 articles were reviewed with a total of 21 being relevant to the clinical issue. Studies were evaluated for level of evidence and relevance to the review purpose.

Results: Findings supported many positive aspects of FCC for parents of CSHCN. In particular, FCC seemed to help with overall stability of the family unit during hospitalization. Other important aspects of FCC include improved communication between care givers, providers and parents, assistance with psycho-social concerns, improved behavioral adaptation, decreased length of stay, and overall improvement in family satisfaction.

Significance: There is a great deal to consider when caring for children with special healthcare needs and their families during hospitalization. Nurses bridge relations between ancillary staff, providers and parents and they also serve as educators and advocates for their patients. Important future research for nursing includes improving cultural competency to positively impact FCC, further evaluating nurse and parent perspectives regarding barriers to FCC, improved communication tools to foster FCC, relationship building and the nurses role in regards to FCC and the nurses role in telemedicine for rural outreach and the potential for FCC in that service arena. Nurses are the force behind incorporating parents and caregivers in decision-making and caregiving. Working collaboratively nurses and parents of children who have special health needs have the potential of forming a strong alliance to positively impact care.

◀ ▶ go to PG.

CHILDREN WITH SPECIAL HEALTH CARE NEEDS

Parenting a Child with Autism: Filipino American Beliefs and Perceptions

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Introduction: Autism spectrum disorders (ASD) encompass developmental disabilities that impact an individual's behavioral patterns, social interactions, and ability to communicate with others. According to the CDC, ASD strikes approximately 1 out of 68 children in the United States. The prevalence of ASD in Asian Americans ranges from 3.0 to 21.0 per 1,000 children. Aggregating data about ASD in the Asian American and Pacific Islander group does not consider the unique cultural beliefs held by each group.
Significance: Few studies have been conducted on ASD in Filipino Americans, and largely remain underreported in the United States. Stigma and shame is associated with parenting a child who is developmentally disabled. Children may experience a delay in treatment as a result of the stigma. Seeking early intervention is necessary to promote optimal development for the child with ASD. Parents may experience psychological and/or physical health consequences from stressors associated with managing care for their child.
Purposes/Aims: This research study aims to attain a better understanding of ASD from the perspective of Filipino American parents. Cultural beliefs and values influence patterns of help-seeking behavior and perception of illness. Filipino American cultural beliefs and perceptions about ASD, and understanding and management of ASD will be explored. A theory about the processes involved in how Filipino American parents of a child with ASD understand and manage their child's developmental disability will be generated.
Background: Health and illness in Filipino culture is based on *timbang* (balance), where health stems from attaining balance, and illness stems from a consequence of imbalance. Traditional Filipino cultural values that may affect help-seeking behavior include *hiya* (shame), *amor propio* (self-esteem), *pakikisama* (getting along), and *bahala na* (leaving things in the hands of God). As a collectivist culture, group needs are prioritized over individual needs, and influence communication patterns and help-seeking behavior.
Methods: Grounded theory will explore ASD from a cultural perspective. In-person interviews will be conducted to glean insight into the beliefs and perceptions of ASD and to capture processes involved in managing and understanding the developmental disability. Research questions will be framed using Kleinman's exploratory model of illness. The study will be guided using social constructionism as a theoretical perspective, and symbolic interactionism and pragmatism as philosophical underpinnings.
Results: Data analysis will commence with coding processes based in grounded theory. The constant comparative method drives data analysis supported by inductive processes. Other tools will be used in analysis—memos, diagrams, field notes, and reflexive journals. Demographic information will also be collected and analyzed through descriptive statistics.
Implications: Research efforts exploring ASD in the context of Filipino American culture is crucial for nursing interventions and parental management of the developmental disability. Future nursing research will need to focus on the development of culturally-sensitive, validated screening tools to assist with early identification of ASD in Filipino Americans. Implementation of culturally tailored programs would integrate traditional Filipino health beliefs to optimize overall health outcomes in children with ASD through early screening and intervention programs.

Funding: Sigma Theta Tau International Honor Society of Nursing Alpha Eta Chapter Research Award.

go to PG.

CHILDREN WITH SPECIAL HEALTH CARE NEEDS

Religiosity, Spirituality, and Hardiness in Parents Raising a Child with a Disability

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Purpose/Aims: To examine religiosity, spirituality, and hardiness in parents raising children with disabilities (CWD) to determine if there are differences according to parent gender/type of disability and if there is a relationship between variables.
Background: Public religiosity refers to what one does to worship outside the home. Private religiosity refers to what one does to worship in one's own home. Spirituality refers to how often individuals feel prayers are answered/how much God influences their life. Hardiness considers if the family is optimistic/downtrodden when faced with difficulties. Religiosity and spirituality may be important for families raising a CWD because of belief systems/social support offered by religion. Hardiness is associated with coping/ satisfaction with family functioning in families raising CWD. Although important, there is little information on how these variables are linked in families raising a CWD, and how parent gender/type of disability is related to these variables.
Methods: After obtaining IRB approval and parental consent, 223 parents living in a western state and raising children with autism (n=63), Down syndrome (DS) (n=43), other disabilities (OD) including orthopedic impairment, intellectual disabilities, emotional or physical disabilities (n=51), multiple disabilities (MD) including both physical and intellectual disabilities (n=32) or typically developing children (TDC) (n = 34) independently completed a 13 item public and private religiosity scale, a 6 item spirituality scale and the 20 item Family Hardiness Index. Analysis included descriptive statistics, ANOVA, correlations, and regressions.
Results: Mothers' private/public religiosity and spirituality were significantly higher than fathers'. Differences were noted according to type of disability: parents of TDC (M = 3.26) and parents raising children with MD (M = 3.32) had higher hardiness scores than parents raising children with autism (M = 3.11). However, parents of children with OD had higher hardiness scores than parents raising children with MD (M = 3.19). Parents' public/private religiosity and spirituality were positively correlated with hardiness. In multiple regressions after controlling for family income, parent education, total number of children in the family, the age of the CWD, and parent caregiver burden (to indicate the level of stress the parent experienced), mothers' private religiosity predicted hardiness and explained 27% of the variance. Mothers' public religiosity predicted hardiness before/ after including controls, explaining 25% of the variance. Mothers' spirituality predicted hardiness before/after including controls, and explained 26% of the variance. In multiple regressions using similar control variables, fathers' private religiosity predicted hardiness only after adding control variables and explained 27% of the variance. Fathers' public religiosity approached significance in predicting hardiness; but after adding control variables, became significant and explained 27% of the variance. Fathers' spirituality predicted hardiness before/after adding control variables, explaining 34% of the variance.
Implications: Since differences occurred in spirituality and religiosity according to parent gender and disability and these same variables predicted hardiness after adding control variables, it is important to provide assistance related to spirituality and religiosity according to parent gender and disability type and offer information to these parents about seeking comfort and strength from religious and spiritual sources in order to strengthen hardiness.

◀ ▶ go to PG.

CHRONIC CARE MANAGEMENT

HEART FAILURE PATIENT SELF-CARE: AN EVIDENCE-BASED OUTPATIENT MANAGEMENT PROGRAM

Christine Ensign, Shelley Hawkins, Barry Greenberg

A MULTIDIMENSIONAL MODEL OF PHYSICAL HEALTH IN PATIENTS WITH COPD

Jungeun Lee, Weichao Yuwen, Huong Q. Nguyen, Vincent Fan

FACTORS RELATED TO HYPERTENSION MEDICATION NON-ADHERENCE FOR VIETNAMESE POLICE

Wen-Wen Li, Duong Thi Kim Nhung, Wei-Shu Lai, Shiow-Li Hwang

INSTITUTING INR PATIENT-SELF TEST METERS IN ADULTS ON WARFARIN IN A CARDIOLOGY PRACTICE

Melvyn Rabanal, Karen Macauley

GRIP STRENGTH TO ASSESS FUNCTIONAL STRENGTH IN PATIENTS RECEIVING STEM CELL TRANSPLANT

Cindy Sayre

TRANSITIONAL CARE FOR PATIENTS WITH CHRONIC KIDNEY DISEASE

Cynthia F. Corbett, Katherine R. Tuttle, Joshua J. Neumiller

STUDY DESIGN AND PARTICIPANT CHARACTERISTICS: THE CCM CLINICAL TRIAL

Cynthia F. Corbett, Lynn Kimball, Kenneth B. Daratha

◀ ▶ go to PG.

Heart Failure Patient Self-Care: An Evidence-Based Outpatient Management Program

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Purpose: The purpose of this evidence-based practice project is to incorporate an outpatient self-care management program for heart failure (HF) patients recently discharged from the hospital, to reduce hospital admissions and improve patient self-care.

Background: According to the American Heart Association, there are over 5 million people in the United States with HF and projections suggest its prevalence will increase by 46% through 2030. Heart failure is also the most common cause of hospital admissions in the United States for patients age 65 years and older. Despite health system improvements, national readmission rates remain high at 23%. However, significant evidence exists that HF self-care management programs can improve patient self-care and decrease HF related readmissions. While HF management focuses on ensuring evidence-based therapies are prescribed, providers often fail to assess the patient's and/or caregiver's ability and self-confidence to provide adequate self-care. Current guidelines recommend health professionals provide comprehensive HF education and counseling that is focused on knowledge, skills of management, and self-care behaviors. In the project facility, there was no educational outpatient HF self-care patient management program.

Practice Change: The purpose of this evidence-based project is to increase HF patient self-care knowledge and behavior by 10% and reduce readmissions at a cardiology clinic in southern California. Brown and Ecoff's Evidence Based Practice Institute Model provides the foundation for the project. All participants discharged from the hospital with the diagnosis of HF were seen in the outpatient HF clinic within 14 days and were evaluated using the validated self-care of heart index questionnaire (SCHFI). One week after their outpatient discharge follow-up, each participant and/or caregiver received an individualized and structured one-hour educational nurse visit, utilizing the teach-back method, focused on improving HF self-care behaviors. Telephone follow-up support calls were made on a weekly basis for 5 weeks to assess self-care, address any barriers, and mitigate worsening symptoms. At the end of the program, self-care behaviors were reevaluated using the SCHFI. A chart review is completed to review readmission rates of participants at 30 and 60 days

Outcomes: In progress. It is anticipated that self-care scores of participants, using the SCHFI, will increase by 10% at completion of the program and readmission rates will be less than the national average of 23%.

Conclusion: Evidence-based outpatient HF self-care management programs can improve patient self-care knowledge and behaviors resulting in reduced readmission rates. Preliminary findings suggest a program led by an advanced practice nurse supports the need for individualized outpatient management programs designed to support and improve self-care behavior in HF patients.

◀ ▶ go to PG.

A Multidimensional Model of Physical Health in Patients with COPD

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Background: Chronic obstructive pulmonary disease (COPD) is a chronic, inflammatory disease associated significant health burden. Dyspnea and fatigue are highly prevalent symptoms in COPD, and these symptoms may interfere with daily activity and contribute to disability among patients with COPD. However, less is known about the factors that contribute to these major symptoms. Identifying factors that contributes to dyspnea and fatigue may help enhance approaches to disease treatment and symptoms management. Furthermore, the majority of research studying symptoms of COPD used linear approaches to predict fatigue or dyspnea, and the findings are inconsistent. A multidimensional model incorporating disease severity, psychological wellbeing, physical functioning as factors that contributes to symptoms of dyspnea and fatigue in patients with COPD is warranted.

Purposes/Aims: The purpose of this project is to examine a model describing the relations among disease severity, psychological wellbeing, and physical functioning as factors that contributes to dyspnea and fatigue in patients with moderate to very severe COPD.

Methods: This in-progress project is part of an ongoing longitudinal observational study of the biological causes and functional consequences of depression in patients with COPD. We plan to use a cross-sectional design with baseline data. Structural equation modeling with maximum likelihood method of estimation will be use to test hypotheses exploring the relations among disease severity, psychological wellbeing, physical functioning, dyspnea, and fatigue. Symptoms of dyspnea and fatigue were measured by the Chronic Respiratory Disease Questionnaire. Disease severity was measured with spirometry (forced expiratory volume in 1 second % predicted) and the number of co-morbidities. Psychological well-being was measured by the Hospital Anxiety and Depression Scale. Physical functioning was measured by the six-minute walk test.

Results and Implications: We expect that the final structural equation model fit the data, and the specified factors (disease severity, psychological wellbeing, and physical function) explain a large portion of variance in fatigue and dyspnea. Exploratory analyses will be conducted to examine interrelationships among the factors, and potential indirect effects of factors on fatigue and dyspnea as mediated by other factors. The results of this study will shed light on the factors that directly contribute to dyspnea and fatigue severity in patients with COPD, and potentially help design future interventions to better manage symptoms.

Funding: Support in part by National Institute of Health R01HL093146-01A2.

go to PG.

Factors Related to Hypertension Medication Non-Adherence for Vietnamese Police

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Purpose: To examine the prevalence of antihypertensive medication adherence (MA) and hypertension (HTN) control and to explore to what extent cultural (e.g., use of Vietnamese herbs) and clinical factors (e.g., length of HTN diagnosis) were associated with MA in Vietnamese police.

Background: Little is known about HTN control and MA in Vietnamese police. This study will provide important information about HTN control, and cultural and clinical factors associated with MA in this population.

Methods: A cross-sectional study was conducted using a convenience sample of 100 policemen recruited from an urban hospital in Vietnam. Inclusion criteria were: Vietnamese police ≥ 18 years old, taking HTN medications and able to read and speak Vietnamese. Self-report questionnaires and blood pressure measurements. A total score ≥80% of the highest score of MA scale by Morisky's et al. was defined as MA.

Results: The mean age was 50.88 (±6.31) years old. Majority were men (82%), had college degree (81%) and were married (91%). The average duration of HTN diagnosis was 5.15 (±4.40) years. The average number of prescribed HTN medications was 1.21 (±0.48). Seventeen percent used Vietnamese herbs to treat HTN. MA was reported in 64%, but HTN control was only 53%. MA was higher in the participants with higher perceived susceptibility to HTN-related complications [OR=1.38 (95%CI, 1.16-1.65)], with higher perceived benefit of western HTN medications [OR=1.82 (95%CI, 1.17-2.84)], with longer duration of HTN diagnosis [OR=1.33 (95%CI, 1.06-1.66)], and with lower number of prescribed HTN medications [OR=2.94 (95%CI, 1.12-7.69].

Conclusions and Implications: MA for Vietnamese police was 64% compared to 80% for the general US population. HTN control for Vietnamese police compared to the US population was 53% and 70% respectively. Nearly 20% Vietnamese police used herbs to treat their HTN. Those at risk for non-MA perceived lower susceptibility to HTN-related complications, lower benefit of HTN medications, with shorter duration of HTN diagnosis, and higher number of prescribed HTN medications. These findings indicate that culturally and clinically appropriate nursing interventions for HTN management in Vietnamese police are needed.

◀ ▶ go to PG.

Instituting INR Patient-Self Test Meters in Adults on Warfarin in a Cardiology Practice

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Project Aim: The purpose of the project is to evaluate the effectiveness of INR patient self-testing (PST) in adult patients diagnosed with atrial fibrillation, deep vein thrombosis, and mechanical heart valve on warfarin therapy in a Cardiology practice.

Background: Warfarin is the oral anticoagulant that is most commonly used to control and prevent thromboembolic disorders. It is a sensitive medication that requires meticulous testing and dosing adjustments to attain therapeutic INR levels. An INR level is a crucial laboratory measurement to make certain the blood will not be too "thick" or "thin." The goal of warfarin management is to administer the lowest possible dose to provide the patient protection against abnormal clotting conditions, therefore minimizing risk of bleeding or clotting. High rates of patients in non-therapeutic INR ranges are generally caused by failure of the provider to adjust INR doses based on monitoring. The PST meters offer a quick way to monitor therapeutic INR ranges in the convenience of the patients own home. Self-monitoring is associated with a reduced risk of all-cause mortality and lower rates of thromboembolism and bleeding. The purpose of this study was to evaluate the effectiveness of PST meters in adult patients diagnosed with atrial fibrillation, deep vein thrombosis, and mechanical heart valve on warfarin therapy in a Cardiology practice compared to traditional laboratory methods, or usual care.

Project Approach: Chart reviews were conducted to identify patients on warfarin in the practice with the medical indication of atrial fibrillation, deep vein thrombosis, and mechanical heart valve. Patients on warfarin therapy for greater than six months were included in this study. Data obtained from medical records included age, gender, medical indication, method of testing, and insurance carrier. Data will be analyzed over a four year time period (August 2010 – August 2014) for percent of time in therapeutic range. Data will be reported on the percentage of INR's in therapeutic range for the practice setting based method of testing.

Outcomes: Data collection currently in progress.

Conclusions: To be determined following review and analysis of results.

◀ ▶ go to PG.

CHRONIC CARE MANAGEMENT

Grip Strength to Assess Functional Strength in Patients Receiving Stem Cell Transplant

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Purpose/Aims: 1. Determine feasibility of measuring Hand Grip Strength (HGS) in patients hospitalized in preparation for or for complications of myeloablative hematopoetic stem cell transplant (HSCT). **2.** Describe changes in strength as measured by HGS during course of hospitalization. **3.** Compare relative timing of detection of change in muscle strength as measured by HGS and subjective assessment by nurses providing care to the patient.

Background: Despite aggressive fall prevention programs, rates of falls in hospitals have increased from 2.7 falls per thousand patient days in 2001, to 3-5 falls per thousand patient days in 2014. Patients hospitalized for oncological diagnoses have increased risk of a fall compared with other hospitalized patients on medical surgical units (6.3 vs. 3.1 per thousand patient days) and are more likely to be injured if they do fall. There is further evidence that patients may already have mild weakness on presentation for HSCT, although this may be imperceptible to the patient. Current fall risk screening tools fail to identify up to 17% of patients who subsequently fall. Although weakness is a well-known risk factor for falls, there is currently no objective measure of strength routinely used in hospital settings. Weak HGS is a well-established physiologic marker for frailty. HGS measurements can be obtained quickly, are non-invasive and the instrumentation (hand held dynamometer) is relatively inexpensive. There is evidence of positive correlations between HGS and mobility tests, such as the two and six minute walk and measures of lower extremity strength. Thus, HGS may represent a non-invasive, inexpensive and objective measure that can serve as proxy for global functional strength.

Methods: For this prospective, observational study participants will be 45 consecutive patients admitted in preparation for or for complication of HSCT. HGS will be measured at baseline and daily until day 30 of hospitalization, achievement of absolute neutrophil count of 500 X3 or discharge from hospital, whichever comes first. Mediating variables such as medications (opioid, benzodiazepine), physical therapy and laboratory measures of hemoglobin and hematocrit will be abstracted from the medical record as will nurse assessment of strength. Subjects will rate the difficulty of completing testing on a Likert scale to assess for feasibility and acceptability.

Analysis Plan: Descriptive statistics will be used to report demographics and results from the Likert scale. Analysis of the HGS data will be performed using a linear regression model to determine relationships between percent change of HGS from baseline (dependent variable) and day of hospitalization (independent variable). Survival analysis will be performed to examine time to change (day of hospitalization) to first measured decline in HGS and time to first nursing assessment documenting need for assistance or supervision for mobility transfer and ambulation or unsteady gait. These analyses are expected to determine whether HGS is a more sensitive measure of weakness as compared to nurse assessment.

Implications: Findings may lead to identification of patterns of strength in patients undergoing HSCT, allowing nurses to enhance fall prevention interventions during periods when patients are weakest and most at risk for a fall.

Transitional Care for Patients with Chronic Kidney Disease

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Purpose: The purpose of this study is to pilot test the effectiveness of a medication information management transitional care intervention following hospital discharge among patients with chronic kidney disease (CKD). Specifically, this presentation will focus on describing the design, baseline characteristics of participants, and preliminary results of the "Medication Intervention in Transitional Care to Optimize Outcomes for Chronic Kidney Disease" Clinical Trial.

Background: Patients with CKD have more co-morbidities, are hospitalized more often and for longer lengths of stay, and incur greater healthcare costs than patients with other chronic conditions. Patients with CKD are less likely to receive evidence-based therapies when hospitalized and commonly have complex drug regimens and adverse events which contribute to poor outcomes. The current state of knowledge largely concerns risks of CKD associated with discreet episodes of hospitalization. Among survivors, little is known about strategies to improve the transition from hospital-to-home or how to favorably impact outpatient management, health outcomes, costs, and risks of hospital readmission or death. Enhanced transitional care interventions have been shown to improve medication information transfer, reduce hospital readmissions, and slow the progression of declining health in the general population of hospitalized patients. Interventions that prevent or slow CKD progression such as blood pressure control with angiotensin converting enzyme (ACE) inhibition or angiotensin-2 receptor blockade (ARB) and intensive glycemic control in patients with diabetes are all highly dependent on meticulous medication management following hospital discharge

Methods: A single-center, randomized controlled clinical trial tested the hypothesis that improved medication information transfer (MIT) through a home-based pharmacist-led intervention with in the first week of discharge, would reduce readmissions and visits to the emergency room or urgent care for 90 days. Participants (n=140) were recruited during hospitalization and then randomized to usual care or the MIT intervention.

Results: The poster presentation will describe baseline characteristics of participants, common medication problems identified in the intervention group, and interventions implemented. Of the first 115 enrolled, the most common reasons for the index hospitalization were cardiovascular diseases (33%, 38/115), infections (21%, 24/115), and acute kidney injury (11%, 13/115). Participants'(n=115) mean age (±SD) was 70±11 years, 47% (54/115) were women, and mean estimated glomerular filtration rate (eGFR, CKD-EPI) was 41±13 ml/min/1.73m^2.

Implications: The CKD-MIT clinical trial will determine the effectiveness of an early home-based pharmacy intervention focused on reducing rates of acute care use and risk factors for CKD progression and associated complications.

Funding: The authors gratefully acknowledge financial support the National Institute of Diabetes, Digestive, and Kidney Diseases (R34DK09014016-0).

◀ ▶ go to PG.

CHRONIC CARE MANAGEMENT

Study Design and Participant Characteristics: The CCM Clinical Trial

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Purpose: The purpose of this study is to test the effectiveness of a chronic care management (CCM) intervention among patients that receive primary care from a Federally Qualified Health Center (FQHC) *and* are high utilizers of acute care services. Specifically, this presentation will focus on describing the study design, baseline characteristics of participants, and interventions delivered to participants in the "Chronic Care Management Model Translation to Multimorbid Adults at FQHCs", a randomized, single blind (investigator), two-arm clinical trial.

Background: The fragmented, uncoordinated, and inefficient system of health care delivery in the U.S. fails to meet the needs of aging adults with multiple chronic conditions (multimorbidity). More than half of health care spending for non-institutionalized adults over age 45 is for chronic conditions, and over 80% of Medicare costs can be attributed to beneficiaries with multimorbidity, yet care satisfaction is low, outcomes are sub-optimal and costs are high. Evidence on effective interventions for persons with multimorbidity is limited given that this population is often excluded from clinical trials; however, recent trials provide early evidence that interventions combining health care homes with preventive home visiting strategies improve care delivery and outcomes for adults with multimorbidity. The ability to successfully translate preventive home visiting strategies to aging adults with multimorbidity who are not associated with academic medical centers, live in rural or urban settings, and seek care at Federally Qualified Health Centers (FQHC) is unknown. Testing the effectiveness of these strategies in this diverse setting is *urgently needed* based on the growth of patients seeking care at FQHCs which is expected to dramatically increase with continued implementation of the Affordable Care Act, the fiscal urgency for higher quality care at lower costs, and the challenge to develop care strategies that allow aging adults to better manage chronic conditions in their own homes and communities.

Methods: Guided by the Chronic Care Model, a single-center, randomized controlled clinical trial is testing the hypothesis that implementing the chronic care management (CCM) intervention with aging adults who have multimorbidity and high acute care utilization will improve patient engagement, health outcomes, and cost-effectiveness. Participants (N=300) are being recruited from a FQHC and then randomized to an attention-control group who receive usual care or the CCM intervention which is collaboratively delivered by a nurse and a social worker.

Results: The poster presentation will describe baseline characteristics of the first 100 enrolled participants, including patient activation measure scores, depressive symptom scores, common health problems identified in the intervention group, and interventions implemented in both the intervention group and attention control group.

Implications: The CCM clinical trial will determine the effectiveness of a patient-centered chronic care intervention, delivered over 12 months, on improving patient activation in self-management and quality of life and in reducing rates and costs of acute care use.

Funding: The authors gratefully acknowledge financial support the National Institute of Aging (1R01AGO42467-01A1).

◀ ▶ go to PG.

COMMUNITY HEALTH

HOMELESS INDIVIDUALS' PERCEPTIONS OF EMERGENCY DEPARTMENT STAFF

Lauren Leander, Carol J. Stevens, Shirley Kleinlein, Julie McNulty

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NORTH IDAHO ADVENTIST FREE CLINIC WEIGHT LOSS PROGRAM EVALUATION

Manuela Orban, John Torquato, Catherine Van Son

IS THERE CONSISTENCY IN SELF-REPORTS OF WOOD SMOKE EXPOSURE?

Lisanne Shumway, Jordan Roberts, Mary Lou Robinson, Paula M. Meek

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WHAT IS THE PATTERN OF EXPOSURE TO INDOOR WOOD SMOKE (IWS)?

Jordan Roberts, Lisanne Shumway, Mary Lou Robinson, Paula M. Meek

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EVALUATING A COMMUNITY BASED RECUPERATIVE CARE PILOT PROGRAM

Bonnie H. Bowie, Lauren Valk Lawson, Natalie Sloan

AZNA NURSE INVOLVEMENT IN PUBLIC HEALTH POLICY

Mykaila Hartman, Carol J. Stevens, Denise G. Link, Aliria Munoz

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SADDLES, SPURS, AND DARK HORSE COWBOYS: A STUDY OF INJURY PREVENTION BELIEFS

Alexis M. Newton

THE MEANING OF SPIRITUALITY: A QUALITATIVE STUDY OF HOMELESS WOMEN IN NEVADA

Jené Hurlbut, Marcia M. Ditmyer

◀ ▶ go to PG.

COMMUNITY HEALTH

Homeless Individuals' Perceptions of Emergency Department Staff

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Purpose: The goal of this study was to understand how the homeless perceive medical professionals in the Emergency Department (ED) based on their unique experiences, thoughts and emotions. Much research has been conducted on the perceptions nurses, doctors and other medical personnel have of the homeless; however, little research exists on the homeless population's perception of health care professionals. Furthermore, this study aims to determine an overall sense of welcomeness or unwelcomness from the participants by uncovering repeating themes, patterns and concepts.

Background: Homelessness is a misunderstood condition involving stereotypes, stigmas and assumptions. The combination of acute-care medical professionals with patients of chronic illness and chronic homelessness can lead to incongruity of attitudes. These mindsets have the potential to affect the care homeless individuals receive in the ED and impact their intentions to seek medical help (Ugarriza & Fallon, 1994). Homeless individuals account for 54.5% of all ED visits in the United States, and, they are three times more likely to visit an ED than a non-homeless individual at least once during the year (Kushel et al., 2002). Understanding the perspective of the patient has the potential to clarify existing barriers to care as well as identify areas of improvement for ED staff necessary for positive patient outcomes when working with homeless individuals.

Methods: A qualitative descriptive approach was utilized. After receiving Institutional Review Board (IRB) approval, 10 participants from a Day Resource Center which neighbors a homeless shelter in a southwest urban city were recruited into the study and participated in an interview. A script consisting of open–ended questions formatted around the apriori categories of welcomeness and unwelcomeness was used; prompting questions were used to clarify or redirect. Responses were transcribed by the researcher during the interview. Utilizing content and thematic analysis, interview transcripts were coded and reoccurring patterns were isolated, resulting in generalizations regarding the perceptions of welcomeness and unwelcomeness. Interviews were conducted until no new themes were emerging from the data.

Results: There were three themes that supported the concept of welcomeness; trust, genuine care and feeling like a priority. Additionally, there were four themes that supported the concept of unwelcomeness; dehumanization, feeling dismissed, unresolved care and stereotypes. Findings support significantly unwelcome experiences in the ED and negative perceptions of ED staff, reinforced by similar findings of current research studies.

Implications: Given the supporting literature, negative ED experiences have the potential to steer homeless individuals away from seeking medical attention. This antagonizes health promotion and illness prevention and slows efforts to decrease overcrowding in emergency departments and improve patient outcomes. Findings from this study can inform ED nurses of the perceptions of their homeless patients and promote positive interactions and experiences of welcomeness. Further research is needed to create interventions for improving perceptions of ED staff, promoting health and preventing illness in the homeless population, and reducing ED visits by homeless individuals.

◀ ▶ go to PG.

COMMUNITY HEALTH

North Idaho Adventist Free Clinic Weight Loss Program Evaluation

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Purpose: Evaluate the North Idaho Adventist Free Clinic (NIAFC) spiritually based weight loss program health outcomes, program content, and program process.

Background: More than one-third of U.S. adults are obese and obesity is a primary risk factor for many leading causes of preventable death, including ischemic heart disease, stroke, type II diabetes and certain types of cancer. The annual healthcare cost of obesity in the U.S. is more than 150 billion dollars. Identifying and implementing effective weight loss interventions is imperative to improve the population health and decrease healthcare costs.

Methods: The NIAFC weight loss program is a spiritually based, free of charge, four-month intervention. The program uses the workbook *The Lord's Table* for spiritual content, and is grounded in four foundational practices: delighting in the Lord, disciplined eating, daily exercise, and daily accountability (Cleveland, 2005). In addition to the workbook, the clinic physician provides eight seminars on healthy living, and participants are paired with a volunteer accountability partner. The charts of participants in the NIAFC weight loss program during 2008-2010 were reviewed. Variables extracted included pre and post intervention weight, body mass index (BMI), lipids levels, and HgA1C. The program content was examined by working through *The Lord's Table* workbook and reading the PowerPoint presentations on healthy lifestyle. The program process was examined by sitting in on the four consecutive monthly sessions of a cohort.

Outcomes: During 2008-2010, two to four participants went through the program offered one to two times each year. Twelve (12) participant records had sufficient data to be evaluated for changes in health outcomes. The participants included four men and eight women, ranging in age from 30 to 71 years. All but two participants had starting BMIs greater or equal to 30, ranging from 28 to 50. Participants lost an average of 10 lbs. (4%) over the course of 4 months. Participants had an average reduction in BMI of 2 points (5%); in HgA1C of 2.1% (25%); in total cholesterol of 48 mg/dL (21%); in LDL cholesterol of 14 mg/dL (10%); and in triglycerides of 166 mg/dL (54%). The NIAFC Weight Loss Program incorporates all the elements identified in literature as essential for effective weight-loss interventions and improved health outcomes: intense nutrition, exercise, and multicomponent behavioral counseling, goal-setting, action plans, identification of barriers, action plans to overcome barriers, and continued self-monitoring. These outcomes matched or exceeded outcomes of successful weight loss programs reported in literature.

Conclusions: The NIAFC spiritually based weight loss program offers evidence-based interventions that result in improved outcomes related to measurable indicators of obesity. Increasing the number of sessions from four to twelve is recommended. Consistent and accurate documentation of participant data is needed to obtain accurate outcome measures and establish the effectiveness of the program. In addition, longitudinal data and participant perspectives would add rigor to the program evaluation process. Evaluation of spiritually based weight loss programs is needed in order to recommend their use.

go to PG.

Is There Consistency in Self-Reports of Wood Smoke Exposure?

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Example Questions	**r**	**ICC**
Over the past week when you had wood burning in the stove/ fireplace the door/front of the stove/ fireplace was open?	.80	.74
Typically it is your job to start the wood fire in the stove / fireplace?	.78	.68
When wood is burning it is your job to look after the stove/ fireplace?	.78	.66
On average over the past week how many hours were you in the room where wood was burning	.49	.48
Over the past week when wood was burning in the stove/ fireplace I could smell smoke in the house?	.35	.31
Over the past week when you had wood burning in the stove/ fireplace the windows were open?	.29	.30

Purpose: The purpose of this paper is to assess the consistency in the self-reports of individuals exposed to wood smoke in the home using the 12 questions about the magnitude of Indoor Wood Smoke (IWS) exposure.

Rationale: Wood burning in the home for cooking and heat has increased in the United States. Exposure to IWS is being investigated for the degree of epigenetic changes related to an individual's symptom expression and acceleration of lung decline. Often these types of exposures are assessed by self-reporting, requiring consistency in questions used for gathering such data. Identifying gaps in consistency will be important for future epigenetic research as well as targeted care treatments. It is important to have questions that allows for standardized and consistent self-reporting for individuals exposed.

Method: There were two reporting periods that administered the IWS exposure questions collected seven days apart. The sample consisted of 30 individuals in the Albuquerque, NM area associated with the Lovelace Respiratory Research Institute (LRRI) that were identified as burning wood indoors for heat or cooking daily or almost daily and consented to particle monitoring over a seven-day period during the winter months of 2013-2014. Most homes were large (5 rooms or more 83%) with 1 or 2 people as continuous residence (60%) and all households reported using their wood stove at least weekly to heat their home. Statistical analysis included descriptive statistics, nonparametric test retest and interclass (ICC) correlation on the pre and post MIWSI questions.

Results: The majority of participants were in good health (70%), less than half (43%) worked full time and currently smoked cigarettes (23%) or cigars (11%). Over half of the questions were consistent across time, with test-retest correlations ranging from .80 to .29 and the ICC values very similar (.74 to .30). Question With the least consistency were those that asked about smelling smoke and ventilation.

Implications: These findings provide evidence that there is some consistency in self-reporting over time but some questions did not have any consistency. Further analysis is needed as it is unclear if the questions were interpreted differently for each reporting period or if there were considerable exposures differences between the seven days.

Funding: NHLBI (R15 NR008001).

go to PG.

COMMUNITY HEALTH

What Is the Pattern of Exposure to Indoor Wood Smoke (IWS)?

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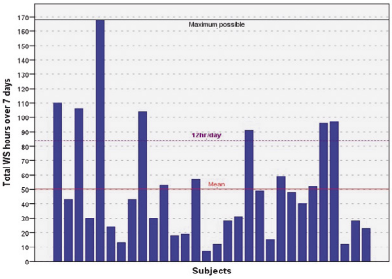
Purpose: The purpose of this presentation is to report on the pattern of indoor wood smoke exposure over a period of seven days.

Rationale: Wood smoke exposure has been shown to increase respiratory symptoms and possibly alter epigenetic DNA patterns that can put one at risk for greater lung dysfunction. It is important to understand more specifically how wood smoke exposure patterns impact these alterations to prevent further harm. For healthcare providers to appropriately advise their patients more information is needed about what are common patterns of IWS.

Method: The sample consisted of 30 homes in the Albuquerque New Mexico area that consented to particle monitoring in their home over a seven-day period during the winter months of 2013-2014. On average the homes had 5 or more rooms (83%) than with households (60%) having 1 or 2 people as residence. An individual living in the home agreed to complete the Saint George Respiratory Questionnaire, ATS Respiratory Survey and to describe the IWS pattern through question about magnitude of exposure and daily wood burning details in a diary. The majority of households report burning wood to heat there homes daily or almost daily (77%) and maintaining the stove regularly (60%) with less reporting cleaning the flume recently (50%). The majority of individuals who were completing the diary and surveys were not working full time (57%), were not currently (last month) smoking cigarettes (59%) and described themselves as in good or very good health (70%). Statistical analysis included descriptive statistics and nonparametric analysis.

Results: In this sample 73.3% of the households use wood as their primary source of heating, and 60% burned daily or almost daily. The graph illustrates the mean burn time was 50 hours and only one household had wood burning constantly (680), with only six other households burning over 12 hours a day. However 46.7% sometimes or always smelled smoke. The majority (76.7%) had wood burning while they slept, being in the same room as the burning wood (73.4%) and no air filters present in the home (96.7%). Burning wood for parts of every day exhibited increased particle and dust trapping compared to burning 1-6 days or all day burning every day.



Implications: There is considerable variation in use, quality of stove, location of stove relative to persons, length of exposure, maintenance, and self-perceived health symptoms that impact a person's overall health. The finding that burning wood for a part of everyday produces the more particles is consistent with other findings in the literature. These findings provide support that greater use of wood stoves potentially leads to greater health impacts due to more particles and dust in the air. This knowledge encourages healthcare providers to adjust their plan of care according to the patients' IWS exposures.

Funding: NHLBI (R15 HL115544).

◀ ▶ go to PG.

COMMUNITY HEALTH

Evaluating a Community Based Recuperative Care Pilot Program

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Purpose: The aim of this study is to evaluate the effectiveness of a pilot community based recuperative care program in a Seattle, Washington neighborhood.

Background: The Affordable Care Act calls for improved transitional care from hospital to home. One population that has historically experienced poor care transitions are people who lack stable housing. Deprived of an adequate space to rest, store medications, obtain proper nutritional and physical care, a person's health declines and recovery is difficult. Lack of an adequate place to convalesce post-hospitalization may result in frequent readmissions. One solution is medical respite or recuperative care, a model of care that provides adults experiencing homelessness with recuperative or convalescent services away from the dangers of the street. The recuperative care program in this study is an outgrowth of a collaborative community-academic partnership between the Seattle Mennonite Church and Seattle University's College of Nursing. After performing a community needs assessment, it was determined that a community based recuperative care model where clients are housed in a motel while receiving case management along with needed services such as wound care and medication management would best meet the needs of this population.

Methods: Measures include demographics of clients, length of stay, program costs, and transition to permanent housing. Qualitative feedback from key stakeholders such as the home care agency and hospital referral personnel will also be collected. In addition, the pilot study evaluation includes exit interviews and six month follow up interviews with clients.

Results: Data collection and concurrent data analysis are in progress.

Implications: The data from this study will be used to refine and move toward a sustainable recuperative care program for this client population.

Funding: Support provided by the Sinegal Foundation.

go to PG.

COMMUNITY HEALTH

AzNA Nurse Involvement in Public Health Policy

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Purpose: The purpose of the study is to determine the level and type of public policy involvement among registered nurses (RN) who are members of the Arizona Nurses Association (AzNA). Furthermore, the study aims to identify the knowledge base and motivation of nurses and their involvement in public policy as well as the barriers and benefits.
Background: RNs have been involved in the policy throughout history, most recently advocating for needle-stick prevention and safe patient handling (ANA, 2014a; ANA, 2014b). RNs initially identified specific changes and subsequently influenced public policy by aiding in drafting legislation. There are 3.1 million RNs; as more RNs become active in policy the potential for impact is great. Research suggests that there is a lack of involvement in public policy by RNs, yet involvement by nurse practitioners is promising. A study of nurse practitioners found that 59.6% of the respondents were involved in 3 or less public policy activities (Oden et al., 2000). The study showed that nurse practitioners believed their involvement improved public health. However, they believed they lacked the time and knowledge necessary to be involved. One of the goals of the AzNA is to advance the profession of nursing through public policy. Therefore, it is important to determine the level and types of involvement of the AzNA members in public policy, as members include RNs and nurse practitioners.
Methods: The study is a descriptive design using a 20-item survey that will be sent to all members of the AzNA. The survey includes questions on demographics, knowledge and education about public policy, involvement and interest in public policy activities, and perceived benefits and barriers. The survey is a modification of an instrument with established validity and reliability used to assess public policy involvement by nurse practitioners.
Results: Demographics and descriptive statistics will provide information about the sample population. Chi-squared analysis will be used to determine differences in public policy involvement among groups of nurses. Regression analysis will determine factors predicting public policy involvement.
Implications: Findings from this study will be valuable information for understanding the role of public policy among nurses. The study can provide insight to association leaders in assisting in recruitment to the association and to public policy committees and activities. In addition, findings will help determine association priorities related to public policy and develop strategies for members and nurses to impact health related issues in patients and communities.

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◀ ▶ go to PG.

COMMUNITY HEALTH

Saddles, Spurs, and Dark Horse Cowboys: A Study of Injury Prevention Beliefs

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Purpose: A dark horse cowboy is a historical term used to describe the "evasive" characteristics of the cowboy who reveals little about himself or his activities, especially his horse riding talents. Cowboys and recreational horse owners regard injuries as inevitable and unavoidable. Nurses are often the first to meet and greet the injured cowboy. Essential to the best care of this population is the understanding of the cowboy culture. Aside from rural health practices, care of the cowboy before or after injury is based upon the cowboy's unique perspective of injury prevention practices and the seeking of care.

Rationale: Over the past ten years there have been little studies on the cowboy culture in relation to injury prevention and safety. As cowboys (and cowgirls) engage in extreme horse and competitive activities such as bull riding, barrel racing, bronc busting, roping, reining, cutting, and working ranches, injuries are poorly documented while injury prevention beliefs are non-existent in the literature. What are documented are judgmental attitudes by health care providers in non-rural areas. These attitudes are reflected in questions and explanatories such as: Why didn't you wear a helmet? Why didn't you wear sturdier boots? Why do you rodeo or work horses? Growing up around horses and competitive horse related activities, the authors are aware of the stigma related to safety attire among western cowboys and western recreational horse enthusiasts.

Methods: A Qualitative Ethnographic design was utilized. Interviews progressed until saturation was met at 45 participants. The participants were recruited by the researchers at rodeo events, horse boarding facilities, recreational horse events, and ranches in Weld County, Colorado; Yellowstone County, Montana; and Roger Mills County, Oklahoma.

Results: A flagrant result from this study is the 179 injuries sustained by participants. Data analysis is in process in accordance with ethnographic methods of bracketing, thematic categorization, and coding. To date, the following themes have emerged: superstition and fatalism. Results will be forthcoming by the time of the conference.

Implications: Raising awareness of this culture within a culture will serve to validate the cowboy perceptions, and opinions, and create relationships of trust in health care encounters after injuries.

◀ ▶ go to PG.

COMMUNITY HEALTH

The Meaning of Spirituality: A Qualitative Study of Homeless Women in Nevada

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Purpose/Aim: The purpose of this qualitative study was to assess the beliefs, attitudes, and perceptions of the meaning of spirituality in a cohort of sheltered homeless women in Nevada.

Background: Rates of homelessness in the US remain high compared to other industrialized countries. A greater proportion of US homeless are women who face a multitude of physical and mental health issues. There is research to suggest that spirituality may help to mitigate the stresses and negative physical and mental impact of homeless women. However, there have been few studies that focus on beliefs, attitudes and perceptions regarding the meaning of spirituality of homeless women.

Methods: Fourteen (14) personal interviews were conducted at a homeless shelter located in southern Nevada. Open-ended questions were used to allow respondents to answer questions in their own terms or in a manner that reflects their own attitudes, beliefs, and/or perceptions rather than those of the researcher. A process for categorization the data collected was used. Respondents agreed to be tape recorded for the purpose of data collection. Only aggregate data was used for purposes of reporting. The data was subsequently transcribed, and grouped in an effort to synthesize the data into identified patterns/themes. Once identified, the themes were then looked at to better determine the beliefs, attitudes and perceptions of respondents.

Results: The sample was one of convenience and the women interviewed ranged in age from 20-68 (M=46). A majority of the women in this sample had experienced homelessness 1-2 times and had been homeless for approximately 0-3 months. From the interviews five overarching themes emerged: 1) a belief in God or a higher power, 2) a distinction between religious beliefs and spirituality, 3) a belief that there is a plan for their life, 4) spirituality and beliefs provides guidance for what is "right" and what is "wrong", and 5) a belief that their life will improve. In their descriptions of spirituality the women often shared stories and life experiences to illustrate their understanding of this concept.

Implications: The findings of this study support the fundamental importance of spirituality in the lives of homeless women. Spirituality was acknowledged as providing hope and support and the ability to improve health and well-being. Implications from this study can help healthcare professionals to design interventions that support spiritual practices and perhaps lessen the negative impact of homelessness for these women. Moreover, healthcare professionals need to become comfortable in addressing the spiritual needs of clients, in doing so this will improve the holistic care that is provided to this marginalized and vulnerable population. During a time when rates of homeless for women have increased, further research is needed to explicate the meaning of spirituality and how this impacts their overall resiliency and health.

*Special recognition to Leslie K. Robbins, PhD, RN, PMHCNS-BC, PMHCNP-BC (NM only) for her contributions to this study.

◀ ▶ go to PG.

go to PG.

CULTURE

DISCONNECTED: SOMALI REFUGEES AND U.S. HEALTHCARE PROVIDERS

Jane M. Dyer

TYPHOON HAIYAN PROJECT: REBUILDING LEYTE, PHILIPPINES

Nanette P. Leonardo, Marican Jhocson, Romar Lingad, Emilyn Lao, Grace Guzman

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RECRUITMENT STRATEGIES FOR CONDUCTING RESEARCH WITH BURMESE REFUGEES

Deborah Williams, Marylyn McEwen

ACCESSING HEALTHCARE IN MONSOON SEASON: NURSING FACULTY AND STUDENT EXPERIENCES IN INDIA

Sharon K. Titus, Catherine Heinlein

HEALTH BELIEFS, ACCULTURATION AND TOBACCO USE AMONG ARAB-AMERICANS IN CALIFORNIA

Najood Azar

CENTER FOR AMERICAN INDIAN RESILIENCE (CAIR): RESEARCH CORE

Anna L. Schwartz, Priscilla R. Sanderson, Nicolette Teufel-Shone

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A SYSTEMATIC REVIEW OF TYPE 2 DIABETES SELF-CARE PRACTICES IN ETHIOPIAN IMMIGRANTS

Selamawit Balcha, Tiffany Dzou, Brendan Oluaha,
Linda R. Phillips, Janet C. Mentes

◀ ▶ go to PG.

HEALTH-SEEKING BEHAVIOR OF KOREAN WOMEN WITH MYOCARDIAL INFARCTION

Insil Lee

AN ETHNOGRAPHIC STUDY OF HEALTH PROMOTION ACTIVITIES IN RURAL PAPUA NEW GUINEA

Carol J. Bett

EVALUATING QUALITY IMPROVEMENT PROCESSES AND STRATEGIES ACROSS 3 AFRICAN COUNTRIES

Sarah Gimbel, Alison Rustagi, Bradley Wagenaar, Maria de Joana Coutinho,
Ruth Nduati, Grace Wariua, Stephen Gloyd, Seydou Kouyate,
Maria Fatima Cuembelo, Kenneth Sherr

◀ ▶ go to PG.

CULTURE

Disconnected: Somali Refugees and U.S. Healthcare Providers

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Purpose: Identify contributors to difficulties around health care access and provision of primary care for Somali refugees and U.S. healthcare providers in order to identify opportunities for improvement of care.

Background: Language challenges, differences in health beliefs, and cultural misunderstandings between Somali refugee patients and staff at a university community clinic have often lead to confusion, frustration, wasted resources, and, ultimately, poor health outcomes. Refugees from Somalia are the largest refugee group to be resettled in Utah. Most of these refugees seek healthcare at a specific university community clinic, due to close proximity of residence and transportation routes. Providing care at this site for refugees has been identified as a challenge by both the clinic's healthcare providers and Somali refugees.

Methods: After IRB approval, clinic healthcare providers (nurses, medical assistants, nurse practitioners, and physicians) who met inclusion criteria were recruited for voluntary participation from the community clinic and assured of lack of impact on their employment, if they participated. Two focus groups of these providers were conducted, recorded, transcribed, and analyzed with ATLAS.ti ®. Somali community contacts assisted in the recruitment of Somali refugees receiving care at the university community clinic site. Three focus groups of Somali refugees (males and females in separate groups), who met recruitment criteria, were held, either in apartments or at a trusted community site. Certified translators were hired and provided translation for three languages. At the request of the Somali groups, no recordings were made. Both the researcher and research assistants took notes in all focus groups and met after each group to review and agree on content heard. Results were analyzed, categories were identified, and opportunities for improvement emerged.

Results: Both providers of care and refugees appreciated the efforts of the other group in the healthcare interaction. Culturally knowledgeable and Somali-language-proficient medical assistants and nurses were seen by the refugees as more important than culturally knowledgeable and Somali-language-proficient physicians or nurse practitioners. All groups cited lack of sensitive and gender-appropriate translators, too-short appointment times, and lack of knowledge about the others' culture as disconnects in the healthcare interaction. Transportation issues were also identified by both groups as contributing to care difficulties. Refugees did not share complementary or alternative therapies with providers, lacked understanding of preventive care, and equated receiving a medication with good care. This information was shared with the Somali community through the Somali community organizations, healthcare providers at the university community clinic, and with administrators at that same clinic site.

Implications/Significance: Education for clinic healthcare providers is needed to increase their understanding of the Somali culture, common Somali health beliefs, and Somali health practices to assure their abilities to provide accessible and appropriate care. Increasing orientations to U.S. healthcare by refugee resettlement organizations and Somali community organizations will assist refugees to access and understand care. Clinic administrators must address sensitive, gender-appropriate translator availability and creatively address transportation availability.

Funding: This project was partially funded a grant from the Gamma Rho Chapter of Sigma Theta Tau International.

◀ ▶ go to PG.

CULTURE

Typhoon Haiyan Project: Rebuilding Leyte, Philippines

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Purpose: to describe challenges and needs for health services and potential efforts of the Global Health Initiative Program in the Leyte, Philippines.

Background: Ensuring optimum health is a basic service that governments are mandated to address. In industrialized countries as the United States, Health Insurance Systems, guarantees access to advanced medical technologies and treatments for citizens. Basic needs as food, shelter, security, and education, are also provided. Things like electricity, heat, safe drinking water, transportation, and safe infrastructure are lacking in Third World countries, where health disparities are a major concern. The economic struggles in the Philippines, is truly challenging. Natural calamities are common occurrences, together with insurgencies, corruption and government destabilization that contribute to the woes of a Republic, trying to gain stable footing in the community of nations. In the aftermath of the destructions of Typhoon Haiyan, in 2013, particularly in the Leyte province, the need for immediate, sustainable health care for individuals living in 300 communities in this coastal province, becomes more palpable in its urgency. The global community has responded with relief efforts aimed at rebuilding the lives of those affected, and together with the national government, the task towards regaining a structured normalcy remains challenging.

Methods: The Global Health Initiative Program of the School of Nursing/Charles R. Drew University is taking heed to the call to action. The students, faculty, alumni and administration are coordinating with other non-government and faith- based organizations to send Medical/Surgical/dental Mission Trips to Leyte by February of 2015. Also, health promotion and disease prevention lectures and demonstration will be conducted by the MMDSON students which would include proper hand hygiene, safe food preparation and storage, common remedies for diseases such as dehydration, cough and colds, insect bites, and skin infections. Important health screenings will be provided regarding detection/ management/prevention of Diabetes, Hypertension/Cardiovascular diseases, thyroid disorders and malnutrition. We will update Health information Boards in 30 Rural Health Units in cooperation with USAID and Department of Health.

Results: The recent fact-finding mission in August 2014, revealed grim statistics of the health needs of the poor people in this region. It is difficult to imagine how villagers are able to overcome emergencies that can arise at any given time, with the limited health personnel (1 MD, 2 RNs, 3 Midwives, 1 Dentist). The nearest tertiary hospital is a 9 hours commute. Pharmaceutical supplies are limited and basic health screening services as immunizations are held once a month. Maternal mortality and morbidity remains high. Health care access is difficult especially in the most remote areas. Fatalistic beliefs and use of herbal/ folk remedies are popular, as could be expected of indigent families. The economy of this fourth class municipality is not enough to allocate funds for decent health services, thus the need for external help become obvious.

Implications: Establishment of a link towards the attainment of sustainable health and education programs is the goal of the CDU-MMDSON which would bridge the gaps and disparities and thereby improving the lives of the Leyte Community.

◀ ▶ go to PG.

Recruitment Strategies for Conducting Research with Burmese Refugees

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Purposes/Aims: Recruitment in resettled refugee populations is a dynamic process. Challenges arise and flexibility is required to access refugee populations for research. Innovative, culturally relevant techniques aid in accessing refugee communities. Ethnic subgroups have diversified experiences and learning the historical and cultural background for a subgroup is crucial to successful recruitment. The purpose of this paper is to discuss the effectiveness of recruitment strategies for an ethnographic study with the Burmese Chin Hakha community in a southwest urban community.

Rationale/Conceptual Basis/Background: The concept of culture is an ethnographic centerpiece of intricate ties connected to the way we act towards each other, relate to situations around us, and describe our self. To describe a culture requires listening and learning from the participants as experts. Recruitment with a culture unfamiliar to the researcher requires building trust, community immersion, and maintaining reflexivity with every action.

Methods: Participant observation has been conducted to become familiar with the routine of every day life in the Burmese Chin community. Gatekeepers and cultural navigators provided introductions of the researcher to the Burmese Chin community. Pastors were pivotal gatekeepers in the resettled Burmese Chin population. This is due a history of people having fled Burma to avoid severe persecution because of their choice of religion. Participants were obtained from educational sessions on tuberculosis held at the church with an interpreter. Participants were also recruited from community events organized by local churches and health care workers. A cultural navigator employed in a Refugee Women's Health Clinic assisted with recruitment. This provided access to potential participants in a culturally competent manner while also increasing their health care access and equitable care.

Results: Recruitment is currently in process, three participants have been recruited. One participant was enrolled in the study through the cultural navigator at the Women's Refugee Health Clinic, and two participants enrolled through contact with the church. Successful recruitment is attributed to becoming familiar with community leaders and members. Attending community outreach events, children's activities, English language classes, and trainings offered with the cultural navigators has reinforced trust and is building relationships in the community. Carefully explaining the study and allowing time for questions has alleviated participant fear. Face-to-face reminders for interview appointments have contributed to retention.

Implications: Successful recruitment strategies build capacity in the community. Community leaders are strengthened and power is gained in accessing health care and receiving equitable care. Educational sessions inform the community and allow time for clarification of the information. This face-to-face time with the researcher builds credibility and rapport for accelerated recruitment time. Knowledge of Burmese refugees' culture will inform culturally competent recruitment styles and facilitate future research.

◀ ▶ go to PG.

Accessing Healthcare in Monsoon Season: Nursing Faculty and Student Experiences in India

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Purpose: to share lived experiences of faculty and nursing students who participated in study abroad program to India on the extreme challenges of accessing healthcare during monsoon season.

Background: Barriers to accessing healthcare are recognized globally. Flooding, the most common global natural disaster is one such barrier to accessing healthcare (Torti, 2013). American nursing students who recognize differences in global healthcare services better understand healthcare issues unique to culturally diverse populations (Pretorius, 2007). Thus, nursing programs have intentionally included transcultural care in their curriculums. Ryan et al. (2000) add that nursing faculty and students who teach and learn cultural skills by immersion experiences in "their world [country]" have a "long-term impact" in their professional nursing role, international perspective, personal [life], and intellectual development (p. 402).

Brief Description of the Undertaking: Each year (2012-2014), during the month of August, a country-specific course provided an opportunity for nursing students to participate in a short-term study abroad nursing experience. The purpose was to develop an understanding of theoretically based transcultural healthcare practices. Seminar format to prepare students for in-country experiences was utilized and offered a means to stimulate discussion regarding health related issues specific to India. These seminars and online classroom exercises assisted nursing students in formulating personal perspectives and individual cultural values that promote professional nursing worldwide. Students participated as members of healthcare teams in a variety of access-to-care settings, including an urban hospital, rural mobile medical clinics, safety-net clinics for prostitutes, non-profit children's outreach, and homes for the destitute/dying through the Mother Teresa Centers. Pre/post-trip evaluations by students offered insights to future faculty led transcultural courses and experiences.

Outcomes Achieved: As a result of these learning experiences, students gained culturally sensitive clinical skills that are now embedded into their nursing practice. One student shared, "It deepened my respect for other cultures and practices" while another noted, "This experience helped me gain skills in providing global healthcare" (Titus, 2013). Additionally a student stated, "I was able to learn about global health by physically seeing the way other people live, and how it determines their perception and access to health care" (Service Learning Post-Trip Evaluation, 2014). Students have since participated in scholarly activities, including intramural presentations and a manuscript to a professional student nursing journal on these lived experiences. This transcultural health course and scholarly activities fueled interest in students advancing their nursing education.

Conclusions: The knowledge gained through an immersion experience in India on meanings of access-to-care has imparted a personal and professional growth experience our nursing students would not have received in a traditional American classroom. Recognition of global healthcare services and how access to these services often drastically changes during monsoon season is best learned through immersion experiences. Schools of nursing that offer transcultural learning experiences provide intentional opportunities for both faculty and students to further develop culturally congruent nursing practice and incredible opportunities to serve vulnerable populations in "their world, not mine" (Ryan, 2000).

◀ ▶ go to PG.

CULTURE

Health Beliefs, Acculturation and Tobacco Use among Arab-Americans in California

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Background: Tobacco use is prevalent in the Middle East, and relatively, high rates of smoking behaviors are reported in the immigrant populations from this region.

Purpose: The aims of this study were to examine the association between tobacco use and acculturation status among Arab-Americans living in Southern California.

Research Questions: this study is aiming to answer the following questions:
1. What are the demographic characteristics of Arab-Americans who participated in the study?
2. What is the tobacco use rate of Arab-Americans aged 18 years and older in California?
3. What is the acculturation status of Arab-Americans aged 18 years and living in California according to Berry's model?
4. Is there an association between demographics (age, gender, years spent in the U.S., generation type, level of education, religion, marital status, and income); acculturation level, marginality (Anglo marginality, Arab marginality, and Arab-American marginality); and tobacco use (never, ever, current) of Arab-Americans aged 18 and older in California?
5. Is there a difference in tobacco use rates between levels of acculturation of Arab-American aged 18 and older in California?

Methods: This study examined tobacco use in association with health beliefs and acculturation status among a convenience sample (N=132) of Arab-Americans in California. A cross-sectional descriptive correlational design was employed guided by an integrative model of the Health Belief Model and Berry's Acculturation Model. Participants completed set questionnaires assessing smoking status and acculturation levels based on Berry's model of acculturation.

Findings: Results showed that despite the increase in subjects' general health concern, tobacco use was still high. Subjects reported that barriers surrounding tobacco cessation were greater than the benefits of quitting, and those with lower levels of acculturation had higher levels of tobacco use regardless of duration of residency. The data supported the hypothesis that culture plays an important role in smoking behavior and health motivation.

Conclusion: The Arab culture emphasizes both fatalism and reliance on God's will, but disease prevention programs in the US emphasize the individual's role in health promotion. Thus, culturally-sensitive tobacco cessation programs should be tailored to meet the needs of this high risk population.

Implications: The results of this study is beneficial to public health nurses working with culturally diverse population, they therefore have the opportunity to provide culturally sensitive tobacco use prevention and effective cessation programs accordingly.

◀ ▶ go to PG.

CULTURE

Center for American Indian Resilience (CAIR): Research Core

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Purpose: CAIR is a collaborative effort between Northern Arizona University, University of Arizona, Diné College and American Indian (AI) communities to promote health and document models and meanings of individual, family and community resilience.

Background: Health disparities disproportionately affect AI. Yet, their spirit and culture endure. CAIR is exploring the relationship between community assets and health, e.g. the role of traditional knowledge, the power of collective experiences and the value of integrating cultural strategies in teaching health behaviors and supporting positive health outcomes. Documenting these health strategies and positive behaviors oftentimes is not collected in public health research. An overarching goal is to transfer and integrate cultural strategies and tribal elders' wisdom, knowledge and experience into contemporary public education and health promotion intervention.

Undertaking: The research core's focus is to mentor junior investigators and community-investigator teams to document models of resilience in AI communities.

Outcomes Achieved: Two pilot research studies were funded as part of the Center grant, use a community-based participatory research approach to documenting and promoting resilience in urban AIs in Tucson and Flagstaff, Arizona. In addition, five community-based projects have been funded that focus on collaborations between a university partner and AI agency partner. These collaborative projects aim to improve and understand resilience and culture through: (1) strengthening the aging process of AI elders, (2) empowering AI youth with disabilities, (3) reinforcing sports as a cultural strength, (4) addressing uranium contamination of traditional foods, and (5) empowering youth through a radio projects designed to promote community health. The overarching goal of all of this work is to identify, assess, translate and apply models of resilience associated with positive outcomes in AIs.

Conclusions: The projects of the CAIR Research Core are strengthening and enhancing existing community and academic partnerships. Our work is deepening the scientific knowledge of resilience and health of AI. The CAIR project will facilitate the translation of knowledge from research to practice to inform and transform public health education, practice and policy.

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◀ ▶ go to PG.

A Systematic Review of Type 2 Diabetes Self-Care Practices in Ethiopian Immigrants

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Aim: The aim of this review was to explore the published literature on the relationship of acculturation and self-care practices of older Ethiopian immigrants with Type 2 Diabetes (T2D) and to use findings to suggest future studies that would identify specific factors that inhibit self-care behaviors among this population.

Background: Ethiopian Immigrants represent the second largest African Immigrant population with over half a million residing in the United States (US) (US Census, 2012). Among studies that have considered Ethiopian immigrants specifically, there is evidence that Ethiopian immigrants have a higher T2D prevalence associated with duration in the U.S. Self-care practices are essential components of T2D disease management that prevent T2D related complications. However, given the many operationalizations of acculturation, conclusive evidence of the relationship between acculturation and self-care practices among this group is still lacking.

Methods: A systematic review using PubMed, Medline, EMBASE and CINHAL was carried out exploring a cross-cultural relationship between acculturation and self-care practices by examining national and international studies involving immigrants. All study designs (qualitative and quantitative) were eligible, and no restriction was put on the date of the studies. Analyses examined the extent to which measures of acculturation (i.e., acculturation score, years in the United States, and language use) were associated with self-care practices and the immigrant group. Studies of self-care practices included those that tested one or more of several measures (i.e., medication adherence, dietary acceptability, exercise patterns, and/or glycemic control).

Results: The majority of the studies indicate some consistent relationships among studies done with Ethiopian immigrants who reside in Minnesota, Canada, and Israel, as well as Mexican, Asian, Caribbean, Nigerian, and Somali immigrants who reside in the US. A pattern is noted among studies where the less one is acculturated the poorest his/her dietary adherence, glucose monitoring, and exercise practices. Studies also indicate an inverse relationship between medication adherence and acculturation, making it the least challenging of the self-care practices. Additional observed individual factors include educational status, age, perceived severity of the disease, lack of awareness of how to follow diet plan, and longer duration with the disease. Due to variations in the location of studies, small sample sizes, cultural variability, and measurement bias (i.e. self-reported self-care practices), the validity of some of the studies are questioned. No study included all the variables mentioned in the search methods which made finding the patterns of the relationship difficult. Therefore there is no conclusive statement to be drawn on whether acculturation affects self-care practices of T2D among older Ethiopian immigrants.

Implications and Conclusion: Findings from this review are inconclusive of the influence of acculturation on self-care practices of T2D specific to older Ethiopian immigrants, while confirming the relationship exists cross-culturally. A pattern was noted among studies such that the less acculturation, the poorer the dietary adherence, glucose monitoring, and the less exercises. Investigating barriers to self-care practices of older Ethiopian immigrants will allow health care practitioners to implement culturally-sensitive disease management interventions by acculturation status.

Funding: UCLA/CDU Partnership for Enhancing Diversity of Nurses with Research Careers/NIH Grant Number: 5R25GM102777-02.

◀ ▶ go to PG.

Health-Seeking Behavior of Korean Women with Myocardial Infarction

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Purpose: This study was to generate a theory of HSB among Korean women with MI with regard to their experiences of MI at the time of symptom presentation, and the process of treatment seeking.

Background: Coronary heart disease is the second leading cause of death among both men and women in Korea. Yet the mortality rate of heart disease among women aged over 65 is nearly twice that of their male counterpart. Although mortality rates for women are approximately 10 years behind those for men, women have no survival benefits. More women have poor clinical outcomes and prognosis than men. Studies have reported women's non-specific symptoms lead them to be slow in seeking treatments, and relatively advanced age and accompanying comorbid diseases cause more serious hemodynamic status among women. However, there is scanty knowledge about the reason, apart from physiological and biological differences, for why women have longer symptom-to-door time. The health-seeking behavior (HSB) is influenced by multiple factors including socio-economic variables, social status of individuals, perceived quality of service, and social perspectives of gender. Social and cultural factors are central in identifying HSB among women. In spite of this, no study has been found in published literature on the social and cultural construction of myocardial infarction (MI) among Korean women, which affects MI care for this population.

Methods: Grounded theory was adopted to explore the experiences of Korean women with MI at the time of symptom presentation to identify Korean women's health-seeking process in getting optimal treatment. 18 women participated in 42 interviews using a theoretical sampling from two university hospitals. 42 open-ended interviews were tape-recorded and transcribed verbatim, and then constant comparative analysis was chosen to achieve saturation of theory.

Results: The core phenomenon experienced by women, as articulated in their colloquial expression was "finding out what's going on and relieving symptoms." The process of HSB for seeking a treatment was a sequential and iterative cognitive. The concepts of HSB of Korean women with MI were "experiencing symptoms," "attributing symptoms," "evaluating situation," "managing symptoms," "consulting others about symptoms," "getting an optimal treatment," "maintaining optimal health." Women performed a series of actions through the process from the time of symptoms onset to getting an optimal treatment and maintaining optimal health. For some women, the process was repeated if symptoms evolved and relapse occurred. Inner iteration loops happened among some women as women consult symptoms to others. Women got alarmed at unusual and evolving symptoms, which started from mild and non-specific symptoms ahead of MI. Attributing of symptoms was made based on previous experiences and evaluating of situations directed next step how to relieve symptoms and identify the causes. After an optimal intervention, women paid attention to strategies for maintaining optimal health as an ongoing process.

Implications: The study was socially and physiologically contexted, therefore empirical testing in clinical setting needs to be done for future studies.

Funding: This study is supported by funds from the Hester McLaw scholarship of the School of Nursing, University of Washington.

go to PG.

CULTURE

An Ethnographic Study of Health Promotion Activities in Rural Papua New Guinea

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Purpose/Aims: This study examined factors influencing the adoption and sustainability of community based health care (CBHC) programs in rural Papua New Guinea (PNG); including sociocultural beliefs, religious practices, and community resources associated with social capital (trust, reciprocity, social engagement).

Rationale: Health disparities in developing countries require health promotion strategies that are congruent with the worldview of the community. Collective societies with close kinship ties such as those in rural PNG equate social harmony with health. For health promotion programs to be adopted a consensual decision making strategy is needed and the community empowered to develop culturally appropriate means of integrating innovations into common practice.

Background: Papua New Guinea (PNG), like many other developing countries suffers from a preponderance of health inequities particularly in rural areas. Stagnant health indicators are exacerbated by limited access to health services and inadequate resources. These issues are magnified by widespread health literacy problems and a lack of awareness regarding high risk behaviors.

Method: This qualitative study used a descriptive, ethnographic approach to explore the influence of cultural health beliefs, consensual decision making practices, and the role of social capital on the adoption of health promotion activities. The primary sites were rural villages in the highlands of PNG that participated with the CBHC program. In-depth interviews using open ended questions were the primary data collection method. Questions focused on traditional and current beliefs about health and illness, kinship obligations, community resources, and participation in village activities.

Results: The following themes were identified using thematic analysis of the data: 1) A synthesis of traditional health beliefs and innovative practices influences how health promotion activities are perceived and implemented; 2) Relational harmony is seen as essential for the maintenance of health; 3) Strong kinship ties and consensual decision making is the norm in rural villages, however women continue to have a limited voice; 4) Religious practices are viewed as integral to societal stability and psychosocial health.

Implications: Developing a comprehensive understanding of sociocultural influences on the adoption of health promotion practices can help nurses facilitate community empowerment and sustainability of community based health care programs in rural areas.

Funding: University of New Mexico Graduate Students Grant and Wichita State University College of Health Professions Human Capital Development Grant.

◀ ▶ go to PG.

CULTURE

Evaluating Quality Improvement Processes and Strategies across 3 African Countries

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Purpose: To evaluate the impact of systems analysis and improvement interventions targeting nurses and nurse managers in low-income countries.

Background: Prevention of mother-to-child HIV transmission (pMTCT) is complex, requiring that sequential, linked systems work well independently and together, and engage patients throughout the pMTCT cascade. A systems view can highlight inefficiencies at each step of the cascade, better explain how steps interrelate, and foster novel, iterative approaches to improve pMTCT and identify best practices for scale-up. Few rigorous evaluations have investigated the impact of systems analysis and improvement interventions in low-income countries.

Methods: A cluster randomized trial in 18 intervention and 18 control facilities split equally across three study countries with diverse histories, health systems, and HIV burden (Mozambique, Cote d'Ivoire, Kenya) is underway to assess the effectiveness of a five-step systems analysis and improvement intervention. The health facility-based intervention is a mentored process of 1. Cascade analysis with optimization functionality, 2. Process mapping, and 3-5. Continuous Quality Improvement (CQI) cycles of planning, implementing, analyzing, and re-iteration. Steps 1 and 2 are designed to identify and prioritize service areas for improvement (HIV testing, ART provision, postpartum care, PCR testing, pediatric cART initiation), and generate workflow modifications for testing. Steps 3-5 include the CQI cycle. The intervention, which targets nurses and nurse managers, will be evaluated over nine months, focusing on process measures that reflect improved pMTCT efficiency and quality.

Results: The five-step intervention was previously piloted over a 6-month period in Mozambique, and significantly adapted to meet the needs and competencies of district-level nursing managers. Pilot results highlighted the importance of leadership and staffing patterns in implementation success. The pragmatic intervention trial will be completed at the end of 2014, and main impact and process evaluation results will be presented.

Implications: This trial is a rigorous evaluation of a simple, iterative and contextually appropriate intervention to understand and improve pMTCT services. Results will provide evidence of its effectiveness, which may be applicable for testing in other similarly complex areas.

CURRENT ISSUES IN GERONTOLOGY

OVERVIEW: CURRENT ISSUES IN GERONTOLOGY

Schola N. Matovu

COMRADE: COMMUNICATING RESIDENT ADVERSE EVENTS

Laura M. Wagner

ACCESS TO COMMUNITY-BASED PALLIATIVE CARE FOR OLDER ADULTS WITH ADVANCED ILLNESS

Nancy Dudley, Margaret Wallhagen

PERCEPTIONS AND BELIEFS TOWARD LUNG CANCER SCREENING AMONG OLDER SMOKERS

Janine K. Cataldo, Anne Berit Petersen

OLDER GRANDPARENTS AS PRIMARY CAREGIVERS: METHODOLOGICAL CONSIDERATIONS

Schola Matovu, Margaret Wallhagen

◀ ▶ go to PG.

CURRENT ISSUES IN GERONTOLOGY

Overview: Current Issues in Gerontology

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Objective 1: Those who attend this symposium will be able to describe some of the individual- and system- level health equity and access issues faced by diverse groups of older adults and understand how these issues may hinder or promote optimal aging.
Objective 2: Those who attend this symposium will be able to identify methodological, systematic and policy interventions that could improve the overall health of older adults.

Understanding factors that influence wellbeing is critical to research on optimal aging. Use of research evidence to engage in practice and policy improvement initiatives that identify cost-effective, culturally sensitive systems and interventions for organizing and delivering quality healthcare to older adults is imperative. The individual presentations in this symposium each address individual, systematic and policy issues that may impact the wellbeing of older adults and improve the equity and access to quality and safe nursing care available to them.

The first paper describes findings of an intervention aimed at improving how licensed nurses (both LVNs and RNs) communicate patient safety events to nursing home residents and families. The second paper uses conceptual analysis to explore individual and health system characteristics associated with access to community-based palliative care for older adults with serious and complex chronic illness. The third paper provides information about the factors related to older smokers as a high risk population for lung cancer and discuss guidelines for lung cancer screening the decisions to have screening in this population. The fourth paper describes experiences of older African American grandparents raising grandchildren, how this role impacts their social, financial physiological wellbeing and highlights the importance of utilizing appropriate methodological approaches to better understand the phenomenon and areas for potential psychosocial interventions. Together, these papers expand the boundaries of understanding of multiple issues that impact the health and wellbeing of older adults and illustrate how research can identify factors that hinder or promote optimal aging in this population.

◀ ▶ go to PG.

COMRADE: COMmunicating Resident ADverse Events

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Purpose: The purpose of this study is to report data from an intervention aimed at improving how licensed nurses (both LVNs and RNs) communicate patient safety events to nursing home residents and families.

Background: Each year, at least 8 million events and errors occur across the 16,000 nursing homes in the U.S. Licensed nurses are often the primary contact to inform residents and family members when there is a patient safety event such as medication error or fall, for example. Nurses surveyed feel that they lack training in this communication process that frequently feels incomplete, challenging, and uncomfortable.

Methods: This is a Phase 1 trial. In Phase 1.0 we tested the intervention training workshops in three Northern California nursing homes. Phase 1.1 we implemented the revised training sessions in a rural Central California nursing home to explore the quality of the communication following training. In Phase 1.2 we are in the process of audiotaping nurses (goal: n=20) before and after the Phase 1.0 version training session to evaluate changes in how the nurse communicates a simulated event via telephone to a standardized graduate research assistant “family member” using a structured tool provided in the training sessions.

Results: Thus far, 30 nurses have completed the training. Of these, 40% were staff nurses and 30% managers, with the remainder support staff (e.g., staff development nurse; treatment nurse). Using a hypothetical serious event scenario, only 60% of the time would nurses apologize and communicate full details of the event. A similar percentage worried they would be reprimanded due to their involvement. We found that nurse participants benefited from the training, with managers and directors of nursing especially reporting increased comfort in event communication.

Implications: We aim to continually refine the training program components and outcome measures with the goal of conducting a future randomized trial to explore the impact this training has on communication processes and outcomes. This study has great potential at improving how licensed nurses communicate with family members after a patient safety event as well as improving nurses’ comfort levels in this process, as well as how family members respond to open and transparent communication. The implications for education include adding patient safety competencies regarding communication of patient safety events in both Baccalaureate and Graduate Nursing curriculums.

Funding: This study was funded by the 2013-2015 UCSF Hellman Fellows Program; and the Virginia Stone, Western Institute of Nursing, Dorothy A. Cornelius Scholar, Hildegard E. Peplau, the American Nurses Foundation Nursing Research Grants Program, 2013-2014.

◀ ▶ go to PG.

CURRENT ISSUES IN GERONTOLOGY

Access to Community-Based Palliative Care for Older Adults with Advanced Illness

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Purpose: Barriers exist in access to community-based palliative care for older adults nearing the end-of-life, not in hospice. Impaired access may have negative health consequences or might limit access to needed supportive symptom management. The purpose of this conceptual analysis is to explore the factors associated with access to community-based palliative care by older adults with serious and complex chronic illness.

Definition of Concept: The concept access is defined as the degree to which older adults with serious and complex chronic illness nearing the end-of-life are inhibited or facilitated in their ability to gain entry to and to receive care and services from the health care system that include community-based palliative care.

Internal Consistency of the Concept: This conceptual analysis utilized Anderson's Behavioral Model of Health Services Use (2007) to explore the individual and health system characteristics associated with access to community-based palliative care. Research studies from peer-reviewed journals (2003 to 2013) were analyzed using an adaptation of Walker and Avant's (2004) process of concept analysis.

Logic Linking Concept to Research Problem: Acceass to community-based palliative care for older adults with serious and complex chronic illness was associated with provider knowledge and understanding of palliative care, clarity of prognosis, and interprofessional role clarification.

Conclusions: Findings are discussed in relation to Anderson's conceptual framework of health services use regarding individual and health system characteristics associated with access to community-based palliative care and suggest the need for earlier referral. A better understanding of the antecedents and consequences associated with access to community-based palliative care for older adults with serious and complex chronic illness is important to nursing in many ways that include promoting provider education, establishing triggers for referral, and defining the processes of care for co-management by primary care providers and the interprofessional palliative care team.

◀ ▶ go to PG.

Perceptions and Beliefs toward Lung Cancer Screening among Older Smokers

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Background: In the United States, lung cancer is the leading cause of cancer-related death and 85% of cases are caused by smoking. Of all cancers, lung cancer has one of the lowest five-year survival rates (17%), but when diagnosed early, the five-year survival rate jumps to 52%. However only 15% of all lung cancer cases are diagnosed at an early stage. Recently there is strong evidence that lung cancer mortality is decreased by 20% with low-dose computed tomography (LDCT) screening for healthy individuals with an elevated risk for lung cancer (i.e., adults age 55-80 years, with a 30 pack-year smoking history who currently smoke or have quit within the past 15 years). Successful implementation of lung cancer screening guidelines depend on being able to reach high-risk individuals, yet studies show that those at higher risk (i.e., older smokers) are less interested in being screened despite awareness of risk.

Purpose/Aims: The purpose of this study was to survey a national sample of older smokers to identify what perceptions and beliefs are associated with the decision to have a LDCT scan. The aims for this study were to: 1) Identify the demographics, perceptions and beliefs associated with the decision to have an LDCT scan if "asked today", and 2) Provide a predictive model of factors to explain a smokers' willingness to have a LDCT scan.

Methods: During the month of July 2014, a national Qualtrics panel was conducted online; the sample includes 549 participants between the ages of 45 and 81. Eligible participants were older (≥ 45 yo), current and former smokers (<2 yrs. since cessation). Frequencies and descriptive statistics were run on all demographic variables and Pearson Correlations were conducted for participant demographics, number of years smoked and beliefs and perceptions associated with lung cancer screening. A logistic regression analysis was conducted to predict agreement to have a LDCT scan for lung cancer using perceptions and beliefs as predictors.

Results: None of the demographics were associated with lung cancer screening perceptions and beliefs. Eighty percent would agree to a LDCT today but only 26% have been told they are at high risk for lung cancer. Only 11% said a negative result would give them permission to continue to smoke. A test of the full model against a constant model was statistically significant, indicating that the predictors as a set reliably distinguished between those who would agree to a LDCT scan "today" and those who would not (Chi square 81.71, $p < .0001$, df = 5). The significant determinants were having beliefs that: screening will decrease risk of dying of lung cancer, they are at high risk for lung cancer, early detection of lung cancer will result in a good prognosis, and a negative result will decrease worry about lung cancer. Additional significant predictors were being worried about lung cancer and perceiving the screening as convenient and accurate.

Implications: These results suggest the importance of education for older smokers about the accuracy of LDCT and the health advantages of lung cancer screening.

◀ ▶ go to PG.

Older Grandparents as Primary Caregivers: Methodological Considerations

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Purpose/Specific Aims: The purpose of this study was to seek understanding of the experiences and mental health of African American grandparents (55-years and older) who provide primary care for their grandchildren. The specific aims are: 1) to explore the range of factors that influence the experience of these older caregivers. 2) to analyze caregivers' perceptions of their decision to care for their grandchildren, including the subsequent potential outcomes; impact on their health, changes in their quality of life, and their relationship satisfaction with significant others. 3) to explore the prevalence of mental health symptoms, using Cultural Formulation Interview of the DSM IV.

Background: In the United States, grandparents across class, race and gender lines have recommitted to the parent role as full-time caregivers for their grandchildren. The literature indicates that this time commitment ranges from three to ten years, usually with very limited resources available to support these older adults. Multiple social factors have been identified as influencing this trend on the phenomenon among these elderly caregivers. These include: inability for adult children to take care of their own children as a result of incarceration; effects of substance abuse or other mental illnesses; and other factors such as child abuse and abandonment, unemployment, divorce or death. Consequently, these grandparents have been reported to experience physical, psychological, emotional, social, and financial strain. To date, limited research has been conducted to better understand the experiences of older African American grandparents, particularly, the mental health impact of this role on their psychosocial wellbeing.

Methods: Using Grounded Theory qualitative method, interviews were conducted with grandmothers recruited from Oakland and the surrounding Bay Area. Snowball sampling technique was used to recruit 55 years and older, English-speaking, African American grandparents providing care to their grandchild for at least six months. The interviews were audio-recorded, transcribed and analyzed using both open and axial coding as well as reflexive and analytic memoing congruent with the methodologically. This iterative analytic process allowed the researcher to identify themes emerging from the data and develop a conceptual framework of the basic social processes surrounding the older African American grandparents who are primary caregivers for their grandchildren.

Findings: In congruence with grounded theory methods, saturation was achieved as participant narratives revealed underlying factors that influence the caregiving experiences of these older grandparents under the themes of *Value System, External/Social Factors,* and *The Core***.** These findings are consistent with the literature siting both negative and positive impacts of caregiving on the social, financial and physiological wellbeing of older grandparents who care for their grandchildren. Additionally, this study highlighted the importance of utilizing appropriate methodological approaches to better understand the phenomenon and identified areas of potential psychosocial interventions.

Implications: These findings could contribute to a better understanding of the experiences of older African American grandparents as caregivers for their grandchildren. This study could also inform other researchers and clinicians who seek explanatory models upon which to design interventions or tailor social services such as childcare and respite care for older adult caregivers to grandchildren.

◀ ▶ go to PG.

DIABETES

DIABETES MELLITUS AND HMONG AMERICANS: A SCOPING REVIEW

Fay Mitchell-Brown

DIABETES PREVENTION THE HARD WAY: MODIFIED DIET AND INCREASED EXERCISE

Torrie St. Julien, Kathy James, Franklin K. Lo

TRANSITIONAL CARE FOR ADULT PATIENTS WITH DIABETES MELLITUS

Eric T. Tobin, Shelley Hawkins, Crisamar Anunciado

FAMILY AND FRIENDS INVOLVEMENT IN SELF-CARE FOR AFRICAN AMERICANS WITH TYPE 2 DIABETES: A REVIEW OF THE LITERATURE

Judy McKelvy, Arleen Brown

PILOT TESTING OF A PATIENT PORTAL SYSTEM AMONG PATIENTS WITH TYPE 2 DIABETES (T2D)

Brittany Morgan, Donna Velasquez

IMPROVING PATIENT GLYCEMIC CONTROL THROUGH A DIABETES MANAGEMENT MENTORSHIP PROGRAM

Kathy Lopez-Bushnell, Nicole Morris

◀ ▶ go to PG.

DIABETES

Diabetes Mellitus and Hmong Americans: A Scoping Review

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Aim: To provide of a review of research evidence of diabetes in the Hmong.

Background: When immigrating to the US, the Hmong, an ethnic minority group predominantly from Laos, experience a transition from an agrarian society to a more industrialized society. This places the Hmong at an increased risk for chronic illnesses such as diabetes. Anecdotal evidence suggests that diabetes is on the rise in this population. Language, religion, and cultural beliefs are important factors to consider when planning culturally relevant diabetes care for the Hmong population.

Methods: Seven databases were systematically searched for studies examining factors that influence diabetes care in the Hmong. A total of nine studies were retrieved. A scoping methodology was applied.

Results: The empirical evidence of diabetes in Hmongs is limited, and key findings suggest that those living with diabetes have limited knowledge of the disease.

Implication: Cultural differences in Hmong Americans are significant in their diabetes care and should be considered when developing educational interventions.

Keywords: Scoping review, scoping study, Hmong, diabetes mellitus

◀ ▶ go to PG.

DIABETES

Diabetes Prevention the Hard Way: Modified Diet and Increased Exercise

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Purpose: The aim of this Evidenced Based Project (EBP) is focused on prevention of the progression of diabetes mellitus or reversal of pre-diabetic participants back to a normal glycated hemoglobin A1C (HgA1C) level of < 5.7%. Evidenced based research has shown that diet alone does not provide a long term solution for most individuals, as weight regain is common. Weight loss has been known to decrease insulin resistance and risk for diabetes as well as other metabolic abnormalities. The goals of diabetic prevention are delaying the onset of diabetes, preserving beta cell function, and preventing or delaying microvascular and perhaps cardiovascular complications. This project involves lifestyle intervention with the purpose of 7% weight loss and a minimum of 150 minutes of physical activity a week.

Background: The estimated overall prevalence of diabetes among adults in the United States ranges from 5.8 to 12.9 percent. Diabetes accounts for almost 14 percent of United States health care expenditures, half of which is related to complications associated with underlying microvascular and macrovascular changes contributing to problems such as myocardial infarction (MI), stroke, end-stage renal disease, retinopathy, and foot ulcers. Quality of life and economic factors are directly related to a high prevalence of diabetes and adversely impacts employment, absenteeism, and work productivity.

Methods: My approach is modeled after the Diabetes Prevention Program (DPP). This evidenced based project will be implemented in a primary care setting where an average of forty percent of the population are diabetic. Patients will be identified based on pre-diabetic HgA1C levels between 5.7 and 6.4%, over the past 6 months. There will be weekly meetings over a 12 week period with participants, and/or weekly phone calls, if they are unable to attend meetings. The project will educate and monitor participant's progress with regards to weight loss and activity levels. The data collected will be used for pre and post measurements: HgA1C level, weight, height, activity level, nutrition habits, and BMI.

Outcomes: To be determined: To reduce HgA1C < 5.7% and 7% overall weight loss.

Conclusion: Reducing the overall prevalence of pre-diabetics in this practice, may lead to lower health costs, a healthier patient population, and decreased cardiovascular incidents related to diabetes. Furthermore, the results from this program could be used in conjunction or comparison with decreasing the rates of metabolic syndrome among the diabetic population.

◀ ▶ go to PG.

DIABETES

Transitional Care for Adult Patients with Diabetes Mellitus

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Purpose: The purpose of this evidence-based practice project is to incorporate a diabetes transitional care program using a shared medical appointment model to improve patient self-care management behaviors and glycemic control in diabetic patients at a southern California hospital.

Background: Diabetes is a challenging healthcare problem associated with significant mortality and morbidity issues. In 2012, 29.1 million people, or 9.3% of the U.S. population, had a diagnosis of diabetes mellitus and 28.9 million of those patients were 20 years of age and older. Today, diabetes is of epidemic proportion worldwide and an additional 5.4% of the adult population is projected to be diagnosed with diabetes by 2025. The growing incidence of diabetes can be attributed to an increase in obesity, lack of exercise, diet high in processed sugars, and/or overall lack of diabetes self-management knowledge. Research consistently supports transitional care as an effective evidence-based solution for enhancing the overall management of patients with diabetes as reflected in improved self-management and glycemic control. At the project facility, there is no formalized transitional care program for diabetes patients in place.

Practice Change Process: The purpose of this evidence-based practice project is to enhance diabetes patient self-care knowledge by 20% and improve patient glycemic control by a 10% reduction in HgbA1C levels. Patients 18 years of age and older with a primary or secondary diagnosis of diabetes who are hospitalized and have a HgbA1C > 7.5% will be selected to participate in the transitional diabetes care program. Following discharge from the hospital, the patient will be seen within a 14-day time frame. Using Pender's theory of Health Promotion as a foundation for the project, selected patients will participate in a 90-minute multi-disciplinary medical appointment to discuss evidence-based care regarding diabetes management. Patients are educated on the American Association of Diabetes Education (AADE) - 7 Self-Care Behaviors when in the hospital. The Diabetes Knowledge Questionnaire will be administered pre and post intervention in order to measure the patient's knowledge regarding diabetes self-care management. In addition, glycemic control will be determined through Hgb A1C levels obtained at baseline and two - three months post-intervention.

Outcomes: In progress. It is anticipated that participants will have a 20% improvement in diabetes self-care knowledge and a 10% reduction in Hgb A1C levels two – three months post intervention.

Conclusions: Transitional diabetes patient care provides a multi-faceted approach to evidence-based diabetes self-care management. Patients are empowered with self-care management skills promoting improved diabetes self-care behaviors and glycemic control. Transitional care can play an important role in improving quality of life, reducing costs, and improving access to health care for adults with diabetes. Advanced practice nurses possess the knowledge and skills to assume a leadership role in the development and implementation of transitional care programs for diabetes patients.

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◀ ▶ go to PG.

DIABETES

Family and Friends Involvement in Self-Care for African Americans with Type 2 Diabetes: A Review of the Literature

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Background: Diabetes is a common chronic condition that is associated with devastating health consequences for African Americans, who experience higher prevalence of diabetes and its complications. African American women, in particular, face a disproportionate burden of diabetes and its complications. Although there are well documented evidence-based therapies and self-management strategies to reduce morbidity and mortality from diabetes, use of these therapies among African American women is suboptimal.

Objective: To conduct a systematic review of the nature and effectiveness of social network (e.g. friends and family members) involvement in self-care for African American adults with type 2 diabetes (T2DM). Results of this review will be used to inform a culturally tailored intervention to enhance intrinsic motivation for engaging in recommended diabetes self-care behaviors among African American women with T2DM.

Methods: We conducted a systematic review of the published English-language literature (including PubMed, Web of Science, and CINAHL databases) using standardized search terms including African American, friends and family, social support, type 2 diabetes, and self-management to identify articles on the involvement of family and friends in self-management practices for African American adults with T2DM. We further identified those studies that focused on African American women. We also reviewed the references of each article selected for inclusion to identify other relevant articles. The text of each article was reviewed and content abstracted by one author (JLM).

Results: We reviewed 111 articles and identified 18 that met inclusion criteria; 5 of these focused on African American women. Characteristics of social networks that may influence diabetes self care and outcomes were identified, including several specific to African American women. Overall for African Americans, friends/family members who can serve as role models are more effective in helping person with diabetes be successful in obtaining glycemic control. African American women with diabetes obtained better glycemic control when they are satisfied with social support and when friends/family members are educated in diabetes care and can provide positive support. One recent study suggests that text messages may be considered an additional “friend” that can augment the support provided by members of the social network through reminders and opportunities to increase mastery.

Conclusion: Friend/family centered approaches to supporting diabetes self-management can help African American adults improve glycemic control. Supplementing support with text messaging may enhance social support interventions. Additional research is needed to identify culturally-tailored social network interventions that result in improved diabetes outcomes for African American women.

◀ ▶ go to PG.

Pilot Testing of a Patient Portal System among Patients with Type 2 Diabetes (T2D)

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Purpose: The purpose of the project is to pilot messaging using the patient portal to patients with T2D and evaluate the effect of the messages on flu shot compliance, follow-up appointment rates, patient-provider communication, and patient satisfaction.

Background: Approximately 8.3% of the US population and 347 million people worldwide have Type 2 diabetes (T2D).T2D is a complicated disease, with many co-morbidities. The American Diabetes Association guideline specifically recommends that patients with T2D be cared for by a team, with a "collaborative therapeutic alliance" between the team, family, and with patient at the center of the care plan. To facilitate communication among patients and healthcare providers and encourage patient involvement in their care, the Centers for Medicare & Medicaid Services (CMS), instituted the Electronic Health Record (EHR) Incentive Program. Stage I and II of this program require that providers meet the Patient Electronic objective which gives patients access to their health information. The patient portal is an online database where patients can access their health information 24 hours a day. Patients are able to communicate with providers, see laboratory results, and access accurate medication lists. Stage I of the meaningful use involves registering patients, allowing them to access basic information, such as laboratory results and medications through the portal. Patient messaging to and from the provider is included in Stage II of meaningful use

Methods: The project is being implemented at a Federally Qualified Health Center in the southwest United States. The project facility implemented Stage I, registering their patients with the patient portal, at the beginning of 2014 and plans to start sending messages to their patients, which is Phase II, in January 2015. Following IRB approval, adult patients with T2D, who speak Spanish and/or English and who are registered with the patient portal will be recruited for the project. Each patient will receive a series of three messages through the patient portal: a reminder to get the flu shot, a reminder the patient is due for his or her three-month diabetic check-up, and the third message will ask if the patient has any questions for the provider about their recent visit. Following the three messages, a patient satisfaction survey will be sent through the patient portal to any patient who received any of the above messages. The electronic health record will be used to measure patient responses, flu shot compliance, and three-month appointment rates.

Implications for Practice: The patient portal is a new and emerging area, with high reimbursement dollars attached to its meaningful use. There is strong evidence that communication between patients and providers improves with use of the patient portal, thus strengthening the patient-provider relationship. Furthermore, use of the patient portal has the potential to help promote health and manage chronic diseases, such as T2D.

◀ ▶ go to PG.

DIABETES

Improving Patient Glycemic Control through a Diabetes Management Mentorship Program

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Background: The classic healthcare system is based on the concept of “curing” what ails the patient. Diabetes is incurable; a chronic condition requiring care that addresses more than just the medical and pharmacological needs of a patient (Arts, Landewe-Cleuren, Schaper, & Vrijhoef, 2011). During hospitalization, nurses educate patients regarding diabetes and diabetes self-management. However, several studies have shown that nursing knowledge deficits exist in the areas of pharmacokinetics of insulin, target blood glucose ranges, and the appropriate treatment of hypoglycemia (Modic, et al., 2013). In addition, nurses have poor comprehension of fundamental diabetes care, including appropriate HgA1c levels and self-care management (Young, 2011).

Purpose: Implementation of a Diabetes Management Mentorship (DMM) program will increase nursing knowledge of fundamental diabetes care and nurse confidence in the provision of self-care management education to hospitalized patients with diabetes. Hospitalized diabetic patients will have reduced hypo/hyperglycemic episodes, their glycemic control will improve and they will have decreased hospital readmissions.

Methods/Practice: This IRB approved study is currently collecting baseline data via a voluntary survey to measure hospital nursing staff knowledge and self-confidence in teaching diabetes to hospitalized patients. Retrospective patient data from 2013 is being collected to measure patient outcomes while receiving standard care. In November 2014, 20 hospital staff nurses will be recruited to function as DMMs. The application process includes a written application, recommendations from Unit Directors, and a formal interview with study staff. Applicants are required to have a minimum of one year nursing experience. Once selected, nurses will have eight hours of protected time for monthly mentorship activities. They will complete additional education regarding diabetes, disseminate this information to other staff nurses, conduct hypo/hyperglycemia audits on their home units and teach diabetes self-management skills to hospitalized patients.

Findings/Conclusions: This is a replication of a previous study in an Ohio Hospital where the facility observed a decrease in hypoglycemic events, fewer insulin errors, an increase in outpatient education referrals and a 50 percent increase in hospital-wide adherence to existing hypoglycemia protocols (Modic, Canfield, Kaser, Sauvey & Kukla, 2012). Baseline data is still being collected with regards to nursing knowledge, self-confidence and patient outcomes.

Implications for Practice: The innovative DMM program will provide an educational opportunity for both nursing staff and hospitalized diabetic patients who may not have access to diabetes education in the rural communities. The DMMs will serve as empowering agents for their peers and their patients and will demonstrate an increase in diabetes knowledge and self-confidence.

This pilot program is designed to evaluate the effectiveness of the creation of an elite nursing team with advanced diabetes knowledge. This program could provide a way to close the gap between theoretical nursing knowledge of diabetes and actual nursing knowledge of the disease process and its treatment. This program will operationalize nursing knowledge and result in improved, sustainable patient outcomes in actual healthcare practice. If proven effective the DMM model, specific to diabetes, can be generalized with all chronic illness educational needs in the hospital inpatient setting.

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EDUCATION: CURRICULAR ISSUES

SOCIAL JUSTICE: THE IMPACT OF A CURRICULAR CHANGE ON NURSING STUDENTS

Katrina Einhellig, Courtney Gryskiewicz, Faye Hummel

EMBEDDING HEALTH EQUITY AND SOCIAL JUSTICE ACROSS THE PRELICENSURE CURRICULUM

Theresa A. Harvath, Kupiri W. Ackerman-Barger

ADVOCACY AND CIVIC ENGAGEMENT IN A COMMUNITY HEALTH NURSING COURSE

Claire P. Valderama-Wallace

SUPPORTING THE CASE FOR CONCEPT-BASED CURRICULUM: OUTCOMES OF A FACULTY SURVEY

Kathryn G. Magorian

◀ ▶ go to PG.

Social Justice: The Impact of a Curricular Change on Nursing Students

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Purpose/Aims: The purpose of this study was to evaluate the impact of a curricular change on the perceptions, knowledge, and actions of undergraduate nursing students related to the concept of social justice. Affective learning strategies were threaded throughout the undergraduate nursing curriculum in order to more fully develop the understanding of social justice by nursing graduates.

Rationale/Background: Although the AACN Baccalaureate Essentials have identified social justice as one of five professional values for nurses, the development of curricula that fundamentally supports this value has been slow to develop. The question remains as to the best teaching strategies that foster the growth of social justice as a key concern for nurses throughout their professional practice.

It is not enough to integrate the concept of social justice in nursing curriculum in order to achieve knowledge development by nursing students; we must focus on the acquisition of thinking and the progression toward skills by which students identify the myriad of variables that exist to prevent social justice within healthcare.

Inequities in the current healthcare system are well documented. Nurses serve as the largest group of healthcare providers, and the preparation they receive in their nursing education creates the foundation to assist patients toward equitable care; often making the difference between a positive and negative outcome for the patient. It becomes critical for nursing educators to ensure that graduates have been exposed to all aspects of the construct of social justice and the various ways that they can provide advocacy for the marginalized. Based on a needs assessment, the School of Nursing has identified potential for growth in the curricular thread of social justice. In order to foster student outcomes related to this professional value, this project will focus on integration of interactive teaching strategies throughout the five semester nursing program.

Methods: This mixed methods intervention design used a convenience sample of 108 undergraduate nursing students within a five semester baccalaureate nursing program. The instrument used was a 7-item demographic survey and a 24-item Social Justice Attitudes Scale. Qualitative data was generated via focus groups following implementation of the initial intervention. The intervention included affective learning strategies threaded throughout the five semester course sequence.

Results: Focus groups were conducted in August 2014 and the focus of this presentation will be on the qualitative data generated as a result of these focus groups. Quantitative data collection began July 2014 and will finish in December 2015.

Implications: The research demonstrates the potential of affective learning strategies to change the attitudes of nursing students regarding the perceptions and knowledge of social justice. By increasing the personal investment of nursing students in their role as proponents of social justice, they enter the nursing workforce increasingly equipped to advocate for the marginalized of our society.

◀ ▶ go to PG.

Embedding Health Equity and Social Justice across the Prelicensure Curriculum

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Purpose/Aims: According to the World Health Organization (2011), the social determinants of health are the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels. As such, the social determinants of health are responsible for many of the inequities in the delivery of health care in the United States. Using Fink's taxonomy for designing significant learning experiences, this poster will present a model for how to integrate issues of health equity and social justice throughout a prelicensure curriculum in nursing. The specific aims are to:

1. Describe how issues of health equity and social justice are embedded in learning objectives within a series of courses across the curriculum;
2. Describe a faculty development project that promotes competence in issues of health equity and social justice to ensure effective engagement with students; and,
3. Describe innovative learning activities used to engage students in complex issues related to health equity and social justice.

Background/Rationale: Social determinants of health are critical to the understanding of the health of vulnerable populations, health inequities, access to care, and the environmental and social contexts that shape well-being, quality of life, and health across the lifespan. The social determinants of health include individual-level and contextual characteristics that shape daily routine.

Project Description: According to Fink (2013), in a course with significant learning, students will:

1. **Understand** and **remember** key concepts.
2. Know how to **use** the content.
3. **Relate** this subject to other subjects.
4. Understand the **personal** and **social** implications of this subject.
5. **Value** this subject.
6. Know how to **keep on learning** about this subject.

This taxonomy provides a useful framework for embedding concepts of health equity and social justice throughout a curriculum. In particular, learning objectives that focus on the personal and social implications of a subject and on the value of the subject provide opportunities to include attention to issues of racism, homophobia, economic and health disparities and access to care. We used this framework to ensure that issues of social justice and health equity are addressed in each of the clinical courses in our curriculum. In addition, we are undergoing a series of faculty development workshops that provide faculty with the knowledge and skills needed to address this content in a variety of courses throughout the curriculum. These faculty development workshops are designed to build a faculty community where the concepts of health equity and social justice are both individual and institutional core values. Through these common core values we hope to graduate students who are committed to promoting health equity and social justice in their practice.

Outcomes: This curriculum is currently under review and awaiting approval.

Conclusion: Attention to issues of health equity and social justice need to be embedded throughout a curriculum in order for students to develop a rich understanding and appreciation of the role nursing plays in reducing disparities.

◀ ▶ go to PG.

Advocacy and Civic Engagement in a Community Health Nursing Course

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Purposes/Aims: This presentation provides an exemplar of an education project for community health nursing theory and practicum courses.

The aims of this project are to: 1) engage undergraduate nursing students in conducting a community assessment of vulnerable populations, 2) examine the impact of health policy on the work of public health nurses and the health of vulnerable communities, 3) promote an interdisciplinary approach to advocacy, and 4) articulate the importance of social determinants of health and the roles of public health nurses to local policymakers.

Rationale/Background: Community health nursing clinical sites are increasingly nontraditional, providing students with unique opportunities to examine the upstream factors that shape the health of vulnerable populations. Students are in a unique position to communicate the needs of vulnerable communities and importance of community health nurses to local policymakers.

Description: At the end of the clinical experience, clinical groups draft a bill of rights with a minimum of five rights. The students provide a rationale for each that is based on their community assessments, interactions with clients and staff, and newfound knowledge about systems theory and health policy. Each student also writes a description of why nurses have a stake in health policy. One bill of rights for each clinical site is sent via email to local policymakers, including city council members.

Outcomes Achieved/Documented: This activity was completed by one clinical group of ten students and will be assigned to 30 community health nursing theory students. One document focused on the homeless and the other advocated for the severely mentally ill, corresponding to students' placements. Several students said the project allowed them to critically think individually and as a group. Their bills of rights demonstrated conviction and the application of various public health nursing competencies. Students received responses from two city council members and one received a call from a social worker referred to him by the city manager. Outcomes will be described at the end of the theory course in fall quarter in March 2015 and considered in future clinical and theory courses.

Conclusions: Writing a bill of rights for vulnerable populations allows students to synthesize clinical activities and written assignments. This activity has the potential to empower students to enhance their collective and individual voices as they engage policymakers. It also contributes to students' understanding of the expansive scope of nursing and can foster professional interest in health policy.

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Supporting the Case for Concept-Based Curriculum: Outcomes of a Faculty Survey

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Purpose: The aims of this study were to (1) determine the efficacy of Diamond's Model in implementing a concept-based curriculum (CBC), (2) evaluate the effectiveness of a CBC in improving student outcomes, and (3) determine faculty factors influencing effective implementation.

Rationale: The call for dramatic reform in nursing education continues to necessitate curriculum change.

Methods: This was a two part survey design observational study which took place between January and February, 2013. A list of 17 schools currently using a CBC was obtained from Pearson Publishing. A sample of 576 nurse educators teaching at those schools were identified as a potential pool of participants based on the following inclusion criteria: valid e-mail address and active teaching in an undergraduate program. A 53-item five point Likert scale survey (1 as strongly disagree and 5 as strongly agree) was emailed to their published email addresses. The survey was developed by the investigator based on the literature review and guided by Diamond's Model. Part I of the survey measured the efficacy of Diamond's Model in guiding the implementation of a CBC. Part II measured three priority outcomes: reduction of content, decrease in content redundancy, and improvement in student clinical decision abilities. The survey was examined for content validity by three experts, one with expertise in instrument development and two with expertise in concept-based curriculum. Psychometric analysis was performed. Cronbach's Alpha for the instrument was .972. Institutional Review Board was obtained. Participants provided information on their teaching responsibilities, years of experience teaching in a medical / clinical model or CBC, type of program in which they taught, and their level of education.

Results: A total of 543 faculty met the inclusion criteria. 133 completed the survey (response rate 25%). Among those 50% were doctorally prepared, 34% held a Master's Degree in Nursing Education, and 79% had combined teaching responsibilities in the classroom and clinical area. The majority (58%) taught less than 2 years using a concept-based approach and 62% taught at the baccalaureate level.

Part I of the survey measured the efficacy of Diamond's Model in guiding the implementation of a CBC. The mean score for perceiving Diamond's Model as efficacious in implementing a CBC was 3.65 (.72) Part II of the survey measured the effectiveness of a CBC in improving outcomes in three priority areas: the mean (and standard deviation in parenthesis) for reduction of content was 3.40 (.97); decrease in content redundancy was 3.29 (1.05), and improvement in student clinical decision abilities mean was 3.52 (.97).

Among faculty factors that influenced effective implementation were teaching in Associate Degree program (p = .03); and number of years teaching in a CBC (p = .02).

Implications: Nurse educators with appropriate preparation in education, are necessary to execute a well-planned and effective curriculum for the new nurse in practice. Experience (e.g. number of years of as an educator) does not equate with better outcomes. On-going research for outcomes comparison of new nurses who were educated in a concept-based approach is essential.

◀ ▶ go to PG.

◀ ▶ go to PG.

EDUCATION: STUDENTS

MENTEE EXPERIENCE: ACROSS TIME AND SPACE

Kimberly Madden, Marylyn McEwen, Carrie Jo Braden

WHAT NURSING STUDENTS WISH THEY HAD KNOWN PRIOR TO A PATIENT DEATH

Barbara Heise, Danielle Shkapich

NURSING STUDENTS' ATTITUDES TOWARD OLDER ADULTS IN SOUTHERN CALIFORNIA

Young-Shin Lee, Jung-Ah Lee, Stephanie Vaughn, Michelle Chan

THE IMPACT OF SELF-ESTEEM AND STRESS ON THE HEALTH OF NURSING STUDENTS

Vicki Wilson, Alison Merrill, Melissa Henry, Jacalyn Dougherty

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CORRELATION OF COMMUNICATION SKILL AND SOCIAL NETWORKING IN HEALTH CARE STUDENTS

Louise Suit, Patricia Winkler, Linda Campbell, Karen Pennington,
Mary Pat Szutenbach, Robert Haight, Debora Roybal, Marianne McCollum

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FORMATION OF BREASTFEEDING KNOWLEDGE & ATTITUDES IN UNDERGRADUATE NURSING STUDENTS

Brooklynn T. Fay, Joy R. Goebel, Lucy Van Otterloo, Anthony W. McGuire

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THE STUDENTS ARE ALL RIGHT:
STABILITY OF OPTIMISM IN NURSING STUDENTS

Karen M. Lundberg, Karen S. Dearing, Christopher I. Macintosh

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EDUCATION: STUDENTS

Mentee Experience: Across Time and Space

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Purposes/Aims: To describe a minority student's mentee experience that started with an applied research faculty mentor in an undergraduate Research Scholars' program located in one state and that is continuing into a PhD program located in another state. By chance a new primary mentor from the PhD program faculty was mentored by the same applied research mentor. The resulting current mentee experience could be described as resonant, having tapped into a deep, rich vibrant resource.

Rationale/Background: The offering of undergraduate research experience through a scholars' program is one approach to foster development of a scientific workforce where early exposure to the potential of research to significantly impact the health of those our profession serves can shape a career path. This case study examines the successful outcome of a baccalaureate nursing research scholar program that exceeded expectations in preparing a minority nursing student on the path of academia.

Mentorship began in the baccalaureate setting with a practiced nursing research faculty member, continued as the student entered a master's program in another state, and is now contributing to the transference of mentorship into a doctoral program is a key factor in the professional development path.

Outcomes Achieved/Documented: Successful mentorship entailed multiple steps and methods to include face-to-face, telephonic communication, electronic correspondence and mentorship transference. The student achievements included local, regional, national and international presentations as well as a publication in a peer-reviewed nursing journal prior to graduating from the baccalaureate program. The mentee is currently engaged in a class taught by the new primary mentor, who is facilitating knowledge expansion and in-depth thought processes about the theoretical underpinnings for the proposed dissertation study.

Conclusions: Mentorship with aims to increase minority nursing faculty should consider expanding the mentorship beyond the walls of the institution and program to continue through completion with possible transference from one mentor and/or one institution to another.

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What Nursing Students Wish They Had Known Prior to a Patient Death

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Death is an emotionally charged and stressful event for anyone. Registered Nurses (RNs) provide the primary care through the dying process as well as post-mortem care for dying patients and their families. For student nurses, who are still learning the RN role, the death of a patient can be an overwhelming experience. Yet little evidence exists regarding nursing student perceptions of the death of a patient. Thus, a national study to examine the perceptions of nursing students who experienced the death of a patient was undertaken. The purpose of this study was to ascertain from nursing students what they wished they had been taught about dying and the death of a patient.

After IRB and National Student Nurse Association (NSNA) Board approval, members of the NSNA were sent emails and invited to respond to a Qualtrics survey (N=55,000). 2804 NSNA members started the survey with 2480 nursing students completing the survey. Qualitative responses to the question, "As a nursing student, what would you want your nursing faculty to teach/prepare you about dying and the death of a patient?" included 785 responses. Qualtrics survey data was analyzed using NVIVO (10) using an iterative content analysis process until saturation was obtained. Students identified the following themes: 1) how to communicate with the dying patient and their family; 2) supportive care measures; 3) coping strategies for health care workers; 4) post-mortem care; 5) physical signs of imminent death; and 6) overall more end-of-life care instruction. Students requested more simulation experiences on death and dying to better prepare them for an actual death of a patient.

With these findings, nursing instructors are better equipped with the knowledge necessary to meet the needs of their students regarding end-of-life instruction. As students enter the clinical setting better prepared to handle death and dying, they will have an increased capacity to provide competent and compassionate care to their patients during their schooling and throughout their careers as professional nurses.

Funding: This research was partially funded by an internal grant through the Brigham Young University Office of Research and Creative Activities (ORCA) for the amount of $1500.

◀ ▶ go to PG.

Nursing Students' Attitudes toward Older Adults in Southern California

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Background: As the number of older adults in the U.S. increases and the nursing shortage continues, there are too few nurses to care for this population. In addition, pervasive negative societal views toward aging hamper the recruitment of qualified and skilled healthcare providers into gerontological field.

Purpose: The purpose of this study was to identify California BSN nursing students' attitudes toward older adults and their potential career choices in nursing practice.

Methods: Using web-based surveys, a descriptive study was conducted exploring nursing students' attitudes toward older adults in three state universities with BSN programs in Southern California.

Results: A total of 177 nursing students from 3 nursing schools participated in the survey.
The mean age was 24 (SD=5.8) years old. Majority of participants were female (90%). Race/ethnicities of participants were very diverse including Caucasian non-Hispanic (44%), Asian non-Hispanic (40%), Hispanic/Latino (8.5%), and other (7.5%). US born students were 81%. Majority (89%) reported that English was preferred language. The mean attitude score was 2.05 (SD=0.56) out of 6, the higher, the more positive attitude. Male students were more likely to show positive attitudes toward older adults than female students (p=.02). Students who communicated regularly with older adults showed more positive attitudes toward older adults than those who never or rarely communicated with older adults (p=.05). Approximately 78.5% students reported that they were confident in their ability to provide care for older adults. However, 16.4% of students responded that they would choose to primarily work with older adults for their future career, and 1.7% wanted to work in long-term care settings.

Conclusions/Implications: The findings from the study demonstrated that majority of nursing students showed unfavorable attitudes toward older adults and that few students considered care for older adult as their future nursing career choice. Further studies are recommended identifying nursing students' perceptions toward aging and their care choices as well as developing appropriate teaching strategies to improve care competency for older adults.

◀ ▶ go to PG.

EDUCATION: STUDENTS

The Impact of Self-Esteem and Stress on the Health of Nursing Students

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Purpose: To explore the relationship between levels of self-esteem of nursing students, their perceived levels of stress and reported health problems during a baccalaureate program.

Background: Nursing is postulated to be among the most stressful of the health care professions. A lack of personal control over the work environment, emotional and physical demands of caring for patients, work overloads, substandard staffing, burnout, and a lack of a social and administrative support have been identified as stressors experienced by nurses in the work place (Auerbach, 2007; Toh, Ang & Devi, 2012). The health care system is facing a significant shortage of nurses, leading to an increase in the level of stress experienced by those currently practicing This is likely to negatively impact their overall physical and mental health. Sharma & Kaur (2012) posit that too much stress may reduce self-esteem, cause mental and physical health issues, and affect nursing students' academic achievement. Because one in five nurses leave the profession within the first year of practice, intervention strategies must be identified to help nursing students and new nurses deal with excessive stress (Madkour, 2009).

It is well established that a relationship exists between stress and health. Self-esteem is also known to impact one's health. Rosenberg (1985) defines self-esteem as an evaluation which an individual makes and maintains with regard to him/herself. Further, it is a favorable or unfavorable view of self. Stinson, et al (2008) found that individuals with low self-esteem experienced increased health problems over time while those with high self-esteem had a decreased number of health-related problems. Thus, it appears that one's level of self-esteem may serve as a protective factor between the amount of experienced stress and health problems/issues. Since nurses experience high levels of stress both in school and in the workplace, it is important to identify those at risk for stress-related health problems.

Methods: A convenience sample of 100 nursing students from a 5 semester baccalaureate program participated in this arm of a larger, longitudinal study. General demographic, work, and family information were collected. Stress was measured using the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983) in their first semester. Self-esteem was measured using 10 self-esteem items on the International Personality Item Pool (Goldberg, et al., 2006) and mental and physical health were measured using the SF-12 health survey (Ware, et al., 2002) at the beginning and 8 months into the program.

Results: Descriptive and hierarchical regression analyses will be done to look at the relationship between stress, self-efficacy and mental and physical health at these 2 time points in the study.

Implications: Stress in nursing is multifaceted and cannot be eliminated from professional practice. The extent that self-esteem plays a protective role in maintaining mental and physical health must be studied to assist educators, and later supervisors to design programs to manage stress and enhance self-esteem in students and graduate nurses. This could potentially buffer or protect new nurses from the negative effects of on-the-job stressors.

◀ ▶ go to PG.

Correlation of Communication Skill and Social Networking in Health Care Students

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Aim: To study the relationship between of the use of social networking services on health professions students' written and oral communication skills.
Background: Faculty noted anecdotal concern about the decline of students' oral and written communication skills in an electronic age of students' increasing use of social media. Social networks were considered as: using instant messaging, text messaging, social networking websites such as Facebook, online virtual worlds, and contributing content to wikis, blogs, and video websites. Because little research had been done on links between social networking and communication skills, an interprofessional research team implemented a study to determine if there was a relationship between social networking usage and oral and written communication skills for health care students.
Method: An exploratory correlational design studied students' communication skills from oral and written assignments in a healthcare ethics course required of all health professions students. Participants included undergraduate and graduate health professions students in nursing, pharmacy, physical therapy, and health services administration. All students completed a technology assessment questionnaire and were assessed for oral and written communication by using 5-point Likert scale VALUE rubrics from the American Association of Colleges and Universities.
Results: A total of 132 students participated in the study with an average age of 28.7 years old (±9.3) with a range of 18-56 years of age. The average number of hours on the Internet weekly was 20.7 (±14.7). Contrary to expected findings, the study found no meaningful relationships between frequency of social network usage and oral and written communication skills in health professions students. A negative correlation was found between students' written communication scores and the frequency students contributed to Wikis ($r=0.25$, $p<0.01$). No statistically significant results were found between communication scores and frequency of accessing the Internet from a handheld device. Nearly one-third of the participants reported using handheld devices in class for non-class activities.
Implications: One of the most frequent complaints by faculty is that current students with increased use of social networking lack the level of communication skills of previous generations. The age of the participants may have affected the study results. One possible reason is that the students in the study entered the era of social networking at a time when they had already learned proper communication skills. Ultimately, this study found no meaningful correlation between frequency of social network usage and oral and written communication skills in health professions students. It is no surprise that faculty should be aware of students use of technology in class for non-class activities.

◀ ▶ go to PG.

Formation of Breastfeeding Knowledge & Attitudes in Undergraduate Nursing Students

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Purpose/Aims: The aims of this study are to evaluate the influence of breastfeeding curriculum in an undergraduate nursing program and to examine perceptions of nursing students towards supporting breastfeeding mothers.

Rationale/Conceptual Basis/Background: The importance and benefits of breastfeeding in the first 6 months of life are well established. However, breastfeeding rates differ significantly among populations and frequently fail to meet established guidelines. Nurses are in the prime position during the pregnancy/postnatal period to influence this important health outcome, and nurses receive the majority of their breastfeeding education in nursing school. Little is known about breastfeeding knowledge acquisition and attitudes developed by undergraduate nursing students. Social Cognitive Theory will be applied in this study to gain a better understanding of the effect of breastfeeding content in the current maternal-child nursing curriculum on undergraduate nursing students.

Methods: Mixed methods will be used to meet the study aims. The quantitative aim will be assessed with a pretest/post-test design using a 24 question Breastfeeding Knowledge Questionnaire. The questionnaire consists of three domains: (1) Benefits of Breastfeeding, (2) Physiology of Lactation and, (3) Breastfeeding Management. Content and face validity were considered and Cronbach's alpha for internal consistency is 0.70 for the Breastfeeding Questionnaire. One-way repeated measures ANOVA will be used to determine students' change in breastfeeding knowledge over time. For the qualitative aim of exploring attitudes of nursing students related to breastfeeding, students will be asked to answer an open-ended question related to supporting breastfeeding in the emerging family. Thematic abstract analysis will be performed on the data obtained by the question. Approximately 100 undergraduate nursing students from a large urban university in Southern California will be invited to participate in the online survey.

Results: Nursing student demographics will be reported. Changes in breastfeeding knowledge as measured by the Breastfeeding Knowledge Questionnaire will be compared from baseline to the end of the semester. Themes from the open-ended questions will be identified and reported.

Implications: Inaccurate breastfeeding support and attitudinal barriers of nurses can be detrimental to the initiation, duration and exclusivity of breastfeeding. Identifying breastfeeding knowledge deficits and attitudes at the undergraduate level provides insight to modify breastfeeding education in order to positively impact breastfeeding rates and improve outcomes for mother and baby.

◀ ▶ go to PG.

EDUCATION: STUDENTS

The Students Are All Right: Stability of Optimism in Nursing Students

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Aims: The specific aims of this study are two-fold: (1) to identify perceptions of health, wellbeing, being hassled, and optimism/life experiences of nursing students in the first year of clinical courses of the baccalaureate degree program at the college of Nursing at Brigham Young University; and (2) to assess the stability of these perceptions through the end of the first academic semester.

Background: At the outset, nursing students are often unaware of the amount of work required to complete their nursing education. The expectation for nurses entering the profession has grown substantially and concomitantly the demands upon the first year nursing student continue to grow. Prospects of completing a rigorous program of study can become daunting. The health, wellbeing, and psychological status of the student shape the student's ability to complete their program of study and be prepared to care for patients.

Methods: After IRB approval, a convenience sample of first year nursing students was recruited for this descriptive pre-post study. Data were gathered during the first week and last week of the nursing school semester. Instruments used in this study included LOT-R, RUSHS, and SF-12.

Results: Statistical analysis revealed no significant difference between the pretest and posttest scores on the LOT-R, most subscales of RUSHS, and physical health subscale of the SF-12 tools. This finding suggests first year nursing students were coping successfully during this semester of the program for the most part. Students did report increased frequency and severity of challenges from pretest to posttest on the time subscale of the RUSHS instrument and there was a statistically significant decrease in the mental health subscale of the SF-12, indicating students did experience some challenges during the course of the semester.

Implications: Optimism is posited to play a role in adjustment in the work place. Additional research is needed with nursing students who are further along in their education and those recently graduated to understand the role optimism plays as students' transition into their nursing careers.

◀ ▶ go to PG.

EDUCATION: DIVERSITY

THE EXAM ANALYSIS: INCREASING EQUITY AND ACCESS IN AT RISK NURSING STUDENTS

Iris Mamier, Vaneta Condon, Earline Miller, Barbara Ninan, Grenith Zimmermann

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A QUANTITATIVE ANALYSIS OF AT-RISK UNIVERSITY STUDENTS' KNOWLEDGE OF VALLEY FEVER

Charles D. Collom, Randolph Lovegreen

PAY IT FORWARD: AN EVOLVING FACULTY LEARNING COMMUNITY IN SUPPORT OF SCHOLARSHIP

Elizabeth Predeger, Maureen O'Malley

PROMOTING INCLUSION, COGNITIVE DIVERSITY & HEALTH EQUITY THROUGH FACULTY DEVELOPMENT

Kupiri Ackerman-Barger, Debra Bakerjian, David Acosta

THE INFLUENCE OF CLIMATE ON FACULTY OF COLOR EXPERIENCES IN HEALTH PROFESSIONS SCHOOLS

Dena Hassouneh, Kristin Lutz, Ann Beckett

INTERPROFESSIONAL TEAMS: THE ROLE OF A STUDENT'S CULTURE ON ATTITUDES AND READINESS

Alexis Adams-Wynn, Valerie Gruss, Meredith Ecklund

DEVELOPING A POST-GRADUATE E-MENTORING PROGRAM

S. Van Roper

ENHANCING DIVERSITY: ELIMINATING BARRIERS FOR ELL PRACTICAL NURSING STUDENTS

Kathleen A. Pendleton

STUDENT LEARNING ON DIVERSITY, HEALTH DISPARITIES, SOCIAL JUSTICE IN AN ABSN PROGRAM

Nancy Haugen Smith, Margaret Rivero Early, Valerie Landau, Shirley Strong

◀ ▶ go to PG.

EDUCATION: DIVERSITY

The Exam Analysis: Increasing Equity and Access in At Risk Nursing Students

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Purpose: To evaluate the effect of implementing a nursing student retention tool—The Exam Analysis (TEA)©—by comparing exam scores before TEA with final exam score after TEA.

Rationale/Background/Conceptual Basis: TEA is an evidence-based diagnostic and prescriptive program designed to help students learn from incorrect answers and re-strategize after a nursing exam. Nursing faculty often endeavor to find effective strategies to help at-risk and underperforming nursing students to adapt successfully to the demands of a rigorous academic nursing program.

Higher than average attrition rates have been reported for minority students who often face serious barriers to their academic success. Other "at-risk" groups include non-traditional nursing students who may commute, or who work more than 16 hours/week or may juggle family responsibilities while going to nursing school.

When compared to students who maintain strong passing grades, at-risk students may have inadequate test taking skills and greater anxiety. At-risk students who underperform are more likely to have inadequate learning strategies, are less likely to seek help, sometimes appear to be less motivated and may have less cognitive behavioral engagement.

While early work on student attrition focused on the belief that academic failure resulted from the student's lack of motivation and ability, this blaming the victim mentality is partially responsible for the continued inequity in graduation rates for minority and disadvantaged students. However, even in institutions that strive to create an academic and social environment that leads to success, faculty are often at a loss in knowing how to specifically support students academically. TEA is an intervention strategy that can promote student academic success and ultimately leading to increased retention rates.

Methods: A summative evaluative design was used with 221 nursing students who had an initial and final TEA in Fundamentals of Professional Nursing (Fundamentals) and/or Medical Surgical Nursing I (Med-Surg I) from September, 2007 through June, 2010. Program outcomes were evaluated using student records and exam results and SPSS version 22.0 for the statistical analysis. Student initial and final exam scores, test means, and test standard deviations as well as student demographic information and admissions testing results were analyzed using paired t-tests and chi-square tests.

Results: Students who participated in TEA in each of the courses (Fundamentals and Med-Surg I) scored significantly higher on their final exam ($p = .001$ and $p = < .001$, respectively). The grade for the final exam increased at least one half letter grade for 63.4% of students in Fundamentals and 51.7% of students in Med-Surg I.

Implications: This study suggests that TEA is an intervention strategy that promotes at-risk students' academic success leading to increased retention rates. If students learn from past mistakes and effectively re-strategize they can change their academic performance significantly. TEA then provides a tool for nurse educators who seek to provide educational, psychological, and functional support for at-risk students.

◀ ▶ go to PG.

EDUCATION: DIVERSITY

A Quantitative Analysis of At-Risk University Students' Knowledge of Valley Fever

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Purpose: The purpose of this study was to assess student knowledge of valley fever at a small public university in an endemic area, the Central Valley of California.

Background: Valley Fever, is a fungal pathogen endemic to the Southwest States; in California's Central Valley it is caused by inhalation of Coccidioides immitis. 60% of those infected are asymptomatic. It usually presents as flu-like illness, though symptoms can range from meningitis to a lesion in virtually any body tissue. Pregnant women, persons of Filipino, Hispanic, and African-American ancestry are thought to be at greatest risk from Valley Fever. There are no proven methods of primary prevention, but secondary prevention can help prevent complications from going unnoticed. The purpose of this study was to assess the knowledge of Valley Fever of various demographic groups.

Methods: A convenience sample of 750 college students (n=750) was given a survey to assess their knowledge of Valley Fever's etiology, symptoms, and treatment. The survey data was collected by the participants in an undergraduate nursing course. The data is currently under analysis.

Results: The preliminary results show that students who self-identify as Filipino are significantly more likely to correctly identify the symptoms of valley fever. No other differences are yet noted

Implications: *Education:* The immediate results show that public education for secondary prevention is necessary. Given the danger that meningitis poses, there is a need for better public health information. After further analysis of the data, more specifically tailored educational programs can be proposed.

Practice: Nurses should themselves be educated on the signs and symptoms of Valley Fever so that they may inform their clinical practice and educate their patients.

Research: Future research on Valley Fever awareness in the general community will allow for an assessment of the knowledge baseline in the community. The current research can serve as a pilot study for a more detailed analysis of the community's knowledge of Valley Fever.

Pay It Forward: An Evolving Faculty Learning Community in Support of Scholarship

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Purpose: The purpose of this project is to describe the evolution of a co-facilitated faculty learning community designed to support nursing faculty in their scholarship endeavors. An additional aim is to use a cooperative/relational approach to determine immediate and longer term focus, bringing the group together into a community of peer-mentored scholars.

Rationale: In response to Nursing's "call to scholarship" in the new millennium (Bunkers, 2000), it has become increasingly important for nursing educators to engage in scholarship.
Assisting faculty to identify and define their scholarship focus through a shared partnership model is consistent with work of Heinrich, Hurst, Leigh, Oberleitner & Poirrier (2009) work of the *Teacher-Scholar Project*. Further development of this model describes the strengths of scholar-mentoring programs (Heinrich & Oberleitner, 2012). This body of work will form the basis of continued assessment and evolution of the School of Nursing's cooperative faculty learning community in support of scholarship.

Undertaking: The intent of this project is to gain further understanding of the current faculty learning community based on the *Teacher-Scholar Project* model. This information will help faculty to cooperatively design a multi-phased approach to fostering and sustaining faculty scholarship in a School of Nursing in an urban area of the Northwest United States.

Approach: Questions guiding this shared learning endeavor will be:
What should be the short and long term focus for this learning community?
Describe the forces that would sustain and promote this learning community.
Describe the forces that would impede progress of this learning community.
What are the best ways to encourage and support faculty involvement in this scholarship endeavor?

Outcomes/Conclusions: It is anticipated that faculty will share and learn from one another as they identify their shared interests and develop partnerships. Additionally, opportunities to uncover resources for motivation and accountability to both the group and their evolving research trajectories will follow. More importantly, this shared faculty learning community provides each member a voice and a role to "pay it forward".

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◀ ▶ go to PG.

Promoting Inclusion, Cognitive Diversity & Health Equity through Faculty Development

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Overall Purpose: The overall purpose of this presentation is to share an effort by a school of nursing to promote inclusion, cognitive diversity, and health equity as core individual and institutional values. The specific goal of this project was 2-pronged. Through faculty development there is the opportunity to establish best practices for supporting student success for those who have been underserved and underrepresented. Further, there is the opportunity to design curricula that shape healthcare professionals who actively seek social justice and health equity in their practice.

Rationale/Background: Recent calls for workforce diversity and health equity have prompted academic health centers to scrutinize health professions education. Academic health centers struggle with how to support underserved students entering health professions as well as how to create curricula that prepare healthcare providers to promote health equity. A growing body of interdisciplinary literature suggests that current practices are not adequate to meet the needs of underserved students (Kossman, 2009).

Brief Description of Undertaking or Best Practice: In 2014, the authors created a faculty development series that included self-directed learning modules and face to face workshops. Through various exemplars and topics we created a culture that encouraged discussions and questions about lived experiences related to stereotype threat, micro-aggressions, internalized dominance and oppression, educational and health disparities and how these intersect in the presence of inequity. Faculty learned and shared resources for better understanding the nature of inequity and how to support students. The workshops used teaching techniques that include creating group expectations for developing and maintaining a confidential safe learning environment, learning through storytelling and co-participation, and use of expert speakers. The workshops were designed to model best-practices in teaching and learning like flipped classrooms, active learning, and interdisciplinary education.

Outcomes Achieved/Documented: Outcome data indicated that faculty who often desire, but sometimes struggle to meet the needs of their students experienced increased knowledge about inclusion and equity issues, that a safe learning environment helped in exploring course concepts, and that the workshop has deepened faculty commitment to serving diverse and underserved students. Qualitative data were themed into three categories*: 1) Benefits* such as: "I was encouraged by the sharing of personal stories by the leaders and participants. It helps to recognize other places in my life where I can improve my interactions with others and promote a place where everyone feels they belong"; *2) Recommendations*: "Continue to present content in a safe environment"; and 3) *Application:* I will "Take the time for learners to have similar conversations we were able to have".

Conclusions for Educational Practices: It is through faculty development workshops like these that nurse educators can establish and disseminate best practices for supporting student success and promoting health equity. This school of nursing is interested in pooling creative thoughts about best practices to build a stronger nursing faculty community that can collectively contribute to mitigating attrition of high-risk students and to create healthcare providers who will lead the way toward health equity.

◀ ▶ go to PG.

EDUCATION: DIVERSITY

The Influence of Climate on Faculty of Color Experiences in Health Professions Schools

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Purposes/Aims: The purpose of this study was to develop a substantive grounded theory of the experiences of faculty of color (FOC) in predominantly White health professions schools. In this presentation we highlight findings pertaining to the role of school and departmental climate on the experiences of faculty of color.

Rationale/ Background: FOC are a vital resource for increasing the number of health professionals of color in the workforce, decreasing health disparities, and improving the quality of academic environments. Despite the importance of FOC and a stated commitment to diversity on the part of health professions schools and professional organizations, many FOC continue to be underrepresented. In addition to being underrepresented, anecdotal reports suggest that FOC face numerous barriers to contributing to and benefiting from academic environments due to the deeply entrenched problem of racism. To begin to address this problem we conducted a national grounded theory study of the experiences of FOC in predominantly White schools of nursing, medicine, pharmacy, and dentistry.

Methods: Ninety-five FOC participated in the study. Data were collected via face-to-face and telephone interviews. Data analysis began with open coding followed by substantive open coding. The final stages of the analysis consisted of theoretical sampling and selective and theoretical coding to form the emerging theory.

Results: Findings indicate that the satisfaction and success of FOC are highly influenced by the school or departmental climate in which they work. By climate, we mean the most readily observed aspects of the work environment, such as leadership composition, communication patterns, and organizational structure. In contrast, the term culture refers to the more unstructured aspects of the environment, such as values and beliefs, which give birth to an institution's climate. We identified four climate stages with associated characteristics common in health professions schools ranging from exclusionary to inclusive: 1) covert exclusion; 2) indifferent; 3) beginning inclusion; and 4) real inclusion. In addition to identifying school or departmental climate stages we also identified six major institutional elements that vary by climate: 1) recruitment and retention; 2) faculty and student diversity; 3) diversity programs; 4) reports of racism; 5) dialogue; and 6) leadership. We have incorporated these findings into a rubric to aid in understanding and evaluating specific contexts. In this presentation we show how the climate spectrum varies across these six elements and the ways in which these contexts shape faculty of color experiences.

Implications: These findings provide a rubric for understanding and evaluating organizational climate specifically as it relates to the experiences of faculty of color. Awareness of these contexts is critical for leaders to make needed improvements at their schools. Improving the climate for faculty of color in health professions schools is a critical component of the work that needs to be done to improve the satisfaction and success of this important group.

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◀ ▶ go to PG.

Interprofessional Teams: The Role of a Student's Culture on Attitudes and Readiness

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Purposes/Aims: A large, multi-region Midwestern university implemented an interprofessional education immersion day pilot for approximately 950 students, across 10 health professional colleges. The event was a face-to-face, full-day component to online, pre-event coursework. No specific, cultural competency learning models were incorporated across the program.

The purpose of the event was to engage students in an interactive, collaborative learning experience that focused on three Interprofessional Education Collaborative (IPEC) Core Competencies: roles/responsibilities, interprofessional communication, and teams/teamwork. Students were randomly assigned to interdisciplinary teams, led by a trained faculty facilitator, and explored an unfolding case.

The current paper seeks to answer to what extent are the attitudes toward healthcare teams and readiness for interprofessional learning influenced by the ethnicity and gender of health professional students participating in the interprofessional immersion day.

Rationale/Conceptual Basis/Background: Theories that support the importance of culturally competent primary care for patients have long been established in the health care literature. Cultural competency is also a significant component to the Interprofessional Education Collaborative (IPEC) Core Competencies (2011). However, there remains a gap in the linkage between cultural competency and its relationship within the health care team, and organizational structures that include members of the health care team.

Evidence that supports the targeted, cultural competency training between members of the health care team is needed, as health professional colleges adopt interprofessional education accreditation standards and design programs for their diverse students.

Methods: Students who attended an interprofessional education immersion experience were surveyed pre- and post-event on the following measures: Attitudes Toward Health Care Teams Scale and Readiness for Interprofessional Learning Scale (RIPLS). Students provided demographic data, such as their gender, ethnic/racial identity, and professional program.

Results: Outcome data examining the dynamic between culture (e.g., gender and ethnic/racial identity) and its influence on attitudes and readiness toward interprofessional teams and learning will be presented at the conference.

Implications: Differences in health care students' attitudes and readiness for interprofessional teamwork and learning have been associated with the profession and program-level of the student. However, cultural factors may also influence students' attitudes and readiness toward collaborative learning. Incorporating cultural competency models may be a next step for universities developing interprofessional education curricula.

References:
Interprofessional Education Collaborative Expert Panel. (2011). *Core competencies for interprofessional collaborative practice: Report of an expert panel*. Washington, D.C.: Interprofessional Education Collaborative.

Funding:
Health Resources and Services Administration (HRSA) Advanced Nursing Education and Training Grant #D09HP25033: Advancing Interprofessional Education and Clinical Expertise using Technology Initiatives in Advanced Practice Nursing.

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go to PG.

EDUCATION: DIVERSITY

Developing a Post-Graduate E-Mentoring Program

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Purpose/Aims: This research describes post-graduate mentoring of advance nurse practitioners through the Project ECHO (Extension for Community Healthcare Outcomes) model. This model would allow for a tele-mentoring program providing ongoing education and collaborative patient care consultation similar to the functions of a residency program availing centralized support resources at the University of New Mexico (UNM) to post-graduate nurse practitioners in rural areas. The program could support maintenance of post-graduate clinical confidence through the integration of mentoring as well as cultivating knowledge currency in clinical practice. Questions to be explored include: what does it mean to cultivate lifelong learning, what are the expectations for our students to practice in the field, and what tools are needed to create and maintain a cadre of primary care providers that could improve recruitment and retention in rural underserved areas, including promotion of inter-professional healthcare team development.

Rationale/Background: The New Mexico state legislature increased funding to the UNM College of Nursing APN program in the spring of 2014 to train a larger cohort of APNs as primary care providers to tackle the numerous challenges and needs of health care in rural communities. New Mexico is the fifth largest state in the United States with approximately 2 million people, half of whom reside outside the Albuquerque metropolitan area. With the state's healthcare centralized to Albuquerque, there is an enormous challenge for health care delivery to rural residents. A review of the research literature reveals that rural retention and recruitment issues for nurse practitioners include a common theme of a lack of professional support. This research and program development is intended to explore the potential of e-mentoring as a mechanism of professional support, and its effect on rural recruitment and retention.

Brief Description: The mentorship program will be presented using an online e-mentoring platform developed by the ECHO Project. In the final semester of the 2015 family nurse practitioner program, this platform will be used for students to present cases rather than face to face. On graduation, the 90 minute module will be run every 2 weeks allowing for graduates to present live case studies in a HIPAA-secure environment to an interprofessional panel of experienced clinicians. Continuing education units will be provided as part of the module for additional participation motivation. Data regarding skill and knowledge deficits in the field will be collected from the modules and used to inform the UNM College of Nursing APN curriculum.

Conclusions: Professional support is an important aspect of recruitment and retention. Characteristics to develop in graduates include confidence, involvement in lifelong learning, and ongoing development of critical thinking skills. By developing and offering access to a broad group of experts and clinical references, graduates will have an opportunity to continue their learning. It is hoped that this will improve their skill sets, and boost their confidence, as well as improve rural area recruitment and retention resulting in an improved quality of healthcare to underserved rural populations in the state.

◀ ▶ go to PG.

EDUCATION: DIVERSITY

Enhancing Diversity: Eliminating Barriers for ELL Practical Nursing Students

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Study Purpose: The purpose was to determine ethnically diverse/ESL nursing students' perceptions of educational barriers within a Practical Nurse program in a community college setting. There is an identified gap in the literature regarding perceptions of educational barriers for Practical Nursing students. Many ethnically diverse nursing students utilize practical nursing programs as a bridge into the nursing profession and Registered Nursing programs. This study will begin to fill the gap in the literature and discover new perceptions of practical nursing students.

Aims: The overall goal of this study is to stimulate institutional level dialogue on strategies to improve recruitment, retention and graduation of ethnically diverse students, particularly ELL students in licensed practical nursing programs. The specific aims include:

1. To describe perceived barriers to success for ELL students who were previously in the LPN program.
2. To describe perceived strategies for success for ELL students who were previously in the LPN program.

Background: LPN/LVN programs significantly contribute to the diversity of the nursing workforce. The NLN believes that the diversity offered by multiple points of entry into the nursing profession including entrance into the profession as an LPN and the variety of progression options available provide an environment for enrichment and professional growth. In order to produce a more educated and diverse workforce, it is imperative that new models of academic progression are created that are inclusive and supportive of the LPN/LVN as well as other pre-licensure and post-licensure graduates ("NLN", 2011). Addressing the barriers to LPN students' education experiences is a critical step toward building a strong, diverse nursing workforce that could address the increasing diverse health care needs of the country.

Methods: Study Design: This study was a qualitative phenomenological study. Data was collected from former students who successfully completed the PN program and those who academically failed out of the program. Students self-identified as English Language Learners. Through semi-structured face-to-face and phone interviews, data was collected on educational barriers perceived by ethnically diverse/ELL nursing students and strategies they perceived as effective to overcome these barriers.

Results:

Themes: Sub-themes

Barriers: Language, Work/school/life balance, Cultural differences, Lack of social support/discrimination, Other barriers

Strategies: Language strategies, Peer Support/Study groups, Instructors as Resources, Survival skills development strategies

Recommendations: Faculty/Instructor recommendations, Nursing Program/College Resource recommendations, Recommendations for current future ELL nursing students

Implications: The diversity of the U.S. population will continue to increase and the need for an increased number of ethnically diverse nurses will be critical to the provision of quality care. Practical nursing programs provide a financially feasible option with decreased time requirements for ethnic minority nurses to pursue a nursing career, and serve as a bridge to registered nursing programs. This study provides a deeper understanding of the barriers that ethnically diverse practical nursing students face and effective strategies that can be implemented to assist them. It also affirms the critical roles of faculty in assisting ethnically diverse practical nursing students. Strong institutional policies are critical to support these important future members of our country's health care team.

◀ ▶ go to PG.

Student Learning on Diversity, Health Disparities, Social Justice in an ABSN Program

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Purposes/Aims: The purpose of this exploratory study was to analyze how well students in an accelerated baccalaureate nursing program (ABSN) integrated learning about diversity, health disparities and social justice.

Rationale/Conceptual Basis/Background: The investigators wanted to determine if teaching about diversity, health disparities and social justice was reflected in evidence of actual student learning of this content. Additionally, The University has a robust co-curricular program to support the development of students' knowledge about these issues.

Methods: The investigators conducted a content analysis of evidence of student learning within the ABSN program. Faculty members were asked to upload samples of excellence in student learning to our Curriculum Mapping Initiative (CMI) program. Faculty were not specifically asked for evidence that depicts learning on diversity, health disparities and social justice. CMI is an electronic assessment tool designed to create visual maps showing alignment of curricular concepts and learning outcomes. The authors reviewed all the evidence uploaded in CMI by ABSN faculty. Each example of student learning was evaluated using two types of inclusion criteria: explicit evidence which specifically addressed issues of diversity, health disparities and social justice as the topic of the assignment; implicit evidence which included references, photos or other indicators related to these concepts. A rating form was developed for this analysis. The raters were two nurse faculty and one expert in teaching, learning and assessment who was not a nurse. Ratings were done independently, and consensus and subsequent changes in rating occurred in a face to face meeting.

Results: The raters agreed with ratings on 15 of 27 items (56%). After discussion, 12 items (44%) were changed to reach consensus on the ratings. The ratings revealed that 19 items (70%) of 27 pieces of student work contained either explicit or implicit evidence of student learning about these crucial concepts. Eight (30%) of the items did not address these concepts.

Implications/Recommendations: Accurate measurement of student learning is necessary to determine the effectiveness of teaching about diversity, health disparities and social justice. It is recommended that further investigation include the development of a rubric to more clearly define the concepts of interest, to determine the depth of student learning, and to allow comparison between actual course assignments and evidence of student learning about diversity, health disparities and social justice.

◀ ▶ go to PG.

EDUCATIONAL STRATEGIES I

INTERACTIVE TELEVISION VS FACE TO FACE EDUCATION FOR BSN STUDENTS

Marylou V. Robinson, Marcia Gilbert

CHANGING BUSES IN A COMMUNITY HEALTH CLINICAL

Diane Katsma, Ann Bonfiglio, Esther Harris

◀ ▶ go to PG.

EDUCATIONAL STRATEGIES I

Interactive Television vs Face to Face Education for BSN Students

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Purpose: This paper presents the evaluation of Learning Outcomes, measured as course grades and student perceptions, for the introductory pharmacology class located on the main university campus and at a new distance location. Outcomes will allow faculty and administration to evaluate the quality of the technology experience and consider necessary improvements in future course offerings.

Background: An expansion of enrollment for the traditional BSN program was developed to meet the growing demands of local and regional clinical partners. This expansion included a second location linked to the main campus with an electronic interactive television bridge (ITV). Face to face faculty were present at both locations. This allowed content coverage by one teacher simultaneously at both locations, but enabled active learning in-class activities to be facilitated by the on-location faculty. The lecture could be originated from either campus.

Methods: Demographic measurements included: location assigned; age range; gender; ethnicity/race; and prior degree status. A non-affiliated research assistant generated a de-identified numeric code in a SPSS data base for each student; this enabled faculty investigators to review results and still ensure student anonymity. The pre and post-course anonymous surveys recorded perception and satisfaction scores with the use of ITV. Thematic analysis will identify open ended question findings. Test grades on each of four exams, the final exam, and the final course grade with the demographic variables and cohort location will be processed using SPSS software. Pre-course survey themes refined the post course survey questions.

Outcomes: Results will be completed by Feb 2015 for N = 166 students on the main campus and N = 37 at the remote location. Pre-survey results indicated a wide range of opinion concerning the anticipated value and potential issues of learning via an ITV bridge. Final survey measures are scheduled for the first two weeks of December, 2014 and final grades will be completed by the end of December 2014. Any statistically significant differences will be reported and any thematic differences will be used to evaluate earning outcomes and experiences.

Conclusions: This project will evaluate the use of accessible, flexible educational technologies, and whether student demographic groups are negatively impacted by these non-traditional teaching modalities.

◀ ▶ go to PG.

EDUCATIONAL STRATEGIES I

Changing Buses in a Community Health Clinical

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Purpose/Aims: The purpose of this best teaching practice was to facilitate student understanding of the challenges families without private transportation face on a daily basis.

Rationale/Background: Undergraduate nursing students often come from backgrounds with little practical exposure to the lived experience of families in poverty. In community health clinicals students case manage vulnerable populations and are perplexed why families miss appointments, don't have nutritious food in the house, and are not taking advantage of resources in the community.

Best Practice: This teaching strategy gives small groups of students a role such as "18 year-old single mom with six month old and two year old" along with an itinerary for the day including four destinations/addresses and tasks, i.e. Social Security Office to obtain application for SSI. All students listen to a transportation presentation detailing the bus systems and then begin their assignment of riding city buses to the destinations.

Outcomes Achieved: Students begin their day knowing they will be riding buses, yet they came to class ill prepared for walking and without food. Initially groups were confident that they would complete the assignment quickly and effortlessly, because—after all, they are intelligent nursing students. After about two hours into the experience the texts and phone calls to the instructor began. "This is a lot harder than we thought!" or a phone call "We are not even halfway done and we are hot, tired, and hungry". The student written reflections revealed themes of compassion and respect for those who have to depend on public transportation and an increase in their own humility.

Conclusions: Spending a day on the buses in a community health clinical assists students in understanding the day-to-day challenges for families students case manage. Changing student attitudes is one of the more difficult tasks nursing educators are confronted with, yet student reflections suggest that indeed attitudes are changed after a long grueling day navigating public transportation. To more completely understand how attitudes change, future research could utilize reliable and valid tool(s) that measure differences.

◀ ▶ go to PG.

go to PG.

EDUCATIONAL STRATEGIES II

DEVELOPING A RURAL HEALTH MASSIVE OPEN ONLINE COURSE (MOOC)

S. Van Roper, Jennifer B. Averill

IMPLEMENTATION OF BEST PRACTICES IN SIMULATION DEBRIEFING

Deborah Rojas, Jeanette McNeill, Kristin Schams, Carlo Parker

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CLASSROOM ASSESSMENT TECHNIQUES (CAT): A MAKING LEARNING VISIBLE PROJECT

Sharyl Eve Toscano

SCHOLARSHIP OF TWITTER IN NURSING EDUCATION AND LEADERSHIP DEVELOPMENT

Jane M. Carrington, Cheryl Lacasse

ENGAGING LEARNERS USING PODCASTING, STORYTELLING, AND REFLECTIVE PRACTICE

Cheryl Lacasse

USE OF WORD CLOUDS TO DEVELOP REFLECTION WITH ONLINE UNDERGRADUATE NURSING STUDENTS

Delene Volkert, Annie Andreozzi, Ashley Edgar, Lynn D. Ewell, Mary Flanigan, Courtney Kralich, Lindsay Martin, Charity O'Neal, Christy A. Parker

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DO DEDICATED EDUCATION UNITS (DEU) FACILITATE CRITICAL THINKING IN NURSING STUDENTS?

Thomas J. Hendrix, Maureen O'Malley

◀ ▶ go to PG.

COMPARISON OF STUDENT OUTCOMES BETWEEN ONLINE AND LECTURE NURSING RESEARCH CLASSES

Phyllis Heintz, Charles D. Collom

USING PEER LONGITUDINAL CASE STUDY TO TEACH PHARMACOLOGIC CONCEPTS

Wing Lam, Kimberly Vana, Graciela Silva, Cynthia Holcomb

THE EFFECT OF TEAM-BASED LEARNING ON COMMUNICATION IN FIRST YEAR NURSING STUDENTS

Christine Michel

◀ ▶ go to PG.

Developing a Rural Health Massive Open Online Course (MOOC)

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Purpose/Aims: Our rural health massive online course (MOOC) was conceived and launched at the University of New Mexico (UNM) College of Nursing (CoN) in 2014. The purpose was to provide an in-depth course to nurses on rurality, rural health disparities, exploring rural culture and language, strategies for resource assessment and utilization, healthcare policy, effective practice and research strategy development, encouraging innovative healthcare delivery strategies and offering an opportunity for inter-regional global exchange of rural health issues and ideas. The course was developed as one of five courses as a pilot for UNM's involvement in MOOCs offering knowledge exchange with the global community.

Rationale/Background: Half the world's population lives in rural and remote areas. A common imbalance in most countries is that most health care workers live in urban areas. This poses a significant challenge to almost all countries to provide rural and remote healthcare services. Rural regions on a global level tend to be poorer as well. Despite government policies and regulations attempting to influence these imbalances, free markets tend to have healthcare providers drawn to urban centers. The purpose of this course is to open communication between nurses on a global level to exchange ideas and learn from each other how different parts of the world address rural health issues.

Brief Description: This is a MOOC presented to the global community of nurses to discuss and educate on rural health issues. The course ran over an eight week period of time. Guests from various disciplines at UNM and beyond were engaged in teaching modules. Each module had a visual aid of approximately 15 minutes. Didactic included reading assignments and video clips along with monitored discussion boards and 4 peer-graded tests. A pre- and post- participation survey was administered.

Conclusions: Global interaction is a valuable component of learning and sharing of ideas. The de-monopolization of knowledge and force multiplication of information through peer exchange allows for a greater understanding of the challenges and solutions to increasing healthcare in rural communities. The exchange of ideas is vital to continued growth and efficiency in this healthcare sector. This is an example of excellence in online communication and education.

◀ ▶ go to PG.

EDUCATIONAL STRATEGIES II

Implementation of Best Practices in Simulation Debriefing

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Purpose: To integrate the International Nursing Association for Clinical Simulation and Learning's (INACSL) Standards of Best Practice in debriefing into a simulation program.

Rationale: Over the last 10 years the use of high-fidelity simulation in BSN education has been increasing. Recently it was reported that simulation may be used to replace 50% of the traditional undergraduate clinical experience. Research has demonstrated that debriefing is the most vital component in the simulation learning experience in regard to gains in knowledge for the student. Despite this fact research has shown that only 48% of faculty conducting simulations has had formal training in debriefing and only 19% were evaluated after training. Because of these data, an evidence-based simulation debriefing program was developed based on the INACSL VI, the standards for debriefing. All faculty engaged in debriefing processes were trained and then evaluated in debriefing techniques using established valid and reliable methodologies, to ensure students to receive the maximum educational benefit from their simulated patient experiences. The simulation program had already incorporated the first five of seven INACSL standards into its practices.

Methods: Initially the Simulation Coordinator attended training on debriefing and evaluation through the Center for Medical Simulation. The training focused on utilizing INACSL Standard VI and the *Debriefing Assessment for Simulation in Healthcare* (DASH) tool for rating debriefing effectiveness. Subsequently, faculty training by the Simulation Coordinator consisted of debriefing terminology, three step model of debriefing, and INACSL Standard VI. Finally, trained faculty were evaluated during simulation debriefing using the DASH instrument. A worksheet with the DASH score and recommendations for improvement were provided as feedback. Should a faculty member require remediation, additional training, literature and support will be offered to assist with improvement of debriefing skills. Yearly competency in debriefing will be required.

Outcomes: The faculty (15) who completed debriefing training were evaluated with the DASH tool. The range of scores was 5.2-5.9(0-7). This indicated that faculty were satisfactory (competently) applying the debriefing training correctly.

Conclusions: Nursing courses utilizing simulation pedagogy at this school of nursing now have competent, trained faculty to facilitate the debriefing process. The next step in standardizing debriefing will be to evaluate the impact of the new debriefing process on student learning outcomes. To facilitate this video-aided debriefing is now being implemented so student performance in simulation can be measured. The Creighton tool for use in evaluation of student performance will be used for this purpose. This will address Simulation Standard VII, Participant Assessment and Evaluation. Educators utilizing simulation pedagogy should standardize their simulation process with particular attention to the debriefing phase of simulation. Methods for evaluation of both faculty and student performance should be implemented and monitored to allow for continued quality improvement efforts. As the use of simulation grows, efforts are required to improve and standardize the student learning experience. Further research into the effectiveness of implementation of INASCL's standards is warranted.

◀ ▶ go to PG.

EDUCATIONAL STRATEGIES II

Classroom Assessment Techniques (CAT): A Making Learning Visible Project

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Background: Pharmacology is a knowledge based course taken in preparation for application in clinical practice. Traditional testing methods require that students pass a multiple choice exam without much attention focused on what is being taught in class prior to that terminal assessment. Classroom Assessment Techniques (CAT) (Angelo & Cross, 1993) guided my classroom inquiry. Each CAT requires planning, implementation, and responding. By closing the loop prior to subsequent lectures and or activities results from the assessments direct classroom teaching.

Does individual accountability via CAT assessment placed before, during, and post synchronous learning improve students' perceptions of learning in three categories: prior knowledge, recall, and understanding; analysis and critical thinking; and synthesis and critical thinking?

Method: CATs are chosen based on goal inventory. Based on the Teaching goals inventory self -scoring worksheet, higher-order thinking skills and discipline-specific knowledge and skills scored the highest for this course. These results directed me to CATs aimed at assessing prior knowledge, recall, and understanding, assessing skill in analysis and critical thinking, and assessing skill in synthesis and creative thinking. Methods used to address the project question included: group informational feedback (GIFT), test item analysis and faculty reflection.

Outcomes: As a faculty member I noted that classroom discussion and questioning during the class period following a classroom assessment activity were meaningful and engaged. Muddy points acted to address gaps in learning prior to testing which resulted in higher test scores on key concepts related to the muddy points reviewed. Live course revision might seem radical but when grounded in CAT it was meaningful for both faculty and students. Changes were grounded in the CAT which acted to document achievement and/or lack of achievement of difficult concepts. Instead of waiting for a future offering to address lack of achievement, I was able to address it immediately and prior to testing. I was equally surprised by both the result of mutual sharing in the classroom and the importance of explaining the "why" behind the CAT to the students. Mere encouragement and support of student effort was not enough. I had to constantly reinforce the objective behind CAT. Students struggled to create matrix where "the answer was not in the book". Despite their accomplishment of creating a matrix that was accurate, students still had a desire to see the "right answer".

Conclusion: Sharing knowledge about pedagogy (in this case CAT) fostered student understanding, engagement, and enthusiasm for the course and perhaps the instructor. In summary students recognized that I had developed and communicated a system that was "effective", and "evidence based". Students named specific CATs like the muddy point and the "pre class assignments" as helpful in making a "complex" subject "understandable". What was so insightful was the student's characterization of the "system" as "unusual" and their recognition that a student needed to "trust her and you will succeed".

If the student perceives what you're doing as madness, a faculty member who explains the method behind the madness might transform the perception of madness to a perception of "brilliance".

Reference:
Angelo, T. & Cross, K. (1993) *Classroom Assessment Techniques: A Handbook for College Teachers.* San Francisco: Jossey-Bass Publishers.

◀ ▶ go to PG.

EDUCATIONAL STRATEGIES II

Scholarship of Twitter in Nursing Education and Leadership Development

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Purpose: Health care reform has placed enormous challenges on nurses to reach underprivileged patients and rise to roles of leadership to inform health policy and improve care management. This movement has placed challenges on nursing curriculum to prepare our graduate nursing students to become the nursing leaders that are essential for positive health outcomes and care delivery. The purpose of this presentation is to introduce Twitter as one mechanism used to achieve these goals.

Background: Social media is gaining momentum as a mechanism to inform followers of advances and policies in healthcare. Twitter in particular is flexible and easy to use, supporting its benefits for communication amongst health care organizations and leaders. Developing nurse leaders and scholars can also benefit from this technology. This work is significant as it describes a mechanism to meet this challenge by preparing our graduate nurse leaders to use emerging technologies for scholarly information sharing and networking with a community of scholars.

Description of Best Practice: Twitter was incorporated into a Master's level policy course to provide students with the opportunity to network with health care leaders and policy makers, and interact with unfolding policies and those in action in the legislation. The flexibility of Twitter also afforded weeklong exchanges with invited experts in nursing policy and national health care leadership. Twitter assignments were carefully constructed to assist students to engage in specific key concepts of health care policy and economics.

Outcomes: We observed initially a learning curve where students were either reluctant to use Twitter or needed assistance in getting set up. We developed a guide to assist students and most found this helpful. After the initial learning curve, students embraced this innovative teaching and learning method. Students commented that they had not considered Twitter for communicating with health care leaders or for staying informed toward health care policy. Successful Twitter assignments included following a nurse leader, professional organization, policy, and bills over several weeks.

Conclusions: The use of social media such as Twitter affords timely information sharing which enhances the learning process by using current information as it relates to teaching/ learning outcomes. Integration of timely information sharing within specific courses in graduate and undergraduate health care education can enhance learning by following current trends health care policy and economics and their impact on the interprofessional management of complex care populations. Currently, this innovative teaching/ learning strategy has been implemented in three (3) courses in online graduate programs focused on the topics of health care policy and economics, quality and safety, and clinical systems leadership.

◀ ▶ go to PG.

EDUCATIONAL STRATEGIES II

Engaging Learners Using Podcasting, Storytelling, and Reflective Practice

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Purpose: To describe the use of podcasting as an educational method of electronic presentation, incorporating principles of patient-centered care, storytelling methodology, and reflective practice thinking to address lessons learned and opportunities to improve patient-centered care.

Background: Nurses span several generations and many are challenged to utilize a broad range of creative technologies to communicate with patients, families, colleagues and members of the interprofessional care team. Nursing leaders are in a unique position to model the use of current and emerging communication technologies to the groups which they lead. Through careful integration, online learning activities enhance the learner experience and add depth to building essential communication skills. Although podcasting may be considered an "older" technology, its use has not been widely used as a mechanism for reflective practice through storytelling.

Description of Best Practice: Novice online graduate students in a survey course in clinical systems leadership engage in a learning activity designed to use storytelling, reflective practice thinking and podcasting to apply the principles of patient-centered care. Preparation for the assignment includes background reading on patient-centered care and storytelling technique. Students are also encouraged to explore recording modalities and can choose a method and program which works best with each student's electronic equipment. Assignment instructions include a range of acceptable audio file types. Students are required to choose a case from their clinical practice experience which can be used as an exemplar of patient-centered care. They tell the clinical story, identify lessons learned from the exemplar, and suggest areas for improvement of the patient-centered care delivered. Podcasting is the media which is used to communicate the clinical exemplar and the reflection on practice.

Outcomes: Student learning outcomes include application of content on patient-centered care, successful utilization of storytelling methodology, reflective practice thinking and use of podcasting technology. Over 200 students in an online RN- MS program in Clinical Systems Leadership have completed this assignment from 2012 - 2014. Students' responses to the assignment indicate that many enjoy the opportunity to choose a clinical case and analyze it with a deeper, more objective understanding of the principles of patient –centered care. The final assignments produced are excellent clinical stories which clearly demonstrate the application of principles of patient-centered care, clinical reflection, effective storytelling, and beginning level competence with podcasting technology.

Conclusions: The development and implementation of a podcasting assignment for online learning blends academic scholarship with essential skill building in electronic communication methods without the use of visual media. This method of presentation has been incorporated into several graduate assignments which emphasize strong reflective communication. Graduate students in online nursing programs have a unique opportunity to learn about, utilize, and evaluate many methods of electronic communication and develop essential communication skills for successful nursing leaders.

◀ ▶ go to PG.

EDUCATIONAL STRATEGIES II

Use of Word Clouds to Develop Reflection with Online Undergraduate Nursing Students

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Purposes/Aims: The purpose of the project is to develop reflective thinking of online RN-BSN students in an online, asynchronous rural community health nursing course.

Rationale/Background: Reflection is an important aspect for the development of critical thinking in undergraduate nursing students. Reflection allows students to integrate learning with their own personal context to develop knowledge at deeper levels. Undergraduate nursing students who attend courses within programs through online, asynchronous programs often express difficulty sharing themes, concepts, or ideas within courses and with their peers. While student interaction among discussion boards is an important aspect of learning for the online student, the use of discussion questions and peer responses can become scripted and lack creativity when utilized weekly. The use of word clouds helps the student develop and analyze themes from their course readings and provides the ability to communicate information with their peers in a creative manner. The use of word clouds allows students to develop themes and concepts beyond the traditional methods and introduces a visual aspect to an online learning environment.

Approach: RN-BSN students enrolled in an asynchronous, online community health course read chapters from their community health textbook regarding evidence-based practice within community health settings. Each student had the choice to create a traditional discussion and peer response or create a word cloud and word cloud caption discussion. Each student who participated in the word cloud discussion created a synthesis of the major themes and concepts using word clouds. Students created their word clouds using an online tutorial provided by the course instructor and wrote short captions for their individual word clouds. Each student posted their word cloud and caption to the online discussion board for the learning module. Students provided feedback to each other through discussion board peer responses. At the conclusion of the module, participating students completed a survey to analyze the learning and reflection developed during the project. Students also created reflections regarding their analysis of the class developed themes using word clouds.

Outcomes: The projected outcome of the ongoing project is that undergraduate students in an online, asynchronous program will reflect on the major themes and concepts of evidence-based practice within community health settings through their own and their peer's word clouds and captions. These reflections will allow students to build a synthesis of these concepts and construct a deeper knowledge of the community health themes.

Conclusions: It is anticipated that the conclusion and recommendation will be for the inclusion of a word cloud and word cloud caption discussion assignment in an asynchronous, online undergraduate nursing program to develop creative methods of building reflection and developing knowledge for the undergraduate RN-BSN student.

◀ ▶ go to PG.

Do Dedicated Education Units (DEU) Facilitate Critical Thinking in Nursing Students?

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Purposes/Aims: The purpose of this study is to investigate whether the learning experience on a dedicated educational unit (DEU) is different than that experienced on a traditional clinical unit in an acute care facility as evidenced by the student's ability to critically think.
Rationale/Background: In a typical undergraduate nursing educational experience, the experiences of students in the clinical setting involved some preparation and then repetitive practice of basic skills over a course of time with a clinical instructor providing oversight and guidance. Beginning in the 1990's and extending until today, many educational and clinical researchers have called for a change in the basic clinical model of a single clinical instructor overseeing a small cohort of clinical students. Increasingly during this time, a nurse serving as a mentor was seen as a better approach to learning then the traditional clinical experience. This was the beginning of the DEU model of clinical learning. In the DEU model, a University professor oversees the learning experiences of a cohort of undergraduate nursing students but it is a volunteer staff nurse that serves as a mentor for a student. In our model, one staff nurse mentors 2 students. The staff nurse develops a relationship with the student, is scheduled to work with the student consistently over a semester, provides guidance and expertise to the student and, in effect, serves as the "Master" to the student "apprentice". The University professor oversees the relationship and provides guidance and counseling as needed. We instituted this model of clinical instruction at our University approximately 5 years ago and have had a consistently positive feedback from the teachers, the clinical staff and, most importantly, the students.
Methods: Our University has instituted the KAPLAN learning package and as part of the package, students are tested three separate times on with a valid and reliable critical thinking test. At the end of their junior year, the students are enrolled in a medical-surgical nursing course with a clinical component. There are 5 clinical groups of 8 students each. One of those groups is geographically far away from campus and students choose it for logistic reasons more than academic preference and, as such, that group will not be part of this study. The remaining 4 groups are physically near each other and two of them utilize the DEU clinical model and the other two do not. The faculty overseeing each of these groups are stable and consistent for many years. This creates a natural experiment. Each student will be tested for critical thinking before and after their clinical experiences. The researchers will evaluate the change in critical thinking through a difference of means t-test. The study will last through 2016.
Implications: If the null hypothesis (all clinical groups are the same) is not supported and the DEU shows a significant improvement in critical thinking when compared to the traditional clinical setting, this would lend support to the notion that the DEU model should be expanded to the other clinical settings.

◀ ▶ go to PG.

Comparison of Student Outcomes between Online and Lecture Nursing Research Classes

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Purpose: The purpose of this study was to compare a range of student learning outcomes including examinations, journal critiques, journal club discussions, and a research paper between two sections of a nursing research course, one in- class and one online.

Background: The migration of nursing courses to online formats make education more accessible for RN's returning for bachelor's degrees as well as traditional students. A few studies examined the effectiveness of online learning, comparing the risks and benefits of online classes (Patterson, Krause, & Roy, 2012) or using test grades alone to evaluate online education (Nelson, 2010). Few studies compared the range of student learning outcomes between the two modalities to measure comprehension and application in examination scores, analysis in journal critiques, and synthesis in a research paper.

Methods: Two sections of nursing research were offered; the first section a traditional in-class course, the second section an asynchronous online course. Both sections completed an identical curriculum with the same exams, assignments, and learning activities. Students completed written discussion guides for both in-class and on-line discussions. Students were unaware a research study was being conducted until consent was requested after the courses ended.

Results: Final grades and average test scores for both groups were remarkably similar given there were slight variations between the groups in the individual grading activities. The final grade for the online cohort was 90.29% (n = 24) compared with 90.67% (n= 32) for the in-class cohort. In general, the quality of in-class activities for the in-class group was slightly lower than the online cohort. They worked in small groups during class and there was less depth in the work submitted for grading. The online group had similar activities, but needed to work independently prior to sharing their work with their small groups online.

Implications: *Practice:* Small group work in the classroom may be an effective way to engage students in the content; however, the researcher observed variability in terms of student engagement. Some students actively engaged and facilitated their small groups while others were reluctant to participate and provided less input. It is often difficult to evaluate the knowledge student engagement during in-class small group discussions even when they complete written discussion guides. Online discussion forums are highly visible and reveal student knowledge and engagement. *Nursing Research:* Further studies are needed to examine how in- class experiences may be enhanced by incorporating online strategies. Including online discussion forums as part of a hybrid in-class experience or "flipping" content by placing traditional lectures online in order to provide experiential work in the classroom.

◀ ▶ go to PG.

Using Peer Longitudinal Case Study to Teach Pharmacologic Concepts

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Purpose: The purpose of this study is to determine whether a peer nursing student who presents a longitudinal case study on warfarin in a pharmacology course classroom influences prelicensure and postbaccalaureate nursing students' knowledge and perceived knowledge about warfarin.

Background: The National Research Council notes the importance of collecting meaningful data about active learning strategies (Michael, 2006). To date, several studies have evaluated the use of problem-based learning in teaching pharmacy students (Galvao et al., 2014). Research has focused recently on using case studies in nursing pharmacology courses (Vana & Silva, 2014).

Methods: The study is a descriptive design that used a convenience sample of baccalaureate nursing students enrolled in two pharmacology courses. All participating students answered warfarin case-study questions based on information provided on case-study handouts. Students completed a self-demographic questionnaire, a knowledge pretest and posttest, and a satisfaction questionnaire after the activity, which evaluated students' knowledge and perceived knowledge on 11 warfarin concepts. The results were analyzed by prelicensure, postbaccalaureate, and the two groups combined. Statistical analyses included frequencies and percentages for nominal variables and medians, maximum, and minimum values for continuous and ordinal variables, derived from questionnaires and tools. Fisher's exact tests compared distributions by groups. Within groups, pretest and posttest scores were compared by Wilcoxon signed-rank tests, and between groups, comparisons by Mann-Whitney tests. A Pearson correlation evaluated the relationship between the total posttest and total satisfaction scores.

Results: For all students ($N = 89$), the number of correct answers improved significantly between pretests and posttests for Items 2-11 ($p < .0001$), which evaluated students' knowledge on warfarin's site of action, associated laboratory values, use of vitamin K, and food-drug interactions. However, no significant difference was seen in the number of correct answers for the first question, which asked about warfarin's mechanism of action. Comparing prelicensure and postbaccalaureate groups, no significant difference was seen for pretest total scores (median 7.00, $n = 55$; median 7.50, $n = 34$; respectively; $p = .399$). Similarly, no difference was seen for posttest total scores by groups (prelicensure: median = 9.00, $n = 54$; postbaccalaureate: median = 10.00, $n = 32$; $p = .344$). For both groups, there were no significant differences in answers on the satisfaction questionnaire, which evaluated students' perceived knowledge of warfarin concepts; the medians for both groups were 4.00 for all 11 items. Students agreed that they could identify and explain these concepts. The Pearson correlation between the total posttest and total satisfaction scores for the combined group was .338 ($p = .003$), showing a low but significant correlation between students' posttest total scores and their perceived warfarin knowledge, as evaluated by the satisfaction questionnaire.

Implications: Overall, there is a statistically significant improvement between nursing students' scores on the pretests and posttests on warfarin knowledge when utilizing a peer-presented longitudinal case study. Nursing students agreed overall that they were knowledgeable about warfarin after being taught by a peer. Further research in peer-led case studies is needed to evaluate this active-learning technique in different student populations and environments.

◀ ▶ go to PG.

EDUCATIONAL STRATEGIES II

The Effect of Team-Based Learning on Communication in First Year Nursing Students

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Purpose: The purpose of this study is to describe the effects of Team-Based Learning (TBL) on first year nursing students' communication skills. Nurses must be able to communicate accurately with patients and their colleagues; therefore, identifying students areas of communication needs early in their University course work is beneficial.

Rationale: Historically, the nursing core class, pathophysiology, has been taught using a faculty driven lecture model coupled with PowerPoint presentations. This method has had mixed success with students in this content intensive course. Moreover, when students move into their first clinical setting, they are called upon to teach and communicate with patients and other healthcare team members in a shared group setting. Such interactions are often awkward and challenging. When discussions require incorporating pathophysiology concepts into their clinical practice, students often feel completely inept and overwhelmed.
TBL has been demonstrated to promote knowledge acquisition and application through group interactions (Michaelsen, Sweet and Parmelee, 2008)). To improve and maximize the student's ability to effectively teach and communicate with patients and healthcare staff in the clinical setting, a modified TBL pedagogy will be used as an educational intervention to decreased students' communication anxiety levels.

Methods: All students will be asked to complete a survey at the beginning and end of each semester. The survey consists of demographic questions and items from the Personal Report of Communication Apprehension (PRAC-24) (Watson, 1990) and Value of Teams Survey (Baylor College of Medicine, 2001). Participants will also complete a peer evaluation for each team member after the second and fifth TBL group activity each semester. The surveys assess communication apprehension levels and groups interaction experiences. Peer evaluations focus on feedback in relation to student communication effectiveness and group participation.

Data Analyses: Survey responses and participant demographic data will be analyzed in SPSS and summarized using descriptive statistics. Narrative responses from peer evaluation data and surveys will be transcribed, analyzed, and themes developed.

Conclusions: Study findings will provide insight into student communication apprehension levels and group interaction experiences using a TBL approach. Adding to the body of knowledge on teaching strategies that can enhance communications and group learning is critically important information for nurse educators preparing students for success.

◀ ▶ go to PG.

END OF LIFE

PROMOTING ADVANCE DIRECTIVE COMPLETION AMONG HISPANICS: AN EBP PROJECT

Luis Daniel San Miguel, Mary Jo Clark

MEXICAN AMERICANS' RECEPTIVENESS TO HOSPICE

Margaret L. Rising

IMPROVING END-OF-LIFE CARE: AN EVIDENCE-BASED CURRICULUM FOR NURSING STUDENTS

N. McLeskey

A SYSTEMATIC REVIEW OF END-OF-LIFE DECISION-MAKING IN CHINESE AMERICAN SENIORS

Tiffany Dzou, Selamawit Balcha, Janet C. Mentes, Linda R. Phillips

go to PG.

END OF LIFE

Promoting Advance Directive Completion among Hispanics: An EBP Project

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Purpose: To promote completion of advance directives (AD) by increasing knowledge, positive attitudes, and comfort with advance care planning (ACP) in a Hispanic population through culturally appropriate interventions.

Background: Hispanics utilize more aggressive medical treatment at the end-of-life and are less likely to receive end-of-life care consistent with their wishes than nonHispanic Whites (Agency for Health Research and Quality, 2012; Hanchate, Kronman, Young-Xu, Ash, & Emanuel, 2009). However, the majority of Hispanics would prefer comfort care measures rather than life-prolonging treatment if seriously ill (Kelly, Wenger, and Sarkisian, 2010). Such contradiction is reinforced by the fact that Hispanics are less likely than nonHispanic Whites to have an AD (Carr, 2011; Lake Research Partners & Coalition for Compassionate Care of California, 2012). Increasing AD completion among Hispanics can promote end-of-life care consistent with their wishes, diminish healthcare disparities, and eliminate unnecessary healthcare spending.

Best Practice: The project was implemented with a Hispanic religious congregation. General invitations to participate were made by way of Sunday bulletin announcements, informational flyers, and weekly announcements during general Sunday meetings. Twenty-four participants attended the initial group session. Two group sessions were held at the congregation's meetinghouse. A folder with printed informational handouts and exercises was provided to each participant along with an initial knowledge and attitudes questionnaire. Sessions included information on the history, legal background, and the basics of ADs. Individual reflections and group exercises were used to explore personal views, ways to talk to loved ones about ACP, and how to make difficult healthcare decisions. At the conclusion of the second group session, the same knowledge and attitude questionnaire was completed. Participants then scheduled a one-on-one session to complete an AD.

Outcomes: Of the 21 eligible participants, 13 attended both group sessions and scheduled a one-on-one visit. Mean scores for knowledge increased from 71% to 91%; mean attitude and comfort scores increased from 61% to 80%; and 100% of participants who attended both group sessions completed an AD.

Implications: Increasing AD completion among Hispanics can be achieved through culturally appropriate interventions that increase knowledge about, attitudes toward, and comfort with end-of-life decisions. Promoting completion of ADs can improve care outcomes and decrease costs. More studies are needed among Hispanics that focus on effective interventions to complete ADs, rather than Hispanic end-of-life cultural preferences alone.

◀ ▶ go to PG.

END OF LIFE

Mexican Americans' Receptiveness to Hospice

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Purpose: To assess the level of evidence reflecting Mexican Americans' receptiveness to hospice.

Background: Hospice offers improved pain control and quality of life. Yet, only 6% of hospice users nationwide are Hispanic. Cultural influences within particular Hispanic subgroups may influence their receptiveness to hospice. In the U.S., 64% of Hispanics are Mexican American (MA). To improve their quality of health care at end of life (EOL), it is important to understand any EOL MA cultural preferences. Traits sometimes attributed to MAs such as family decision making and the tendency to shield elders from knowledge of terminal prognosis may clash with the requirement to acknowledge a six month prognosis for hospice enrollment.

Methods: A Medline, CINAHL and Scopus literature search was conducted using the keywords *Hispanic American,* or *Mexican American,* combined with *hospice care, hospice nursing, palliative care, palliative nursing, terminal care, decision making, prognosis, diagnosis, "truth telling,"* or *"end of life.*" Resulting articles were screened by title and abstract to exclude articles unrelated to hospice or EOL. Articles were closely read for inclusion based on either an exclusive MA focus or a Hispanic or Latino focus where the sample explicitly included MAs. Articles were excluded if participants were solely pediatrics or adolescents, caregivers, or non-MA subgroups. Twenty-three articles remained for review.

Outcomes: Study designs were mainly surveys or low inference qualitative descriptive. Considerable heterogeneity in scales rendered comparisons across studies difficult. The majority of studies were conducted in urban areas with large MA populations, neglecting marginalized and isolated populations. Only six articles focused solely on individuals over age 65, overlooking the views of a large group of potential hospice users. No articles measured or examined the views of MAs who were actually hospice patients. However, some focused on healthy, young, literate and highly acculturated MAs, who reported a greater receptiveness to hospice than their counterparts. Several articles explored preferences for comfort care, which is similar to hospice care in that it involves relinquishing life sustaining therapies (LST). In general, attitudes toward comfort care were mixed when compared to other ethnicities. However, a strong majority of relatively healthy elderly MAs would choose comfort care instead of LST in hypothetical scenarios involving no recovery. More than Whites, communication dynamics among MAs at EOL tend to consistently involve family, shared and passive decision-making, as well as avoidance of direct discussion of terminal prognosis. Hospice utilization rates by MAs may be affected by disease type and abundance of MAs in the population.

Conclusions/Implications: More research is needed from regions sparsely populated by MAs as well as on the relationship between disease type and hospice utilization. Future research should include intervention and richly detailed qualitative studies with elderly MAs and their families because EOL themes may be overlooked by translated survey questions and low inference semi-structured interviews. Being mindful not to stereotype, providers should remain alert to cultural differences between the dominant healthcare system and the increasing number of MAs in the EOL context, particularly with respect to decision making and prognostic disclosure.

◀ ▶ go to PG.

END OF LIFE

Improving End-of-Life Care: An Evidence-Based Curriculum for Nursing Students

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Rationale/Background: Individuals are living longer, experiencing terminal diseases for extended periods of time and they often die in acute settings with nurses at the bedside. A majority of these nurses have not had focused end-of-life knowledge and skills in their nursing school curriculum. Nurses frequently feel ill-prepared to manage the symptomatology and needs of this patient population which in turn causes many to experience anxiety and fear when caring for a dying patient.

Purposes/Aims: The purpose of this project is to develop and implement an online end-of-life curriculum, with the goal of changing nursing student's attitudes towards caring for dying patients and better prepare them to care for this patient population.

Undertaking/Best Practice/Approach/Methods/Process: End-of-Life evidence-based practice information is available and will be utilized to develop an online course for eight undergraduate nursing students at the University of Utah College of Nursing. Information related to the project will be presented to 3rd semester nursing students in the beginning of the Spring 2015 semester and they will be invited to participate. Once the students agree, they will be asked to complete a validated pre questionnaire, complete the online course and on completion of the course will again take a post questionnaire (same as the pre questionnaire). The data collected will be de-identified and evaluated.

Outcomes Achieved/Documented: The anticipated outcome for the project is that the nursing students will have improved attitudes towards caring for dying patients and be better equipped to care for this patient population.

Conclusions: Providing this curriculum to nursing students will equip them to become more confident nurses in meeting the needs and managing the symptoms of dying patients. Additionally, patients will experience peaceful deaths and family members will feel relief in knowing their loved one is receiving optimal care. Future use of this online course will be accessible to University of Utah College of Nursing graduate nursing students and faculty.

◀ ▶ go to PG.

A Systematic Review of End-of-Life Decision-Making in Chinese American Seniors

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Aim: The aim of this systematic review was to evaluate current factors influencing end-of-life (EOL) care decision-making in Chinese Americans seniors (CAS).

Background: According to the US Census Bureau (2012), the Asian population is projected to more than double from 2012 to 2050, with its share of the nation's total population climbing from 5.1% to 8.2%. As the largest subgroup of Asian Americans in the United States (US), Chinese Americans are an increasing portion of the aging US population. However, less than 2% of Asian American/Pacific Islanders (AAPI) use hospice care, despite AAPIs comprising 5% of the total US population. This disparity suggests our knowledge about the factors influencing CAS EOL decision-making is as yet incomplete.

Method: A literature search was conducted in September 2014 using CINAHL, PubMed, Medline, and Google Scholar databases and the Internet. Keywords used were: 'Chinese American Seniors', 'Chinese Seniors', 'end-of-life', 'decision making', 'hospice care', 'palliative care' and 'aging'. No date restrictions were placed on articles considered for review, and national and international studies were included. Articles from peer-reviewed journals meeting the inclusion criteria included studies specific to CAS as well as Chinese seniors in westernized countries (i.e. Chinese seniors in Canada, Hong Kong, Singapore, and the United Kingdom). Articles with keywords and titles referencing Asian Americans without findings specific to the Chinese American subgroup were excluded. Analyses of the literature focused on references to cultural practices, acculturation, and EOL decision-making.

Results: The literature review revealed a dearth of information specific to CAS EOL care. Findings for factors influencing EOL decision-making were inconsistent. While some studies focused on the collectivistic nature of Chinese culture, others noted a shift towards Chinese seniors adopting Western values of patient autonomy. Many of the studies on Chinese seniors EOL care were conducted outside the US. Review of the literature suggested that for CAS, the EOL decision-making process is a complex interweaving of culture (Confucianism, filial piety), social/acculturation factors, and personal family dynamics. Most researchers did not measure the impact of acculturation factors (years education in the US, years of residence, work history, English proficiency, and living arrangements) on CAS EOL decision-making, but acculturation was referenced in explanations of CAS' diverse EOL preferences. Most studies used convenience sampling and lacked generalizability.

Conclusion: As the population of Chinese American Seniors in the US increases, the importance of understanding CAS EOL decision-making increases as well. Continued research efforts should be made to elucidate CAS EOL decision-making process. Future studies need to measure acculturation as a possible source of diversity, which leads CAS to various outlooks on EOL care.

Implications: Culturally congruent EOL care for the CAS may not strictly adhere to traditional views of filial piety and family centered models. CAS are becoming increasingly diverse. Health care providers' assessment of CAS' degree of acculturation may provide insight into factors affecting EOL preferences.

Funding: Provided by: UCLA/CDU Partnership for Enhancing Diversity of Nurses with Research Careers/ NIH Grant Number: 5R25GM102777-02.

◀ ▶ go to PG.

go to PG.

FAMILY-CENTERED CARE

DEVELOPMENTALLY SUPPORTIVE CARE IN THE CARDIAC INTENSIVE CARE UNIT: A CONCEPT ANALYSIS

Jennifer K. Peterson, Lorraine Evangelista

THEORETICAL FRAMEWORKS TO EXPLORE COMPANION ANIMALS AS SOCIAL SUPPORTS

Basilia Basin

THE MANAGEMENT OF EMOTIONS IN CAREGIVERS OF SPECIAL NEEDS CHILDREN

Carla M. Hagen, Melissa LaRue

◀ ▶ go to PG.

Developmentally Supportive Care in the Cardiac Intensive Care Unit: A Concept Analysis

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Introduction: Literature provides strong support for developmentally supportive care in the Neonatal Intensive Care Unit (NICU) as a care model associated with reduced length of stay, improved enteral feeding, and improved neurodevelopmental outcomes. Many infants who undergo surgery for congenital heart disease are neonates, but developmentally supportive care is not the usual care model in a Cardiovascular Intensive Care Unit (CVICU). Following congenital heart surgery, the infant requires multiple monitors of vital functions, chest tubes, endotracheal intubation and mechanical ventilation, central venous and arterial lines, urinary catheter, and may require high technology support such as extracorporeal life support or delayed sternal closure. The invasive nature of this level of support may initially preclude a developmental care model. However, as the infant recovers, the nursing and medical care needs become less intense, which may be an appropriate time to change the focus of care from lifesaving high technology to developmental support. The neonate with heart disease is typically a term infant, unlike the focus on premature infants in the NICU. However, some recent literature suggests that the brains of infants with heart disease developmentally resemble that of a premature infant. The CVICU patient population also includes children with heart disease of all ages, from neonates to young adults. Neurodevelopmental delay is common in children with heart disease, and risk factors for delays include neonatal surgical repair, preoperative medical and neurological co-morbidities, length of cardiopulmonary bypass and deep hypothermic circulatory arrest, birth weight less than 2.5 kg, and hospital length of stay. Neonates and young infants with the most complex heart defects are at highest risk for developmental delay, and may benefit greatly from developmental support.

Purpose/Aim: It is not known whether the components of NICU developmentally supportive care are applicable to the care of infants and children with cardiac disease. The purpose of this concept analysis is to better understand how developmentally supportive care is applicable to the care of infants and children with heart disease, and their families, in the CVICU.

Methods: Using the Walker and Avant method of concept analysis, definitions and uses of the concept of developmental care in the CVICU will be identified and the attributes will be described. A model case of developmentally supportive care for infants and children with heart disease will be developed, as will examples of a contrary case, related case, and borderline case. Antecedents of the concept and consequences of the application of developmentally supportive care for infants and children with heart disease will be discussed.

Conclusion/Implications: This concept analysis will provide guidelines and operational structure for CVICU nurses to implement developmentally supportive care measures in a population of infants and children with severe heart disease who are at risk for developmental delay, at an appropriate time in their recovery. Establishing a more developmentally supportive care environment will facilitate holistic care of the infant or child and their family, and support excellence in nursing practice.

◀ ▶ go to PG.

Theoretical Frameworks to Explore Companion Animals as Social Supports

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Purpose: To examine theoretical frameworks used to explore companion animals as social supports.

Background: Social support can be defined as receiving psychological and material resources from others to cope with stress. In this definition the term *others* may include companion animals. Research has demonstrated that the relationship one ascribes to a companion animal is considered unique and offers non-human social support. A majority of American households (56%) have a companion animal, and of those people 99% consider the animal as part of the family network. Currently, there is not a specific human-animal theoretical framework available to research the social support from human companion animal relationships.

Methods: A literature search was conducted in Medline, CINAHL, and PsycInfo using the keywords *pets*, *human-animal bonding*, and *social support*. The search was limited to research papers between 1946 and 2013, available in English, and on adult subjects. Articles identified (n=37) were screened by title and abstract to exclude unrelated articles and include articles reporting about an individual's own companion animal and social support obtained from the companion animal. For example, articles about animal-assisted therapy and service animals were excluded. Thirteen articles met the criteria. To increase the number of articles, reference lists were searched to identify additional key literature (n=10) and were added to compose 23 articles to be reviewed.

Outcomes: Various theoretical frameworks were used to explore social support received from companion animals; many were borrowed from human-relationship theories. Of the 23 articles reviewed, 11 articles used explicit theoretical frameworks. These frameworks included: Bowlby's attachment theory, Ainsworth's attachment theory, Bartholomew and Horowitz's theory of adult attachment, Lazarus and Folkman's stress, coping and adaption theory, Weiss' loneliness theory, stages of change theory, social ecological model of health framework, and contemporary evolutionary theory. The attachment theories emerged as the predominate theory. The studies that did not use a theoretical framework offered no explanation to justify the rationale.

Conclusions/Implications: The lack of a consistent framework to explore human-animal relationships, specifically social support from companion animals, has left researchers to borrow theories from human-human relationships. The design of a specific human-animal relationship theory could provide a more robust framework to examine the unique relationship people have with their companion animal. A specific human-animal framework could be useful to nurses when planning and implementing interventions for people living with a companion animal. Further research is needed to move beyond borrowed frameworks to create a specific human-animal relationship theory. Conducting a grounded theory study about the relationships people have with their companion animal is the next step towards a specific human-animal relationship theory.

◀ ▶ go to PG.

FAMILY-CENTERED CARE

The Management of Emotions in Caregivers of Special Needs Children

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Purpose/Aims: The primary aim of this investigation was to explore if the management of emotions (guilt, anger, and depression) improved for caregivers of children with special needs after participation in Powerful Tools for Caregivers (PTC), a 6-week educational series designed to help family caregivers take care of themselves. A secondary aim was to learn what concerns caregivers reported about their emotional health.

Rationale/Background: Caregivers of children with special needs describe negative physical, emotional and functional health consequences of long-term, informal caregiving. Caregiving demands met by caregivers of children with disabilities or special behavioral needs can cause chronic stress and have a negative effect on the caregivers' physical and emotional health. PTC is a psycho-educational program rooted in Bandura's Social Cognitive Theory, and posits that the management of emotions: (guilt, anger, and depression) will improve by identifying constructive ways of dealing with these feelings.

Methods: To measure the effectiveness of PTC among caregivers of special needs children participants completed pre-and post-program surveys. Forty eight caregivers participated in six, two-hour sessions that focused on: reducing personal stress, practicing self-care, communicating effectively in challenging situations, dealing with difficult emotions, making tough caregiving decisions, and setting goals and problem-solving. Six PTC series were held in four different states representing the Northwest, Midwest, Southeast, and East Coast regions of the country. The PTC content and survey materials were originally created for caregivers of older adults and were revised to address the caregiver population of children with special needs. For this study, the domains of caregiver emotional health were assessed based on five multi-part questions, of which participants responses were calculated on a 4-point (0-3) scale (*never, sometimes, often, always*). One question focused on the emotion of guilt, while the emotions of anger and depression were addressed in two questions each. An open-ended question explored what caregivers considered their most important caregiving concerns, and for this investigation were reviewed in the context of difficult emotions. The pre-program survey was administered before the first session, and the post-program survey immediately after the sixth session. The same questions were asked for both the pre-and post-program surveys.

Results: Preliminary analysis show that participants (n=40*) reported an overall improvement in the management of their emotions ($P <.01$) from the PTC intervention (pre-program (M=0.82) to post-program (M=0.71). While there was significant overall improvement of emotions post PTC, when guilt, anger, and depression were analyzed separately, there was no significant change in the management of the emotion of anger ($P <.6$); both the emotions of guilt ($P<.03$) and depression ($P<.009$) demonstrated significant differences after the intervention of the six PTC sessions. Ten of the 48 caregivers reported concerns related to management of their emotions. *Due to missing data from participants.

Implications: Findings indicate that participation in PTC can improve the management of emotions for caregivers of special needs children, especially the emotions of guilt and depression. Identifying caregivers concerns related to emotional health assists health care providers to assess strategies of support to caregivers of children with special needs.

◀ ▶ go to PG.

HEALTH LITERACY

IMPROVING ACCESS TO CARE FOR PATIENTS WITH LIMITED ENGLISH PROFICIENCY

Kathy Lopez-Bushnell, Geraldine Guerra-Sandoval, Dorte Hartwig

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EXPLORING ENVIRONMENTAL HEALTH LITERACY: CULTURAL PERSPECTIVES

Gail Oneal, Laura Hahn, Gina Ord

◀ ▶ go to PG.

HEALTH LITERACY

Improving Access to Care for Patients with Limited English Proficiency

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Purpose/Aims: The purpose of this research project is to investigate the use of interpreter services and interpreter equipment at a medical-surgical hospital unit and meet the communication needs of Limited English Proficient (LEP) patients. The specific aims of this study are 1) To improve nursing staff usage of interpreters/equipment in order to provide effective communication with LEP patients and, 2) To enhance LEP patients understanding of their health condition, care and hospital procedures.

Rationale/Background: Language barriers pose a great threat to effective patient communication and quality of care. According to the Sullivan Commission the number of minorities in the United States is 25%, 18% are LEP and only 10% of minorities are nurses (Pares-Avila, 2011). The imbalance of nursing staff to LEP patients may result in health care disparities because LEP patients are more satisfied and have better patient outcomes when spoken to in their same language (Pares-Avila, 2011). When nurses of same ethnic background and language as the LEP patients were assigned to them on the medical surgical unit, the nurses reported that LEP patients were nervous due to unknown procedures, lab draws and they had many questions about their plan of care and daily needs. Although there are several nurses on the unit that are bi-lingual, their language skills may not be adequate. The University of New Mexico Hospital provides training for bi-lingual individuals to become medical interpreters in order to assist in communication needs with the LEP population. There are approximately ten to fourteen LEP patients on the unit monthly but only three nurses are certified to interpret. Nursing staff that are not qualified to interpret often do not understand or utilize interpreters and/or equipment in order to effectively communicate with LEP patients.

Methods: This is an IRB approved study that will use pre/post survey of 200 LEP hospitalized patients who were surveyed before and after nursing education on interpreter services, language interpreter policy, interpreter resources and the use of the interpreter equipment. The interpreter Language Services will also provide in-services to inform the staff of their resources and services, the survey will measure LEP communication needs and how they are met.

Outcomes Achieved/Documented: In 2013 the staff were taught and in-serviced on how to call interpreters and how to use the equipment. In 2014 the Interpreter and Language Services reported that there were 207 telephonic interpretations and four video interpretations from January to June. This research project will include re-educating the staff and conducting a pre-post survey to investigate if interpreter usage will increase and result in effective communication with the LEP population.

Conclusions: Nursing staff were taught how to implement interpreter services for patients on a medical/surgical unit and are using the equipment to communicate with LEP patients. The nursing staff are improving patient satisfaction, minimizing unnecessary medical procedures and improving health care outcomes of the LEP population in the unit.

◀ ▶ go to PG.

Exploring Environmental Health Literacy: Cultural Perspectives

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Purpose/Aims: The purpose of the study is to discover and explore meanings assigned to environmental health (EH) terms by Hispanic, American Indian, and farm family adults in a Pacific Northwest agricultural county with known environmental hazards. The aims of the study are to 1) to discover how people from populations at-risk for environmental exposures culturally understand, define, and use environmental health terms in common language, and (2) to compare differences and similarities of the perceptions and meanings of EH terms in at-risk populations.

Rational/Conceptual Basis/Background: Environmental health literacy (EHL) is necessary for people to understand the link between their environments and health, and includes knowledge of EH terms. It combines environmental literacy (ability to read, understand and act on environmental information) and health literacy. Previous studies have shown that current terms used by health professionals and scientists are difficult, technical, and/or confusing. Yet, health professionals including nurses need to educate populations about their EH risks to prevent poor health outcomes. It is known that there is less health literacy and more environmental health risks to rural families, and much higher rates of health problems in agricultural populations. However, there is not much known about how different populations acknowledge and interpret terms used to inform people about environmental health risks. Health professionals, including nurses, cannot change risk perceptions, and therefore behaviors, until perceptions about the information provided are known. If cultural meanings for health terms and risks are known, new information that reflects those meanings may be more accepted.

Methods: A qualitative design using focus groups to discover common themes is currently underway. Participants include Hispanic, American Indian, and agricultural farm family residents of Yakima County, Washington. A total of 6 homogenous focus groups (2 Hispanic, 2 American Indian, 2 farm family groups) are being held over a five month period. Each focus group will have 6-10 participants. Written notes and audiotaped transcriptions of within and between all groups will be used for a thematic analysis. Major themes or concepts identified will be reported as to general consensus, meaningfulness of themes, theme refinement, and differences among groups.

Results: Expected results will assist in our future research to increase environmental health literacy and reduce home and workplace environmental risks through nurse interventions for rural residents.

Implications: Information obtained in the planned focus groups about cultural meanings of EH terms will assist in development of new tailored media material that nurses and other health professionals may use to educate people about environmental health. Results from comparing different cultural groups will also provide clues as to which cultural factors may more fully influence perceptions when designing or modifying EH interventions.

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HEALTHCARE SYSTEMS RESEARCH ACROSS THE CONTINUUM OF CARE

OVERVIEW: HEALTHCARE SYSTEMS RESEARCH ACROSS THE CONTINUUM OF CARE

Pauline Wang-Romjue, Andrea LeClaire, Elizabeth B. Thumm, Nora Flucke

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PRACTICE ENVIRONMENT EFFECTS ON NP AUTONOMY AND PATIENT OUTCOMES IN AMBULATORY CARE

Pauline Wang-Romjue

INTEGRATION OF MENTAL HEALTH INTO PEDIATRIC PRIMARY CARE: THE ROLE OF NURSING

Andrea LeClaire

PSYCHOLOGICAL WELL-BEING OF THE NURSE-MIDWIFE WORKFORCE: A THEORETICAL PROPOSITION

E. Brie Thumm

MODELS OF COMMUNITY-BASED CARE COORDINATION

Nora Flucke

◀ ▶ go to PG.

HEALTHCARE SYSTEMS RESEARCH ACROSS THE CONTINUUM OF CARE

Overview: Healthcare Systems Research across the Continuum of Care

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Ambulatory patient encounters currently outweigh acute care patient encounters by several orders of magnitude. With a shifting focus from inpatient to preventive and non-acute care, the difference between one billion ambulatory care encounters versus eight million acute care encounters (Ong, 2011) is expected to widen. Between 2010 and 2020, the nursing workforce employed in ambulatory care settings is predicted to increase by 32.7% or one million RNs (United States Department of Labor. Bureau of Labor Statistics, 2012). Despite this growth, research to support the practice of outpatient and community care providers is not keeping pace. According to the Institute of Medicine, effective workforce planning and policy development require better data collection with an improved information infrastructure (IOM, 2011).

Theory: The Systems Research Organizing Model (SROM) (Brewer, Verran & Stichler, 2008), used as the framework for systems research across the continuum of care, is based on Donabedian's Structure, Process, Outcomes framework (Donabedian, 1966) and the Quality Health Outcomes Model (Mitchell, Ferketich & Jennings, 1998). The model acknowledges the complex interrelationship between elements within a system. Applied to the need for additional research beyond the acute care setting, the provider or nurse is represented in the position of the client, understood as the consumer of research within the SROM concepts. The healthcare system provides the context in which one billion patient encounters occur each year. The action focus lies in the development of a body of evidence to guide education, policy and practice for non-acute patient care. The outcome concept focuses on increasing system level research able to meet the demand for scientific evidence across the continuum of care.

Aim: Identify areas of research with an insufficient evidence base to support nursing practice in outpatient and community-based care settings.

Method: Review of the literature around issues impacting nurses in ambulatory care, primary care, and community-based care.

Findings: Researchers identified four focus areas lacking robust evidence to sustain nursing education and practice for quality outpatient and community-based care delivery.

- Practice environment characteristics contributions to the relationship between Nurse Practitioner autonomy and patient outcomes in ambulatory care
- Primary care Pediatric Nurse Practitioner's role perceptions and barriers to performing mental health screening
- The effect of practice climate on the certified nurse midwife professional psychological well-being and the implications for patient and organizational outcomes
- Evaluation of rural care coordination models for population health, quality, and cost outcomes

Conclusion: The mismatch between supply and demand for evidence-based knowledge in non-acute care settings calls for more research to support the delivery of high-quality nursing care across the care continuum.

◀ ▶ go to PG.

HEALTHCARE SYSTEMS RESEARCH ACROSS THE CONTINUUM OF CARE

Practice Environment Effects on NP Autonomy and Patient Outcomes in Ambulatory Care

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Purpose/Aim: The Patient Affordable Care Act (2010) emphasizes the need for the nursing profession, especially Nurse Practitioners (NP), to be the central force in meeting the anticipated increased health care demands and needs of the wave of Baby Boomer retirees. With the profession's proximity to patients, NPs can yield favorable outcomes in safe and efficient patient care depending on the practice environment characteristics in which NPs work. However, there is sparse research about the relationship between NP practice and patient outcomes as influenced by the practice environment characteristics in ambulatory care. Therefore, it is vital to examine what practice environment characteristics contribute to the relationship between NP autonomy and patient outcomes in ambulatory care. The purpose of this abstract is to describe the process of how the phenomenon of interest will be studied, using the Evolutionary Transitions Model (ETM) to harvest findings to illuminate the relationship between NP autonomy and patient outcomes in ambulatory care.

Theory: ETM is based on Donabedian's (1966) structure, process, and outcomes model. The author conceived the four main constructs (structure, perceived organizational support, transition agent, and transition recipient) of ETM from Eisenberger's (1986) perceived organizational support and Meleis's (2000) health transitions theory. EMT provides the framework for studying and categorizing characteristics of organizational structure (practice environment) that may influence the relationship between NP autonomy and patient outcomes in ambulatory care. Structure includes attributes, such as leadership, communication, and staffing within the organization, that affect the quality and quantity of care provided. Organizational support refers to the NP's perception of specific organizational structural attributes that support the NP's practice. Transition agent is the NP's independent and interdependent role. The interdependent role of the NP denotes functions and activities of the NP that partially or entirely depend on another health care provider's functions or actions to complete their own activities. For instance, the NP will continuously monitor patient condition and consult with the doctor about any changes. In the course of a patient's care experience, the NP plans and coordinates services to prepare the patient for transition from one episode of care to the next. NP's independent role refers to role function and responsibilities only NPs can be accountable for. They include nursing assessment, diagnosis, planning, and evaluation of patient care, which do not require a physician's order. The patient, a holistic being, is the transition recipient.

Discussion/Conclusion: EMT is used to explicate how organizational structure characteristics may be mediated by NPs' perceived organizational support, and affect the relationship between the NP's practice autonomy and patient outcomes in ambulatory care. The dynamic and complex systemic relationships between the four constructs provide the framework to guide research and examine the relationships between the NP's practice autonomy and patient outcomes as influenced by organizational structural characteristics in ambulatory care.

◀ ▶ go to PG.

HEALTHCARE SYSTEMS RESEARCH ACROSS THE CONTINUUM OF CARE

Integration of Mental Health into Pediatric Primary Care: The Role of Nursing

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Purpose/Aims: There is an ongoing and continuous emphasis on integrating mental health care and primary health care for the last several years. Mental health screening works best in primary care settings as opposed to acute care settings. The purpose of this podium is to provide a theoretical approach and conceptual model for assessing nurses' perception of their role in this dynamic through primary care. Application of the model defines the barriers and potential for further education on mental health screening for nurses in integrated mental health care.

Description of Theory: The System's Research Organization Model (SROM) structures and models research designs looking at the system of nursing's role in the integration of mental health assessment of the pediatric medical patient. Brewer, Verran, and Stichler's SROM present four core constructs: client, content, action focus and outcomes (2007). The inter-relatedness and feedback loops of this model are essential in understanding the nursing system and process, and comprehending how all elements are interrelated.

Internal Consistency of the Theory Developed: The theory notes that the organization of the healthcare systems defines the client and nursing action focus. The combined influence of the organizational system on the nurse and nursing actions predictably defines the outcome as well as the range of the outcome focus. These propositions are consistent with the findings in the literature demonstrating the level of the outcomes for client mental health.

Logic Linking the Theory to Nursing Practice/Research: The theoretical framework of the Systems Research Organizing Model (SROM) (Brewer, Verran, & Stichler, 2007) focuses nursing research on systems as a whole, the individual parts of the whole, and the interactions of the parts. The potential effect of assessing PNP's perception of mental health screening and the organizational systems barriers allows them to be critiqued and eventually repaired. Barriers to screening and PNP's perceptions in this research topic may be instrumental in determining new successful approaches to mental health screening in pediatrics. The role of nursing in mental health screening in pediatric primary care are applied to the SROM.

Conclusions: Focusing on pediatric mental health screening and its implementation allows for quality of care to be improved, and mental health issues to possibly be further identified in the pediatric population using the SROM model. Identification of organizational problems in pediatrics can lead to improved prevention and treatment. Using the SROM to address the holistic approach to patient care and treating the mental and physical components of patients will improve the ever present mental health needs in children and adolescents.

Reference:
Brewer, B. B., Verran, J. A., & Stichler, J. F. (2007). The Systems Research Organizing Model: a conceptual perspective for facilities design. *HERD, 1*(4), 7-19.

◀ ▶ go to PG.

Psychological Well-Being of the Nurse-Midwife Workforce: A Theoretical Proposition

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Background/Purpose: Certified nurse midwives provide cost-effective, high quality maternity care for low-risk women.[1] Despite this, only 7.9% of births in the U.S. were attended by midwives in 2011.[2] of the approximately 13,000 licensed CNMs[3], only 5,460 are employed as nurse-midwives according the Bureau of Labor. [4] Simultaneously, there is a shortage of maternity care providers. According to the American College of Obstetricians and Gynecologists, in 2011 nearly half of U.S. counties did not have and obstetricians and gynecologists.[5] In April 2014, the Maternity Shortage Act was introduced in the House of Representatives to address the lack of maternity care providers in specific rural and urban areas.[6] Attention to the of the midwifery workforce is essential to maternity care in the U.S.

Organizational psychologists have demonstrated correlations between work environment, professional psychological well-being (i.e. burnout and work engagement), and organizational outcomes.[7,8,9] Nurse researchers have corroborated these findings in nursing populations. Job characteristics correlated to engagement and burnout include bullying exposure, supportive practice environment, and nurse-physician relationship.[10,11] Additionally, nurse researchers found that burnout and engagement were predictive of organizational[11] and patient outcomes.[12]

Theory: The Job Demands-Resources model (JD-R) is a framework with which to evaluate the relationships among work environment, professional psychological well-being, and the effects on outcomes.[13] The relationships are broken down into two processes. The Health Impairment Process proposes that job demands contribute to burnout that negatively affects outcomes. The Motivational Process posits that resources are correlated to work engagement and positively affect outcomes. Additionally, the JD-R allows for a mediating effect with resources mediating the relationship between demands and burnout and demands mediating the relationship between resources and engagement.

A systematic review of the literature was conducted using databases CINAHL, PubMed, Web of Science, and PsychInfo to identify research into the professional psychological well-being of midwives. Key words entered included "midwife", "midwives", "burnout", "work engagement", and "job engagement".

Results: The review revealed that there is a little research regarding the professional psychological well-being of midwives. There are two studies on work engagement[14,15] and seven on burnout [16,17,18,19,20,21] among midwives. The contemporary literature was conducted exclusively outside of the U.S.

The demands and resources addressed in the literature included fixed variables, such as patient volume, and malleable variables, such as autonomy. Two of the studies investigated outcomes correlated to the professional psychological well-being of midwives. Researchers correlated engagement with the midwife's perceptions of quality of care and the midwife's general health.[14] Using a longitudinal design, resarchers investigated the midwives' intention to leave and actual departure from midwifery employment.[21]

Gaps in the Empirical Literature: This systematic review revealed a lack of evidence into work engagement and burnout among CNMs in the U.S. The gaps include the organizational demands and resources unique to the midwifery workforce and the implications on patient and organizational outcomes. This knowledge is essential in order to develop evidence-based practice environments that foster growth of the midwifery workforce and increase access to cost-effective, high quality maternity care.

◀ ▶ go to PG.

Models of Community-Based Care Coordination

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Background: Provisions of the Affordable Care Act have led to widespread interest in care coordination to enhance quality of care and cost outcomes in the management of chronic complex conditions. Incentives to improve continuity of care across providers and settings have led to a variety of innovative care coordination models.

Objective: The purpose of this presentation is to provide an overview of community-based care coordination models described in the current literature.

Methods: Peer-reviewed health services literature published in English between 2010 and 2014 was reviewed for descriptions of community-based care coordination models. Models were assessed for represented perspective, domain and mechanisms, as well as sensitivity to explain nursing contribution to team-based chronic disease management.

Findings and Conclusions: Community-based care coordination described in the literature can be broadly categorized into models of practice transformation, transitional care, as well as internally and externally embedded care managers. All models share the purpose of supporting processes and outcomes of team-based chronic care management. Practice models with a narrower focus were found for specific programs for disease management, patient navigation/linking to resources, self-care support, or medication management. Care coordination models varied in scope and representation according to patient, provider, or system perspectives. Multi-level and cross-level frameworks linking provider activities to population level outcomes were common. All sourced research showed limited generalizability due to bounding within geo-political, workforce, technology, and financial contexts. Contributions by nurses to improve quality and cost outcomes could not always be discriminated within the models. Further, care coordination models that were tested in rural and frontier communities were largely underrepresented.

Implications: Additional research is needed to study the role of nurses in community-based care coordination. Assessment of characteristics associated with improved performance outcomes will be key to practice and policy decisions pertaining to workforce development and training. Understudied rural settings with a large proportion of unskilled and lay workers in care coordination roles should become a priority focus of investigation. The development of evidence-based strategies to accelerate data-driven performance optimization of chronic care management will be critical to addressing widening urban-rural disparities (Singh & Siahpush, 2014). Future nursing research, that tests care coordination models in rural populations, will be needed to keep pace with delivery system transformation, which emphasizes a shift from acute care to prevention-based population health management for better service delivery to underserved populations.

Reference:

Singh, G. K., & Siahpush, M. (2014). Widening rural–urban disparities in life expectancy, US, 1969–2009. *American Journal of Preventive Medicine, 46*(2), e19-e29.

◀ ▶ go to PG.

INTERPROFESSIONAL EDUCATION/ COLLABORATION

PREPARING INTERPROFESSIONAL STUDENT TEAMS IN GLOBAL HEALTHCARE ENGAGEMENT

Sandy Carollo, Catrina Schwartz, Debbie Brinker

CROSSDISCIPLINARY HEALTHCARE DELIVERY MODEL FOR A HEALTH PROTECTION PROGRAM

Tim Porter–O'Grady, Deb Gorombei

TIME FOR TRANSDISCIPLINARY GROUP AND FAMILY HEALTH PROTECTION EDUCATION

Tim Porter–O'Grady, Deb Gorombei

INTERPROFESSIONAL DISASTER SIMULATION

Jacqueline Paik, Dolores Wright, Michelle Buckman, Kathi Wild

INTERPROFESSIONAL EDUCATION IN A PHARMACOLOGY COURSE USING HIGH-FIDELITY SIMULATION

Lori Hendrickx, Brittney Meyer, Teresa Seefeldt,
Paula Lubeck, Debra Farver, Jodi Heins

◀ ▶ go to PG.

Preparing Interprofessional Student Teams in Global Healthcare Engagement

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Purpose/Aims: The purpose of this presentation is to demonstrate how to integrate the teamSTEPPS^{TM} approach, and interprofessional role play activities, to support student led assessment teams focused on global healthcare delivery. Emphasis is placed on leadership, communication, mutual support, and situation monitoring. These competencies are directed toward community assessment and integration of team based elements including cultural awareness, health literacy, global citizenship, and social justice.

Rationale/Background: Teamwork is not an outcome of simply placing a group of individuals together in one place; it is, however, a response to commitment, collaboration, and effective communication with a common goal (King et al., 2008). Review of prior preparatory interventions highlighted a need to modify the orientation of student led teams pre-departure. Identified barriers included lack of team cohesion secondary to geographical boundaries, and varied program of study schedules. Each barrier contributed to deficient understanding of roles and responsibilities within the team. Additionally, it was identified that previous preparation included a passive or non-contextual method, further contributing to a lack of confidence in providing a team based approach to healthcare abroad.

Undertaking/Best Practice/Approach/Methods/Process: TeamSTEPPS^{TM} is recognized as " an evidence-based set of teamwork tools, aimed at optimizing patient outcomes by improving communication and teamwork skills among healthcare professionals" (Health Research and Educational Trust, 2010, para.1). A one day retreat was scheduled to provide an opportunity for enhanced teambuilding pre-departure. The retreat was constructed with the teamSTEPPS^{TM} model as a template. Students were divided into four groups of six participants with each group assigned a topic to present at the retreat. During the retreat students presented their group topic, and then self-selected teams to work on group teaching projects while in country. Finally, the retreat offered a simulation with a standardized patient and Spanish interpreter, to allow students to actively participate in a role-played clinic scenario. This was followed with sequential debriefing to understand clinic logistics, team roles, and to emphasize key team based elements of health literacy, global citizenship, social justice, and cultural awareness.

Outcomes Achieved/Documented: Student participants included nursing students and pharmacy students. Outcomes in country included personal observations by faculty identifying student leadership skills and confidence. Notably faculty were in consensus that the team demonstrated understanding of individual and team roles and responsibilities. Additionally, sound leadership skills supported understanding of seamless logistics, and because of this, students were able to focus on the common goal of providing care rather than the "how to" of developing teams and clinics. Finally, the team took the lead in debriefing after each clinic, demonstrating what had been modeled during the retreat. TeamSTEPPS^{TM} surveys were obtained pre-departure and following the student experiences, and are currently in review.

Conclusions: The one day retreat using the teamSTEPPS^{TM} model provided an effective venue to foster team cohesion and collaboration. Interprofessional collaborative teamwork is a core competency in all healthcare curricula both undergraduate and graduate. This experience serves as an example of how early involvement can effectively prepare students to work in teams and toward common goals.

◀ ▶ go to PG.

INTERPROFESSIONAL EDUCATION/COLLABORATION

Crossdisciplinary Healthcare Delivery Model for a Health Protection Program

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Purposes/Aims: With shortages of primary care providers in both rural and urban areas, access to care is often limited. The Circle of Caring advanced practice model by Dunphy and Winland-Brown was modified to transcend disciplines and clinical settings to reduce access inequities and foster provider collaboration. Using this model, health education and screenings were delivered efficiently and cost effectively to promote healthy behaviors and subsequent health outcomes in groups of families.

Theory Description: Attributes of caring in this model include courage, authentic presence, advocacy, knowing, commitment, and patience. In *primary care* settings, medical model components include formulation of a medical diagnosis and identification of patient responses to illness. In *community-based* settings, providers identify population health risks, susceptibilities, and community strengths and focus on chronic disease prevention to protect the health of groups. Providers in each setting envelope patients in caring throughout healthcare encounters and create plans to respond to pertinent findings.

Internal Consistency: Setting-specific *primary care* and *community-based* Circle of Caring models were combined to demonstrate how interdisciplinary screenings and education can be delivered in a caring, socially supported manner. Primary care clinical and therapeutic decision making were integrated with community-based proactive problem solving and prevention methodologies. Intended whole person outcomes include the achievement of long-term, *subjective* indicators of well-being including functional outcomes as well as improved *objective* indicators or health.

Linkage to Practice: Using this approach, contextual and environmental influences on health behaviors, population health risks, and biopsychosocial responses to health status can be rapidly addressed by interdisciplinary providers. Providers can maintain regular contact with groups through shared use facilities combined with online technologies versus individual-based episodic care at an off-site clinical setting where it is often difficult to obtain appointments for education required to protect patients from developing chronic illnesses. By combining the conceptual focus of both settings, interdisciplinary care can be brought to families and communities for health screenings and education to prevent chronic illness before one develops a diagnosis. Additionally, providers can use complimentary clinical strategies as well as family and group social support to foster a trusting, caring relationship which mediates patient engagement to improve long-term subjective and objective indicators of wellbeing.

Conclusions: Contextual and environmental antecedents heavily influence the long-term health behaviors of families and groups. Annual or episodic *illness* care in primary care settings may not produce long-term changes when certain complex health issues such as diabetes, hypertension and obesity require ongoing assessment, education, engagement and support. Efficient and cost-effective health protection is possible when primary care planning is combined with community-based partnership elements to address chronic health risks in families and groups. For long-term changes, a transformation in engagement, knowledge, skills, beliefs, and behaviors must occur in a caring atmosphere to maximize provider time, health care equity, utilization and whole person patient outcomes.

◀ ▶ go to PG.

INTERPROFESSIONAL EDUCATION/COLLABORATION

Time for Transdisciplinary Group and Family Health Protection Education

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Purposes/Aims: This project provides a template for a turn-key multi-component, evidenced-based, cost effective, scalable, and efficacious method to enhance overall wellbeing and reduce disease risk in busy families with adolescents living in rural and urban obesogenic environments. This project addresses gaps in the literature and barriers to wellness in working class, low, and middle-income households with unequal access to health education.

Rationale/Background: Chronic illness and obesity has increased across all age groups necessitating evidence-based prevention, intervention, and interdisciplinary collaboration. In working families, time constraints limit meal planning and preparation time, physical activity, and health knowledge acquisition. Families also report limited access to and/or inability to afford healthy foods or family health club memberships. Many providers report not having time, resources and transdisciplinary providers necessary for health education/ promotion and primarily focus on reimbursable *illness* care.

Process: This project evaluated the feasibility and effectiveness of a theory-based, 14-week, transdisciplinary, multi-component health screening/promotion program designed to improve health knowledge, focus on family lifestyle behaviors, and reduce current and future health risks. To control cost and time factors, the project was deployed using a shared-use facility and online hybrid format. A convenience sample of fourteen adult-seventh grade student dyads with varying body mass indexes were enrolled. Program content was obtained from sources with evidence-supported outcomes involving hands on science experiments, video demonstrations, technology, math, and Spanish. *Dyads* were given wristband pedometers, motivational website access and were invited to three evening sessions as well as local physical activities. *Children* received in-class instruction on physical activity, nutrition and mindfulness training including evaluation of food advertisements. *Adults* were given a nutrition book describing the Standard American Diet and recipes for busy families. Weekly emails and family informational packets were distributed including adjunct nutrition and physical activity games to facilitate at-home family involvement and support. Over two hundred data points were serially collected from the dyads.

Outcomes: Several adult and child participants were overweight or obese. Some adults had undiagnosed hypertensive blood pressures requiring referral to primary care providers. Serial outcome measures included physical activity, fitness parameters, dietary intake, mindfulness as well as motivation and engagement indicators (in process). Anecdotal reports revealed that some children were now eating breakfast and increasing activity. Others reported the project was the stimulus needed to take action in their family's health.

Conclusions: This program addressed busy family lifestyles, provider time and access issues and lack of available health protection education and screenings. Upon final analysis, physical, environmental and other qualitative data may demonstrate serial transformation in engagement, knowledge, skills, beliefs, and behaviors linked to long-term self-management and preventative behaviors. Early and equitable health care education access and delivery using this template would likely translate into inter-generational and long-term improved healthcare utilization and whole person health outcomes.

◀ ▶ go to PG.

INTERPROFESSIONAL EDUCATION/COLLABORATION

Interprofessional Disaster Simulation

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Purpose: The Institute of Medicine (IOM, 2002, 2010) calls for more interprofessional collaboration between nurses and physicians. At the same time, organizations who accredit health professional education call for more interprofessional education. The need for interprofessional collaboration becomes very apparent during disaster when time is critical, health professionals must work together, and all are under high stress. The purpose of this presentation is to describe the process whereby nurse educators constructed a curriculum and prepared senior nursing students to participate in an interprofessional simulated disaster event (SDE).

Background: The University School of Medicine (SM) has conducted a one-day (SDE) for senior medical students for several years. After a trial run which included students from nursing, pharmacy, and allied health, representatives from the four schools met to debrief and consider the possibility of members from all four schools, (about 400 senior students) participating in a similar event.

Description: The school of nursing's planning committee reviewed literature to identify core competencies. The Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) communication model were applied to all activities requiring time-critical decision-making skills. On-line modules were to be completed prior to the SDE which used power-point presentations with voice-over, hyperlinks, videos, and pre- and post-testing of student knowledge. Evaluations were completed following SDE.

Four competencies identified as suitable to teach and evaluate during an SDE, focused on communication skills, chain of command, disaster safety principles, and ethical issues. The didactic portion was presented in three on-line modules. Module one was a general introduction to disaster care. Module two included Team STEPPS, disaster triage, public health response, decontamination, bomb blast injuries, and mental health. Module three was school specific and nursing's module contained: emergency management systems, crush injuries, cholinergic crisis, and cardiac crisis. The live, in-person experience was four hours and covered decontamination, three emergency patients using high-fidelity patient simulators, and a simulated home invasion with gunshot and blunt trauma victims. Four days were necessary to accommodate 402 students.

Outcomes: An on-line course and SDE can prepare student nurses to be effective communicators during a real event. Having faced an ethical dilemma in simulation can increase students' awareness of the potential moral issues faced during a disaster. This introduction to disaster safety principles inspired some to join an emergency response team.

Conclusions: Students from all four schools demonstrated improvement in both content knowledge and attitudes regarding a critical event response. An SDE should be part of nursing students' educational experience. At any time any nurse may need to respond to a disaster and being prepared with the appropriate knowledge and skills will help to ensure good patient care and patient safety. To determine sustained improvement in knowledge, attitudes, and skills further research is required.

Objectives: Discuss the sequence of developing an interprofessional simulated disaster event. Compare an interprofessional simulated disaster event with traditional didactic method.

◀ ▶ go to PG.

INTERPROFESSIONAL EDUCATION/COLLABORATION

Interprofessional Education in a Pharmacology Course Using High-Fidelity Simulation

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Background: The use of simulation in nursing clinical courses has become an expected teaching modality in most nursing education programs. Traditionally, simulation in pharmacology courses has been minimal and nursing students have had limited opportunity to work in a collaborative manner with pharmacy personnel.
Purpose: In an effort to improve understanding of pharmacology content and provide an interactive interprofessional learning activity between nursing (n=69) and pharmacy (n=77) students, a simulation on autonomic pharmacology using a SimMan 3G patient simulator was developed.
Methods: Students completed pre and post-activity surveys to assess perceptions of the interprofessional simulation and impact on knowledge of pharmacology content.
Results: Student perceptions were positive with strengths identified as the multidisciplinary approach, realistic nature of the simulation and the opportunity to work in a team environment. Ninety per cent of the students felt the simulation increased their pharmacology knowledge, although results did not show a statistically significant increase in knowledge scores. Students also indicated the simulation taught them how to apply pharmacology knowledge in a patient care situation. Implications: The study demonstrated that interprofessional high-fidelity simulation in a pharmacology course is feasible and perceived favorably by students. Further study is needed to assess the effect pharmacology simulation has on knowledge of content.

Funding: By Society for Simulation in Healthcare.

◀ ▶ go to PG.

MENTAL HEALTH

BEHAVIORAL HEALTH HOSPITALIZATIONS IN CENTRAL CALIFORNIA: PREDICTORS OF READMISSION

Diane Crayton, Tamara Mckinnon, Marla Marek

INTERPROFESSIONAL PRIMARY CARE OUTREACH FOR PERSONS WITH SEVERE MENTAL ILLNESS

Gerri Collins-Bride, Barbara Burgel, Linda Chafetz,
Lewis Fannon, Sherri Borden

MENTAL HEALTH AGENCY PARTNERS WITH GRADUATE STUDENTS IN PHYSICAL EXAMINATION TRAINING

Carolyn Martin, Mey Saephanh, Jessica Fisher, Kristi Bahr

go to PG.

MENTAL HEALTH

Behavioral Health Hospitalizations in Central California: Predictors of Readmission

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Purpose/Aim: This study examined the correlation between demographics, clinical characteristics and community health program enrollment status of mentally-ill individuals and readmissions to the behavioral health hospital.

Rationale/Conceptual Basis/Background: Hospital readmissions of patients with chronic illness presents a financial burden to healthcare organizations and adversely impacts the patients' lives. This is particularly true for people with mental health disorders. Having the ability to identify risk factors would potentially reduce hospital readmission rates. Thus, leading to a more effective allocation of case management resources to those with the most critical needs.

The Institute of Medicine (IOM) and The Joint Commission (JCAHO) standards represent two federal initiatives that address issues related to management of patients with Mental Health (MH) and Substance Abuse (SA) conditions (IOM, 2006; JCAHO, 2012). Both publications focus on improving access and the overall quality of health for these populations. While there are extensive studies on readmissions to community hospitals, the literature on predicators and readmission to behavioral health hospitals for MH and SA is extremely limited.

Methods: A rural community electronic health records data bank for 2012 to 2013 was used to conduct a retrospective examination of demographics and clinical characteristics of residents age 18 and older. Enrolled individuals were either previously hospitalized or in community treatment programs or both. Non-enrolled individuals included those never hospitalized and never enrolled in community treatment programs. The investigator examined 902 records for individuals hospitalized from January 1 to June 30, 2012. Data was analyzed over a 12-month period, for information on demographics and clinical characteristics, including diagnosis at admission, primary provider, length of stay, and number of hospital readmissions, as well as concurrent, prior, and discharge treatment.

Results: Characteristics were similar for enrolled and non-enrolled groups in terms of gender, race/ethnicity, preferred language, unemployed and not seeking work. Of the 902 records, a higher percentage of non-enrolled individuals reported a house or apartment as their residence as opposed to enrolled individuals who reside in housing with support. Enrolled individuals were more likely to be never married and have a primary provider as opposed to non-enrolled. With regard to education level completed, enrolled individuals reported higher rates of secondary education than non-enrolled. No significance was found between enrolled and non-enrolled individual readmissions at 30 days, but readmissions rates were significantly higher for the enrolled within 60 and over 90 days.

Implications: Identification of key characteristics are important when planning care for patients with mental health disorders. It is vital in discharge planning to identify patient-centered treatment and recovery plans. This is particularly true for individuals with underlying MH and SA conditions, whose decision-making abilities are impaired. Utilization of predictors for admission can assist registered nurses in strategically preparing individuals for a successful transition from hospital to community.

◀ ▶ go to PG.

Interprofessional Primary Care Outreach for Persons with Severe Mental Illness

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Aims: The Interprofessional Primary Care Outreach for People with Mental Illness (IPCOM) project aims to increase access to primary care services for persons with severe mental illness served in behavioral health residential treatment programs by enhancing communication and interprofessional collaborative practice.

Background: The Interprofessional Primary Care Outreach for People with Mental Illness (IPCOM) project develops a unique nurse-managed interprofessional multisite primary care practice for the severely mentally ill. Utilizing a long term NP led primary care outreach practice for medically complex patients with mental illness, the IPCOM project focuses on development of communication systems and infrastructure to facilitate collaboration across disciplines that currently operate in parallel fashion. The interprofessional teams consist of a nurse practitioner, psychiatrist, pharmacist, dentist, and mental health staff. The population served has high acuity for both mental health and medical conditions, is ethnically and culturally diverse, and are predominantly homeless and from neighborhoods designated as health professional shortage areas. Existing literature confirms that a lack of collaboration across disciplines increases morbidity and decreases quality of care in this population.

Methods: New teamwork and communication strategies instituted in IPCOM include: education about the interprofessional core competencies and the patient-centered health home for all team members, including students; introduction of huddles across disciplines; quality improvement projects involving students and focused on residential staff and client education to include smoking cessation and chronic pain management; and, introduction of an electronic health record for primary care charting, with decision support and outcome tracking for metabolic monitoring, referral for HIV screening, and smoking cessation outcomes.

A number of tools are used to evaluate IPCOM outcomes, including client, student, and other team member outcomes. This poster will present findings on two measures: client factors to include socio-demographic, diagnoses, medications, with NP interventions captured electronically on each primary care encounter during the first 12 months of IPCOM; and, team member perceptions of collaboration, measured over time to include baseline, 6 and 12 months, with the Collaborative Practice Assessment Tool (CPAT) (57 items).

Conclusions: Enhanced communication with interprofessional collaborative practice strategies in this unique NP practice model has high potential for increasing access to and improving the quality of primary care for persons with severe mental illness. IPCOM lessons learned during year one will be discussed, with an outline of year two goals and objectives.

Funding: HRSA Nurse Education, Practice, Quality and Retention Grant (2013-2016).

◀ ▶ go to PG.

MENTAL HEALTH

Mental Health Agency Partners with Graduate Students in Physical Examination Training

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Purpose: Develop four unfolding case study training modules for mental health nurses who work in an inpatient psychiatric unit.
Background: The physical health of the mentally ill is often neglected in inpatient psychiatric units. There is an urgent need to integrate both physical and psychological care to improve the overall health of those with mental illness and to prevent the revolving door between inpatient mental health units and the emergency department.
Description: Training occurs over a two-day period with four case study modules presented four times. Sixty mental health nurses attend the sessions. Physical assessment is included in each training module and upon completion of the four case studies. The participants demonstrate in groups of three (with each taking turns being the patient, the observer, and the nurse) a complete physical exam with the following components: skin, neurological, respiratory, abdominal, genitourinary, cardiac, and pain. The four case studies are built around four patients: one is pregnant and the others have diagnoses of cirrhosis, respiratory distress, or cardiac issues. Other medical components are added as the cases unfold: electrolyte imbalance, wound care, diabetes, metabolic disorder, dialysis, fall risk, cognitive impairment, hypertensive crisis, rhabdomyoloysis, and neuroleptic malignant syndrome. Laboratory results and psychotrophic medications are included. Each case study starts with presenting symptoms and as the scenario worsens nurses are prompted to discuss what other issues and problems may be considered. Students develop learning objectives, participant learning outcomes, and an evaluation plan.
Outcomes: At the conclusion of this activity the <u>students</u> are able to implement the role of nurse educator through a learning experience in a mental health agency; apply principles of teaching and learning, curriculum development, assessment, and evaluation in a clinical setting; and utilize preceptor and participant feedback to evaluate personal teaching effectiveness. At the conclusion of this activity <u>mental health nurses</u> are able to care for the physical needs of a person having a mental health crisis, demonstrate how to perform physical assessments on inpatient mental health patients, and recognize symptoms that necessitate prompt intervention in order to reduce unnecessary hospital readmission.
Conclusion: Graduate student nurse educators are exposed to pedagogical strategies for teaching mental health nurses in a clinical setting. Mental health nurses learn how to identify physical problems in order to appropriately intervene and transfer inpatient psychiatric patients to the emergency department. Students share materials with the mental health agency, which allows repetition of the modules with nurses and staff who were unable to attend. Research is needed to test the efficacy and effectiveness of pedagogical approaches, such as the use of case studies and physical assessment skill development, in the continuing education of mental health nurses.
Implications: Mental health nurses often miss important physical details in the assessment of their inpatient mental health patients. In order to address the burden of physical illness in patients with mental illness, nurses must perform physical examinations in psychiatric inpatient settings.

◀ ▶ go to PG.

METHODOLOGY

DOCUMENTARY ANALYSIS OF NEWSPAPER ARTICLES: A TOOL FOR COMMUNITY ASSESSMENT

Lauren Valk Lawson

IMAGES OF THE NAVAJO NATION: AN ART JOURNALING EXPERIENCE

Blaine A. Winters, Linda Mabey, Joanna Fugal, Rachel Strein

PSYCHOMETRIC ANALYSIS OF THE SF-12 HEALTH SURVEY IN KOREAN AMERICAN ADULTS

Cha-Nam Shin

TRANSLATION AND VALIDATION OF THE JAPANESE VERSION OF THE EXPOSURE TO DISRUPTIVE BEHAVIOR SCALE

Hiromi Hirata

UPDATE ON MEASURES OF FAMILISM IN THE CONTEXT OF ACCULTURATION

Janice D. Crist, Socorro Escandón

USING LARGE RESEARCH DATA SETS TO EXAMINE DIABETES SIGNS/SYMPTOMS AMONG LATINO ELDERS

Dal Lae Chin, Karen A. Monsen, Madeleine J. Kerr, OiSaeng Hong

THE RESPIRATORY DISTRESS OBSERVATION SCALE: ARE THREE MINUTES NECESSARY?

Karen Reavis, Jane Georges, Joseph Burkard

◀ ▶ go to PG.

SELF-REFLECTION AS A RESEARCH INSTRUMENT IN AN INTERPRETIVE PHENOMENOLOGICAL STUDY

Natalie M. Pool, Mary S. Koithan

COMMUNITY RECRUITMENT OF SERIOUSLY ILL AFRICAN AMERICAN ELDERS

Heather Coats, Anne Rosenfeld, LaDonna Northington

◀ ▶ go to PG.

Documentary Analysis of Newspaper Articles: A Tool for Community Assessment

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Purpose: The purpose of this case study is to demonstrate the usefulness of documentary analysis of newspaper articles as a means to identify potential trends and events that may influence the development of a medical respite for people experiencing homelessness.

Background: An essential aspect of community-collaborative assessment and strategic planning is to garner public opinion and to examine the trends, factors and events that affect health and health services in the community. Focus groups are a commonly used tool to acquire insight into a topic of interest. Although a focus group may result in a rich understanding of a community issue, the complexity of group dynamics may bias views and challenge the analysis of information gathered. As an alternative, newspaper articles offer an opportunity to identify the emergence of social perspectives and meaning. Newspaper articles are an easy-to-access source that provides a range of insight from eye-witness accounts to opinion pieces. Documentary analysis provides a method with which to examine the content of written materials, such as newspaper articles, for insight into the social activities described.

Methods: Documentary analysis provided a method to examine articles identified in two local newspapers, the Seattle Times and the Real Change. The key words homeless, homelessness, health care for the homeless and medical respite were used for the initial search of articles that were published from January 1st to December 31st 2012. Once articles were identified, content analysis was used to identify common themes related to the three identified forces of change that impact the development of medical respites: the health care delivery system, community resistance, and available funding.

Outcomes: The key word homelessness initially resulted in 347 articles; 168 in the Seattle Times, 179 in the Real Change. Articles were further reviewed and assigned to one of the common themes related to each of the identified external forces of change. Of the resulting 31 articles, 20 (65%) focused on funding, seven (22%) addressed community resistance to services, and four (13%) mentioned health care systems.

Conclusion: Use of documentary analysis of newspaper articles provided the means to glean applicable content for the assessment. Three forces of change were identified. First, the financial climate is uncertain. While there may be some increases in funding for veteran services, most services have experienced actual or potential cuts in funding or preservation at current amounts. Finding new funding to support a medical respite may be a challenge. Community resistance in the neighborhood to services for homeless people is another potential impediment to address. Finally, there was the likely possibility of improved access to health insurance through the Affordable Care Act. These findings were compiled into a report for a community advisory board to use while considering strategies for the creation of the medical respite.

◀ ▶ go to PG.

Images of the Navajo Nation: An Art Journaling Experience

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Purpose/Aims: The purpose of this project was to explore the use of student artwork as a reflective journaling tool for baccalaureate nursing students participating in a clinical rotation on culture and public health.

Rationale/Background: Written journaling to encourage student reflection is the norm in nursing education. A review of the nursing literature found student artwork as a journaling tool revealed limited research on the topic. Written journaling to encourage student reflection is the norm in nursing education (Epp, 2008). Faculty wanted to explore journaling with student artwork as a tool for processing cultural learning.

Methods: Eight nursing students from a western university were instructed to create 10 illustrated journal entries during a three week immersion experience on the Navajo reservation in Arizona. Each entry consisted of a title, a brief narrative, and an illustration of the cultural experience described. Students were informed they would not be graded on the quality of their artwork and were given full-credit for completing the assignment. Following completion of the course and submission of final grades, students were asked to respond via email to three open-ended questions: their initial reaction to the assignment, how they felt about using artwork as a journaling tool at the end of the experience, and the advantages and disadvantages of the artwork journaling experience. We evaluated and summarized the students' responses.

Outcomes Achieved: All eight students responded to the three questions, revealing the following: Five of eight students expressed excitement at the prospect of drawing reflections on their cultural learning versus writing them. Three reported initial apprehension that they would perform poorly. Regarding the advantages of the experience, all students at the end of the experience reported enjoying this different type of journaling and sharing their artwork with their peers. They stated artwork allowed for more creativity, was more meaningful and expressive than a strictly written journal, and helped them remember details they might have forgotten otherwise. Regarding the disadvantages, several students wrote they were not used to drawing as a way to express themselves. Students also reported that it took more time to draw than to simply write their thoughts.

Conclusions: All students made positive comments about the assignment. Artwork journaling was found to be an effective tool for processing student cultural experiences in a nonthreatening manner and can be an alternative way for students to process and document their experiences. Using artwork journaling with a larger group of students in a variety of cultural settings would allow for comparison across settings.

Reference:
Epp, S. (2008). The value of reflective journaling in undergraduate nursing education: A literature review. *International Journal of Nursing Studies, 45*(9), 1379-1388.

◀ ▶ go to PG.

Psychometric Analysis of the SF-12 Health Survey in Korean American Adults

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Purposes/Aims: This secondary analysis was to evaluate the reliability and validity of the SF-12 Health Survey in a sample of Korean American adults.

Background: The SF-12 is a widely used measure of perceived health status. Despite reports of reliability and validity, prior studies found a poor model fit using the instrument with some ethnic populations.

Methods: The parent study collected data from a convenience sample of 517 Korean American adults through the Korean community in a Midwestern city using survey questionnaires. Participants completed the survey in either Korean (n = 256) or English (n = 261). Measurement theory guided the current study. This data analysis focused on the SF-12 health survey and examined reliability and validity using internal consistency test and confirmatory factor analysis.

Results: The sample was 57.1% female with mean age 41.6 ± 13.40, and 78.4% college educated. Compared to national norms, the sample was healthy based on the physical health scores (47.9 ± 7.9 in the Korean survey sample and 50.2 ± 8.3 in the English survey sample) and mental health scores (47.3 ± 8.6 in the Korean survey sample; 49.5 ± 9.8 in the English survey sample). Reliability was supported with Cronbach's alphas (.81-.83 for physical health and .82-.84 for mental health). Confirmatory factor analysis showed that physical and mental health are highly correlated to each other (r = .79 for the Korean survey sample; r = .73 for the English survey sample) at p <.05. All items loaded significantly on their respective construct with good factor loadings (r >.60) except two items (self-rated health and have a lot of energy), which was consistent with previous research findings. The measurement models of the SF-12 demonstrated an acceptable fit to the data according to fit indices: RMSEA (<.08), NFI, NNFI, and CFI (all >.90) in the sample of the Korean and English surveys.

Implications: This study demonstrated evidence of reliability and validity in a healthy Korean American adult sample. Additional study in more diverse populations is recommended to evaluate the validity of the measure, in particular, for the two items that cross loaded on physical and mental health.

◀ ▶ go to PG.

METHODOLOGY

Translation and Validation of the Japanese Version of the Exposure to Disruptive Behavior Scale

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Background: Although less research into disruptive behaviors including aggressive behavior (AB) by an older adult with dementia has been carried out in Japan than in Western countries, some Japanese researchers have reported relationships between AB and negative impacts on formal caregivers, such as stress. However, none of the Japanese studies were conducted using a valid measurement that identified a relationship between dementia-related aggression and caregiver's stress.

Purpose: The purpose of this research was to translate the Exposure to Disruptive Behavior (EDB) scale into Japanese and establish preliminary evidence for reliability and validity.

Methods: This research was a cross-sectional design. Data were collected from formal caregivers (n = 137) who were working in the skilled care units for residents with dementia in ten nursing homes in the northern and western areas of Japan. The present study conducted the instrument translation in six stages. The EDB scale was translated into Japanese, using the guidelines for cross-cultural adaptation of self-report measures. The validity of the EDBJ scale was tested with the Stressor Assessment Scale (SAS) for direct CWs in nursing homes.

Findings: Alpha reliabilities obtained with this sample were α = .92 for the frequency of AB using the EDB Japanese version (EDBJ), α = .94 for the EDBJ-Stress, and α = .94 for the entirety of the EDBJ. The expected pattern and the significant correlation between the EDBJ scale and the Stressor Assessment Scale contribute to the evidence of construct validity.

Implications: The EDB scale was translated from English into Japanese and established strong internal consistency reliability with Cronbach's coefficient alpha and preliminary evidence for construct validity. The Japanese version of the EDB scale provides opportunity for future research comparing the frequency of residents' aggressive behaviors and formal caregivers' stress related to aggressive behaviors in Japanese nursing homes.

◀ ▶ go to PG.

METHODOLOGY

Update on Measures of Familism in the Context of Acculturation

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Purpose: To review the literature regarding how the construct of familism has been operationalized and used in research with different contexts and cultures, to bring clarity to how familism in the context of acculturation affects equity and access.

Background: Latino elders and caregivers make decisions together; for example, whether to use home care or palliative care services. Latino elders use available health care services less frequently compared to Anglo elders, even though functional problems are more prevalent in Latino elders at earlier ages. The literature is equivocal about whether the role of familism is a barrier or predictor for accessing services; and whether acculturation affects familism-based influences. Although there is general agreement on how familism is conceptualized, there is variation in how familism is operationalized (measured) and used and whether it is considered vis-à-vis acculturation.

Methods: An extensive and critical integrative review of articles found through the PubMed and CINAHL databases. Key words were familism, familismo, filial obligation, and family caregiving. The initial database search yielded 129 articles. After delimiting them to the last 5 years, we reviewed 48 articles, dated from 2009 to 2014. We extracted purpose/designs, sample characteristics, familism measures or key words if no measures, and whether acculturation was considered and/or measured. This poster reports the summarized extractions from the articles and exemplar familism and acculturation measures to describe current knowledge and implications for equity and access.

Results: Purpose/designs were descriptive/exploratory quantitative (n=24); exploratory qualitative (n=7); mixed methods (n=1); intervention (n=3); instrument development (n=4), including a filial piety scale; concept development (n=2), and other (n=3). Sample characteristics were (n=1-1,9800); elders and caregivers; med-surg, psychiatric and palliative care clients, of the following origins: Filipino, Puerto Rican, Mexican, Mexican American, Black Caribbean, African, Chilean, Central or South American; i.e., Argentinian, Guatemalan, Spanish, Columbian, Cuban, of the U.S. Virgin Islands; and Anglo. States of the USA were southwestern, southeastern, central south, northeastern, and eastern seaboard. Familism was measured in only 4 articles with 4 different scales, plus one on filial piety being developed. Articles measuring acculturation = 8, using 7 different measures; of the articles not measuring acculturation, 7 mentioned it as possibly affecting familism in the background or discussion sections.

Implications: Familism is operationalized in many ways; articles often do not use the specific word ‘familism’ or explicitly measure it. This review for the past 5 years adds to the literature review we presented on familism in 2009. At that time, we had found that definitions of this construct related to the strong attachment and identification of individuals to their nuclear and extended families and that familism scales had been formulated as early as 1959 but were not sufficiently specific for assessing caregiving families. In this review we found similar definitions but less frequent measurement of the construct, and frequent mention of acculturation without measurement. A comprehensive familism measure with sensitivity to acculturation needs to be proposed and disseminated. The poster invites collaboration on this topic to influence future measures, interventions, and policy to improve equity and access.

◀ ▶ go to PG.

METHODOLOGY

Using Large Research Data Sets to Examine Diabetes Signs/Symptoms among Latino Elders

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Background: Diabetes disproportionately affects Latinos with excess healthcare costs, premature suffering, and death. Methods are needed that identify signs/symptoms of Latinos with diabetes to improve healthcare and population health. The Omaha System is a standardized assessment structure and comprehensive, holistic assessment tool used with Latinos for over 15 years. It can be mapped to other structured data such as large research data sets in order to normalize and extend the analysis of hidden patterns in data.

Purpose: The purpose of this study was to examine diabetes signs/symptoms among Latino Americans with diabetes, compared to those with no diabetes, using a structured data approach.

Methods: This study used cross-sectional secondary data from the Sacramento Area Latino Study on Aging (SALSA) project with a cohort study of Latino American older adults aged 60 or greater residing in rural and urban areas of Sacramento County, California. A total of 932 participants were included in this study. Signs/symptoms of diabetes were compared across the sample, and mapped to the Omaha System to enable comparison with previous diabetes signs/symptoms research findings.

Results: The mean age of the participants was 75years, 60% were female, the average education level was 8th grade, and 75% had household incomes under $2,000 per month. About 42% were born in Mexico and 7% in another Latin American country. Approximately 39% (n=367) reported having type 2 diabetes. For elderly Latino Americans with diabetes, 83% of 24 signs/symptoms were significantly greater. A comparison of signs/symptoms between elderly Latino Americans with diabetes and those without diabetes was significantly different in the following problems: Sleepiness or drowsiness during the day (43% vs. 28%, p<.001), Muscle cramps in legs/feet (43% vs. 34%, p=.009), Leg hurt when walk (42% vs. 28%, p<.001), Urinating more frequently (32% vs. 18%, p<.001), Feet or legs feel numb or lost sensation (30% vs. 14%, p<.001), Tired in morning when wake up (27% vs. 15%, p<.001), Tingling sensations in legs/arms (23% vs. 11%, p<.001), Feel weak all over (23% vs. 13%, p<.001), Burning pain in legs/feet (22% vs. 11%, p<.001), Vision change from clear to blurry (19% vs. 8%, p<.001), Tingling/prickling in legs/feet (19% vs. 8%, p<.001), Tingling/prickling in hands/fingers (18% vs. 9%, p<.001), Blurred vision (16% vs. 6%, p<.001), Feet too sensitive to touch (16% vs. 7%, p<.001), Often very thirsty (16% vs. 6%, p<.001), Shortness of breath during day (15% vs. 8% p=.001), Irritable just before meal (13% vs. 4%, p<.001), Hurt when blankets/sheets touch skin (9% vs. 3%, p<.001), and Skin on feet so dry it cracks open (8% vs.4%, p=.006). Similar problems have been identified in other Omaha System datasets among diabetic patients, with minor variation in rank order.

Conclusions: The study demonstrates the feasibility of using large datasets to examine, quantify, and analyze diabetes signs/symptoms among Latinos. Findings increase understanding the burden of signs/symptoms among Latinos with diabetes and provide a baseline for standardized surveillance of population health. There is potential to build a comprehensive, holistic data management system to improve diabetes care and population health outcomes.

Funding: This research was partially funded by the National Institute of Aging (Grant number: AG12975), National Institute for Diabetes, Digestive and Kidney Diseases (Grant number: DK60753), and National Institute of Nursing Research and National Center for Minority Health and Health Disparities (P20-NR08367).

◀ ▶ go to PG.

METHODOLOGY

The Respiratory Distress Observation Scale: Are Three Minutes Necessary?

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Purpose: The purpose of this study was to compare the differences in scoring results on the RDOS at one minute versus three minutes when evaluating the cognitively impaired adult patient on mechanical ventilation.

Background: According to the American Thoracic Society the Respiratory Distress Observation Scale (RDOS) is currently the only scale that can objectively score respiratory distress in the cognitively impaired adult. However, this scale is relatively new and has not been extensively evaluated for validity and reliability across populations.

Research performed in 2008 and 2010 regarding RDOS validity and reliability testing utilized only a 3 minute observation period. For use in clinical practice, a shorter observation period is practical. Other observational scales that are used on adults in critical care are validated for scoring in as little as 30 seconds, such as the Richmond Agitation and Sedation Scale (RASS) and the Glasgow Coma Scale.

Method: This study was an observational study in which the 2008 RDOS scoring was completed on cognitively impaired medical intensive care patients on mechanical ventilation. This study took place in a 24 bed medical intensive care unit at a large metropolitan hospital. Mechanically ventilated subjects were pre-screened for levels of cognition. Patients with psychiatric related diagnoses were excluded. Scoring was completed within 5 minutes that included a one minute and then a 3 minute period or alternatively a 3 minute then one minute period. This study was approved by the hospital's Institutional Review Board.

Results: 52 subjects with a total of 133 paired observations were analyzed for correlation. t-test results showed a significant correlation at a level of $p < 0.001$. Post hoc power analysis for two-tailed paired t-testing revealed a power level of 1.0. Utilizing the Pearson's product moment correlation test, the correlation between the three minute and one minute observation period for the RDOS was highly significant, with $r(131) = .80, p < 0.001$.

Discussion/Implications: For the 2008 RDOS, a one minute observation period is essentially as good as a 3 minute observation period. For busy clinicians, an RDOS requiring less time is more likely to be used in clinical practice in the intensive care unit for adults.

◀ ▶ go to PG.

METHODOLOGY

Self-Reflection as a Research Instrument in an Interpretive Phenomenological Study

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Purpose: American Indians (AI) exhibit a significant and persistent cancer inequity marked by elevated mortality and morbidity. AIs often report negative cancer care experiences that contribute to this disparity. Nurses provide the majority of care and play a principal role in patient experiences, particularly among underserved or marginalized populations. This preliminary study within a larger interpretive phenomenological investigation will make explicit personal experiences with this phenomenon and explore their meaning within the context of providing cancer care to AI patients.

Rationale: Interpretive phenomenology requires that the researcher integrate his or her own biases and assumptions into the investigation as a conscious act of enmeshment between philosophical orientation and the phenomenon of study. An aversion to bracketing is in alignment with this methodology's ontological propositions, marking a deliberate departure from descriptive phenomenology. Researchers engage in immediate, insightful, and intensely reflective writing in an effort to avoid contamination of the study by superficial preconceptions. As a critical first step, self-reflection allows meaning to be assigned while recognizing the inseparability of emotion, thought, and language in human experience.

Methods: A comprehensive personal reflection on the meaning of providing cancer care to AI patients was undertaken using a modified process for producing lived-experience descriptions: 1) an initial description of the experience was handwritten using a journal with careful attention given to avoiding causal explanations, generalizations, or initial interpretations; 2) feelings, moods, emotions, and embodied sensations were detailed; 3) particularly vivid events and experiences were identified and further described in subsequent writings after dwelling within previous journal entries; 4) constant attention was given to how the body felt as well as other sensory responses resulting in increasingly corporeal writing; 5) language and text remained authentic and reflective of how the experience felt at a particular moment in time.

Results: Analysis is ongoing, but these preliminary results will help to identify the limitations and boundaries surrounding individual interpretation of an experienced phenomenon; encourage greater reflexivity, resulting in a richer overall interpretation; guide productive hermeneutic interviews among future participants as they express the meaning of providing nursing care to AI cancer patients; and improve the rigor within the larger investigation. Completion of this first turn of the hermeneutic circle will contribute to our understanding of the phenomenon as a whole through appraisal of the many parts.

Implications: This personal reflection illuminates the lifeworld of a cancer care provider and is an essential first step towards exploring nursing's role in the ongoing AI cancer inequity in clinical practice. The nuances and hidden meaning within the AI patient-nurse relationship likely impact the delivery and quality of cancer care provided to this population and warrant further investigation.

◀ ▶ go to PG.

Community Recruitment of Seriously Ill African American Elders

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Purpose: To describe community research recruitment methods with seriously ill African American elders.

Background: Minority group members' participation in clinical research is essential for eliminating palliative care (PC) health inequalities. For African American (AA) elders with serious illnesses, disparities in the receipt of PC, satisfaction with that care, and care inconsistent with their wishes, leading to decreased quality of life and increased suffering, are well documented. Collaborative partnerships within the community are essential to ensure success with recruitment of seriously ill African American elders.

Methods: The current study is a descriptive study of psych-social-spiritual healing in seriously ill AA elders. Recruitment site #1 was a primary care nurse practitioner clinic in urban Jackson, MS. Within this clinic setting, the principal investigator developed relationships with the executive director, the providers, and the entire staff. At the suggestion of the executive director, weekly calls to the staff from the PI were made. The weekly call prompted the staff to quickly scan the schedule of patients being seen in the clinic that week for any potential participants based on inclusion criteria. If a potential participant was found on the weekly schedule by the staff, the staff would share with the PI only which provider was seeing the potential participant without sharing any patient identifiers. At that time, the PI would e-mail the provider to a reminder to discuss the study with patients who might meet the inclusion criteria. After the clinic visit, the PI would follow-up with the provider in person to determine if participant had given verbal approval for PI to contact them. The second recruitment site was a statewide congregational health nursing (CHN) society based in Jackson, MS with a mission of reducing disparities for AAs. The PI developed relationships with the executive director and other CHN by providing assistance at the church based health and wellness programs. Through these efforts, trusting relationships were developed with a core group of CHN. These CHNs would then inquire with potential participants. If those persons were interested in participating, the CHN would provide contact information to the PI.

Results: Effective strategies of community research recruitment methods were to identify key community partners, build trusting relationships with community partners, and become involved and participate in community events. The trust that was already present between potential participants and the community partner was then transferred to the PI. In this way, a collective trust has been developed between all interested parties and has been a key factor for participation in the PI's ongoing study.

Implications: Recruitment methods that identify community partners, build trusting relationships, and develop collaborative productive partnerships can be used successfully by other nurse scientists working with vulnerable populations.

◀ ▶ go to PG.

go to PG.

NURSE PRACTITIONER RESIDENCY PROGRAMS IN THE WEST: FACTORS FOR SUCCESS

OVERVIEW: NURSE PRACTITIONER RESIDENCY PROGRAMS IN THE WEST: FACTORS FOR SUCCESS

Nancy Fugate Woods

NURSE PRACTITIONER RESIDENCY TRAINING PROGRAM IN THE WEST: AVAILABILITY AND CURRICULA

Susan Mitchell

“WHO HAS YOUR BACK”: DEFINING KEY CHARACTERISTICS OF NP RESIDENCY ADMINISTRATORS

Terry Keene

EVALUATING THE IMPACT: THE ROLE OF SELF-REFLECTIVE JOURNALING IN NP RESIDENCIES

Anne Poppe, Adeline Wakeman, Joyce E. Wipf, Kameka Brown

THE BUSINESS CASE FOR TRANSITION-TO-PRACTICE PROGRAMS: A COST ANALYSIS OF THE SEATTLE VA DNP RESIDENCY PROGRAM

Kameka Brown

go to PG.

NURSE PRACTITIONER RESIDENCY PROGRAMS IN THE WEST: FACTORS FOR SUCCESS

Overview: Nurse Practitioner Residency Programs in the West: Factors for Success

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As the US population ages, the prevalence of chronic illnesses is increasing. Multiple co-morbidities are becoming more common in the primary care setting. Medicine has established residency training, funded largely by CMS, to prepare physicians for entry to practice in a variety of specialties as well as in internal medicine and family medicine. Nursing has well-established residencies for new nurses orienting in hospitals and some outpatient settings that facilitate practice for those completing the AD or BSN degrees. Indeed, the Institute of Medicine (IOM) Committee on the Future of Nursing recommended that residencies be provided for entry to practice for nurses with undergraduate and graduate degrees, including preparation as nurse practitioners. With the infusion of Patient Protection and Affordable Care Act (PPACA) funding to expand innovative nursing training, include NP residency programming, designing effective and sustainable transition-to-practice programs is even more critical. As the American Academy of Colleges of Nurses (AACN) ushers in the residency program accreditation this year, three pilot programs are currently serving as pioneering pilot sites. Over 80 residency/fellowships currently exist with nearly a dozen in the Northwest. Largely relying on Margaret Flinter's design, empirical analysis of program effectiveness and sustainability is missing. In addition, little is known about sources of support for NP residency programs. A recent IOM report, *Graduate Medical Education that Meets the Nation's Health Needs*, recommended shifting some funding for residency education from hospitals to community-based sites. In 2013, the Seattle VA convened a regional forum on NP residency programs in anticipation of their future development of an interprofessional opportunity for primary care post-DNP residencies in the western region. This forum posed several questions, including: key residency program design needs, ideal resident competencies to insure success and sustainability planning.

Given the rapidity of development of residency programs for Nurse Practitioners and the changing patterns for funding medical residency programs, this is an opportune time for investigation of the status of these programs. The purposes of this symposium are to:

1. Examine the availability of residency training for NPs in the WIN region and patterns of curricula for these programs.
2. Determine "Who Has Your Back" by defining key characteristics of NP Residency Administrators.
3. Evaluate the impact of NP residencies using self-reflective journaling.
4. Make the Business Case for Transition-to-Practice Programs for Nurse Practitioners using a cost analysis of the Seattle VA DNP Residency Program.
5. Project future needs for residency programs for NPs in the West, including need for training resources and research.

NURSE PRACTITIONER RESIDENCY PROGRAMS IN THE WEST: FACTORS FOR SUCCESS

Nurse Practitioner Residency Training Program in the West: Availability and Curricula

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Purpose: Review the existing literature on NP residency programs for primary care providers in the WIN region as a basis for describing their locations and curricula.

Background: Over 80 residencies for nurse practitioners exist in the nation, with a growing number in the WIN region. To date little is known about their curricula.

Methods: Cochrane, PubMed, CINAHL, ERIC, and the Proquest Dissertation & Thesis databases were searched for relevant resources. The search was conducted between March and May 2014 using both controlled vocabulary terms and keywords. References lists were screened. A Google keyword search was conducted primarily for the purpose of identifying current residency programs. Resources originating outside the U.S. and non-English resources were excluded. Data were analyzed by review of the websites to identify the location of programs in the WIN region and the number of residents enrolled where that could be determined. Content analysis of curricular components, including didactic, clinical practice (continuity and specialty training), and practice inquiry experiences was conducted to reveal patterns across the sites.

Outcomes Documented: Common curricular elements included: **1) Precepted continuity clinics** in which NP residents develop a patient panel with an NP or MD preceptor; **2) Specialty rotations** in which residents rotate through specialty clinics such as orthopedics, women's health/prenatal care, psychiatry, geriatrics, HIV and Hep C, dermatology, newborn, and pediatrics; **3) Independent clinics** in which residents see patients independently with a designated primary care provider (PCP) available for consultation; and **4) Didactic sessions** in which residents attend didactic sessions on high-volume/high-risk topics. Common to many programs was emphasis on mentoring by a clinician. Limited information was available about interprofessional networking, processes to enhance role transition, and practice inquiry experiences.

Conclusions: This review documented the number and variety of NP residency programs in the WIN region. In addition, results suggested a need for a structured program for new-graduate nurse practitioners. Challenges revealed by the review were attributable to the complexity of large care systems which are meeting an influx of complex new patients with the implementation of the Affordable Care Act, the critical timing of role formation in the first year of NP practice, the need for strategies for utilizing evidence-based practice, and sustainable funding for these programs.

◀ ▶ go to PG.

NURSE PRACTITIONER RESIDENCY PROGRAMS IN THE WEST: FACTORS FOR SUCCESS

“Who Has Your Back”: Defining Key Characteristics of NP Residency Administrators

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Background: Nurse practitioner residencies are rapidly increasing due to demand in response to both novice nurse practitioner demand and the Institutes of Medicine (2010) recommendation. As the largest employer of nurses and nurse practitioners, the Veterans Health Administration currently operates over 15% of all VA residencies in the country. While there is a shared understanding of these yearlong residency structures, there exists a gap needed for effective program administration and planning.

Purpose: The purpose of this review is to identify the key competencies needed for the unique position of NP Residency Program Director not traditionally seen in the role Nursing Director and/or Medical Director.

Methods: An online survey was conducted by the VA Center of Excellence in Primary Care (COE PCE) Co-Directors who oversee the NP Residency programs in their facilities (N=5). The respondents were asked to review the skills they possessed at the commencement of their residency program, the skills they felt they needed to be successful to management their residency program, and the skills they currently possessed one year later. the COE PCE offers a unique interprofessional residency experience that is intended to enhance understanding of interprofessional roles and remove silos.

Results: All five directors identified themselves as successful clinicians and critical thinkers but, believed that human resource, grant writing, curriculum development and conflict resolution skills were critical for the role of NP Director. Three felt that academic affiliation was critical to their success as a clinical director. Only one director believed they were prepared upon entry to the role to be NP director. All agreed that their unique role of NP Director could not be successfully leveraged within another role (i.e. Nursing Director) due to the vantage point needed to move the discipline forward.

Conclusions: The evolution of Nurse Practitioner Residencies continues to grow and is rapidly moving with the recent addition of an accreditation. As more residencies develop, it is critical that leaders of these residencies acknowledge and identify leadership qualities specific and unique to this profession. This will afford trainees and residents the ability to experience embedded leadership with the skills to develop programing that caters to their needs as well as advocates on their behalf.

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◀ ▶ go to PG.

Evaluating the Impact: The Role of Self-Reflective Journaling in NP Residencies

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Background: Nurse practitioners transitioning from education to clinical practice may face a sharp learning curve that is difficult to traverse and often times isolating. Given increasingly complex primary care patients, many health care employers require prior NP work experience as a condition for employment. Nurse practitioner residencies function to bridge the gap during the transition to practice. As nurse practitioner residencies continue to grow, the need to evaluate program effectiveness is critical. The Puget Sound VA Center of Excellence in Primary Care Education has established an NP residency in conjunction with interprofessional education and team-based care; one component of assessing the NP residency experience is through reflective journaling.

Purpose: The purpose of this review is to examine key themes identified during a yearlong NP residency period through reflective journaling.

Methods: The resident (N=1) was asked to maintain an electronic journal weekly archiving their residency experience. At the end of the residency period, the journals were transcribed into an electronic database and qualitatively analyzed for common themes. Using the theoretical underpinning of Meleis *Transition Theory*, the results were catalogued along a linear time series to reflect the transition.

Results: During the initial months of practice (month 1-3), the resident expressed greater anxiety and sense of being overwhelmed with both practice and the residency. By month 6, the resident expressed a greater sense of self and the ability to manage a patient load effectively. By the end of the residency (month 12), the resident expressed deeper awareness of clinical skills and expressed satisfaction with participating in the residency.

Conclusions: As nurse practitioner residencies continue to proliferate, it is critically important that the effectiveness of these programs is measured. Currently, no standard measure of effectiveness exists. By examining the self-reflection of the resident, this program was able to assess the direct impact on the NP as they transitioned from novice provider to proficient practitioner.

Funding: This project has been funded by the Centers of Excellence in Primary Care Education of the Office of Academic Affiliations, US Department of Veterans Affairs.

go to PG.

NURSE PRACTITIONER RESIDENCY PROGRAMS IN THE WEST: FACTORS FOR SUCCESS

The Business Case for Transition-to-Practice Programs: A Cost Analysis of the Seattle VA DNP Residency Program

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Background: In 2012, U.S. health care spending increased to $2.8 trillion or $8,915 per person (Centers for Medicare and Medicaid Services [CMS], 2013). The increase in aging population, medical technology advances, and increased healthcare utilization, health care expenditures are forecasted to be19.9% of GDP by 2022(CMS, 2012). With the passing of the Patient Protection and Affordable Care Act (P-PACA, US Congress, 2010), the United States strives for improved quality and a reduction in healthcare cost. National organizations have identified the need for nursing residencies to support “transition-to-practice” and offer additional skill development commonly seen with complex clinical population. However, with workforce shortages increasing within nursing and primary medicine, nurses, as administrators and providers, need to provide both cost and effectiveness evidence of the value of nursing interventions to leverage innovation design feature of PPACA.

Purpose: Although evidence of the benefit of nursing residencies exist, very few address the unique needs at the advanced practice level and associated implementation costs. The aim of this review is to introduce key “upfront” costs for nurse residency programs and to conduct cost benefit analysis utilizing program costs and organization gains.

Methods: A cataloged review of all costs associated with program startup was conducted. An analysis of the costs and benefits were performed at the end of the first year of the program. Costs associated with the programs viability were divided between direct costs and indirect costs. Direct costs included salaries and benefits (resident, preceptors), program director, scholarship (presentation and travel). Indirect costs included educational didactic costs. Additionally, a post start up (Year 2 and Year 3) analysis was conducted to assess the return on initial investment. Return on investment (ROI) compared the cost in dollars of the program to the net benefit of the program.

Results: The initial start up for residency programs can be a costly; however, the return on investment is noted by year 3 of program operations with the program experiencing cost neutral gains year 2.

Conclusions: Nurse practitioner residency programs are a vital innovation to advance practice. Yet the startup costs can be a deciding factor for most organizations. The preliminary data of this review demonstrates the fiscal benefit of these programs.

◀ ▶ go to PG.

NURSE RECRUITMENT/RETENTION

A CONCEPT MODEL FOR UNDERSTANDING INTERNATIONAL NURSE MIGRATION

Sally Moyce, Rebecca Lash, Mary Lou Siantz

COMMUNICATION IMPROVEMENT PROJECT: THE SHIFT HUDDLE ON THE PEDIATRIC ICU

William Babb, Valerie Barboa, Kathy Bergs, Marian Daigle,
Rachel Rivera, Jo Ann Wildenstein

EVIDENCE-BASED EDUCATIONAL PROGRAM ENGAGES NURSES AT THE BEDSIDE TO IMPLEMENT EVIDENCE-BASED PRACTICE

Nicole Weimer

CREATION OF A DISCHARGE NURSE POSITION ON THE NEUROSCIENCE PROGRESSIVE CARE UNIT

Deborah Minke, Valerie Specter, Katherine Painter

IMPLEMENTING AN SBAR COMMUNICATION PROTOCOL: A QUALITY IMPROVEMENT PROJECT

Susan M. Renz, Marie Boltz, Janice D. Crist

EVALUATION OF THE REVISED PAIN RESOURCE NURSE TRAINING PROGRAM PRE/POSTTEST

Sheryl Wyant

THE NURSING COMMUNITY APGAR PROGRAM PHASES I-IV

Molly Prengaman, Ed Baker, David Schmitz

◀ ▶ go to PG.

NURSES' USE OF THE EHR SYSTEM TO DOCUMENT PATIENT SYMPTOMS IN ACUTE CARE SETTINGS

Mustafa Ozkaynak, Blaine Reeder, Mary Beth Makic, Karen Sousa

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EVIDENCE BASED PRACTICE AMONG PRIMARY CARE NURSE PRACTITIONERS

S. Van Roper

NURSE CHARACTERISTICS ASSOCIATED WITH PERCEPTION OF COMMUNICATION AND TEAMWORK

Linda Kim, Courtney Lyder, Donna McNeese-Smith,
Linda Searle Leach, Jack Needleman

WE ARE ALL IN THE SAME BOAT: THE ROLE OF PROFESSIONALISM IN CROSS DEPARTMENTAL REPORT

Marla J. Marek, Lauren Marson, Rene Masri, Renee Olson,
Catherine Van Nieuwenhuyzen, Susan Y. Wong

NURSES ROLE IN CELLULITIS CASES TO REDUCE FALL-RELATED HOSPITALIZATION

Gerardo Rene Flores, Dorothy J. Wiley

ROLES AND RESPONSIBILITIES OF NURSES WORKING IN AMBULATORY CARE

Maureen O'Malley, Christine Michel, Lisa Jackson

◀ ▶ go to PG.

A Concept Model for Understanding International Nurse Migration

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Purpose: To introduce a theoretical framework which examines factors influencing the migration patterns of internationally educated nurses.

Description of Theory: Nurse migration is a topic of interest for countries attempting to recruit internationally educated nurses, the institutions which hope to retain them, and the countries losing their workforce. Traditionally, the push-pull model, developed in 1979, has been used as a conceptual framework for understanding nurse migration. However, this model does not fully explain reasons nurses choose to stay in host countries despite barriers to nursing practice and safe patient care. The concept model introduced here provides a new context for understanding nurse migration, using a more complete analysis of various factors influencing nurses' decisions. Adapted from Padarath et al's (2003) model, this framework expands on the push-pull factors and includes stick and stay factors to further understand why nurses choose to migrate in the first place or to remain in their host countries. Stick factors seek to explain reasons nurses do not leave their countries of origin, such as the administrative barriers to migration or responsibilities to family at home. Stay factors relate to reasons nurses stay in their new countries, rather than returning home, including not wanting to interrupt their children's education in the new country or feeling responsible for sending home remittances. This model adds block factors to explain the additional factors influencing a nurse's decision to migrate.

Approach: A systematic review of the English-language literature exploring the lived experiences of internationally educated nurses yielded 44 quantitative and qualitative primary research articles. The authors reviewed articles to elicit themes of nurse migration not discussed in previous migration models.

Relation to Nursing Practice: Nurse managers attempting to maintain an internationally educated nursing staff can benefit from understanding the barriers nurses face once in the host country, and health care organizations can use the framework to improve nurse transitions and ultimately improve patient care and safety. Policy makers in countries attempting to recruit nurses and to retain and internationally educated nursing workforce can better address regulatory barriers facing migrating nurses. Finally, a new conceptual framework will streamline efforts to explore nurse migration, and research will benefit from a model which facilitates a thorough assessment of the influences of migration.

Conclusions: Nurse migration is a global issue, affecting both countries of origin who experience workforce shortages and host countries who assist nurses assimilate into a new culture. A comprehensive model which incorporates the myriad forces for nurse migration is essential for understanding motivations of nurses to migrate. The proposed conceptual model can be used by researchers, organizations and policy makers seeking to better understand the implications of nurse migration.

◀ ▶ go to PG.

NURSE RECRUITMENT/RETENTION

Communication Improvement Project: The Shift Huddle on the Pediatric ICU

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Problem: The pediatric intensive care unit (PICU) at UNMH is a dynamic environment. The critical patient population and the ever-present possibility of new admissions and deteriorating patient conditions can make managing patient care and workflow challenging. To handle these challenges and optimize patient outcomes, teamwork and communication among all members of the nursing staff must be present. The current method of report between nurses and charge nurses has been an efficient way to “change the guard” in the PICU for many years. However, staff communication has been a major PICU safety focus and we felt a layer of intra-shift communication would be beneficial for staff and patients.

Methods: Our literature review showed that effective and increased communication is a vital part of a safe nursing environment. The nursing quality report *Keeping Patients Safe* (2003) by the Institute of Medicine recommends a safety culture that employs “ongoing, effective, multidirectional communication.” Based on our review we decided to launch daily, brief team meetings of all nursing staff. These “huddles” would be a way to share information on critically ill patients, upcoming procedures or “travel” needs, and identify nurses who may need help with a busy assignment.

Results: Literature review showed that this type of informational huddle format had been attempted only in clinics and surgical centers – not ICUs. We encountered obstacles that were products of the critical care environment such as bedside procedures and high patient acuity. We overcame these through trial and error with timing and location of huddles and by keeping huddles brief.

Conclusion: Overall, the huddle process has had a positive impact on PICU communication. The huddles reflect the IOM’s directive calling for “ongoing, effective, multidirectional communication.” Shift huddles have become a permanent part of the PICU communication matrix.

Nursing Implications: The shift huddle has evolved in the PICU. In addition to sharing vital patient information, the PICU leadership team and UBE use the huddle to briefly share important unit process and logistical information. We find these “huddle points” to be more effective than just emailing information to staff. Even with the addition of “huddle points”, we have been able to maintain the horizontal – staff nurse to staff nurse – feel of the daily shift huddle.

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◀ ▶ go to PG.

NURSE RECRUITMENT/RETENTION

Evidence-Based Educational Program Engages Nurses at the Bedside to Implement Evidence-Based Practice

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Aim: Standardized hospital nursing practice can result in improved patient outcomes, satisfaction, and safety. The main aim of this project was to eliminate barriers that preclude nurses at the bedside from participating in and implementing evidence-based practice (EBP).
Background: Bedside nurse positions only encompass their time at the bedside. There is little opportunity during their 12-hour shifts to step away in order to research best practices, identify solutions to problems, or keep up with current nursing literature. The Nursing Research Council offers classes on "How to" for writing clinical questions in PICO format, the Plan-Do-Study-Act (PDSA) cycle, literature reviews, or research articles. There is a Director of Nurse Research, publication workshops, and a Nurse Residency Program that provides recently graduated nurses with the opportunity to acquire knowledge and complete an evidence-based project. We hypothesized that, "By providing bedside nurses with dedicated time and money, knowledge, participation, and implementation of practice improvement would increase".
Method: Baccalaureate prepared nurses were invited to apply for an Evidence-Based Practice Champion position. Nurse from various areas participated such as; Pediatrics, Progressive Care, Neonatal, ICU, Interventional Radiology, and OR services. The program provided four hours a week of paid release time for 10 bedside nurses a year. Time included education about EBP, researching practice improvement issues happening on a unit or in the institution. The champions were trained one-on-one by the program facilitator, content experts, or attendance at hospital provided evidence-based practice class. The program was funded by the University of New Mexico Hospitals. Projects completed were presented at a hospital-wide conference. Examples of this were; "Sternal Precaution Training in Pediatric Cardiac Patients", "Code Situations and Rapid Sequence Intubation (RSI) Medications", and "Can a Cleaning Protocol Replace the need for Disposable ECG leads".
Outcomes Achieved: The training program took place over 2 years and 20 nurses were enrolled. Nurses at the bedside made 11 practice changes, two IRB approvals, and three hospital-wide initiatives. Two publications in peer reviewed nursing journals were generated and a third manuscript has been submitted. Seven posters were presented at statewide and national conferences. The nurses reported that they experienced professional growth during the program and that it was instrumental in advancing them into positions of leadership and higher education (MSN and DNP).
Conclusion: The Evidence-Based Practice Champion program allowed nurses to learn, present, and write about evidence-based practice by feeling supported and guided to bring their ideas to the forefront.

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◀ ▶ go to PG.

NURSE RECRUITMENT/RETENTION

Creation of a Discharge Nurse Position on the Neuroscience Progressive Care Unit

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Purposes: The purpose of this project was to determine if adding a position of a discharge nurse to 5 South the neuroscience progressive care unit would increase patient satisfaction, increase our core measures compliance, and improve patient discharges.

Rationale/Background: Follow-up calls after discharge have been show to decrease readmission rates when in concert with comprehensive discharge planning prior to discharge. (Cynthia Locker MS, 2011) (Harrison, 2011). While readmission rates did not appear to be a problem at an average of 2-5% on our unit, we knew that it was a potential problem and could impact our reimbursement rates. In addition, there is now money available from CMS for the top hospital performers depending on the HCAHP scores. Telephone calls can also increase patient satisfaction scores (Eyal Braun, 2009). 5 South Neuroscience's HCAHP and Press Ganey Scores were below the hospital average. Our goal was to prevent readmissions when possible and increase patient satisfaction and prevent unintended complications for the patients we discharge home.

Methods: In November of 2012, 5 South implemented a discharge nurse position for our unit. In addition to the development of a comprehensive discharge plan for each discharge, we wanted the discharge nurse to track core measures and provide core measure education when applicable, make follow up calls to ensure the transition of care was going smoothly at home and serve as a resource nurse on the floor. The nurses selected for the discharge nurse position were selected because of their clinical expertise, adaptability and pleasantness.

Outcomes: We measured five patient satisfaction items to determine if the discharge nurse impacted patient satisfaction. Both the Press Ganey and HCAHPS scores increased from an average as low as 72% to as high average as high as 86% after implementation of the nurse discharge program. There were also several anecdotal results of near misses and increased satisfaction of staff and faculty. During the summer of 2014 the discharge nurse was often needed to staff the floor and unable to function as the discharge nurse. The data for those three months actually did not show any significant changes in patient satisfaction scores, but the staff did reported decreased satisfaction and, our core measures scores for stroke education decreased enough to threaten our status as a primary stroke center. This demonstrated how crucial the discharge nurse's roles were in core measure education and documentation. 5 South found that the program was so successful that we have added another discharge nurse to provide 7 days/week coverage.

Conclusions: The addition of a discharge nurse position to 5 South is crucial to maintain/ improve patient satisfaction, and prevent unintended complications in this incredibly vulnerable population resulting in readmission to the hospital. While all nurses learn to discharge patients, this expertise a nurse can give to a patient can be the deciding factor in how well a patient does when he goes home. This pilot project shows how important a dedicated discharge nurse education and instructions are to the patient's safe transition home from the hospital.

◀ ▶ go to PG.

NURSE RECRUITMENT/RETENTION

Implementing an SBAR Communication Protocol: A Quality Improvement Project

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Purpose: A quality improvement project implemented a systematic method for nurses to collect and communicate data pertaining to change in resident health status. The primary aim was to improve the communication between nurses and primary care providers (nurse practitioners and physicians) and reduce the incidence of avoidable hospital transfers of nursing home residents.

Rationale/Background: Primary care providers and nurses both acknowledge that a combination of communication issues with nurses results in avoidable, unnecessary hospitalizations of nursing home residents, placing them at risk for dangerous and costly complications. The timing, clarity, and content of information, as well as the nurse's ability to synthesize and communicate key clinical information to the primary care provider are key determinants to these outcomes.

Methods: Utilizing Kotter's Theory of Change, a quality improvement project with a pre/post evaluation was implemented in a 137-bed skilled nursing facility, part of a faith-based continuing retirement community in rural Pennsylvania. An SBAR Communication Protocol was implemented over a 4-month period containing the following components: (1) A systematic method for nurses to collect data and communicate (SBAR technique); (2) nurse training on SBAR; (3) training of medical providers on SBAR; and (4) systematic evaluation of unplanned hospital transfers integrated into quality improvement activity. Primary care satisfaction with communication was evaluated through a semi-structured questionnaire to assess satisfaction with SBAR implementation. The rate of unplanned hospital transfers was evaluated by the nursing home's medical director bi-weekly to track and trend avoidable hospitalizations Nurses' compliance with completing the SBAR tool was tracked and trended.

Outcomes: SBAR utilization was associated with a trend toward fewer overall unplanned hospital transfers, fewer 30-day readmissions to the hospital, and more transfers avoided. Medical providers reported improved satisfaction with communication, improved consistency in data conveyed regarding resident change in status, and a view that information conveyed influences decision-making regarding hospitalizations.

Conclusions: SBAR methodology offers a viable approach to preventing avoidable hospitalization of nursing home residents and improving clinician satisfaction. This project's design can be easily implemented in any long-term care facility as part of the quality improvement process.

◀ ▶ go to PG.

NURSE RECRUITMENT/RETENTION

Evaluation of the Revised Pain Resource Nurse Training Program Pre/Posttest

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Purpose: To evaluate the 1) gains in pain knowledge from pre to posttest and 2) number of questions and content of the questions that were answered incorrectly by > 50% the participants.

Background: There is evidence that pain management in hospitals is improving with routine pain assessment and the development and implementation of treatment strategies; however, pain is still inadequately treated. The Pain Resource Nurse (PRN) program provides nurses with core knowledge in the nursing care of people with pain. Research has reported that participation in the pain resource nurse program improves pain management at hospitals.

Description: A 2-day annual pain resource nurse conference is offered by the Puget Sound Pain Resource Nurse Education Cooperative and includes a 42 question pretest and posttest. The pretest is part of the on line conference registration process and is completed 1-2 months prior to the conference. The online posttest is available to participants immediately following the conference for three weeks. 805 nurses completed the pretest over the four years; 2011 (*n*=190), 2012 (*n*=162), 2013 (*n*=185), and 2014 (*n*=268). 655 nurses completed the posttest over the four years; 2011 (*n*=171), 2012 (*n*=112), 2013 (*n*=149), and 2014 (*n*=223). The pre/post test scores are analyzed using descriptive statistics and independent *t*-tests. Descriptive statistics were used to identify the questions that > 50% of participants answered incorrectly on the pretest and posttest for each of the four years.

Outcomes Achieved: Examination of the test score means reveals that pre-test mean scores were consistently lower than posttest mean scores; 2011 (M_{Pre} =24.93, SD_{Pre} = 5.45; M_{Post}=33.12, SD_{Post}=4.36), 2012 (M_{Pre} =24.82, SD_{Pre} = 4.91; M_{Post}=33.19, SD_{Post}=3.96), 2013 (M_{Pre} =26.09, SD_{Pre} = 5.93; M_{Post}=33.00, SD_{Post}=3.19), and 2014 (M_{Pre} =26.49, SD_{Pre} = 5.22; M_{Post}=34.76, SD_{Post}=3.94). Independent *t*-tests compared the pre/posttest mean scores and were significant; 2011 ($t_{(359)}$=-15.655, p<.001), 2012 ($t_{(272)}$=-14.985, p<.001), 2013 ($t_{(332)}$=-12.825, p<.001), 2014 ($t_{(489)}$=-14.712, p<.001). Sixteen to eighteen pretest questions were responded to incorrectly by > to 50% of participants and zero to four posttest questions were responded to incorrectly by > to 50% of participants for the four years evaluated.

Conclusions/Implications for Educational Practices/Recommendations: Nurses consistently improved their pain knowledge at posttest for each of the four years. In addition, 38%-43% of questions on the pretest and only 10% or 0% of the questions on the posttest were responded to incorrectly by >50% of participants. The posttest questions missed were related to pharmacologic topics (e.g. equianalgesia, side effects). Limitations include: 1) attrition rate of participants who took the pretest but did not take the posttest and 2) the pre/posttest are the same test. We do not know if the posttest scores reflect the knowledge gain from the program or an effect of the pre-test. Future research is needed to link nurse improvements in pain knowledge to patient outcomes.

◀ ▶ go to PG.

NURSE RECRUITMENT/RETENTION

The Nursing Community Apgar Program Phases I-IV

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Purposes/Aims: The purpose of this project was to develop a program through which critical access hospitals (CAH) and their communities could improve nurse recruitment and retention practices.

Rationale/Conceptual Basis/Background: In rural and frontier areas of the United States, the nursing shortage is particularly severe. Current changes in our health care system may result in a surge of newly insured individuals seeking care and further strain the rural health workforce. Drs. Baker and Schmitz previously developed a program to address rural family physician recruitment and retention issues. The development of a parallel nursing program serves to provide a unique interventional package with which rural hospitals will be able to address their workforce needs. Conceptually, the project drew upon Bushy's application of the core nursing concepts of person, environment, health, and nursing to the unique aspects of rural nursing.

Methods: The Nursing Community Apgar Program resulted from interprofessional, collaborative efforts of university, medical residency, and rural nursing personnel. Phase I of the project was the development of the Nursing Community Apgar Questionnaire (NCAQ). In Phase II, the NCAQ was piloted at eleven critical access hospitals in Idaho and a comparative database established. The Nursing Community Apgar Program was initiated in Phase III and provided CAHs insight into how they compared with other CAHs across the state. Phase IV allowed CAHs to compare two years of their results on the NCAQ, identify strengths and challenges, and receive strategies for solutions to their persistent challenges.

Results: Critical access hospitals from across the state have participated in the program as it progressed from simply identifying factors that influence nurse recruitment and retention to development of solution strategies. Data analysis allows CAHs to see how their results compare with the data base means and assess their progress over time. Collection of recruitment and retention practices that result in positive improvements in NCAQ results has begun as an initial step in identifying best practices.

Implications: The Nursing Community Apgar Program can be utilized by rural communities and hospitals as a real-time assessment tool which can be used to strengthen their advertising and interviewing, tailor their negotiation and contract strategies, and track their progress over time. The program serves to identify solutions to common challenges and develop best practice policies for rural nurse recruitment and retention. Application of the program in other rural states may identify trends and themes at regional and national levels.

Funding: Provided by the Idaho Office of Rural Health and Primary Care.

◀ ▶ go to PG.

NURSE RECRUITMENT/RETENTION

Nurses' Use of the EHR System to Document Patient Symptoms in Acute Care Settings

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Aim: The specific aim of this presentation is to describe how Registered Nurses (RNs) use the electronic health record (EHR) system to document symptom assessment and management in acute care settings through a preliminary work system analysis of fourteen interviews with nurses.

Background: Symptom assessment and management is one of the essential activities of RNs in inpatient settings. Ineffective symptom assessment and management leads to sub-optimal patient outcomes. These activities can be improved through organizational and informatics interventions. However, effective design and implementation of informatics interventions depends on understanding existing work flows in acute care settings. This study was conducted as part of a broader project to develop nurse-sensitive patient-outcome metrics for quality improvement and operational decision-making.

Methods: We interviewed fourteen nurses who work at inpatient units of an academic hospital using semi-structured interviews. Interview questions pertained to work experience, patient care responsibilities, patient assessment, symptom management, and use of information technologies in the RNs work. For our preliminary analysis, we framed interview results according to the System Engineering Initiative in Patient Safety (SEIPS) model (Figure 1) developed by Carayon et al. The SEIPS model includes *people*, *tasks*, *organization*, *technology and tools*, and *environment* components.

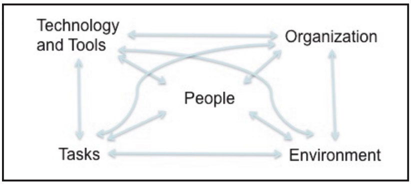

Figure 1. The SEIPS model

Results: The *people* component includes the RNs, charge nurses, physicians, physical therapists, and patients. The *task* component includes symptom assessment, medication administration, documentation, and communication with other clinicians. *Organization* includes hospital policies and procedures. *Technology and tools* includes the EHR system, paper-based notes, medication scanners, and communications technology. These components interact with each other to form the nursing work system. For example, some RNs (*people*) prefer to complete charting (*task*) using the EHR (*technology and tools*) at the bed side while others conduct charting outside the patient room. Due to workload (*organization*), sometimes charting at the bed side is not possible and this can impact accuracy and completeness of patient documentation. EHR usability issues can also affect timeliness and accuracy of documentation.

Implications: Using the SEIPS model during a preliminary analysis we described the RNs work system related to patient symptom assessment and management in an acute care setting. This study contributes to practice by exploring the relationship between the components of the RNs work system which should inform the design of future informatics and organizational interventions.

◀ ▶ go to PG.

Evidence Based Practice among Primary Care Nurse Practitioners

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Purpose/Aims: The purpose of this research is to describe primary care nurse practitioner (PCNP) beliefs in, implementation, knowledge and utilization of evidence based practice (EBP) utilizing a common primary care diagnosis with nationally accepted EBP guidelines.

Rationale/Background: EBP is considered the professional clinical practice standard today (Institutes of Medicine, 2003). Subsequently, it is important to assess if EBP is implemented and utilized systematically in primary care clinical practice. EBP is defined as a clinical practice of inquisitiveness and evaluation of the relevant data utilizing this information for clinical practice (Journal of American Medical Association, 1992; Sackett, Rosenberg, Gray, Haynes & Richardson, 1996). Despite convincing research that supports good patient outcomes as a result of clinical practice based on EBP, patient outcomes often do not significantly improve (National Cancer Institute, 2007 & 2011; US Dept of Health & Human Services-US DHHS, 2011). For example, the Joint Commission on Prevention, Detection, Evaluation and Treatment of High Blood Pressure (JNC 7) has noted that research from clinical trials has successfully standardized hypertension (HTN) management producing marked improvement in blood pressure management and improved quality patient outcomes (US DHHS, 2011). Yet patient blood pressure control remains suboptimal according to the Institutes of Medicine (2010). Inquiry into why this is occurring is just beginning to come forth in the literature.

Brief Description: Four questionnaires were incorporated into one survey to examine PCNP beliefs, implementation, knowledge and utilization of EBP. The JNC 7 guideline knowledge and self-reported use in the treatment of hypertension in ambulatory care was used to measure EBP utilization. A convenience sample of 202 FNPs, ANPs and GNPs were obtained during the American Academy of Nurse Practitioners National Conference 2011 in Las Vegas, Nevada.

Conclusions: PCNPs surveyed were found to have a high level of belief in EBP but did not report implementing EBP more than 3 times in the past 8 weeks. Belief was statistically higher in doctoral prepared PCNPs. Ninety-five percent of the participants were familiar with the JNC 7 guideline but the groups scored a mean of 69% on knowledge of JNC 7 guideline specifics. Only 25% of the respondents indicated they utilized guidelines in hypertension management. This research is a step towards understanding how PCNPs utilize EBP and the PCNPs' ability to influence optimal patient outcomes. As PCNPs assume a leadership role in primary health care, methods to increase PCNP utilization of EBP will need to be understood and implemented to improve and optimize patient outcomes.

◀ ▶ go to PG.

NURSE RECRUITMENT/RETENTION

Nurse Characteristics Associated with Perception of Communication and Teamwork

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Purpose: The purpose of this study was to investigate healthcare provider's characteristics that have a significant effect on their perceptions of communication effectiveness, teamwork, and patient safety culture.

Background: Effective nurse-physician communication and teamwork, as well as patient safety culture, were identified as important variables in reducing negative patient outcomes. Hence, identification of factors that affect inter-professional communication, teamwork, and patient safety culture is critical so that the potential negative impact on patient outcomes can be minimized through targeted interventions aimed at improving these provider outcomes. Educational interventions, including communication and teambuilding interventions are often provided applying a generic, large-group, pedagogic teaching method; however, healthcare educators may optimize training outcomes by varying their teaching to meet the individual needs of adult learners.

Methods: This study applied a cross-sectional design and used a convenience sampling method to recruit a final sample of 61 nurse and physician participants from two medical/ surgical units in two comparable hospitals located in Los Angeles County. All Registered Nurses and hospitalist physicians who met the inclusion criteria of 21 years of age or older, were employed by one of the two participating hospitals on a full-time or part-time basis for at least three months, and who provided direct patient care in the applicable medical/ surgical unit were considered for participation in the study. Multiple regression analysis was performed using the "enter" method, to identify specific provider characteristic variables that resulted in significant variances in the communication, teamwork, and patient safety culture perception scores.

Results: Results from this study show that there were significant relationships between nurses' race, age, and years of nursing practice in the U.S. and their perceptions of communication, accounting for about 70% of the variance in the nurse communication perception scores $F(25,22)=2.065$, $p=.045$, $R^2= .701$. Significant relationships were also found between nurses' gender, age, race, years of nursing practice in the U.S., years of employment in the current unit, English proficiency levels and their perceptions of teamwork, accounting for almost 82% of the variance in teamwork perception scores $F(25,22)=3.925$, $p=.001$, $R^2= .817$. There were no significant relationships between nurse's characteristics and their perceptions of patient safety culture. Furthermore, there were no significant relationships between physician's characteristics and their perceptions of communication effectiveness, teamwork, or patient safety culture.

Conclusion/Implications: Based on the results of this research, tailoring healthcare provider communication and teamwork training according to specific provider characteristics (e.g. nurse's race/culture, years of experience) may maximize training results. It may be helpful to supplement the educational interventions with additional training, such as assertiveness training and to hold more frequent, smaller group sessions that accommodate various levels of competencies and work experiences. Such strategies are especially relevant when there is a high percentage of staff members who practiced or received their pre-licensure education in another country and/or have different cultural backgrounds, or for new graduates who may have lower levels of competencies as compared to more experienced staff.

◀ ▶ go to PG.

We Are All in the Same Boat: The Role of Professionalism in Cross Departmental Report

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Background: As part of their care routine, nurses give and receive report multiple times every day. With each encounter, nurses are required to communicate with other nurses. However, not all nurse to nurse communication encounters are positive nor do they reflect the key elements of professionalism. In their sentinel event report on patient safety, The Joint Commission (TJC) discusses the implications of a hostile work environment, including its negative effects on patients and their families (2008). The Joint Commission also emphasizes how intimidating and disruptive behaviors erode professional behavior. Although several studies examined negative communication encounters between nurses, few studies focused on nurse to nurse report as a key contributor to unprofessional behaviors. In addition, no studies were found that explored the interactions between report and professional behaviors as perceived by the nurses themselves.

Purpose: The purpose of this study is to examine professional elements that contribute to success and satisfaction with nurse to nurse cross-departmental report. Research questions include: a) what are the contributing factors to cross-departmental nurse to nurse communication success and satisfaction, b) what are the barriers to cross-departmental nurse to nurse communication success and satisfaction, and c) how does individual nurse perception of professionalism influence the nurse to nurse communication encounter?

Methodology: The sample consisted of 12 Registered Nurses working in a variety of acute care settings the central valley of California. Data was collected through in-depth interviews and analyzed using Grounded theory methodology. Data collection and analysis occurred simultaneously using the constant comparative method.

Results: Findings indicate that a successful and satisfying cross departmental report encounter included a thorough and uninterrupted exchange. Additional components included listening, a positive attitude, relevant information, mutual respect, and report being presented in a systematic manner. Barriers to a positive experience included interruptions, negative attitudes or tone of voice, being rushed and/or disorganized, involved difficult and complex patients, and encounters where nurses were made to feel inferior. Nurses had a wide range of perceptions on how professionalism impacted their cross departmental report encounters. They discussed preconceived ideas about unprofessional behaviors from certain departments that influenced them even before encounters occurred. Unfortunately, nurses reported unprofessional behaviors more often than professional ones. Most nurses were able to articulate what report would look like if professionalism were the standard. However, these discussions were framed in the ideal world rather than the real world. Negative encounters with giving and receiving report have led to generalized assumptions about “All ICU nurses” or “All PACU nurses”, when giving report to certain areas.

Implications for Practice: When nurses discussed what could be done to improve professional behaviors in the workplace, they frequently revealed the need to recognize “we are all in the same boat”. All nurses struggle with heavy workloads, complicated patients, and/or not enough time. The idea that mutual respect needs to be promoted and nurtured was evident in their discussions of professionalism. Using standardized reporting tools was another suggestion from these participants to improve cross departmental nurse to nurse reporting.

◀ ▶ go to PG.

NURSE RECRUITMENT/RETENTION

Nurses Role in Cellulitis Cases to Reduce Fall-Related Hospitalization

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Purpose: Evaluate associations between falls and anatomical location of cellulitis for Emergency Department (ED) patients.

Background: Falls are a major cause of injury and affected adults and children strongly impact nursing practice. For example, the combined domestic direct-care and lost-productivity costs of falls exceeds $81 billion annually. Also, while cellulitis rates affect relatively few, ~24/1000 person-years Americans annually, over 9 million office and emergency department (ED) visits are attributable to cellulitis, costing >$98 million annually. Nurses evaluate and treat patients with cellulitis in a variety of settings. However, nurses do not see patients with cellulitis at an increased risk for falls. Fall-related hospitalizations may be reduced if new preventable causes are identified, such as cellulitis. Ultimately, nursing research can identify causes that lead to effective nursing practice interventions that will reduce costs and resource utilization and improve the public's health.

Methods: Cross-sectional population-based analysis of the Nationwide Emergency Department Sample (NEDS) dataset; a weighted random sample of U.S. hospital-based emergency department visits, linked to hospitalization records, yielding national and regional rates. Exposure of interests, upper extremity ([UE], ICD-9 682.0-682.4) and lower extremity ([LE], ICD-9 682.8-682.9) cellulitis were identified from ICD-9 coded ED diagnoses. Outcome of interest, hospitalization rates (/100,000) was estimated using weighted, tabular age-specific stratified analyses.

Results: Together hospitalization and lower extremity cellulitis rates increased with age: e.g., 237/100,000 18-44 year olds were evaluated in EDs for fall-related injuries while 712 cases of LE cellulitis (/100,000) adults $\geq$85 year olds were similarly evaluated. Among people that presented to the ED with a fall as an external cause of injury, LE cellulitis increased risk for hospitalization across all age groups, when compared to those without cellulitis (Rate Ratio [RR]=1.78-5.57, p-values□0.05). Fallers with both LE and UE cellulitis showed higher hospitalization rates than unaffected infants, children, and adults (RR=2.17-8.24, p-values<0.05). Fallers with only UE cellulitis were less likely to be hospitalized than unaffected comparators younger than 65 years (RR= 0.40-0.94, p-values □0.05); however, those older than 65 were no more likely than those without UE cellulitis (RR=1.19, p>0.05).

Implications: Developing early intervention strategies to prevent falls resulting in major injury is important; LE cellulitis may physiologically alter sensorium and balance in ways that lead to falls. These analyses show LE cellulitis more commonly affect older age groups and increase rates of hospitalization among those who fall. Although fallers with UE cellulitis <65 years of age are less likely to be hospitalized, findings may relate to differences in fall characteristics and comorbid conditions. Questions for future nursing research include explicating causal risk factors for LE cellulitis associated falls, especially those that result in hospitalization. Injury-reduction strategies may be informed by early screening and treatment strategies targeted at LE cellulitis are integral to nursing practice.

◀ ▶ go to PG.

Roles and Responsibilities of Nurses Working in Ambulatory Care

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Purpose: The purpose of this study is to describe the responsibilities, educational preparation, skills and educational needs of registered nurses working in ambulatory care. The study findings will assist educators to revise and update their curricula focusing on the growing health care demand for nurses outside of acute care.

Rationale: The changing health care system is driving the need for a greater focus on outpatient healthcare. Changing trends include; the increase in the aging population (CDC, 2014; National Institute on Aging), the need to support and manage more community patients with multiple chronic conditions (NIH, 2014), the Readmission Reduction Program requirements designated by the Centers for Medicare & Medicaid Services (CMS) (CMS, 2014), as well as the increase in the number of patients who now have access to health care providers. These forces will influence the educational preparation of nurses as they will need a more broad and comprehensive mix of skills (Ortman, Velkoff, and Howard Hogan, 2014). These changes are impacting the need for nurses with a greater skill set to be more effective in delivering care, monitoring outcomes and making improvements for individual patients, as well as making process improvements within facilities. As a consequence of the rapidly changing environment, nursing schools must consider their educational offerings and develop more focused outpatient care curriculum based on the needs unique to ambulatory care today. Similarly, educators must emphasize the need for students to adapt their care based on the needs of the patient seen in a particular setting.

Methods: All participants completed a researcher-developed online survey based on the Ambulatory Care Nursing Orientation and Competency Assessment Guide (AAACN, 2010). Content validity was verified by a team of educators and ambulatory care nurses. Participants were asked about their role and responsibilities and the received/required educational preparation.

Data Analyses: Survey responses and demographic data were analyzed in SPSS and summarized using descriptive statistics. Narrative responses were transcribed, analyzed, and themes developed.

Conclusions: Study findings will provide insight into the actual responsibilities and perceived educational needs of nurses working in ambulatory care. Nurse educators must be informed about the responsibilities and educational needs of the growing group of working nurses.

◀ ▶ go to PG.

◀ ▶ go to PG.

NURSES' HEALTH

MEASURING OUTCOMES OF STRESS MANAGEMENT EDUCATION ON MENTAL HEALTH STAFF

Sheri McIlvain, Crystal Lederhos

BURNOUT IN THE NURSE EDUCATOR ROLE

Melissa L. M. Henry, Julie Sampson, Peter Chen

EVALUATING COPING RESPONSES OF PEDIATRIC ONCOLOGY NURSES AS SECOND VICTIMS

Kristin M. Belderson

PILOT STUDY TO EVALUATE SLEEP HABITS IN MEDICAL/SURGICAL NURSES

Michaela S. McCarthy, Erin Markley

THE EFFECT OF RN UNDERGRADUATE EDUCATIONAL LEVELS ON PERCEIVED BARRIERS TO EVIDENCE-BASED PRACTICE

Rosa Matonti

IMPROVING PARENTS' ACCESS TO SHAKEN BABY SYNDROME PREVENTION EDUCATION

Kathy Lopez-Bushnell, Jayme Robertson

INCREASING NURSES' KNOWLEDGE FOR MANAGEMENT OF NURSES WITH SUBSTANCE USE DISORDERS

Kathy Lopez-Bushnell

go to PG.

THE ROLE OF ETHNIC NURSING ORGANIZATIONS IN DEVELOPING NURSE LEADERS

Maryanne Balderrama Garon, Maria Matza, Jasmin Que-Laohoo

GENDER DIFFERENCES IN RETIREMENT PREPARATION AMONG REGISTERED NURSES

Shanna Keele

NURSES' SCRAPS: WHAT DO THEY TELL US?

Rhea Eubesio, Verna Sitzer, Karen Reavis, Lynn Marder, Julianna Timmerman

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HIGH ACUITY & MED-SURG UNIT COMPASSION FATIGUE, SATISFACTION, AND BURNOUT

Eric Henson, Karina Nunez, Cindy Hoang, Thu Nguyen, Geoff Shuster

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RESILIENCE, STIGMA AND BARRIERS TO MENTAL HEALTH CARE IN AIR FORCE NURSING STAFF

Stephen H. A. Hernandez, Brenda J. Morgan, Mark. B. Parshall

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NURSES' HEALTH

Measuring Outcomes of Stress Management Education on Mental Health Staff

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Purpose: The purpose of this study was to assess the usefulness of an instructional intervention to decrease anxiety and stress of nursing and multidisciplinary staff on behavioral health inpatient units.

Background: A great deal is known about the sources of stress at work for mental health nurses, namely how to measure stress and its impact on a range of outcome indicators. Research completed with nursing students showed a greater reduction of anxiety in an autogenic training group than in two comparison groups, as evidenced by scores on the State Trait Anxiety Inventory. Meta-analysis indicate that stress management workshops and behavioral technique training can be effective in reducing stress as well. Research that examines the practical application of stress reduction techniques and the resulting ability to moderate or minimize stressors for this population, however, is lacking.

Methods: Behavioral Health staff attended a workshop which included education on the following stress management skills: self-awareness through mind and body, emotion scan, autogenic training, and diaphragmatic breathing. Qualitative information was gathered regarding participants' experiences of the workshop. Perception of stress was measured using the State-Trait Anxiety Inventory for Adults and questions about the use of stress management techniques. Surveys were completed at three time points; pre-workshop (Time 0), one month (Time 1) after workshop completion and two months (Time 2) after workshop completion. A generalized estimating equation (GEE) was chosen to determine whether the workshop (provided in between Time 0 and Time 1) decreased state-anxiety risk (SA) and trait-anxiety risk (TA).

Results: All participants (n=37) completed both the state-anxiety risk and trait-anxiety risk measures for Time 0. Of these, 21 completed both measures at Time 1, and 15 completed both measures at Time 2. State-anxiety decreased from Time 0 ($M = 36.70$, $SD = 9.65$) to Time 1 ($M = 35.19$, $SD = 8.45$), and again at Time 2 ($M = 34.33$, $SD = 9.47$). Though state-anxiety risk decreased over time, there was not a significant difference between the groups, Chi2 = 1.74, $p = .1868$. There were no significant differences across time for the trait-anxiety risk (TA) variable, Chi2 = 1.95, $p = 1.621$. While the TA variable decreased from Time 0 ($M = 37.81$, $SD = 9.79$) to Time 1 ($M = 35.71$, $SD = 8.36$), the trait-anxiety risk increased from Time 1 to Time 2 ($M = 36.33$, $SD = 8.31$). Qualitative evidence is currently being reviewed, though preliminary anecdotal evidence from participants who have utilized the skills taught in the workshop indicates improved ability to manage stress and greater job satisfaction.

Implications: This study adds to the literature on the ability of stress management training interventions to moderate or minimize stressors for behavioral health staff. Lack of consistency between the quantitative and anecdotal evidence of this study indicates a need for additional studies with larger sample sizes and in depth qualitative analysis. The decreasing completion rate seen in this study points to a possibly critical flaw in intervention methodology for behavioral health staff – lack of time and motivation for participation.

◀ ▶ go to PG.

NURSES' HEALTH

Burnout in the Nurse Educator Role

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Purpose: To examine the relationship of family and work balance and other role factors with burnout in nurse educators.

Background: The U. S. is projected to have a significant shortage of nurses to meet the demands of a growing healthcare sector over the next 20 years (AACN, 2014). One factor contributing to the shortage is stagnant nursing school enrollment that is unable to meet the increasing demands for nursing services, due to faculty shortages across the country. Issues of nursing faculty recruitment and retention have been linked to a limited number of doctoral prepared nurses, higher paying employment in the private sector, high faculty workload, burnout and job dissatisfaction, disinterest in conducting research, and an aging workforce (AACN, 2011; Disch, Edwardson, & Adwan, 2004). Understanding factors related to faculty burnout and dissatisfaction is critical to develop strategies to better recruit and retain nursing faculty. One of the key factors that may lead to faculty burnout and dissatisfaction is the balance of their work and family roles, which few studies have explored the complex relationship.

Methods: A stratified, random sample of approximately 1200 nursing faculty from universities and community colleges throughout the country were approached via email to participate during spring 2009 semester using web-based Surveymonkey.com® software. General demographic and work related information were collected. How well faculty perceived their overall 'fit' between their work and family roles was assessed by a modified 12-item Work and Family Conflict Scale. This scale includes 4 subscales that measure the degree of conflict between the work and family roles related to either time or strain. Burnout was measured using a modified Shirom–Melamed Burnout Scale.

Results: The survey was completed by 287 nursing faculty across the U.S. Using multiple regression analysis, we will examine the relationships between work and family dynamics and burnout among nursing faculty. This data will be ready to present by the date of the conference.

Implications: This study describes some of the complexity in the relationship between work and family role commitments and burnout experienced by nurse faculty. By understanding the factors leading to burnout in nurse educators, we can better support faculty in the role and develop models to retain and recruit new faculty to the educator role.

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◀ ▶ go to PG.

Evaluating Coping Responses of Pediatric Oncology Nurses as Second Victims

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Purpose: To evaluate pediatric oncology direct-care nurses' coping responses to stressful events, specifically medication errors, in order to describe nurses' coping behaviors and assess whether the nurses have unmet post-event support needs as second victims.

Background: Medication administration is a task centrally embedded in nursing practice thereby placing nurses at significant risk for experiencing errors and becoming second victims to the error events. Although a systematic literature review established that nurses experience emotional, physical, psychological distress effects following error events, there is limited evidence describing nurses' coping behaviors upon experiencing medication errors. Coping is identified as a person's continual process of cognitively and behaviorally attempting to deal with internal and external sources of stress. Classification of coping responses include (a) adaptive or problem-focused coping, in which the aim is to solve the problem or alter the source of stress, and (b) maladaptive or emotion-focused coping, which aims to manage or mitigate the emotional distress caused by the source of stress.

Methods: This study employed a descriptive, non-experimental, quantitative survey instrument comprised of (a) the 28-item Brief COPE inventory to assess participants' coping responses to medication error events, and (b) a list of ten support mechanisms available within the clinical site. Of the 115 direct-care pediatric oncology nurses employed in a Rocky Mountain region tertiary care facility, 82 were invited to participate in the study and 66 completed the survey instrument (80.5% response rate). Data was analyzed using descriptive and correlational statistics for coping responses and preferred support interventions.

Results: Nurses' adaptive coping responses prevail over maladaptive reactions. The majority of participants report using adaptive and problem-focused coping responses when faced with stressful situations, such as medication errors, by using Active Coping, Planning, Use of Instrumental Support, Acceptance, and Positive Reframing. Conversely, participants report using maladaptive and emotion-focused coping mechanisms less frequently in the form of Venting, Self-Distraction, Substance Use, Behavioral Disengagement, and Denial. Participants report minimal use of Humor as a coping response, which may be attributed to its close alignment with other maladaptive coping mechanisms such as Denial and Venting. Participants identify timely and empathetic conversations with peers (71%), family (58%), and supervisors (26%) as optimal sources of emotional and psychological support following medication error events. Participants' preference to talk about their medication errors with family as a source of emotional and psychological support is supported through a slightly positive, statistically significant correlation with Use of Emotional Support as a coping response ($r = .24$, $p = .05$).

Implications: Nurses' coping abilities relate to their perceptions of the medication error experience and their subsequent emotional and physical reactions. Nurses as second victims to medication errors are at risk for experiencing distress effects leading to burnout and job turnover. Understanding pediatric oncology nurses' coping behaviors can facilitate nurse leaders in providing effective post-event support for nurses as second victims.

◀ ▶ go to PG.

Pilot Study to Evaluate Sleep Habits in Medical/Surgical Nurses

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Purpose: The purpose of this pilot study was to evaluate the sleep habits of a small sample of nurses on a medical/surgical unit at an academic medical center.

Background: Circadian misalignment influences cognitive ability in the short term and has implications on cardiovascular, endocrine and immune system health in the long term. Fatigue and sleep loss have been shown to increase decision regret among nurses. This study was designed to evaluate whether nurses working 12 hour shifts regularly experience circadian misalignment.

Methods: Nurses on a medical/surgical floor were asked to keep a sleep/exercise/stress diary and wear a Fitbit for one week. Nurses in this study worked 12 hour shifts, and nurses working all shifts were eligible for the study. Total sleep time (TST), stress upon awakening, and amount of exercise were compared across workday versus non-workday. Self-reported total sleep time and amount of exercise were corroborated by Fitbit data.

Results: A total of 13 nurses participated in the study. The nurses were all female, ranged from 1-7 years of experience, and all worked on the same medical/surgical floor. A shorter mean total sleep time prior to a shift and an earlier awakening on workdays indicated that the nurses were suffering from circadian misalignment due to social jet lag related to shift work.

Implications: Existing studies of shift workers from various industries indicate that errors and near-miss events are more likely to be made if a worker is fatigued due to decreased sleep prior to the shift. Nurses comprise almost a quarter of all health care workers in the United States, but medical/surgical nurses remain an understudied population. The consequences of circadian misalignment in nurses, both in terms of nursing errors and long term health implications, needs to be further studied.

go to PG.

The Effect of RN Undergraduate Educational Levels on Perceived Barriers to Evidence-Based Practice

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Purpose/Aim: The purpose of this study is to ascertain if there is a difference in the perceptions of barriers to evidence-based practice (EBP) between those nurses from an associate degree nursing (ADN) versus a baccalaureate degree nursing (BSN) program. This study will be conducted in order to fill a gap in the literature.

Rationale/Background: Currently, 49% of the nursing staff in the ambulatory clinic areas are ADN prepared and 42% have a BSN, thus affecting the willingness to look for and utilize the most current best practice is not always deemed a priority (University of New Mexico, 2014). Moreover, the ADN programs have just recently begun to incorporate EBP into their curricula, due to the IOM (2003) mandates and those from the QSEN initiative in 2007 (Barnsteiner et al., 2012; Greiner & Knebel, 2003; Jones, 2013). This compounded with a shortened educational timeframe has an impact on the utilization of EBP (Haverkamp & Ball, 2013).

There have been a number of studies performed looking at the barriers to utilization of EBP (Brown et al., 2010; Buhaid et al., 2014; Chan et al., 2011; Chen et al.2013; Eizenberg, 2011; Kocoman et al., 2010; Solomon & Spross, 2011; Stichler et al., 2011; Tan et al., 2012). but none that specifically explore the barriers perceived by ambulatory care nurses in the United States. In the ambulatory care setting the nurses face a number of problems and constraints specific to their specialty such as: the location of the clinic (they may be located away from the main hospital), there may be only one nurse to a clinic, and there may be no one in the clinic to provide mentoring. Nurses in ambulatory care clinics are more isolated than their inpatient counterparts. Most often they do not have the same resources that are provided to their inpatient peers such as: unit based educators, research mentors, research council, and a research nurse leader.

Methods: This project will utilize a quantitative methodology, with a non-experimental cross-sectional design. Furthermore, this project will utilize data from a large urban academic medical center in the southwest United States (US). A convenience sample of ambulatory care nurses in the various clinical settings (primary care, medicine, and specialty care) will be utilized. The BARRIERS Scale (Funk et al., 1991) and a demographic questionnaire will be distributed to 254 ambulatory clinic nurses; this is the entire sample of ambulatory clinic nurses in this academic healthcare system (University of New Mexico Nursing Portfolio, 2014).

Outcomes: The author is currently awaiting IRB approval. The electronic survey and demographic questionnaire will be deployed as soon as IRB approval is obtained. Data will be analyzed utilizing descriptive statistics, independent t-tests, chi-square goodness-of-fit and logistic regression.

Conclusions: Due to the educational and curricular differences between ADN and BSN programs potentially the perceived barriers to EBP would be dissimilar for each discipline, and thus would require different interventions.

◀ ▶ go to PG.

NURSES' HEALTH

Improving Parents' Access to Shaken Baby Syndrome Prevention Education

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Purposes/Aims: The purpose of this evidence based intervention is to reduce the incidence of SBS in families who have hospitalized children. The aims are: 1) to educate all parents at University of New Mexico Hospital's (UNMH) with children in the Intermediate Care Nursery (ICN) and Newborn Intensive Care Unit (NBICU) and 2) to measure readmission rates of these children SBS.

Rationale/Background: Shaken Baby Syndrome (SBS), a form of child abuse, is the leading cause of death in children under one year of age. The death rate from SBS is 15% to 38%, and more than 80% of SBS children have lifelong brain injuries. This preventable child abuse costs the US health care system over $124 billion annually.

Methods: The interventions include giving parents the flier "Never Shake a Baby," reviewing the flier with them, and providing instruction on the dangers of SBS and coping with crying. The parents then watched the DVD "Portrait of Promise: Preventing Shaken Baby Syndrome." Nurses also use a simulation doll as an interactive tool for parents to visualize the brain damage that occurs when a baby is shaken. The nurses then asked parents whether they had questions concerning the SBS information they had received, and gave them a consent letter for a follow up phone call to determine what they remembered from the program. The parents were then called at 7 months, and the survey was completed.

Outcomes Achieved/Documented: There were 802 parents from the UNMH ICN and NICU who participated in the program. Ninety-nine percent of those who responded found the information they received helpful, 16.7% stated this was the first time they had heard that shaking a baby is dangerous, and 99.5% recommended that this information be given to all new parents. The majority of respondents were 19-25 years old and only one fourth of these parents had any high school education. Over a third of the children lived in a single-parent household. The majority of the parents had Medicaid or a governmental program for health insurance, which also put them at high risk for SBS. The most significant of the findings was that none of the children whose parents received education were readmitted to the hospital during this study.

Conclusions: The results indicate that many parents with children in the sub-acute and intensive care nurseries do not know about SBS and normal infant crying. It is clear that parents' knowledge is improved by the nurses' sharing information with parents while they are in the hospital with their children. A simple pamphlet and video with the one-to-one education seems to be effective. These children being born in the ICN and in the NICU presents a great opportunity for nurses to educate their at-risk parents, and has resulted in prevention of SBS for this high-risk population.

◀ ▶ go to PG.

NURSES' HEALTH

Increasing Nurses' Knowledge for Management of Nurses with Substance Use Disorders

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Purpose/Aims: The main purpose of this research was to demonstrate improved nurse leader's knowledge about substance use disorders (SUD) in nurses. The aims were;1) to increase confidence and to take action for nurses with employee performance problems and 2) to reduced stigmatized attitudes toward nurses with SUD.

Rationale/Background: Nurses are the center of hospital care teams and it is their responsibility to assure safe and effective nursing care in the health care system. This function has profound influence on the quality of patient outcomes and there is a serious problem when nurses use substances that impair their performance and may result in patient harm. Patient safety may be jeopardized when nurses have SUD which can impact performance via slower reaction times, diversion of prescription drugs, patient neglect, and medication errors. SUD is defined as the "persistent usage of alcohol or drugs and functional impacts caused by this usage." (Cadiz, Truxillo & O'Neill 2014). The performance of nurses with SUD is not only a threat to patient safety, but also a threat to their own health. Thus, it is the ethical and legal responsibility of nurse leaders and co-workers to have the knowledge and skills to recognize and report the problem so that the nurse can obtain effective help for his or her SUD. Yet, there are powerful barriers to nurse leaders gaining the necessary knowledge and skills for recommending SUD intervention. In the workplace, many nurses choose to remain silent about a co-worker who may have an SUD because of "loyalty, fear of being a hypocrite, guilt, or fear of jeopardizing a colleague's license to practice." Nurses and the American public view SUD as a "moral failure of lack of will power" (Trossman, S. 2003). Furthermore, the persistence of negative stereotypes and ongoing stigma towards SUDs (Cadiz, D., Truxillo, D., O'Neill, C. 2012) make nurses even more reluctant to take action.

Methods: This was an IRB approved research that used RedCap to randomized the University of New Mexico Hospital (UNMH) nurse leaders for the consent and pre- and post-tests. The intervention was a 4 hour CEU approved class. The measurement was the mean changes in knowledge, self-efficacy, and substance abuse stigma.

Outcomes Achieved/Documented: There were 116 UNMH nurse leaders who participated in the class and over the majority being a supervisor over 5 years with 66% in areas of adult care. Only 9% of the nurse leaders had supervised someone in the monitoring program. Results indicated that participants' knowledge, self-efficacy and perceived utility was higher after training than just before training

Conclusions: The results suggest that supervisor classroom training, of "Fit to Perform" positively affects knowledge, self-efficacy, and reduces stigma and adds another effective training resource for supervisors managing nurses with substance use disorders.

◀ ▶ go to PG.

The Role of Ethnic Nursing Organizations in Developing Nurse Leaders

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Purposes/Aims: The aim of this qualitative descriptive study was to explore the role of ethnic nursing organizations in developing their members for leadership.

Rationale/Conceptual Basis/Background: There is a disparity between the ethnic makeup of the US population, and those of nurse, nurse leaders and nursing faculty members. While the US population is 63% non-Hispanic whites and California only 42% non-Hispanic whites (US Census Bureau 2012 statistics), the nursing profession is more than 83% non-Hispanic white (HRSA report, 2008). Amongst nursing leadership and nursing faculty members, the disparity is even greater. “Only 12.3 % of full time nursing faculty members are coming from minority backgrounds” (AACN report). In order to foster diversity amongst nursing leaders and nursing faculty, it is desirable to encourage minority nurses to develop for these roles. One source of mentoring and development might be found in the ethnic or minority nurse organizations. Since this has not been the focus of research in nursing to date, a qualitative study using content analysis method was conducted.

Methods: The research team conducted in depth interviews of nurses who held membership for at least 3 years in one of the ethnic nursing organizations. Focus of these interviews was aimed at discovering how the organization helped them develop in their career, provided mentorship or encouraged them in continuing education or seeking leadership. Qualitative content analysis methods are being utilized to analyze results. Transcribed interviews have been analyzed and initial coding done.

Results: To date, 14 participants have been interviewed with plans to interview until saturation is achieved. The participants interviewed are members of their local Black Nurses Associations, Philippine Nurses Association or Hispanic Nurses Association. Both male and female nurses have participated, with ages ranging from 32 – 65 and years in nursing from 15-33. Education levels range from BSN to Ph.D.

Early analysis indicates that these organizations provide opportunities for leadership, mentoring and encouragement to the members. The participants noted comfort and a sense of community and “home” from being with persons from similar backgrounds. “You don’t have to explain where you come from” one participant reported. However, others noted that it is “not enough” and mentors are found in other professional organizations, also. A key finding thus far is the importance of community and “giving back” to their communities as strength of these orgs.

Implications: It is important to understand factors that help to both retain and develop nurses as leaders. Many factors have been considered, but thus far, no one has looked at the ethnic nursing organizations as a potential source in contributing to this development. As noted, this is an area with virtually no research. It is important to learn the role of the ethnic nursing organizations in developing nurse leaders. Understanding and disseminating the role of these organizations might lead to future considerations of they can contribute to increasing the diversity of nursing leadership and faculty.

Funding: This research was supported by a California State University Senior Intramural Research Award.

◀ ▶ go to PG.

Gender Differences in Retirement Preparation among Registered Nurses

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Sixty percent of U.S. registered nurses (RNs) age 45-60 have not participated in retirement planning. Further, in the next 10 to 15 years, this cohort of 1 million RNs will reach retirement age. Previous RN retirement studies focus on RN retirement outlook, RN economic preparation for retirement, or retirement intent. No contemporary research explores gender differences in RN retirement planning processes. The omission of gender studies in RN retirement is a concern with the current RN workforce demographics. As retirement benefits have been suggested as a retention strategy, it is imperative to ascertain retirement preparation needs. Therefore, the purpose of this study was to ascertain whether gender differences exist in future time perspective, retirement goal clarity, self-rated knowledge of financial planning for retirement, and retirement planning activity level among employed U.S. RNs.

This study utilized a cross sectional design with a convenience sample of 706 employed RNs. Hershey, Jacobs-Lawson, McArdle, and Hamagami's Retirement Planning Preparation Questionnaire was used to assess retirement preparation through online survey methods. Hershey's Conceptual Model of the Factors that Influence Investor Behavior served as the theoretical framework for this study.

Using analysis of variance statistical methods, the resulting sample demonstrated no statistical difference for gender in both future time perspective [F (1, 688) = .328, p = .567, partial eta = .000] and retirement goal clarity [F (1, 685) = .001, p = .971, partial eta = .000]. However, there was a statistical significance for gender in both self-rated knowledge of financial planning for retirement [F (1, 690) = 6.418, p = .012, partial eta = .009] [mean males = 4.76; females = 4.30], and retirement planning activity level [F (1, 662) = 9.53, p = .002, partial eta = .014] [mean males = 3.88; females = 3.34], indicating male RNs are more active than their female RN counterparts in these certain domains of retirement planning. Administration and nursing leadership should be aware that further assistance is needed for both male and female RNs in clarifying retirement goals. Female RNs may require more education and direction in financial planning than their male counterparts. Future studies should investigate the impact of financial education on retirement planning for both male and female RNs.

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◀ ▶ go to PG.

NURSES' HEALTH

Nurses' Scraps: What Do They Tell Us?

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Purpose: The purpose of this IRB-approved study was to describe the content of nurses' handwritten notes (scraps) used for patient care and handover report.

Background: Prominent organizations including the Joint Commission, World Health Organization, and the Agency for Healthcare Quality and Research also have published standards and recommendations on improving handover communication among healthcare providers. Standardizing the content of handover has been a common strategy to improve patient safety. In a qualitative study, nurses' handwritten notes were found to be dynamic and played a significant yet undocumented role in the delivery of care Hardey (2000). Nurses used handwritten notes because of perceived inadequacies of organizational documentation systems. Much remains unknown about what nurses' perceive as important information worth writing down.

Methods: This descriptive, cross-sectional study was conducted in a non-profit community hospital located in Southern California. A convenience sample of registered nurses with inpatient assignments was invited to voluntarily submit their written notes through an information letter. Submission of notes indicated consent to participate. These notes were not part of the patient's medical record. Scraps and a demographic information sheet were collected in a sealed envelope over a 24-hour period. No participant identifying information was requested.

Results: A sample of 103 RNs submitted their "scraps" for analysis. The majority of participants were female (83%), BSN prepared (75%), with a mean age 38, and mean RN experience of 10 years. Participants wrote on both sides (56%), and customized with > 1 color/type of writing implement (41%), emphasis (87%), and symbols (100%).

Ninety-nine percent (99%) of report sheets included the patient's name with 55% being handwritten. Fifty-one percent (51%) included account numbers and date of birth as second patient identifiers. Patient room numbers were handwritten on 70% of report sheets. From 78% to 92% of report sheets included some form of systems review (i.e. neuro, cardiac, pulmonary, etc.). A high percentage (≥ 90%) of report sheets included handwritten patient history, medications, vascular access, test results, tasks, and plan of care. Although some of the above items were commonly handwritten on report sheets, safety information, with the exception of allergies (88%) and vital signs (75%), was not. Isolation status (48%), fall risk (38%), hospital-acquired pressure ulcer risk (8%), other risks (20%), and vaccine status (12%) had low percentages of handwritten presence on report sheets.

Implications: Nurses' scraps are context-specific, customizable, and contain emphasized information. Although nurses commonly handwrote patients' background, assessment, and plan of care information, safety-related information was not present. These findings should inform additional studies on: 1) exploration of an electronic handover tool, nursing satisfaction, and handover time, and 2) examining the relationship between a standardized handover process and patient safety events at change of shift.

◀ ▶ go to PG.

High Acuity & Med-Surg Unit Compassion Fatigue, Satisfaction, and Burnout

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Background: Nursing is a caring, compassionate profession and these characteristics plus professional knowledge and skill are associated with good patient care as well as hospital patient satisfaction. Conversely, high levels of burnout and work related stress are associated with poorer patient care and lower hospital patient satisfaction. The Professional Quality of Life scale (ProQOL) is a standardized instrument measuring three discrete dimensions associated with nursing practice: Compassion Satisfaction**,** Burnout, and Compassion Fatigue (Stamm, 2005).

Purpose: The purpose of this study was to measure the level of compassion satisfaction, burnout, and compassion fatigue among high acuity and medical surgical units in a level one trauma hospital and to compare these results with published results from a level two trauma hospital using standardized low, medium and high levels cutoffs.

Methods: Demographic and ProQOL data were collected from a cross sectional convenience sample of 5 units (N=48) following approval from human subjects review. Surveys were anonymous. Data were entered into SPSS 22 and analyzed for results

Results: Results from this study were compared with the Hooper et al. 2010 study. Space here prevents detailed comparisons but they will be presented at WIN. This study sample had 22 medical surgical and 26 high acuity unit participants. Eighty percent of the high acuity unit staff were female compared to 63% of the medical surgical unit; while a third of the high acuity unit staff were under 30 compared with 50% of the medical surgical units. Day night shift responses were about even for both groups while 75% of the medical surgical staff had worked for four or less years compared with a little more than half the high acuity staff. Due to sample size and data distribution Mann Whitney U was used to compare high acuity and medical surgical unit results. There were no significant differences between the two types of units on any of the three dimensions; or between day and night shift; male compared with female, and time on the unit. Thirty percent of the high acuity and 50% of the medical surgical group had high compassion satisfaction levels while 25% of each had high satisfaction fatigue levels. While high levels of burnout were similar across all groups, including those in the Hooper 2010 study, the level 1 trauma hospital high acuity units had 20% more moderate burnout scores at 75% of the sample. The level 1 trauma medical surgical unit satisfaction high level score was almost twice every other unit in both studies while moderate scores were similar across all units in both studies.

Implications: Stamm (2005) indicates high satisfaction and high fatigue are common in both types of units, high compassion fatigue scores for both level 1 trauma hospital units were 80%. High burnout scores are a more serious concern and can impact patient care and nursing staff retention: Results of this study and the Hooper et al. 2010 study suggest a systematic means of identifying, supporting and counseling may help retention and improve hospital nursing patient care.

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go to PG.

Resilience, Stigma and Barriers to Mental Health Care in Air Force Nursing Staff

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Purposes/Aims: The purpose of this investigation is to assess perceived stigma and barriers to accessing mental health services (MHS), stress, and resilience among Air Force (AF) registered nurses (RNs) and medical technicians.

Rationale/Background: These perceptions may influence the health and readiness of nursing personnel and the care they provide to military beneficiaries. The goal is to use study findings to develop and test intervention(s) that reduce stigma and barriers to care, decrease stress, and promote resilience. These findings may inform policy to encourage access to MHS, as well as, to assure the health of caregivers and improve the retention of personnel.

This study will extend preliminary work that assessed AF nursing personnel's perceptions of stigma and barriers to accessing MHS among active component AF RNs and medical technicians ($N = 211$).[1] Most of the sample agreed that *Members of my unit might have less confidence in me* and *My unit leadership might treat me differently*. RNs were significantly more likely than medical technicians to agree that accessing MHS would be embarrassing, harm their career, or cause leaders to blame them for the problem ($p \leq .03$ for each comparison). Getting time off from work for treatment and scheduling appointments were perceived as barriers by 41% and 21% of respondents, respectively. The authors concluded that the proportions of AF nursing personnel reporting concerns about potential stigmatizing consequences of seeking mental health care are substantial and are similar to ranges previously reported by military service members screening positive for mental health problems after deployment.

Methods: A descriptive comparative design will be utilized to investigate these perceptions with AF RNs and medical technicians stationed at three Medical Groups. The principal investigator (PI) has received the support of the Chief Nurse (CN) of each Medical Group to send an electronic memorandum to potential participants that includes; an invitation to participate, study information, and a uniform resource locator and instructions to complete the secure, anonymous electronic survey.

The PI will travel to each site to speak with available AF nursing staff and answer potential participants' questions. Supporting staff designated by each CN will e-mail the memorandum to potential participants at each location. Personnel who choose to participate will be asked to complete the survey which includes demographic items, the Britt and Hoge et al. Stigma scale, Hoge et al. Barriers to Care scale, Conner-Davidson-25 Resilience scale, and Perceived Stress Questionnaire. These scales have acceptable reliability and validity and have been utilized in past research with military personnel. The survey should take approximately 10-15 minutes for each participant to complete. The survey will be administered through the University of New Mexico Health Sciences Center Clinical Translational Science Center (UNM HSC CTSC) Research Electronic Data Capture (REDCap) program which allows participants to complete the survey through most electronic devices with internet access.

Data Analysis: IBM® SPSS® will be used to conduct the statistical analysis of the collected data.

Funding: This study is fully supported by the TriService Nursing Research Program (TSNRP Grant N14-P17).

Reference:

[1] Hernandez, S., Bedrick, E., & Parshall, M. (in press). Stigma and barriers to accessing mental health services perceived by Air Force nursing personnel. *Military Medicine*.

◀ ▶ go to PG.

OLDER ADULTS

HEART DISEASE MANAGEMENT IN OLDER ADULTS: THE CALIFORNIA HEALTH INTERVIEW SURVEY

Mo-Kyung Sin

POSTTRAUMATIC GROWTH AMONG OLDER ADULTS WITH SEVERE AGE RELATED MACULAR DEGENERATION

Corinna Trujillo Tanner

IMPACT OF A GROUP-SINGING PROGRAM ON OLDER ADULT HEALTH

Musetta Chang-Chi Fu, Basia Belza

EARLY LIFE STRUCTURAL RACISM EXPERIENCES & DIABETES SELF-MANAGEMENT IN OLDER AGE

K. Skrine Jeffers, L. R. Phillips, M. Heilemann, E. Thomas, S. Haley

CAM HEALTH LITERACY AND OLDER RURAL ADULTS

Jean Shreffler-Grant, Elizabeth Nichols, Clarann Weinert

◀ ▶ go to PG.

Heart Disease Management in Older Adults: The California Health Interview Survey

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Background: Heart disease is a leading cause of morbidity and mortality among non-Latino caucasians in the U.S. Perceived self-confidence of disease management in people with heart disease is essential for improved health outcomes. Health care providers play a pivotal role in assisting people with heart disease in order to implement and follow treatment plans.

Purpose: The purposes of this study are first to assess disease self-care confidence for non-Latino caucasions with heart disease, and second to assess the prevalence of healthcare providers who develop heart disease self-management plan with their patients, using a population-based study in California.

Methods: In this descriptive study, non-Latino caucasian adults (n=3,965,000) age 60-85 with a diagnosis of heart disease were drawn from the 2011-2012 the California Health Interview Survey, a population-based, cross-sectional random-digit dial telephone survey. Descriptive statistics were used to analyze the data.

Results: About 59% responded very confidently with heart disease self-management, 34% somewhat confidently and 7% not confidently at all. Approximately 79% of patients with heart disease reported their health care providers worked with them to develop heart disease self-management plan, however, only 30% of them had a written or printed copy of the plan.

Discussion: Although relatively high numbers of health care providers worked with their patients to develop heart disease self-management plan, not all of them implemented that plan. Considering the importance of the patient's self-confidence of disease self-management and health outcomes, more studies are needed to improve perceived confidence.

◀ ▶ go to PG.

OLDER ADULTS

Posttraumatic Growth among Older Adults with Severe Age Related Macular Degeneration

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Problem: Historically, scientific inquiry around Age Related Macular Degeneration (AMD) has focused on the many ways in which the condition is disabling and is a catalyst of negative outcomes. This has propagated the idea of impending limitation. Post Traumatic Growth (PTG) is a term which describes growth and benefit beyond what an individual experienced before a loss or trauma.

The goal of this study is to measure and describe the extent to which individuals who have vision loss caused by AMD, perceive personal benefits, including changes in perceptions of self, relationships with others, and philosophy of life, accruing from their attempts to cope with their vision loss.

Background: AMD is the leading cause of irreversible blindness worldwide and affects older adults. Many losses accompany the onset of visual impairment, including loss of mobility and driving privileges, difficulty with activities of daily living and visually intensive tasks, such as reading, social isolation and increased risk of injury. There is a general consensus that the negative impact of AMD is profound

The concept of growth as a result of the struggle with blindness has escaped inquiry. Current research reveals that, even with complete acknowledgment of the undesirability of trauma and loss due to life events, “the process of enduring and learning from negative life events can offer a reward that has never before been encountered”, a change which for some people is deeply meaningful.

Specific Aims: Aim 1) to measure and describe the extent to which PTG occurs in a sample of older adults experiencing vision loss caused by AMD **Aim 2)** to discover the demographic correlates of PTG in this sample **Aim 3)** to use semi structured, qualitative interviews to better understand the experience of the struggle with vision loss and how it led to growth among older adults with severe AMD, and to highlight exemplars who have achieved this growth.

Methods: This descriptive and correlational study will use a mixed method approach and a cross sectional design. The data collection will consist of two phases. First an interviewer administered questionnaire comprised of the 21 item Post Traumatic Growth Inventory (PTGI) as well as demographic questions (*n=100)*. Next, in depth, semi structured interviews will be conducted among the 10 highest scoring individuals who score positively on the PTGI, to be used as exemplars to highlight the experience of achieving growth as a result of the struggle with visual impairment.

Results: Forthcoming.

Significance/Relevance to Nursing Practice: By considering and understanding not only the physiologic and symptomology aspects of AMD, but also the psychological and social potential of our patients, nurses achieve their goal of practicing patient centered care. The results of this study, whether positive or negative will help to illuminate and situate patients with AMD in a broader context.

Nurses, whether acting as the primary care provider, psychiatric provider, or in other capacities with patients with AMD are a critical part of the patients sociocultural environment. By recognizing patients’ potential for growth, nurses may actually facilitate the growth itself.

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◀ ▶ go to PG.

Impact of a Group-Singing Program on Older Adult Health

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Background and Purpose: Participating in group-singing may be beneficial to promoting healthy aging through engaging in active music-making activities and breathing exercises. The purposes of this study were to: 1) evaluate the impact of a group-singing program on older adults' cognitive function, pulmonary health, and quality of life (QoL); and 2) determine the program's feasibility.

Methods: We are using a pre and post-test quasi-experimental design to evaluate the impact of a group-singing program on older adult health. Developed by the investigator, the intervention was a 75-minute/week for 12 weeks, group-singing program. The program consists of pre-singing exercises, song-singing and learning, and socialization. Inclusion criteria are age ≥ 60, no diagnosis of dementia, and being able to hear conversations within 2 feet. Older adults were recruited from 3 senior living communities in the Pudget Sound area. Outcome measures includes lung function, cognitive function, QoL, and program feasibility and receptibility. Cognitive function is measured with Verbal Fluency Test (VFT), CERAD 10-Word Recall Test (WRT), and Trail Making Tests (TMT A & B forms). A portable spirometer and a digital respiratory pressure meter are used to evaluate pulmonary function and respiratory muscle strength. The CASP-19 questionnaire measures QoL. Program feasibility and acceptability will be evaluated with a study exit survey. A paired t-test with 2-sided alpha level at 0.05 will be used to test the null hypotheses**,** while linear regression will be used for exploratory analysis.

Preliminary Results: Forty-nine adults were enrolled (mean age 83.5 ± 6.3; range: 63-96); 39 (80%) were female and 40 (82%) reported one or more chronic health conditions. The current retention rate is 82%: 9 participants dropped due to deteoriating health, schedule conflicts, measurement burdens and expection discrepancy. Five participants were not within the age range (age>90) for current FEV1 referenced values, and one refused pulmonary testing. Three participants with macular degeneration could not complete the TMT. Baseline mean results were: FEV1 was 91% ± 30% (range 50%-193%); female maximum inspiratory pressure (MIP) was 33.53 mmH2O ± 15.14 (range 4-65); male maxium expiratory pressure (MEP) was 50.58 mmH2O ± 17.35 (range 7-89); male MIP was 64.60 ± 21.19 (range 33-100); male MEP was 71 ± 31.73 (range 32-131); mean VFT was 62.76 ± 17.22 (range 26-105); WRT was 18.37 ± 4.48 (range 10-26); TMT-A was 53.02 ± 20.12 (range 26-120); TMT-B was 140.78 ± 73.56 (range 57-300); and CASP-19 was 44.67 ± 5.27 (range 32-55). Forty of the 49 participants have completed the program. Data collection is in process with 9 participants finishing by December, 2014. Post-program data will be available March 2015.

Conclusion/Implications: Most of the participants have healthy lungs. Baseline results of cognitive function tests and QoL are comparable with norms, although variations among the participants were observed. Good retention rate implies the program is well-accepted. In the future, researchers need to re-consider measures used due to sensory declines in this population.

Funding: ARCS® Foundation Seattle Chapter; NCATS Grant TL1 TR000422; Hester McLaws Nursing Dissertation Scholarship; Aljoya Endowed Professorship in Aging.

go to PG.

Early Life Structural Racism Experiences & Diabetes Self-Management in Older Age

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Purposes/Aims: To develop a framework for understanding the ways in which the self-management behaviors of African American older adults with uncontrolled type 2 diabetes mellitus are influenced by the structural racism-related experiences that they have encountered throughout their lives.

Conceptual Basis: This study was sensitized by four concepts: symbolic interactionism, social determinants of health, life course perspective, and structural racism.

Methods: This study is using a constructivist ground theory (CGT) methodology. Through the use of focus groups and individual interviews, CGT provides a systematic means for data collection, analysis and theory generation, and acknowledges that the participant and researcher are co-constructing the data. In addition, photo elicitation is being used to generate recall of events experienced from the participants' early years through older age. Photos from events that affected African Americans in several regions of the country were selected.

Results: In-progress.

Implications: Mullings described an "emancipator knowing nursing perspective", which provides guidance on how to critically examine hidden ideologies and assumptions in social structures, and to challenge what is known. Emancipatory knowing seeks to discern underlying, more invisible problems that are fundamental to the more obvious and visible problems. This study will lay the groundwork for the development of deep structural, community-based, nurse-led, culturally-tailored interventions. It will deepen our understanding of the underlying factors that contribute to health disparities among African American seniors with type 2 diabetes.

◀ ▶ go to PG.

CAM Health Literacy and Older Rural Adults

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Purpose: The purpose of this presentation is to describe a project to improve health literacy about complementary and alternative therapies (CAM) among older rural adults through development, presentation, and evaluation of two education modules.

Background: In a series of projects conducted with older rural dwellers, this team of investigators demonstrated that older rural adults, particularly those with chronic health conditions, used as much or more CAM as urban adults. Further, CAM was often self-prescribed and that individuals learned about these CAM practices or products through word of mouth from friends and relatives, consumer marketing, or reading popular literature. Some used CAM in an inconsistent manner and did not have a clear understanding of what the CAM was intended to do, thus underscoring the need for an education project.

Methods: Two education modules: a) health literacy and CAM, and b) electronic health information seeking will be presented to a group of older adults at a Senior Center in one Montana rural community. One module will be presented face to face and the second by webinar. Participants will complete a pre-program instrument packet containing demographic questions and the MSU CAM Health Literacy scale and a post-program packet containing the MSU CAM Health Literacy Scale and questions to evaluate the content and delivery methods. Feedback will also be obtained from the Senior Center Director and local Librarian.

Results: The outcome of the education program will be reported including any changes in CAM Health Literacy and satisfaction with and acceptability of the content and delivery methods. Of particular interest is the acceptability of using a webinar format for presentation of one of the modules.

Implications: There is an urgent need to promote health literacy about CAM among older rural adults. The independent nature of rural dwellers, scarcity of health care resources in rural areas, prevalence of chronic health conditions among older rural adults, a general lack of knowledge about CAM, and concern with the quality of available information about CAM make it critical that older rural consumers have sufficient health literacy about CAM. Adequate CAM health literacy is essential to understand associated risks and benefits so that informed health care choices can be made.

Funding: National Network of Libraries of Medicine Pacific Northwest Region Express Outreach Award.

◀ ▶ go to PG.

ON THE IMPORTANCE OF STORYTELLING IN NURSING

OVERVIEW: ON THE IMPORTANCE OF STORYTELLING IN NURSING

Audrey Russell-Kibble

STORYTELLING TO SUPPORT NURSES EXPERIENCING WORK-RELATED BEREAVEMENT

Brittany Abeln, Audrey Russell-Kibble

COMPASSION FATIGUE: UNDERSTANDING THROUGH STORY-TELLING

Kate G. Sheppard

STORY AND WELLBEING IN REGISTERED NURSES

Jennifer L. Reich

go to PG.

ON THE IMPORTANCE OF STORYTELLING IN NURSING

Overview: On the Importance of Storytelling in Nursing

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The purpose of this symposium is to provide an overview of the importance of story (sharing and telling) in the nursing profession. There was a time when nurses gathered in the break room to share stories. Stories would be told time and again, and renewed with the telling. As health care systems have become more complex the importance of the ritual of storytelling and providing time for this activity is not always supported and in many cases may be completely overlooked. Storytelling is foundational to the community of nurses to form meaningful relationships with peers and to provide opportunities to engage mentors. It is essential that nurses tell their stories: it is through the sharing of their stories about their professional lives that builds nursing community.

The importance of storytelling in nursing is supported in the literature. Nurses in all practice sites and from all levels of education engage in and benefit from sharing the stories of their caregiving experiences. Encouraging nurses to take time to tell their stories has far reaching possibility for nurse retention, for nursing job satisfaction, and for nurses pursuing further education.

The first presentation in this symposium describes a best practice model for nurses experiencing work related bereavement with storytelling as the cornerstone of the model. The second presentation describes research with nurses experiencing compassion fatigue and how understanding of the process is supported through storytelling. The final presentation describes qualitative research conducted on the use of story and story sharing/telling in nursing practice and its' contribution to nurse wellbeing.

◀ ▶ go to PG.

ON THE IMPORTANCE OF STORYTELLING IN NURSING

Storytelling to Support Nurses Experiencing Work-Related Bereavement

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Purpose: Describe storytelling as a method to support nurses who are experiencing work-related bereavement following the death of a patient.

Background: The death of a patient is a universal experience for nurses. An absence of support for nurses experiencing work-related bereavement places them at considerable risk for complicated grief. Complicated grief effectually increases stressors, promotes maladaptive coping and can lead to resignation from the profession. Storytelling has been empirically demonstrated to provide significant support to nurses experiencing work-related bereavement.

Brief Description of Approach to Best Practice: Review of the literature in PubMed was conducted using the keywords: *nurses, death, patient death, attitudes, nurses' response*, *storytelling* and *dying*. The primary investigator's experience of volunteering in a bereavement support group brought awareness of a gap in support for nurses experiencing work-related bereavement that resulted in this best practice model. Casual dialogues occurred with nurses regarding current support available to them and the nurses' preferred methods of grief support. Input was obtained from experts in grief work who use storytelling as a preferred mode for support.

Outcomes: The project resulted in a best practice model to support nurses experiencing work-related bereavement, utilizing storytelling as the main method of support. The model stems from empirical findings in the literature, and utilizes peer-supported storytelling in a group setting as a primary preventative measure. A handout provided to each nurse at the beginning of the story-telling sessions encourages nurses to supplant their storytelling through journal writing and poetry.

Conclusions: The proposed best practice model to support nurses experiencing work-related bereavement through storytelling is expected to reduce possible stressors, prevent maladaptive coping, and promote nurse retention in hospitals. Storytelling is an evidence- based method of supporting nurses in their work-related bereavement. As a support measure, storytelling works to prevent complicated grief thereby producing the best possible outcomes for nurses.

◀ ▶ go to PG.

ON THE IMPORTANCE OF STORYTELLING IN NURSING

Compassion Fatigue: Understanding through Story-Telling

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Purpose: Describe how story-telling helped nurses to recognize compassion fatigue, and feel validation from hearing the stories of others.

Background: Story-telling has been shown to calm and heal the story-teller, and often exerts a positive effect on the listener. This technique can be helpful in the classroom with students, and in patient education. Story-telling exemplifies the art of nursing, and provides a holistic means of understanding illness and health experiences. While nurses are often the listeners in story-telling, nurses can learn from each other through story-telling; in fact, story-telling provides a safe and meaningful method of sharing experiences and validating feelings. Many nurses are reluctant to admit to having any symptoms of compassion fatigue, as even the term can be perceived as stigmatizing.

Method: Learning modules, story-telling, and journaling. Graduate nursing student volunteers (N=59) were presented with 10 learning modules over 10 weeks; learning modules described symptoms of compassion fatigue, including burnout and secondary traumatic stress. In an attempt to reduce the stigma of compassion fatigue, many of the modules contained videotaped stories told by expert nurse leaders and educators, who narrated their own stories and experiences of compassion fatigue. Students submitted weekly journals describing their reactions to the stories told by the expert nurses, and then described their own emotional triggers and physical or mental symptoms of compassion fatigue.

Results: At the beginning of the research study, the majority of volunteers self-described themselves as having no symptoms of compassion fatigue. Furthermore, most volunteers described compassion fatigue as something that happens to “other nurses”, “weak” nurses, “emotional nurses”, but will “never happen to me”. After watching the first nurse expert tell her story about compassion fatigue, about 33% of the volunteers admitted to having similar feelings or experiences shared on the video-tape. Still the majority of the sample felt different from the expert: “better equipped to handle the stress”, “tougher than she is”, “know how to prevent it better than she did”. There was little change after watching the second nurse expert tell her story. After the third nurse expert (also the primary investigator) shared her story with compassion fatigue, the nature of the student journals changed significantly. The great majority of student volunteers began to identify feelings of emotional distress and symptoms of compassion fatigue. Volunteer comments included: “listening to your story made me feel it was OK to say I have compassion fatigue”, “thank you, your story was so validating to me”, and “if someone like you could have compassion fatigue, then it really could happen to anyone.”

Implications: Story-telling can be therapeutic for the teller and the listener, especially as a means to validate feelings or experiences. Situations or interactions in the clinical setting can leave a nurse feeling vulnerable, afraid, sad, or distressed; unfortunately those feelings can often be followed by guilt or shame. Hearing a story from a peer, colleague, or respected leader in which a similar feeling or experience is shared, can help to reduce the guilt or shame and even validate the feelings.

Funding: Foundation of the American Association of Nurse Practitioners.

◀ ▶ go to PG.

ON THE IMPORTANCE OF STORYTELLING IN NURSING

Story and Wellbeing in Registered Nurses

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Purpose: The health and wellbeing of nurses is essential to reducing burnout and turnover in our profession. Story as a potential self-care strategy has the potential to promote health and wellbeing among nurses, which may increase satisfaction and decrease turnover. Therefore, the purpose of this study was to: 1) describe the use of story and story sharing/telling in nursing practice, and 2) describe how story contributes to the nursing workplace.

Background: Although story is a healing strategy often seen in practice, story is not typically recognized as a method for self-care. Therefore, nurses may not be aware they are using story or that they could use story as a self-care approach. More research was needed to determine the potential of story to promote wellbeing in nurses.

Method: A qualitative descriptive approach was used as method of inquiry and analyzed using qualitative content analysis. Thirteen registered nurses who responded to a recruitment letter posted and/or an email were interviewed for this study. All participants were informed of their rights as participants and signed a University of Arizona Institutional Review Board (IRB) approved consent form prior to participation Participants ranged in age from 29 to 66 years with an average age of 48.9 years. Experience level ranged from 1- 42 years of nursing with an average of 23.5 years of nursing experience. The participants represented a range of nursing specialties and educational levels from ADN (n=2), Diploma (n= 1) BSN (n=5), Masters (n=4) to doctoral preparation (n=1). Six of the 13 nurses were staff nurses in an acute care setting. The remaining seven nurses were comprised of a unit manager, case manager, advanced practice nurse, home healthcare nurse, professional practice specialist and a clinical leader. All participants were female.

Findings: Findings revealed that stories are inherent in the practice of professional nursing. Nurses share a common bond and connection through sharing stories about the nursing profession. This connection spans generations, care settings, specialty, levels of education, training and experience. Nurses also use story as a way of remembering and processing information and to teach and mentor each other through the experiences they encounter in work settings. This sharing on the job and outside of work settings is more memorable and valuable to nurses than what they learn in the classroom or through textbooks and case study presentations.

Conclusions: Story creates ease for nurses through validation of shared human experience. When an individual feels heard, both the storyteller and listener benefit from the understanding that is gained from the exchange. Time was the greatest barrier to this exchange within nursing practice. Nurses believe that there is a limited amount of time due to the complexity of the work environment, demands on their time, and current structure of the healthcare system.

◀ ▶ go to PG.

◀ ▶ go to PG.

ONCOLOGY

CANCER SURVIVORSHIP CONNECTIONS: INTERPROFESSIONAL RESEARCH COLLABORATIONS

Elizabeth A. Reifsnider, Noel Arring, Teri Pipe, Teresa Connolly

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ASSOCIATION OF MITOCHONDRIAL DYSFUNCTION WITH CANCER-RELATED FATIGUE

Kristin Filler, Leorey Saligan

SUPPORTIVE CARE NEEDS AND RESOURCE ASSESSMENT OF CANCER PATIENTS

Julie McNulty, Sunny Kim, Linda Larkey, Scott Leischow, Edna Ramos

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RACIAL DIFFERENCES IN COLON/PROSTATE CANCER SCREENING BETWEEN LATINOS AND WHITES

Sunny Kim, Ramesh Thakur, Julie McNulty

TRANSITION AFTER BREAST CANCER TREATMENT: IMPLEMENTING SURVIVORSHIP CARE PLANS

Susan Hope Klein, Shelley Hawkins, Pushpendu Banerjee, James Sinclair

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PREVENTION CARE MANAGEMENT TO IMPROVE LATINA’S COLORECTAL CANCER SCREENING

Echo L. Warner, Julia Bodson, Maria Borrero, Djin Lai, Deanna Kepka

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PROSTATE CANCER SCREENING BEHAVIORS IN AFRICAN-AMERICANS AND THEIR PARTNERS

Angela James, Magda Shaheen

LONELINESS, PHYSICAL AND PSYCHOLOGICAL DISTRESS IN LATINA CANCER SURVIVORS & PARTNERS

Terry Badger, Chris Segrin, Ana Maria Lopez

◀ ▶ go to PG.

ONCOLOGY

Cancer Survivorship Connections: Interprofessional Research Collaborations

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Purpose: The goal of this presentation is to describe the creation of an academic/clinical interprofessional partnership (Cancer Survivorship Connection) focused on advancing the care of the cancer survivor and alleviating symptoms and promoting health. The goal of the partnership is to build collaborations around patient-centered research for cancer patients between the clinical partner and academic partner.

Rationale/Background: The beginning of the partnership was a meeting where we shared our research and clinical interests. The next meeting was focused on creating an inventory of current projects going on in each group and defining priorities and joint projects. The goal for all the meetings and collaborations has been to alleviate the suffering of all cancer patients by a focus on universal "survivorship" which includes incremental efforts to aid cancer recovery, improve the delivery of survivorship care, and support of cancer caregivers. In addition we propose research and clinical community programs to decrease the burden of cancer through primary prevention, interventional prevention in high risk groups, and earlier detection. Through such mutual collaborations it is possible to advance the care of cancer survivors once therapy is concluded and they are 'cured'. But in many cases their lives are forever changed and an interdisciplinary partnership is needed to address their needs.

Description of Best Practice: We have conducted quarterly meetings of the entire group with frequent meeting of the sub-groups. In each of the large meetings we did careful examination of strengths and weaknesses with both institutions. All meetings were non-hierarchical with all input valued and were conducted at mutually convenient locations. We collaborated on all aspects of cancer survivorship from community support to individual care.

Outcomes: We identified opportunities in collaboration around Cancer Survivorship Science, Cancer Prevention, Cancer Recovery, and Cancer Caregiver with each of the 4 areas of emphasis including both academic researchers and clinical practitioners and researchers. We are designing a seamless assessment and navigation protocols from therapy plan with identified patient educational needs, through recovery and wellness plan with attention to individualized special needs and consultations. We are conducting a gap analysis with women received radiation therapy; gaps to be indentified include symptom mgmt, supportive care, and integrative healthcare. We have developed a mobile health application to self-record physical activity, sedentary behavior, sleep and other activities to promote self-care. App is BeWell24 and goal is for patient to share results with provider if desired. The clinical partner has planned a dedicated space with focus on Cancer Patient Experience that integrates physical medicine and rehabilitation, integrative medicine, breast care, patient experience, caregiver lounge all connected by the Cancer Survivorship connection. Two funded studies from partnerships created through the Connection; one focused on quality of life issues of cancer survivors and the other on needs (gap analysis) of community-resources and care for cancer survivor.

Conclusions: Creating a mutually supportive and equal partnership between academic and clinical partners involves obtaining support from highest level of administration. Ensuring that funded researchers are involved and committed also is needed to provide strength to the partnership.

◀ ▶ go to PG.

Association of Mitochondrial Dysfunction with Cancer-Related Fatigue

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Aims: To describe changes in levels of mitochondrial function enzymes and cancer-related fatigue before and after completion of external beam radiation treatment (EBRT) in men with non-metastatic prostate cancer (NM-PC).

Background: Cancer-related fatigue (CRF) is a common and distressing symptom reported by cancer patients. CRF is poorly understood and is often thought to stem from central and peripheral mechanisms, involving neural and muscular mediators, respectively. Mitochondria's role in neural and muscular dysfunctions may explain the biologic underpinnings of CRF. This novel, exploratory study is the first to investigate the association of mitochondrial dysfunction with CRF.

Methods: Participants were enrolled in an active, IRB-approved National Institutes of Health protocol (NCT# 00852111). Self-reported fatigue was assessed using the Functional Assessment of Cancer Therapy–Fatigue subscale (FACT-F). Subjects were grouped into high fatigue (HF) and low fatigue (LF), determined by a >3-point decrease in FACT-F score from baseline to end of EBRT, a change considered clinically-relevant. Central mediators of CRF were measured by Computerized Assessment of Mild Cognitive Impairment (CAMCI). Physical mediators of CRF measured maximum voluntary contraction (MVC) and decay using handgrip dynamometry. Peripheral blood was obtained to detect mitochondrial electron transport chain enzyme complexes (complexes I-IV; 1 kit for each complex) from cell lysates and mitochondrial antioxidant, manganese superoxide dismutase (SOD2) from sera using enzyme-linked immunosorbent assays (ELISA). All measures and peripheral blood were obtained at baseline and completion of EBRT. Nonparametric Wilcoxon rank-sum, Wilcoxon signed-rank tests, and paired *t*-tests were used to analyze the changes of study variables between baseline and completion of EBRT. Estimated correlations among mitochondrial biomarkers and fatigue were calculated using Spearman's rank correlation coefficients.

Results: Fatigue scores of 12 men significantly decreased from baseline to completion of EBRT. Complex II and IV ELISA results were undetectable. There were no significant changes in the mean optical densities of complex I, III, and SOD2 enzymes or in central and peripheral mediators from baseline to end of EBRT. A trend in the change in complex I and III enzyme concentrations were different between the fatigue groups. Handgrip MVC trended towards significance at end of EBRT, where LF subjects had higher MVC than HF subjects. There were no significant correlations with mitochondrial enzymes and handgrip strength. For the group as a whole, correlations at treatment completion were observed for: mitochondrial complex III and attention (r=0.90, p=0.02), mitochondrial Complex III and memory (r=0.75, p=0.08), and mitochondrial Complex I and Total CAMCI Score (r=0.68, p=0.06).

Implications: The study findings suggest that mitochondrial dysfunction during EBRT may induce mental fatigue, not physical fatigue. Knowing relationships between mitochondria and fatigue have clinical implications: understanding specific mitochondrial functions that are associated with mental fatigue is informative in understanding the etiology of CRF; understanding specific molecules related to mitochondrial function enzymes that are correlated with mental fatigue can serve as interventional targets; and identifying potential interventional targets for CRF can assist in developing effective therapies and management for CRF.

◀ ▶ go to PG.

ONCOLOGY

Supportive Care Needs and Resource Assessment of Cancer Patients

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Purposes/Aims: The purpose of this exploratory/descriptive and mixed methods study is to investigate the unmet supportive care needs, and levels of social support and distress, in adult patients who are receiving or who have recently completed treatment for cancer. More specifically, we are determining the patterns of supportive care needs, and examining predictors such as demographics, socioeconomic status, ethnicity, cancer type, social support and personality type.

Rationale/Conceptual Basis/Background: Cancer is the second most common cause of death in the US, with approximately 1.6 million new cases diagnosed and 580,350 deaths each year. A cancer diagnosis frequently causes patients an emotional trauma, which may be exhibited by increased feelings of vulnerability, loss of control, and uncertainty. Psychosocial and emotional distress is a significant problem in one-third to one half of all cancer patients, yet only about 10% receive any psychosocial therapy. Ignoring distress can lead to decreased quality of life (QOL), poorer health behaviors and decreased immune function, contributing to poorer disease outcomes. Cancer treatments lead to a number of health complaints and symptoms, and increased stress and fatigue are common. When patients receive psychosocial support from their social networks and healthcare providers (HCPs), they are better able to manage the effects of cancer and cancer treatment. Understanding the needs of cancer patients is necessary to provide the best possible support and ensure associated outcomes.

Methods: Patients currently receiving treatment for cancer, or who had completed treatment within 6 months were recruited from ambulatory care clinics at the Mayo Clinic Arizona. Questionnaires included the Supportive Care Needs Survey (SCNS), the PROMIS Global Health Scale and Social Support measures, a Supportive Care Needs Preferences Assessment, and a brief, Personality Inventory. A subset of participants was invited to participate in an in-depth interview. This paper focuses on the findings from the quantitative arm of the study.

Results: To date, 56 participants have completed study questionnaires. The sample includes 11 different diagnostic categories, with the most common being breast (64.3%), colorectal (10.7%) and lymphoma (5.4%). The mean age is 64.39 (SD=14.41), 83.9% are female, 78.6% are non-Hispanic White, 26% have completed a graduate degree, 55.4% are married, 48.2% are not employed, and 37.5% have more than 80K income. The proportion of the sample undergoing active treatment is 46.8%, and 35.8% have completed treatment. Preliminary findings show that the highest level of need is in the physical and daily living needs domain, followed by psychological needs.

Implications: The study is part of a unique collaboration among Arizona State University, the Mayo Clinic, and the Cancer Support Community. There is a need to integrate supportive care services within the cancer centers and to inform HCPs and system leaders of the extent of the needs, and the kinds of services that are most needed by the patients. Nurses are in pivotal roles to ensure that supportive care needs are met. The study will inform future intervention design and development. Resources provided in this area ultimately will help the cancer patient achieve optimal well-being and improve QOL.

◀ ▶ go to PG.

Racial Differences in Colon/Prostate Cancer Screening between Latinos and Whites

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Purposes/Aims: To examine racial differences in colorectal and prostate cancer screening rates between Latino Americans and non-Hispanic Whites and the associations with healthcare providers' recommendations for colorectal and prostate cancer screening tests.

Rationale/Conceptual Basis/Background: Prostate and colorectal cancer are most common causes of mortality among American men. Research shows that most of the burden associated with incidence and mortality is shared by the minority populations. The factors associated with this share of burden include age, socioeconomic status, education, and health insurance coverage. In addition, lack of awareness and communication with a healthcare provider, are key barriers for cancer screening. Cancer fatalism has been shown to be a barrier to screening in Latino men.

Methods: Using the 2014 Health Information National Trends Survey, we conducted logistic regression to examine racial difference in whether the respondent (1) had ever had tests to check for colon cancer, and (2) had ever had a PSA test. Sociodemographic variables (e.g., age, education, health insurance coverage) and other associated factors (e.g., communication with healthcare providers about screening, cancer fatalism) were included in the model to understand their relationships with the outcomes.

Results: The sample included 203 male Latino Americans (LAs) (M age=51.80, SD=15.49) and 874 male Non-Hispanic Whites (NHWs) (M age=56.25, SD=16.15). Comparing groups, LAs showed lower colorectal (13.8%) and prostate cancer screening rates (12.8%) than NHWs (79.8%, 83.1% respectively). Controlling for sociodemographic and other associated factors, the findings suggested that both groups were more likely to have had a PSA test when healthcare providers ever talked about PSA test with participants (OR = 2.33; $p < .001$). Communication with healthcare providers about colorectal cancer screening was not significant for both groups.

Implications: Findings suggest an urgent need to increase colorectal and prostate cancer screening rates in Latino communities. Research shows that the quality of the communication regarding the PSA test with healthcare providers is critical for designing effective interventions to increase prostate screening rates. A different profile was found for colorectal cancer screening, which suggests other factors may be more important to explore for interventions to increase colon cancer screening. Nurses can benefit from a greater understanding of the factors that contribute to cancer screening in the Latino Male population, and play a vital role in the cancer screening process, contributing to effective health teaching and proactive communication with patients to increase screening rates.

◀ ▶ go to PG.

Transition after Breast Cancer Treatment: Implementing Survivorship Care Plans

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Purpose: The purpose of this evidence-based practice (EBP) project was to incorporate a treatment summary and survivorship care plan (TS/SCP) for women completing adjuvant treatment for breast cancer in a community-based oncology practice that will enhance their knowledge and satisfaction with care.

Background: Over the last three decades, advances in screening, diagnosis, and treatment have created an evolution in cancer care. In the United States it is estimated 12 to 14 million people, 4% of the population, are survivors of cancer. Breast cancer survivors are a prominent subset, accounting for nearly 2 million survivors. The 2006 Institute of Medicine report; *From Cancer Patient to Cancer Survivors: Lost In Transition,* identified survivorship as a distinct phase in the trajectory of cancer care and called attention to the significant gaps in the provision and coordination of care to this population. TS/SCP are a tool designed to improve outcomes, bridge the knowledge gap, decrease fragmentation of care, and increase satisfaction in the post treatment phase of cancer care. TS/SCP's are incorporated into 43% of all National Cancer Institute (NCI) designated cancer centers. In the project facility, there was no TS/SCP in use with patients.

Practice Innovation Process: The purpose of this EBP project is for 80% of participants to increase their knowledge and satisfaction regarding breast cancer survivorship care. The database of a single office of a large community-based oncology practice in Southern California was queried to identify women who had completed primary adjuvant treatment for stage I-III breast cancer within the previous 12-months. Women were called and invited to attend a single, one-on-one survivorship visit with an Oncology Nurse Practitioner. A personalized TS/SCP was developed using the *Journey Forward Care Plan Builder.* Knowledge was measured pre-visit using the Confidence in Survivorship Information tool (CSI). The women were provided with a copy of the NCI publication *Facing Forward: Life After Cancer Treatment.* The TS/SCP and publication were reviewed and related questions and concerns were addressed. Women were educated on risk reduction strategies. Follow-up visits and referrals were made based on identified ongoing issues. At the completion of the visit, knowledge was reassessed using the CSI and satisfaction was measured using the Patient Satisfaction with Cancer Care (PSCC) tool. The TS/SCP was updated and a final copy was provided to the patient and mailed to the primary care provider (PCP).

Outcomes: In progress. It is anticipated upon completion of this project that 80% of participants will have increased knowledge and satisfaction regarding breast cancer care

Conclusions: Preliminary data shows TS/SCP delivered in the context of a survivorship visit with a Nurse Practitioner consistently increases knowledge of all domains measured in the CSI tool. Satisfaction with the intervention was high. As with many education and wellness interventions, the Nurse Practitioner is uniquely qualified to support patients completing chemotherapy with curative intent as they transition to survivorship care. Furthermore, depending on payer mix, post treatment survivorship visits represent a potential revenue stream for a community-based oncology practice.

◀ ▶ go to PG.

ONCOLOGY

Prevention Care Management to Improve Latina's Colorectal Cancer Screening

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Purpose: Assess colorectal cancer (CRC) screening and the feasibility of the Fecal Immunochemical Test (FIT) for colorectal cancer screening among Latinas in Utah.
Background: Hispanics comprise 16% of the U.S. population, and 22% of Salt Lake County, Utah residents. In Utah, only 64% of Latinas have received appropriate CRC screening. Cancer is the leading cause of all-age mortality among Hispanics; among Latinas, CRC constitutes 10% of all cancer deaths in the United States. Few studies have looked at interventions to increase CRC screening among Latinas.
Methods: We initiated a Prevention Care Manager (PCM) led cancer intervention based on the CDC's PCM health educator model to identify Latinas who were eligible for breast, cervical, and/or CRC screening (N=205). All participants completed a pre- and post-intervention survey. Results of the pre-intervention survey are presented for participants who were eligible for CRC screening (N=95). A subset of participants who were overdue for CRC screening were provided with a home based FIT. R was used to calculate two-sided Fisher's Exact Tests for count data.
Results: The majority of participants who were age-eligible for a CRC screening were overdue (n=81, 85.3%). Those who were overdue for CRC screening were younger (50-59 years: 71.6% vs. ≥60 years: 28.4, p=0.01), and were more likely to report a high perceived likelihood of getting CRC (55.6%), compared to those who were up-to-date on CRC screening (21.4%, p=0.02). The top 3 barriers to CRC screening reported by overdue participants were: didn't know about CRC test (n=24), cost of CRC test (n=14), and have not had any CRC problems (N=11). Those with low acculturation (62.5%) and education (75.0%) were more likely to report 'didn't know about the CRC test' as a barrier than those with high acculturation (25.0%, p=0.02) and education (25.0%, p<0.01), respectively. Those who were employed were more likely to report cost as a barrier (85.7%) compared to unemployed participants (14.3%, p=0.03), whereas unemployed participants were more likely than employed participants to report 'haven't had any CRC problems' as a barrier (27.3% vs. 72.7%, p=0.04). Of the 27 participants provided with a FIT, all completed the test, and all felt the FIT was easy to use and reported they would use it again to screen for CRC. All participants said they felt reminders would help them be more compliant with CRC guidelines.
Implications: The majority of Latinas in our study were overdue for CRC screening. Barriers to CRC screening may be feasibly addressed with improved education on CRC screening guidelines and by utilizing low-cost, home-based FIT tools for low-income, uninsured populations. Latina's relatively high mortality from CRC makes them a priority population for improving CRC screening. Our study demonstrates that home based FIT tests may be a viable option to increase CRC screening among this vulnerable population.

Funding: Provided by the Utah Cancer Action Network.

◀ ▶ go to PG.

ONCOLOGY

Prostate Cancer Screening Behaviors in African-Americans and Their Partners

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Purpose: To determine the behavior and experiences of AA and their partners related to PC screening.

Background: Prostate cancer (PC) is the second leading cause of death of men in US. Literature reveals that the primary cause of increased mortality and morbidity from PC in African American (AA) men is the lack of participation in PC screening.

Methods: Cross-sectional study of 125 AA and their partners (52 women and 73 men) recruited at community health-fairs in LAC. Survey was used to collect information about age, education, personal and family history of PC screening, and PC screening behavior, access, emotional concerns, and myths. Data were analyzed using SPSS V22.

Results: The mean age of participants was 52.44 years (SD=12.36 years), 76% were AA; 39% had college/technical graduate school. Among the AA men, two (3%) had prostate cancer, 22% had family member/friend with PC, and 31% received PC screening' education. Both AA and their partners had similar screening' related behavior and it myths ($p>0.05$). Significant difference was found between AA and their partners in emotional concerns (people doing prostate exams are rude, having a prostate cancer screening is embarrassing for my loved one) ($p<0.05$).

Implications: AA men and their partners had similar PC screening related behavior but differ in their emotional concerns. Participants need more PC screening related education to make an informed decision regarding follow-up and treatment. The community settings assist nurses and other healthcare team members to change the dynamic by which health information is exchanged. Community nursing enables providers to evaluate compliance to teaching as well as to disseminate ongoing healthcare information using community events as a facilitator. A culturally and linguistically appropriate education program to increase awareness/participation in PC screening and clinical trials is needed for AA.

◀ ▶ go to PG.

Loneliness, Physical and Psychological Distress in Latina Cancer Survivors & Partners

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Purpose: The purpose of this paper will be to describe the associations between loneliness, emotional support, physical health and psychological distress among Latinas with breast cancer and their family support partners.

Method: The study uses a randomized clinical trial design testing telephone delivered 8-week counseling and educational intervention with four measurement points. All interventions and assessments are over the telephone. Participants are in the larger study for 6 months; however these data are selected from the baseline assessment.

Sample: Data from 115 Latinas with breast cancer and their family support partners were analyzed for this paper. The typical Latina with breast cancer was in her late 40's, married, had an education level of high school or less and incomes <$30,000. Most were Stage 2 and 3, with a chemotherapy or radiation after surgery. The family support partners were similar for demographic characteristics except slightly younger. Most family support partners were female first degree relatives, whether or not the Latina was married (21.6% mother, 21.6% spouse/significant other, 19.3% sibling, 13.6% daughter, 11.4% friend, 5.7% other, 1.1% son).

Results: Following predictions of the stress process model, there were significant associations ($p > .05$) between loneliness, emotional support, physical health, and psychological distress. Results showed that loneliness exacerbated, and emotional support minimized, the association between physical symptoms and psychological distress. There were strong significant individual-level effects for loneliness and emotional support on physical health and psychological distress for both the Latina cancer survivor and her family support partner. There was strong evidence that a partner's loneliness also worsened the psychological distress in the Latina survivors documenting the interdependence of cancer survivors and their family support partners.

Implications: Findings document the importance of a complete psychosocial history during the cancer experience and the role loneliness plays in health. Clinicians should expand the exploration of social support to also include loneliness to better decrease negative consequences to the health of the cancer survivor and her family support partner.

◀ ▶ go to PG.

◀ ▶ go to PG.

PAIN

PROVIDER-PROVIDER COMMUNICATION IN CHRONIC PAIN SPECIALIST CONSULTATIONS

Alexa R. Meins, Ardith Z. Doorenbos

PAIN, QUALITY OF LIFE AND FUNCTIONAL DISABILITY IN A PEDIATRIC PAIN CLINIC

Kari A. Firestone, Anna Long, Kim D. Jones

SUPPORTING SELF-CARE IN VETERANS WITH CHRONIC PAIN

Erin Lind, Jenny Cecil, Joseph Burkard, David Bittleman

EXAMINING RELATIONSHIPS AMONG FM PAIN INTENSITY, CATASTROPHIZING AND INTERFERENCE

Linda M. Torma, Craig Ravesloot

RETROSPECTIVE & DAILY PAIN RATINGS IN ADULTS WITH POSTHERPETIC NEURALGIA

Robin Meize-Grochowski, Geoff Shuster, Blake Boursaw

◀ ▶ go to PG.

PAIN

Provider-Provider Communication in Chronic Pain Specialist Consultations

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Aims: The aim of this project is to explore the use of empathetic verbal and nonverbal behavior in peer-based interactions between specialty and primary care providers in an effort to reduce burden caused by caring for chronic pain patients.

Background: Pain is the most common complaint in primary care and is the leading cause for disability in the United States. Chronic pain, or pain lasting more than three months, is often complex and difficult to manage, causing provider distress and burnout. Patient-centered communication strategies emphasizing empathy between chronic pain patients and their providers have been shown to promote good patient-provider relationships and improve patient outcomes, but the use of these strategies for reducing provider burden in peer-based, provider-provider interactions has yet to be explored. TelePain, a weekly teleconference series in which primary care providers from the WWAMI and Oregon region receive education on how to provide evidence-based care to chronic pain patients and specialty consultation for their most complex pain patients from a multidisciplinary panel of pain specialists, is one opportunity where peer-based, provider-provider interaction occurs.

Methods: Participant observation was conducted at TelePain meetings to assess the interactions between the multidisciplinary panel of pain specialists and primary care providers during consultations. Evidence of empathetic verbal and nonverbal communication skills by the pain specialists and resulting reactions by primary care providers were recorded.

Results: The panel of pain specialists showed evidence of empathetic verbal and nonverbal communication during TelePain consultations. Verbal cues included burden acknowledgement statements such as, “This is a very difficult case,” and reassurance statements such as, “You have been doing an excellent job with this patient.” Nonverbal cues communicated through video conferencing technologies included gaze orientation to show attention and investment in the discussion, head nodding to show signs of encouragement, and body orientation to show rapport. In response to the verbal and nonverbal cues from the pain specialists, primary care providers released tension in the shoulders and jaw and reciprocated head nodding as a gesture of appreciation.

Discussion/Implications: Primary care providers seeking consultation and assistance with chronic pain patients feel many of the same emotions as a patient seeking medical care for their chronic pain including anxiety, frustration, and vulnerability. Using the teachable verbal and nonverbal communication skills of empathy currently used to improve patient-provider interactions, healthcare providers can support their peers who are treating difficult chronic pain patients. Peer support networks improve provider well-being, which can then improve patient care and reduce burnout.

Funding: Project funded by NINR grants K24NR015340 and R01NR012450.

go to PG.

Pain, Quality of Life and Functional Disability in a Pediatric Pain Clinic

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Purpose: The purpose of this study was to describe functional disability, pain and quality of life in a children being seen at a tertiary pediatric pain specialty clinic in the Pacific Northwest.

Rationale: Children with chronic pain are treated in a variety of settings including primary care and specialty-based clinics. Pain intensity has been shown to be important in understanding pain related functional disability in children. A range of other factors may affect other critical outcomes including functional disability and quality of life. Findings from adult-based studies indicate that contextual factors (e.g. demographics, family history of pain and other patient centered characteristics) may contribute to functional disability above and beyond that of pain intensity but are less documented in pediatric populations.

Methods: Data was collected from a consecutive series of 314 new pediatric pain patients, including: demographics, pain intensity, location, history and frequency, academic status, parental and child optimism, family history for pain, anxiety and depression, and a validated self-report measure Children's Activity Limitations Interview (CALI) a 21-item measure designed to assess pain-related activity limitations in children and adolescents, Data analysis was conducted using SPSS version 22. Summary statistics were used to describe the characteristics of the sample. Means and standard deviations were used for continuous data, and categorical items were described using frequency statistics.

Results: The mean (±SD) age at presentation was 13.79 ± 2.98. Participants reported high levels of pain with a typical pain intensity of 5.82 ± 1.98 and worst pain intensity of 8.95 ± 1.33. 42.3% of participants reported experiencing pain in three or greater locations, while 65.5% reported pain in greater than 2 locations. The most commonly reported pain location included the head (28.5%), abdomen (23.4%), leg (13.6%) and lower back (11.2%) with 78.5% of participants reported experiencing pain at least daily within the last month. 61.4% of participants reported that over the last month, their pain had increased. 87.6% of participants reported difficulty sleeping related to their pain. Over half (50.4%) reported missing greater than 20 days of school within the last school year. The CALI sum scores had a mean of 43.86 ± 17.89. 67.7% of parents reported a family history of pain problems similar to the child with 57.5% reporting a family history of depression and 45.6% family history of anxiety. Child/adolescent perception of their ability to cope or deal with their pain was a mean of 4.86. Parental optimism of ability to cope or deal with their child's pain was 6.77.

Implications: A clinical sample of children and adolescents with chronic pain presenting for assessment at a tertiary pediatric pain specialty clinic showed high levels of pain and functional disability. Furthermore, children with pain indicated poor coping and their parents were not optimistic about their ability to deal with their child's pain. Understanding the variables that contribute to the child and adolescents experience of pain and associated disability is an important step in the groundwork for future research and tailoring specific interventions in children and adolescents with chronic pain.

◀ ▶ go to PG.

Supporting Self-Care in Veterans with Chronic Pain

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Project Aim: The purpose of the project was to determine the effectiveness of promoting self-care on pain levels and quality of life among veterans with chronic pain.

Background: Military veterans with chronic pain are frequently more complex in their presentation than the general population due to challenges of returning to civilian life and the influence of their past military service on their pain. According to the Institute of Medicine (IOM) chronic pain treatment and lost productivity cost American society $560 to $635 billion annually. Conventional pain management methods have been largely dependent on the use of prescription and over the- counter medication and opioids, which are often ineffective for the management of chronic pain. A multimodal and integrative approach that addresses the many dimensions of the biopsychosocial model may be better suited for individuals experiencing such pain. Active self-management initiatives permit more diverse, patient-centered treatment, promote self-management, and are relatively safe and cost-effective.

Project Approach: Veterans with chronic pain seen in a primary care setting received a standardized protocol for addressing chronic pain. This standardized protocol includes the Quality Metric's SF-12v2 Health Survey, the Numeric Pain Rating Scale, a self-care chart, and a personal action plan contract. Patients were seen monthly over a 6-month period. The SF-12v2 score and the Numeric Pain rating scale will be used to evaluate project effectiveness in controlling pain.

Outcomes: Data collection currently in progress, however it is expected there will be a decrease in pain levels and an increase in quality of life over time.

Conclusions: To be determined following review and analysis of results. It is expected that promotion of self-care among chronic pain patients will show success in decreasing pain levels and increasing quality of life in veterans. If successful, a self-care protocol should be initiated in the VA healthcare system as a routine element of care.

◀ ▶ go to PG.

Examining Relationships among FM Pain Intensity, Catastrophizing and Interference

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Purpose/Aims: This study was conducted to examine pain catastrophizing as a mediator of the relationship between pain intensity and interference in adults living with Fibromyalgia (FM).

Background: FM is a persistent, widespread pain condition that is also characterized by tenderness, fatigue, depression, and sleep disturbance. The disease often develops in the third or fourth decade, is highly disabling, and significantly interferes with the ability to participate in meaningful activity. Pain interference describes the effect of pain on the ability to engage in social, emotional, physical, and recreational activities. Pain catastrophizing describes the tendency to overestimate the threat of pain, is characterized by rumination, magnification, and helplessness, can significantly affect the desire to engage in activity. Because chronic pain is a biopsychosocial experience, it is likely that psychosocial variables like catastrophizing can mediate the relationship between pain intensity and pain interference.

Method: This study is a secondary analysis of a longitudinal study designed to examine the effect of chronic pain and environmental barriers on community participation (N=521). The random sample of adults aged 18+ was recruited using a population based mailing technique that included 10,000 households (5 zip codes). A subset reporting a diagnosis of FM was used for the secondary analysis (n=70). Pain interference over the last 7 days was measured with the PROMIS-Short Form 8a. Average pain intensity over the last 7 days was measured on an 11 point scale (0 = no pain, 10 = worst pain you can imagine). The Pain Catastrophizing Scale (PCS) was used to measure catastrophizing. Descriptive statistics were used to characterize the sample. Multiple regression analysis was used to examine pain catastrophizing as a mediator.

Results: The sample was primarily female (89%), White (92%), married (41%), and well-educated (66% with Bachelor degree or higher). However, 45% earned less than $20,000/year. Pain intensity was moderately high (*X* =5.9/10, SD=2.03) as was pain interference (*X*=28/40, SD=8.7). Pain catastrophizing was moderate (*X* =15.7/30, SD=6.31). Correlations were moderate between pain intensity and interference (*r*=44, p =.000), and pain intensity and catastrophizing (*r* =.41, p=.000), but stronger between pain catastrophizing and pain interference (*r* =.59, p=.000). Pain intensity and catastrophizing accounted for nearly 40% of the variance in pain interference. However, catastrophizing was not a mediator. Rather it contributed uniquely to the variance in pain interference.

Implications: Being able to participate in activities enhances quality of life and is an important measure of overall health. This study highlights the importance of integrating mind and body treatment of FM. Higher levels of pain catastrophizing and pain intensity can both significantly increase pain interference and reduce quality of life in persons living with FM. Further research exploring methods designed to reduce pain intensity and catastrophizing is needed.

Funding: For the parent study was provided by the National Institute on Disability and Rehabilitation Research (NIDRR).

◀ ▶ go to PG.

PAIN

Retrospective & Daily Pain Ratings in Adults with Postherpetic Neuralgia

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Background: Postherpetic neuralgia (PHN), which may occur after shingles, is a severe, life altering condition that afflicts approximately 20-30% of individuals who have shingles. While an acute episode of shingles typically lasts 3-4 weeks, PHN can last for months or even years. The primary cause of morbidity in PHN is pain, which is known to be one of the most intractable neuropathic pain disorders. Meditation has been reported as having a positive impact on quality of life in chronic pain, but its use has not been specifically studied in PHN.

Purpose: This study compared pain ratings of community-dwelling older adults with postherpetic neuralgia (PHN) who added meditation to their daily routine with pain ratings of a comparison group who followed their daily routine without the meditation component.

Methods: This randomized pilot study used a repeated measures experimental design to examine the effects of meditation in community dwelling older adults with PHN. Retrospective data were collected at entry to the study (Time 1), two weeks later (Time 2), and then six weeks later (Time 3). Between Time 1 and Time 2 all participants followed usual care only, and recorded their levels of pain in a daily log. Between Time 2 and Time 3 the treatment group added meditation to their usual care, and all participants (treatment and comparative groups) continued recording level of pain in a daily log, for a total of 8 weeks of daily pain ratings for all study participants.

Sample: The 27 study participants were between 55 and 90 years of age, with a mean of 72 years. Fifteen participants were female, and 12 were male. Fourteen participants were White, 11 were Hispanic, and 2 were American Indian. At entry to the study, 18 participants reported moderate or greater pain seven days per week due to PHN.

Results: Analysis of the retrospective data included repeated measures ANOVA for the three time periods. Although no statistically significant differences were found for time or interaction effects, trends indicating a favorable response to mindfulness meditation over time were identified in the majority of the outcome variables. Comparison of retrospective data with daily ratings of pain will be reported on our poster.

Implications: Meditation is a self-management tool that may enable persons with PHN to minimize visits to health care providers for pain control. Multiple medications are often required for managing the pain in PHN, and meditation may provide an adjuvant to pharmacotherapy for pain control. Meditation is easily taught, and can be incorporated into a nurse's plan of care for older adults with PHN.

Findings from this pilot study will provide data for a larger proposal comparing usual care alone with usual care plus meditation in older adults with a variety of chronic pain conditions. Future studies will include a sample size that is powered to detect significant differences at α=.05.

Funding: This project was supported in part by the National Center for Advancing Translational Sciences of the National Institutes of Health through Grant Number UL1 TR000041.

◀ ▶ go to PG.

PREGNANCY AND BREASTFEEDING

WE HAVE AN APP FOR THAT: TOBACCO CESSATION FOR PREGNANT WOMEN

Jo Ann Walsh Dotson, Rowena Pine

ASSOCIATION OF MATERNAL SELF-REPORT AND OBSERVATIONAL DATA AT THREE POINTS POSTPARTUM

Semira Semino-Asaro, Laura L. Hayman

BARRIERS TO SUSTAINABILITY OF EXCLUSIVE BREASTFEEDING IN LOW-INCOME HISPANIC WOMEN

Romar Lingad, Nanette P. Leonardo, Teresa Ortiz, Mariles Rosario,
Anne Guzman, Emilyn Lao, Magda Shaheen

EXCLUSIVE BREASTFEEDING INITIATIVES FOR PREGNANT/LACTATING WOMEN IN EAST LOS ANGELES

Romar Lingad

APGAR, NICU TRANSFER, & SPOUSE/PARTNER PRESENCE AT NURSING STUDENT DOULA BIRTHS

Amanda L. Erickson, Shirley E. Van Zandt

CLARITY IN COLLABORATION: ANALYSIS OF PUBLIC COMMENT TO MIDWIFERY CONCEPT DEFINITIONS

Kim J. Cox, Julia Phillippi, Maria Freytsis, Amy Romano, Leslie Cragin

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PSYCHOSOCIAL PREDICTORS OF GESTATIONAL DIABETES AND BIRTHWEIGHT

Barbara L. Wilson, Jane Dyer, Gwen Latendresse, Bob Wong, Laurie Baksh

◀ ▶ go to PG.

ENGAGING WOMEN OF COLOR IN HEALTH PROFESSIONS: EAST BAY COMMUNITY BIRTH SUPPORT PROJECT

Monica R. McLemore, Monnie R. Efross, Darcy Stanley, Nicole Sata

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NURSES' PERCEPTIONS OF CARING FOR OPIATE ABUSING PREGNANT AND POST-PARTUM WOMEN

Michele R. Shaw, Crystal Lederhos, Donelle Howell, Mel Haberman, Susan Fleming, John Roll

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MORNING INDUCTIONS MAY INCREASE CESAREANS: PRELIMINARY FINDINGS

Mary Barger, Kathryn Lee, Ellen Middleton

HELP FOR BREASTFEEDING MOTHERS WITH PHENYLKETONURIC INFANTS

Sandra A. Banta-Wright, Sheila M. Kodadek, Robert D. Steiner, Gail M. Houck

◀ ▶ go to PG.

PREGNANCY AND BREASTFEEDING

We Have an App for That: Tobacco Cessation for Pregnant Women

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Rowena Pineda, Med

Purposes/Aims: The purpose of this project was to establish and test a standard evaluation for health promotion and education applications developed by the regional health department.

Rationale/Background: Recent advances in mobile communications have resulted in tools and applications which may assist women to learn about and modify health behaviors during pregnancy The association between tobacco and increased risk for low birth weight and premature birth is well established in the literature (CDC, 2001). Tobacco use varies by community and state; in 2011, about 16% of pregnant women in Spokane County smoked, compared to 9% in Washington State and the U.S. (Riffe & Conley, 2013). The regional health district is endeavoring to address issues negatively affecting pregnancy and birth outcomes, with particular focus on tobacco education and cessation for pregnant women.

Undertaking/Best Practice/Approach/Methods/Process: A tobacco cessation application developed by a partnership of academics and providers in 2012 was beta tested in summer of 2013. Based on that feedback, the application was extensively revised and refined, and prepared for rerelease in spring of 2013.

Public health and private provider practices serving pregnant women were recruited and received orientation about the project, training about the 5As of tobacco cessation, and completed pre-tests regarding their practices' policies and performance of tobacco cessation counseling and education. All pregnant women who were patients at the selected sites were invited to view and complete a survey about the application. Women were invited to choose a small baby gift after completing the survey.

Focus groups of the staff at participating sites were conducted following client data collection. Four focus groups were conducted with a total of 27 health providers. Fourteen of the providers also completed a post-test regarding their practices' policies and performance of tobacco cessation. All surveys and pre and post-tests were analyzed using SPSS 22. Focus group data was read and themes identified by project staff.

Outcomes Achieved/Documented: The demographic characteristics of the sample did not differ significantly from the Spokane County birth cohort, with the exception of significantly MORE women (55 out of 210 or 26.2%) reporting tobacco use. Participants also reported that public AND private providers consistently asked about tobacco use, but were less likely to address each subsequent step of the 5A model (advise, assess, assist and arrange). There was no significant different between public and private providers on the diminished compliance with the 5Asl. Provider focus groups revealed acceptance of and interest in utilization of applications to support health education cessation.

Conclusions: Client participants and providers assessment of the module were positive. Both groups identified future module ideas, with breastfeeding and nutrition, marijuana, and e-cigarette use in pregnancy identified as target topics for future modules. The health department will pursue additional resources to expand the use of the module in provider practices and to develop additional modules, and asked the Birth Outcome Task Force to lead that effort. Future modules will be evaluated using the combined survey/focus group approach.

Funding: March of Dimes 2013 Chapter Community Grant.

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◀ ▶ go to PG.

Association of Maternal Self-Report and Observational Data at Three Points Postpartum

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Purposes/Aims: A comparison of observational data with self-report data has the potential to reveal discrepancies between maternal subjective experience as reported through questionnaire responses and objective relational behavior, observed in mother-infant dyadic interaction.

Rationale/Conceptual Basis/Background: Guided by Tronick's Mutual Regulation Model, the purpose of this study is to examine the relations among maternal self-report data related to symptoms of depression, anxiety and parental stress with observations of maternal affect and gaze, in the Face-to-Face Still Face Paradigm (FFSF) at 16, 24, and 43 weeks postpartum. Tronick's renowned Still-Face procedure provides an opportunity to examine objective measures of relational behavior, such as gaze and affect in mother-infant dyadic research.

Methods: This cross-sectional study aims to explore the relationship of these observational behavioral measures with questionnaire responses in a community sample of 98 mothers who participated in an NIH funded study, S*tability of Coping and Memory for Social Stress* (5R01HD050459-02), conducted by Tronick, Snidman, DiCorcia & colleagues (2013). Videotaped interaction of mother-infant dyads were coded with the Gaze-Faze system and maternal self-report data, based on responses to the Parenting Stress Index (PSI), Center for Epidemiological Studies-Depression Scale (CES-D), and the State Trait Anxiety Inventory (STAI) are in the process of being analyzed in relation to this behavioral data. Primary hypotheses focus on the relationship between subjective and objective measures in the context of and in response to an acute social stressor, the Still-Face procedure, while secondary hypotheses are aimed at comparisons between the three different groups of mothers, stratified by infant age. Data from 41 mothers (with16 week old infants), 38 mothers (with 24 week old infants) and 19 mothers (with 43 week old infants) will be analyzed using descriptive-correlational, analysis of variance, and multivariate regression statistical methods.

Results: Results will be interpreted in relation to convergences and discrepancies between subjective maternal data and objective behavioral data in order to highlight the significance of multiple measures.

Implications: In both clinical as well as research settings, incorporating multiple measures facilitates cross-validation of findings, potentially mitigating the limitations of each assessment and/or measurement procedure. In addition, insights gained through examining potential convergences and discrepancies generated from subjective versus objective data may provide an impetus for further refinement of relational measures in mother-infant dyadic research. It is vital for health professionals such as psychiatric mental-health and maternal-child nurses to understand normative patterns of dyadic interaction in order to conceptualize risk factors likely to undermine development and healthy parent-child relationships. In addition, it is critical that both self-report and observational measures be incorporated into nursing research studies focused mother-infant interaction due to the inherent complexity of dyadic processes.

◀ ▶ go to PG.

PREGNANCY AND BREASTFEEDING

Barriers to Sustainability of Exclusive Breastfeeding in Low-Income Hispanic Women

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Purpose: To identify the barriers to implementation/sustainability of breastfeeding practices among the low-income Hispanic women.

Background: Human milk is the most superior, and complete form of nutrition for newborns and children up to two years of age. Numerous studies and evidence based practices have shown that exclusive breastfeeding, giving nothing by mouth to the newborn for up to six months of life, confers countless health benefits. Early and exclusive breastfeeding ensures meaningful and sustainable bonding between the mother and her newborn, especially within the first hour of life, "Golden Hour", when uninterrupted skin to skin contact is most important. Despite the campaigns of various hospitals, clinics, and health advocates, to become "Baby Friendly", there is a considerable resistance to the natural practice of breastfeeding, and little information is known about the barriers to breastfeeding especially among low-income Hispanic women.

Methods: A systematic review of articles pertaining to barriers and facilitators to exclusive breast feeding among low-income pregnant and lactating Hispanic women. We search Google Scholar, PubMed, PsycInfo, Medline, Cinahl, and BMJ Journals. We used *Keywords: exclusive breastfeeding, Hispanic women, low socio-economic population, pregnant and lactating Hispanic women, breastfeeding benefits, barriers to breastfeeding, and health promotion for breastfeeding*. We extracted the data related to all the items mentioned. We found 2,369 articles and 288 articles were systematically reviewed for barriers to exclusive breast feeding among Hispanic women.

Results: Our study showed that the most frequent barriers to the implementation and sustainability of breastfeeding were poor and incorrect knowledge about the advantages of breastfeeding; health professionals' advice; development of sore nipples due to poor latch and technique; breast milk supply has not built up properly; miss-information related to stopping of breastfeeding because of some medication or illness in her or her baby; mother's return to work and is not able to pump or store breast milk in the workplace; lack of support from family, friends, and significant others; misconception derived from infomercials about superiority of artificial milk formula; teen mother's refusal to breastfeed, fearing peer pressure or unwanted effects on their breasts; poor self-image of continued breastfeeding; lack of role models who actually breastfeed and successfully sustained it for six months and beyond; and inconvenience and discomfort of breastfeeding after delivery, anesthesia, or surgery.

Implications: Many barriers to sustainable breastfeeding were identified. There is a need for a culturally and linguistically appropriate breastfeeding benefit awareness programs that will include measures to overcome the barriers and can be implemented with a combined efforts of health care providers and community partners to have a favorable impact on Hispanic women to practice exclusive breastfeeding.

◀ ▶ go to PG.

PREGNANCY AND BREASTFEEDING

Exclusive Breastfeeding Initiatives for Pregnant/Lactating Women in East Los Angeles

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Purpose: To develop and implement a health promotion/advocacy program that will encourage exclusive breastfeeding in the low-income Hispanic women in the East-Los Angeles Community.

Background: Human milk is the most important and complete nutrition for newborns and children up to two years of age. Studies and evidence based practices have shown that exclusive breastfeeding, giving nothing by mouth to the newborn for up to six months of life, has enormous health benefits. The Healthy People 2010 goals included exclusive breastfeeding for the first six months of life, as one key component that improves the health and well-being of women, infants, children, and families. Despite all the efforts in various hospitals, clinics, and health advocates to promote exclusive breastfeeding, there is a considerable resistance to the natural practice of breastfeeding, especially among low-income Hispanic women in the East Los Angeles Community.

Brief Description of Undertaking: The program includes a regular/scheduled monthly 1 hour Breastfeeding lectures for low-income Hispanic pregnant women who reach 28 weeks gestation. Spouses or significant partner of the pregnant women are encouraged to attend the lectures. The lectures will be conducted by the faculty in coordination with the lactation consultants in these facilities. The lecture topics will cover the following: human milk/the complete nutrition guide for babies/importance of breastfeeding; the golden hour: importance of skin to skin within 1 hour of birth; breastfeeding techniques: good latch and milk transfer/maintaining adequate milk supply; using breast pumps/milk banking; common concerns: engorgement (prevention and treatment)/sore nipples/mastitis; and the dangers of formula feeding. The program will be implemented in 2 clinics (Sta. Rosa Medical Clinic and Alta Med medical clinic located in East Los Angeles, 2 hospitals (LA Community Hospital and East Los Angeles Doctors Hospital) and the WICS Office in the area. The evaluation will be in the form questionnaire that will be given to the participants before and after each lecture, and after the delivery of the baby to assess the participants' knowledge, attitude, behavior and exclusive breast feeding practice. Funding for fliers/IEC materials will be provided by First 5 LA and local community/church donors as well as MMDSON students and faculty. The core measures to be evaluated will include rates of Exclusive Breastfeeding among participants (i.e., breast feeding for at least six months post-delivery).

Outcomes: There will be a significant increase in knowledge, increase in positive attitude toward exclusive breastfeeding and increase in the rate of exclusive breast feeding among participants of the program compared to historical level in the participating facilities.

Conclusions/Implications: The implementation of the culturally and linguistically appropriate breastfeeding benefit awareness programs that included measures to overcome the barriers to exclusive breastfeeding will have favorable outcomes and impact not only on the Hispanic women to practice exclusive breastfeeding but also on the health and well-being of the infants, children and the society.

◀ ▶ go to PG.

Apgar, NICU Transfer, & Spouse/Partner Presence at Nursing Student Doula Births

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Objective: This retrospective program evaluation examines the relationship between 1) Apgar scores and 2) NICU transfer rates of newborns, and their relationship to the presence of a spouse/partner/other support person during labor and birth. All births reviewed were attended by nursing student birth doulas (Birth Companions) in large Eastern teaching hospitals.

Background: The Birth Companions Program (BCP) is a 16-year-old service-learning program and elective birth doula course for baccalaureate nursing students in an East coast school of nursing. Students enroll to gain doula training and get additional birth experience. In addition to the core clinical OB education that students receive, this course prepares students to support women and their families emotionally and physically during the birthing experience. All women who participate in the program receive the support of a student nurse birth doula during the labor and birth. A spouse/partner/other support person accompanies most women during labor and birth, but some are alone and depend on the sole support of the Birth Companion. Birth doulas provide emotional, physical, and informational support before, during, and after the birth of a baby. Research on doula care supports its benefits to improve birth outcomes. The perspective of spouses/partners/others has been identified as a gap in the research literature.

Description: This evaluation reports on the support received by mothers whose infants were at risk of poor outcomes immediately following birth, as evidenced by low Apgar scores and transfer to the NICU. The effect of this experience on the mother and newborn and the presence of a support person in addition to the presence of the Birth Companion are of interest and can inform the program of additional services that are needed and may be provided. In addition, maternal age, education level, breastfeeding initiation, newborn's gestational age and birth weight, intermittent and continuous fetal monitoring, cesarean section, and satisfaction scores will be compared between mothers who had the support of a spouse/partner/other and those who did not. Statistical analysis of this data utilizing chi- square and t-test were performed.

Conclusion: The findings of this review provide information about the need for birth doulas to further support mothers and their partner/spouse. In particular course content and program services may be identified that can better assist these mothers immediately after birth. Additional efforts to address the psychosocial needs of these mothers and to promote immediate bonding and breastfeeding may be needed. Nursing students who elect this birth doula training gain valuable experience especially with mothers and families who may experience an infant requiring immediate interventions or transferring to the NICU. Having this additional information for nursing students and birth doulas may impact the care nurses provide and lead to more equitable and accessible support to families.

◀ ▶ go to PG.

PREGNANCY AND BREASTFEEDING

Clarity in Collaboration: Analysis of Public Comment to Midwifery Concept Definitions

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Purposes/Aims: To clarify midwifery and collaborative care concept definitions through a process of qualitative content analysis of public comments acquired during a national survey.

Background/Significance: Standard clinical definitions are crucial to building a national data infrastructure. Nurses, providers and researchers need precise and accurate definitions for key concepts and process in perinatal care. As one of the stakeholders in the ReVITALize Initiative, the American College of Nurse-Midwives (ACNM) partnered with other women's health organizations to clarify, refine and standardize data definitions specific to maternity care. This portion of the larger project describes the analysis of 524 public comments on proposed concept definitions related to midwifery care.

Methods/Strategy: Twenty-one concept definitions related to midwifery and collaborative care were e-mail to key stakeholder for public comment in August-September 2014. Of these 21 concepts, 8 had ≤ 90% support, suggesting needed revision or clarification. The participant feedback on each of these 8 concepts were analyzed using the Thorne's method of qualitative interpretive description. Two qualitative researchers immersed themselves in the data, repeatedly reading participant comments, and then individually coded all comments. The two researchers then discussed the individual results and derived themes and representative quotes for each of the concepts.

Outcomes Achieved: Data will be used by the ACNM reVITALize committee to refine conceptual definitions of midwifery care in December 2014, with results available spring 2015.

Conclusions: While electronic medical records allow for creation of large databases of perinatal information, precise definitions ensure that process and outcomes data from multiple sites and providers are comparable. While an expert committee crafted the definitions, comments from key stakeholders, including clinicians, ensures concepts are comprehensive and clear. This project systematically analyzes public comments; the incorporation public and stakeholder feedback will enhance accuracy and encourage clinician engagement in research.

◀ ▶ go to PG.

Psychosocial Predictors of Gestational Diabetes and Birthweight

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Purposes/Aims: Determine the best sociodemographic and behavioral predictors for gestational diabetes mellitus (GDM) and birthweight (BW); and whether maternal stress, depression, or abuse influence BW and GDM after controlling for selected sociodeomgraphic variables.

Background: Pregnant women with strong social support are less likely to experience emotional distress throughout pregnancy and during the postpartum period, leading to improved maternal and newborn well-being. Social support has also been linked to BW: mothers with low social support have a two-fold increased risk of having a low BW infant. Maternal biopsychosocial factors during pregnancy (e.g., Body Mass Index [BMI], diabetes, depression, and intimate partner violence) are also known to affect BW and gestational age; and some biopsychosocial factors increase the likelihood of GDM. Although recent studies have examined the relationship between GDM and depression to adverse birth outcomes, results have been inconsistent and therefore inconclusive. Our goal was to examine what sociodemographic and behavioral variables influenced the likelihood of either GDM or BW; and whether self-reported abuse, stress, or depression affected the likelihood of BW or GDM after controlling for sociodemographic variables.

Methods: The 2009-2011 Utah PRAMS (Pregnancy Risk Assessment Monitoring System) and birth certificate data from the CDC and Utah State Health Department were analyzed and included 3,655 cases, reflecting 131,016 childbearing women. To identify the best predictors of GDM and BW, a hierarchical stepwise logistical regression was conducted. The first model introduced maternal demographics, behaviors, and socioeconomic status as control variables, including ethnicity, race, age, BMI, tobacco and alcohol use during pregnancy, and poverty level. Model two then tested the effects of cumulative stress, depression and abuse after controlling for model one variables.

Results: Maternal race, age and BMI remained significant predictors of GDM across both models. In the final model, non-white women were nearly 3 times more likely to develop GDM. Also for every year increase in maternal age there was a corresponding 5% increase in risk for GDM. Likewise, for every unit increase in BMI, there was a corresponding 6% increase in risk for GDM. Cumulative stress, depression and physical abuse lacked significant predictive value for GDM. Significant predictors for BW were marital status, smoking during the 3rd trimester, history of a previous preterm baby, use of progesterone prophylaxis, gestational age and maternal BMI. Cumulative stress was the only psychosocial factor that was a significant predictor for BW. For every increase in cumulative stress, there was a corresponding decrease of 15.6 grams in birth weight.

Implications: Healthcare providers often screen for depression or physical abuse in the perinatal period, but screening for stress is less likely to occur. Nurses may be the first providers to recognize stress in a pregnant woman and are likely to be in a position of trust to assess actual stress. Unlike depression and abuse, stress is often overlooked, and this unmet need represents an opportunity for nurses to screen for and assist women with stressors to positively impact birth weight.

◀ ▶ go to PG.

PREGNANCY AND BREASTFEEDING

Engaging Women of Color in Health Professions: East Bay Community Birth Support Project

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Purpose/Aim: The purpose of this project is to provide employment opportunities for low-income and previously incarcerated women of color by training them as birth doulas. Our long-term goal is to develop and support direct paths to advanced health professions for these women.

Rationale/Background: Low-income and previously incarcerated women of color are least represented in the health professions and more likely to experience health disparities in birth outcomes. Three organizations came together to develop a woman of color centric doula training for low-income and previously incarcerated women. The Birth Justice Project (BJP) mission is to end reproductive injustice within incarcerated and underserved populations. Black Women Birthing Justice (BWBJ) is a collective of African-American, African, Caribbean and multiracial women whose vision is that that every woman should have an empowering birthing experience free of unnecessary medical interventions. The University of California, San Francisco (UCSF), Family Health Care Nursing Department's mission is to optimize the health and well-being of children, women, and families in a changing multicultural society through our nursing programs of teaching, research, and practice, as well as through community service. These organizations developed a partnership to establish birth doula work as a "gateway drug" to the health professions for low-income and previously incarcerated women and to test this vocational training as an intervention to reduce recidivism.

Methods: Sixteen women were recruited to participate in the East Bay Community Birth Support Project, which was named to capture our work and our project. The participants in the program are all women of color where 60% identify as African American and 40% identify as Latina/Hispanic. Half of these women report being previously incarcerated. Partnership agreements were developed between BJP, BWBJ and UCSF to create a programmatic and curricular structure that encouraged and targeted recruitment and retention of women of color as trainers and participants. Additionally the cohort of doula trainees were each provided with an experienced mentor doula to assist them with their first five births. Surveys were administered to the entire group regarding quality of and experiences with the training, trainers, ability to grasp the material and belief in personal ability to support women during birth. Focus groups were conducted after the training to determine the participants' perceived self-efficacy of being a doula and doing birth work.

Outcomes Achieved/Documented: Eighty-eight percent of participants completed the entire three-weekends of training and twelve percent completed at least two weekends of training. Overall, women in this training program report high satisfaction and were empowered to provide birth support to women. Half of the participants have disclosed a desire to continue their education and interest in pursuing careers such as nursing, midwifery, psychology, social work and substance abuse counseling. Three doulas are developing specialties working with youth and teens and one doula is collaborating with the training team to develop less heteronormative materials.

Conclusions: Universities should engage community based partners to develop direct, non-traditional pathways to supplement entry of women of color into the health professions.

◀ ▶ go to PG.

PREGNANCY AND BREASTFEEDING

Nurses' Perceptions of Caring for Opiate Abusing Pregnant and Post-Partum Women

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Purpose: This study explored obstetric nurses' perceptions of caring for women during their hospital birthing and postpartum experiences who had prior histories of opioid abuse during pregnancy. Specific aims included to 1) describe common themes associated with nurses' perceptions of caring for this population, and 2) identify specific areas for intervention development.

Background: The use of prescription and illicit opiate medications among women of childbearing age has increased dramatically over the last 30 years in the United States. Although the exact prevalence of female drug use in the United States is unclear, roughly 30% of those considered to be substance-addicted are females in their childbearing years. It is apparent that opiate use during pregnancy is no longer a rare occurrence. There is a critical gap in the literature specific to nurses' perceptions of caring for pregnant women who arrive to the hospital with prior opioid abuse histories. Filling the gap is particularly important if nurses' beliefs, biases, and specific educational needs for providing effective care for opiate using women can be identified and described, then specific areas for intervention development can be discovered.

Methods: Grounded theory methods of inquiry, as described by Corbin and Strauss, were used to guide data collection and to identify common themes. Initially, eight, inpatient, obstetric nurses working in large birthing centers in Washington State were interviewed using semi-structured interviews. Follow-up interviews with four of the nurses were conducted to validate emergent themes.

Results: Four themes were derived from the data: needing more knowledge, feeling challenged, expressing concern for the infant, and knowing the truth.

Implications: The four themes identified can impact nursing practice and patient outcomes by providing specific areas for intervention development focusing on this population of vulnerable women. Obstetric nurses described several ideas for intervention development (e.g., continuing education offerings relevant to caring for opiate abusing mothers, collaborating with providers to design education, re-evaluating pain management philosophies and practices at all levels, and working with social workers to explore available and needed community resources).. Future research includes the evaluation of newly developed personalized interventions; the examination of the empirical linkages among key mother and child health outcomes; the delivery of specific nursing therapeutics; and the exploration of providers' and patients' perceptions and knowledge of opiate use during pregnancy, birth, and beyond.

◀ ▶ go to PG.

PREGNANCY AND BREASTFEEDING

Morning Inductions May Increase Cesareans: Preliminary Findings

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Purpose: This randomized clinical trial (ClinicalTrials.gov: NCT01542151) examines the effects of morning (AM) versus evening (PM) labor inductions in nulliparous women electively induced after 40 weeks on maternal fatigue, labor interventions, and modes of birth.

Background: In the United States (US), 23% are induced. There is evidence that the increase in induced births is contributing to the increasing cesarean rate. Only four studies worldwide, and no US studies, have examined the relationship between the time of day induction begins and obstetrical outcomes, and those four had conflicting results. There are biologic reasons to believe that inductions initiated in the evening may be more effective, working synergistically with normal circadian rhythms, for better birth outcomes. It may also be true that induction times might best be tailored to personal chronobiology (morning lark versus night owl).

Methods: Physicians scheduling eligible women briefly describe the study. If women initially agree, they are randomized to a labor induction time when their induction is scheduled. Research assistants follow-up by telephone further explaining the study. Women agreeing to the study are met at the hospital. On admission, they complete sleep questionnaires (Pittsburgh Sleep Questionnaire, St. Mary's Sleep Survey), a visual analogue fatigue scale, answer a chronotype question, and measure their hand strength with a dynamometer. Bishop score on admission is recorded. Fatigue scale, hand strength, and sleep diary are done by women every 4 hours until women enter active labor. Labor outcomes are abstracted from the medical record after birth. Patient satisfaction is obtained postpartum using descriptive adjectives and rating scale.

Findings: To date 66 out of 80 targeted have been randomized. We anticipate completion of recruitment by December. Thus far, the baseline demographic characteristics between the two groups is similar. Over 50% of women report poor sleep quality in the month prior to the induction. Admission Bishop Scores are 4.4 (SD 2.2) and 3.4 (SD 2.6) for the AM and PM groups, respectively. Overall epidural rate is around 84%. To date, the cesarean rate in the AM group is 46.8% and the PM group 30%.

Implications: Results from this pilot study will examine predictive factors on labor induction that have never previously been studied, such as the effect of chronotype, sleep, and fatigue on outcomes. Results will also increase understanding of successful labor induction elements, possibly altering our current approach to induction scheduling based more on women's personal chronobiology than provider preference.

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◀ ▶ go to PG.

Help for Breastfeeding Mothers with Phenylketonuric Infants

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Introduction: Phenylketonuria (PKU) requires low phenylalanine (Phe) containing protein to maintain desired Phe levels and thereby prevent intellectual disability. At the time of diagnosis, mothers who are breastfeeding an infant with PKU often want to continue breastfeeding because of the documented benefits of breast milk, including a lower amount of Phe than in standard commercial infant formula. However, there are challenges unique to this breastfeeding experience. No study has examined the particular needs that would help mothers to continue breastfeeding their infant with PKU.

Purpose: Identify and describe mothers' needs that would facilitate successful continuation of breastfeeding with their infant diagnosed with PKU.

Sample: Mothers met the following inclusion criteria: 1) at least twenty-one years of age, 2) able to read and write in English, 3) breastfed a child with PKU, and 4) reside in the United States or Canada.

Method: Mothers were recruited from the PKU Listserv. Mothers who responded to the recruitment post were emailed a copy of the information sheet and instructions for the survey. Mothers were informed survey completion would be evidence of their agreement to participate. The Internet survey included open-ended questions; this report concerns mothers' (n = 58) responses to a question about what would have helped while breastfeeding an infant with PKU. A procedure was developed for coding responses into 4 categories: *Lactation Help, Management, More Support* and *No Help*. Intercoder reliability for the coding of responses into categories was 90% agreement.

Results: Lactation Help (n = 27, 47%) was the most frequently identified as needed by mothers, and yielded four subcategories: *breast milk supply* (n = 10, 18%), *PKU and breastfeeding resources* (n = 9, 16%), *breast pumping* (n = 8, 14%), and *lactation consultants* (n = 8, 14%). More Support (n = 13, 23%) was the second most frequent area with three subcategories: *professional support* (n = 9, 16%), *social support* (n = 7, 12%), and *encouragement* (n = 4, 7%). Management of PKU in the context of breastfeeding (n = 11, 19%) was the third area and reflected two subcategories: *PKU management* (n = 6, 11%), and *"how much" (breast milk did the infant ingest)* (n =4, 7%). Only a few mothers (n = 4, 7%) identified *no help* was needed while breastfeeding an infant with PKU, the fourth category.

Discussion: This study provided the first description of mothers' needs identified when breastfeeding an infant with PKU. Lactation and management needs were interrelated and revealed mothers' struggles to adapt breastfeeding while maintaining Phe levels. Mothers wanted more support that would offset their increased workload and effort to continue breastfeeding despite the infant's diagnosis of PKU. A few mothers reported no extra needs and were the exception and not the norm.

Implications: As mothers adapt breastfeeding to maintain their infant's Phe levels, they should be encouraged to obtain an appropriate breast pump for long term pumping in order to maintain their breast milk supply and actively engaged to problem solve the challenges for providing breast milk to an infant with PKU.

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◀ ▶ go to PG.

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PRESSURE ULCERS

PREDICTIVE FACTORS FOR ADVERSE OUTCOMES IN PATIENTS WITH A PRESSURE ULCER

Ruth A. Bryant, Kenn B. Daratha, Cynthia F. Corbett, Gail Oneal

ALL-IN-ONE FOAM DRESSING USED PROPHYLACTICALLY TO PREVENT SACRUM PRESSURE ULCERS

Carolina Baldwin

NOT ALL PRESSURE ULCERS ARE PREVENTABLE: THE KENNEDY TERMINAL ULCER

Anna Nesovic

◀ ▶ go to PG.

PRESSURE ULCERS

Predictive Factors for Adverse Outcomes in Patients with a Pressure Ulcer

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Purposes/Aims: The purpose of this study is to identify factors that predict adverse outcomes in the patient with a pressure ulcer (PrU). A retrospective observational cohort study design was used, including data from a large abstract database of patients discharged from the hospital in Washington State between from 2012 and 2013. This study addresses the following aims for patients hospitalized with sepsis, pneumonia, COPD, heart failure, AMI, CVA, and AKI: 1) To compare rates of comorbidities between PrU and PrU-free patients by PrU stage; (2) To compare rates of adverse outcomes between PrU and PrU-free patients by PrU stage, and (3) To identify predictive factors for adverse outcomes in the hospitalized patient with a PrU.

Rationale/Conceptual Basis/Background: Pressure ulcers (PrU) are a significant safety threat in the hospitalized patient, particularly those who are debilitated with multiple comorbidities. Despite the current use of risk assessment scales, PrUs occur in 4.5% of all hospitalized patients and 8-22% of ICU patients. PrUs increase the risk for poor outcomes including in-hospital mortality, longer hospital lengths of stay, discharge to a setting other than home, greater costs of care, decreased quality or life, and greater post hospital stay morbidity. However, it is not known how the outcomes in the patient with a PrU are affected by interactions of key comorbidities or PrU stage. Additionally, the National Pressure Ulcer Advisory Panel (NPUAP) includes factors predictive of pressure ulcer outcomes as a research priority.

Methods: Using a retrospective observational cohort study design, data will be extracted from the Comprehensive Hospital Abstract Reporting System (CHARS) database in Washington State. The CHARS dataset includes electronically abstracted encounter information from each acute care hospital discharge in Washington State. In order to assemble representative patients at a common point in the course of their diseases, the most common primary medical diagnoses for patients 45+ years of age were identified. The study population will be patients 45+ years of age discharged from the hospital during 2012 and 2013 with a primary ICD-9 discharge diagnosis of sepsis, pneumonia, COPD, heart failure, acute myocardial infarction (AMI), CVA, or acute kidney injury (AKI). Binary logistic regression models will be used to examine differences in risks of in-hospital death and extended length of stay between the PrU and PrU-free groups controlling for age, sex, payer, comorbidities, and length of stay. Comorbid conditions will be derived using the Elixhauser method.

Results: Expected results will provide insight as to the outcomes of the patient with a PrU stratified by PrU stage and comorbidity.

Implications: This project will provide a deeper understanding of PrU risk factors by stage and by comorbidity. The *expected outcome of this research* is to increase the precision of PrU risk assessment and ultimately reduce the occurrence of HAPUs in at risk patient populations.

◀ ▶ go to PG.

PRESSURE ULCERS

All-in-One Foam Dressing Used Prophylactically to Prevent Sacrum Pressure Ulcers

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This quality improvement project was a pilot for the use of the Mepilex Border Sacrum dressing as a cost effective health promotion measure to prevent the formation of sacrum pressure ulcers in the Surgical Intensive Care Unit (SICU). The primary outcome was to determine the effectiveness of using the Mepilex Border Sacrum dressing to reduce the incidence of hospital acquired pressure ulcers in the critically ill patient. The secondary outcome was to determine if this was a cost effective intervention.

Despite new federal legislation and increased awareness, pressure ulcers in critically ill patients continue to be a problem. Acuity as well as contradictory protocols affects these patients more than any other hospitalized patient population. Due to the Commission of Medicaid and Medicare Services (CMS) reimbursement changes for pressure ulcers stage 3 and above, organizations are emphasizing the need for preventative measures. Reducing friction is essential in pressure ulcer prevention, therefore bringing the Mepilex Border Sacrum dressing to the forefront of viable options. This project addressed the need for preventative measures for pressure ulcers in general and sacral pressure ulcers in the SICU in particular.

The project took place in the 26-bed SICU of a level I trauma center; an interdisciplinary project team of institutional stakeholders guided development and planning. A protocol to pilot the prophylactic use of the Mepilex Border Sacrum was developed, which included applying the dressing to all adult patients over the age of 18, admitted to the SICU with a Braden Score less than 15. The skin and wound specialist nurse at the organization in conjunction with the author of this project assessed the sacral area underneath the dressing every day. Patients were followed during their stay in the organization even if they transferred to another unit. The number of patients with pressure ulcers during the pilot period was compared via independent *t* test to the number of patients with pressure ulcers from organizational pressure ulcer data from the past 2 years.

Both project outcomes were met, as there were no pressure ulcers during the pilot period and the cost analysis showed the Mepilex Border Sacrum dressing to be a cost effective intervention. Although future studies should include randomized control trials that include heterogeneous critically ill population, results from this pilot are very encouraging. Long-term positive implications are expected for patients in the form of reduced risk and associated complications of pressure ulcers. Organizational positive implications will take the form of avoidance of financial penalties and increased patient satisfaction. Which will in turn inform the larger health care system and potentially promote significant positive social change.

◀ ▶ go to PG.

PRESSURE ULCERS

Not All Pressure Ulcers Are Preventable: The Kennedy Terminal Ulcer

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Background: Pressure ulcers are a quality measure for long-term care facilities and hospitals. The Centers for Medicare and Medicaid Services (CMS) have regulated reporting of pressure ulcers in these facilities as a measure of nursing care. CMS will not reimburse patient care if a patient develops a pressure ulcer under the care of the facility. While most pressure ulcers are preventable there are certain situations that even with proper care and the use of evidence-based practice guidelines patients will develop an ulcer. One ulcer that appears at the end-of-life is the Kennedy terminal ulcer (KTU).

Objective: To identify current literature about pressure ulcers, unavoidable pressure ulcers, skin changes at life's end (SCALE) and the KTU.

Design: A literature review of MEDLINE, CINAHL, COCHRANE, and PUBMED was completed to determine if certain pressure ulcers are unavoidable and determine what has been published on the KTU, SCALE and pressure ulcer development.

Results: Twenty-two articles have been reviewed. The overall census is that not all pressure ulcers are preventable. The National Pressure Ulcer Advisory Panel held a conference to determine if certain pressure ulcers are unavoidable in 2010[1]. After reviewing the literature, the experts in the field determined that not all pressure ulcers are preventable. An unavoidable pressure ulcer is defined as an ulcer that forms even with the provider evaluating risk factors, taking evidence-based interventions and continuing to assess and reevaluate the plan of care. This panel also recognized that skin failure is different from a pressure ulcer. There is no formal diagnostic criterion available on skin failure. The panel did recognize the KTU as skin failure in end-of-life situations. This ulcer traditionally appears around the sacrococcygeal area, is a butterfly or pear shape, black/blue, red or purple in color, has irregular borders and develops rapidly[1-5]. The etiology of the KTU is due to hypoperfusion to the skin rather than unrelieved pressure. The life expectancy after this ulcer is identified as two days to six weeks.

Conclusion: There is a growing amount of literature to support that not all pressure ulcers are preventable. This is due to the complexity of patient's advanced disease process and comorbidities. Also, the goal of care may not warrant all preventive measures to be taken, for instance comfort care. There is minimal literature available on skin failure and KTUs. A KTU has a different pathophysiology compared to pressure ulcers. Patient and family education is crucial when a KTU is identified. It gives the provider the opportunity to use skin failure as a visual aid as to what is happening inside the body and that the patient may pass away soon. Also, the provider needs to have thorough documentation about prevention measures taken and plan-of-care goals made with the family and patient. This will help decrease suing rates and also insure reimbursement from insurance due to the ulcer being unavoidable and not due to poor care.

Key Words: pressure ulcer, unavoidable pressure ulcer, KTU, skin changes at life's end, pressure ulcer risk factors/prevention, skin changes with aging.

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◀ ▶ go to PG.

REPRODUCTIVE HEALTH

FACTORS INFLUENCING GAY MEN'S SATISFACTION WITH HEALTH CARE INTERACTIONS

Michael L. Huggins

USING MHEALTH TO INCREASE SEXUAL HEALTH EQUITY AND ACCESS AMONG VULNERABLE POPULATIONS

Tiffany M. Montgomery

INFORMATION SEEKING IN ASIANS–PACIFIC ISLANDERS WITH HIV/AIDS

Glenda N. Baguso, Carol Dawson-Rose

TRANSGENDER ISSUES IN HIV DISEASE

Glenda N. Baguso, Carol Dawson-Rose

EDUCATING HEALTHCARE PROVIDERS TO IDENTIFY AND HEAL VICTIMS OF SEX TRAFFICKING

Kupiri W. Ackerman-Barger, Ellen Goldstein, Jann Murray-Garcia, Jerry John Nutor

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GENDER INCLUSIVE FORMS? NURSES' CONFUSION ABOUT TRANS* TERMINOLOGY

Rebecca M. Carabez, Megan B. Scott

go to PG.

REPRODUCTIVE HEALTH

Factors Influencing Gay Men's Satisfaction with Health Care Interactions

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Purpose/Aim: To determine whether self-advocacy, health locus of control, internalized homophobia, and self-stigma predict perception of health care interactions controlling for age, geographic location, income, partner status, educational level, and gender identification.
Rationale/Conceptual Basis/Background: Research suggests that gay men's level of satisfaction with the health care interaction affects their utilization of health care resources. Yet we lack a clear understanding of the factors that influence gay men's perceptions of satisfaction with health care interactions._Researchers posit that the factors influencing perception of satisfaction with health care interactions include self-advocacy skills, health locus of control, internalized homophobia, and self-stigma. However this model has not been tested.
Method: Gay males over 18 years of age in the Commonwealth of Kentucky who have had an interaction with a health care provider within the past 12 months will be eligible to participate. The will be asked to rate their perceptions of their interactions with the health care provider on a Likert scale ranging from 1 (very negative) to 5 (completely positive). Participants will also be asked specific questions concerning their health care, and the health care interaction:

- Do they have a primary care provider, or seek health care at urgent care centers or emergency departments (ED)
- The type of provider (physician, nurse practitioner, physician assistant, nurse) they last saw
- How many times during the past year they saw this provider
- If the health care interaction was with a provider they did not know
- If they shared their sexual orientation with the provider
- Whether they felt the provider welcomed them as gay men

Participants will be asked to complete the following instruments:

1. SF-36v 2.0: Short Form Survey of Patient Health
2. PQS-18: Patient Satisfaction Questionnaire, Short Version III
3. SSS-S: Self-Stigma Scale for Concealable Minorities, Short Form
4. PSAS: Patient Self-Advocacy Scale
5. MHLC: Multidimensional Health Locus of Control Scale
6. IHP: Internalized Homophobia Scale

Participants will be recruited through advertisements that include a weblink in monthly newsletters from two LGBT advocate organizations based in Kentucky. Participants who agree will spend approximately 20 minutes completing the Internet-based questionnaires.
Expected Results: It is predicted that gay men who report higher self-advocacy scores, internal health locus of control, lower levels of internalized homophobia, and lower levels of self-stigma, will report higher levels of satisfaction with health care interactions. Conversely, gay men with lower self-advocacy scores, external health locus of control, higher levels of internalized homophobia, and higher levels of self-stigma will also have more negative satisfaction with health care interactions.
Implications: The knowledge to be gained from this study will be helpful for LGBT advocacy organizations as a foundation for programs to empower gay men in their interactions with health care providers. It will help guide researchers and providers as they attempt to increase gay men's utilization of health care systems in order to improve health outcomes.

◀ ▶ go to PG.

REPRODUCTIVE HEALTH

Using mHealth to Increase Sexual Health Equity and Access among Vulnerable Populations

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Purpose/Aim: This poster presents the background and methods of a sexual health intervention adaptation study.

Background: Young adult minority women have disproportionate rates of sexually transmitted diseases, compared with men and women of other age and ethnic groups. Additionally, these women report unintentional pregnancies at higher rates than other age and ethnic groups. These sexual health disparities are often associated lack of healthcare access and utilization, sexual relationship concurrency, and healthcare provider misreporting.

New learning styles are needed for young adults because they are so different from the generations that came before them. Based on the high rates of text messaging among minority women and the efficacy of prior sexual health text message interventions, the use of a sexual health text messaging interventions among vulnerable populations is warranted. Instead of creating entirely new interventions, however, adaptation of effective interventions is recommended.

Methods: The ADAPT-ITT model can be used to guide the adaptation of evidence-based, sexual health interventions from traditional, face-to-face interventions to text message interventions. The steps of the model include: assessment, decision, adaption, production, topical experts, integration, training, and testing. These steps can be implemented as a three-phase, mixed methods study.

Results: Study findings will be presented in future scholarly posters, presentations, and journal articles.

Implications: There is a strong need for effective mHealth interventions. The adaptation of traditional evidence-based interventions to mobile phone interventions allows for the delivery of these newly adapted interventions in various settings. Previously, only specially trained health practitioners or educators could implement the sexual health interventions. Through text-messaging delivery, untrained employees schools, community centers, health clinics, churches, and other facilities outside of the traditional healthcare settings can promote these interventions.

The findings of this research study will help other researchers to understand how to adapt a successful intervention from a face-to-face model to a promising mHealth model. Receiving a sexual health intervention via text message may decrease barriers to health education associated with lack of time or access to quality healthcare facilities. The use of mHealth removes the burden of trying to find the time to learn about sexual health and incorporates this much needed education into the lives of young women using a form of media with which they are already familiar and use often. It also has the potential to reach disenfranchised women and those with limited access to health care.

◀ ▶ go to PG.

REPRODUCTIVE HEALTH

Information Seeking in Asians–Pacific Islanders with HIV/AIDS

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Purposes/Aims: The purpose of this qualitative descriptive study is to explore how Asian and Pacific Islanders living with HIV (API–LWHA) seek information regarding their illness.

Rationale/Conceptual Basis/Background: Adih, Campsmith, Williams, Hardnett and Hughes (2011) found a statistically significant increase in the incidence of Asian and Pacific Islanders (API) diagnosed with HIV/AIDS. Although the national prevalence of HIV/AIDS among API is lower than that among other groups, the expected increase of HIV/AIDS in the API population—18 million in 2012 to 40 million by the year 2050—signifies a public health risk. The dearth of studies on API¬LWHA and health literacy represents a collective knowledge gap that impinges on prevention strategies, research efforts, policy development, and the lives of API–LWHA.

Methods: Individual 1-hour interviews were conducted with API–LWHA who were recruited from the Asian and Pacific Islander Wellness Center (APIWC) in San Francisco. Each interview was audio taped and transcribed. The interviews provided a forum for exploring sources, types of information, and participant self-evaluation of the process used to seek information. Eight participants self-identified as API–LWHA completed the interview. Constructivist grounded theory was used to reduce these data to themes.

Results: Participants sought out various types of information from various sources. Professional health care workers, social networks, and media (i.e., Internet and printed media) were the primary sources of information. The types of information sought varied by person. Participants sought information regarding general HIV topics, HIV medications, and the use of condoms and clean needles. Health care providers were utilized for information regarding HIV medications. Participants also triangulated information from friends, health providers and social media. The finding that study participants trusted their health care provider more than they trusted less formal sources has implications for health care professionals—in particular, nurses, who play a key role in educating their patients.

Implications: Given that various sources are used by API-LWHA to seek information regarding their illness, nurses and health care providers are in an optimal position in which to be involved in this process. As education for health is important in health outcomes, nurses and health providers must find ways in which to be increase the effectiveness of participant-provider communication and improve ways in which to make information more accessible and applicable to API-LWHA. Not only are nurses and health care providers sources of information, nurses and other health care providers may need to substantiate information that people get from other sources. It is important that API-LWHA receive reliable, updated and culturally sensitive information from all sources. The responsibility of tailoring information so that the specific population of API–LWHA can understand, process and act on the information falls to the nurses and health care providers.

◀ ▶ go to PG.

REPRODUCTIVE HEALTH

Transgender Issues in HIV Disease

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Purposes/Aims: As part of a larger study conducted by the UCSF International HIV/AIDS Nursing Network, the present study was a secondary analysis aimed at examining the symptom experience for transgender persons. The study's purpose was to answer the following questions: What are the frequency and intensity of symptoms in a transgender sample of HIV-infected individuals? Are there gender differences (male, female, transgender) in this sample regarding symptom experience, symptom intensity, quality of life and engagement with health provider?

Rationale/Conceptual Basis/Background: A recent study by Baral et al. (2013) found that worldwide; transgender women had an odds ratio of 48.8 (95% CI 21.2-76.3) of contracting HIV. The Institute of Medicine (2011) found a need for transgender people living with HIV (TPLWH). The TPLWH faces multiple barriers to health and health care. Limited employment opportunities increase reliance on sex work as a means of income (Sausa, Keatley & Operario, 2007), which is found to increase risk of contracting HIV (Operario & Nemoto, 2005). Newfield (2006) found that transgender males report reduced health-related quality of life. Clement-Nolle, Marx & Katz (2006) found stigma leads to harmful behaviors and higher suicide risk due to gender-based victimization. Although symptom frequency and experience is well documented in HIV literature (Holzemer et al., 1999; Holzemer, 2002), more studies that include TPLWH are needed.

Methods: Using the baseline data from a randomized controlled trial on HIV Symptom Management (Wantland et al., 2008), people living with HIV were recruited from 14 sites (Africa, Puerto Rico and United States) in community-based organizations and hospitals. Participants (n=775; transgenders=17; females=296; males=462) completed a demographic survey, the Revised Sign and Symptoms Checklist for Persons with HIV Disease (SSC-HIVrev), Engagement with Health Care provider Instrument (HCP) and the HIV/AIDS Targeted Quality-of-Life Instrument (HAT-QoL).

Results: The data indicates that TPLWH presented with more symptoms and significantly higher symptom intensity when compared with males and females. The top five most frequently reported symptoms were painful joints (p=.001), difficulty concentrating (p=.001), depression (p=.000), muscle aches (p=.031) and weakness (p=.000) among the TPLWH, all statistically significant differences when compared with males and females. Again, comparing gender in this analysis, TPLWH reported significantly higher symptom intensity for painful joints (p=.048), concern over weight gain (p=.018), gas/bloating (p=.002), depression (p=.011) and anxiety (p=.003).

Implications: The data shows that TPLWH present with more symptoms and higher symptom intensity across gender. Symptom management for HIV support that more symptoms and symptom intensity can influence medication adherence, quality of life and decision to seek care (Lorenz, Cunningham, Spritzer, & Hays, 2006; Siegel, Schrimshaw & Dean, 1999; Spirig, Moody, Battegay & De Geest, 2005). Given the high prevalence of HIV among the transgender population, symptom experience, depression, substance abuse, violence and quality of life should be addressed by health providers. Culturally sensitive and personal plan of care for the TPLWH increases time spent with the health care provider, encourages disclosure of gender identity and other health issues, increases the quality of life and helps decrease the frequency and intensity of HIV symptoms.

◀ ▶ go to PG.

Educating Healthcare Providers to Identify and Heal Victims of Sex Trafficking

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Background: A lack of awareness of the invisible population of sex-trafficking victims causes profound missed opportunities to improve the health of individuals and population health. Sex trafficking is a priority health issue because of the physical and mental health risks and outcomes faced by the victims. Research suggests that up to half of sex trafficking victims in the United States have had contact with a physician or other health care provider. Most health care professionals have difficulty recognizing and have limited education and training to appropriately respond to victims of sex trafficking.
Aims: This study aimed to 1) assess and increase knowledge, ability and confidence of healthcare providers to identify and heal victims of sex trafficking; 2) assess and build institutional capacity to appropriately and constructively serve victims of sex trafficking.
Methods: A four-hour workshop was provided that featured the lived experience from a sex trafficking survivor; statistics and referrals from local nonprofit community organizations; trauma-informed primary care; and law enforcement actively working on mitigating and ameliorating the impact that sex trafficking has had on the lives of individuals. The structure of the workshop was intended to provide specific information to healthcare providers, but intentionally recruited community members, advocates and healthcare consumers to brainstorm and develop a collective effort to create structures, practices and resources to help and heal victims of sex trafficking. Paper pre- and post-event surveys with a 4-point Likert scale were administered to participants who identified as health professionals or health professional students to assess their perceived levels of knowledge, ability, and confidence during clinical encounters with patients who are victims of sex trafficking. Pre- and post-surveys with open-ended questions were administered to both health care professionals and non-health care professional participants to assess perceptions of institutional capacity. A brainstorming session was conducted to gather data regarding perceptions of potential solutions to better serve the needs of sex trafficking victims and survivors. IRB approval was obtained prior to the workshop.
Results: Of the 67 participants who completed the questionnaire, 52 were healthcare providers and 15 were staff, administrators or community members. Pre-event distributions indicated that 47.8% (22) healthcare providers had heard that sex trafficking may be a problem, but did not know more than that. Results from the study indicated that the workshop increased knowledge, ability and confidence and promoted a desire to advocate on behalf of sex trafficking victims. The results of a thematic analysis of qualitative participant responses resulted in five prominent themes that included: training, community and institutional capacity, awareness and advocacy, knowledge of local resources, and coordination of care.
Implications: Although equipping individual healthcare providers with knowledge, awareness and confidence is critical, workshops like this will yield little without institutional support, resource availability, and community partnerships. The findings from this study add to the existing literature by demonstrating that building institutional capacity and collective efficacy are critical to provide and sustain optimal care for sex trafficking victims and to make critical change in the harm created by sex-trafficking.

◀ ▶ go to PG.

Gender Inclusive Forms? Nurses' Confusion about Trans* Terminology

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Aims and Objectives: To determine whether nurses are familiar with gender inclusive forms and whether their agencies have them.

Background: Approximately 9 million Americans identify as lesbian, gay, bisexual and transgender (LGBT), with about 950,000 (estimates of 0.2%-0.5% of adult population) identifying as trans* (a term that encompasses the entire spectrum, including transgender, transsexual, trans man, trans woman and other terms). In 2011, the Institute of Medicine identified transgender adults as an understudied population in critical need of health research.

Method: Structured interviews with 268 registered nurses in the San Francisco Bay Area queried about the use of gender inclusive forms (capable of identifying trans* patients) at their agencies.

Results: Only 5% reported use of gender inclusive forms, and the study demonstrated the need for education/training of registered nurses in gender identity and sexual orientation terminology as 44% had no idea whether forms were inclusive, 37% did not understand what a gender inclusive form was, and 14% confused gender with sexual orientation.

Conclusion: The lack of understanding of concepts and terminology may affect basic care of LGBT patients especially those who identify as transgender. Recommendations in understanding common gender identity keywords and utilizing gender inclusive forms are discussed.

Key Words: Transgender health, nursing curriculum, diversity training, health equity

◀ ▶ go to PG.

go to PG.

SAFETY

REDUCING SURGERY SCHEDULING ERRORS

Donna S. Watson, Kenn B. Daratha, Cynthia F. Corbett, Gail Oneal

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CONCEPT ANALYSIS: PATIENT SAFETY

Linda Kim, Courtney Lyder, Donna McNeese-Smith,
Linda Searle Leach, Jack Needleman

BARCODE MEDICATION ADMINISTRATION: USING ROOT CAUSE ANALYSIS TO ENHANCE LEARNING

Lynda M. Gullett, Linda Morrow Torma, David Claudio

PRELICENSURE STUDENT NURSE MEDICATION ERRORS: A SYSTEMATIC REVIEW OF THE LITERATURE

Grace R. Kolodychuk

COGNITIVE LOAD AND INFLUENCES EXPERIENCED BY RNS DURING MEDICATION DELIVERY

Linda Searle Leach, Jennifer McFarlane, Susan D'Antuono,
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go to PG.

SAFETY

Reducing Surgery Scheduling Errors

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Purposes/Aims: The purpose of this patient safety research is to determine whether team training with bundled interventions for surgeons and multidisciplinary staff involved with surgery scheduling will improve the accuracy of surgery scheduling, thereby minimizing scheduling factors that contribute to the occurrence of wrong site surgery (WSS). A quasi-experimental design will be utilized to apply interrupted times series analysis. The research addresses the following aims: 1) To describe and compare overall surgery scheduling error incidence rate and type, and error incidence rate and type by surgery specialty department before and after implementation of bundled team training interventions for surgeons and multidisciplinary staff; and 2) To determine if the trend of surgery scheduling errors is altered after implementation of bundled team training interventions.

Rationale/Conceptual Basis/Background: Despite decades of patient safety research, medical errors occur at an alarming rate and may result in life-threatening disabilities, extended hospitalization, or death. Preventable egregious medical errors include wrong patient, wrong site, and/or wrong procedure surgery. Approximately 40 WSS occur weekly in the United States. Position statements, guidelines, and checklists have failed to decrease the incidence of WSS. Moreover, The Joint Commission has reported 39% of WSS examined began with a surgery scheduling error. The incidence of surgery scheduling errors range between 0.41% to 5.3%; however, research and preventative measures are limited.

Methods: Utilizing quasi-experimental research, prospective data will be collected from a Health Care System (HCS) in southern Washington State. The HCS centralized scheduling department schedules an average of 100 surgery cases daily. Surgery scheduling error data will be collected before and after delivery of team teaching with bundled interventions. Frequency distributions of scheduling error types and surgery specialty will be reported. To determine the effect of a bundled team training intervention that consists of training with bundled interventions above and beyond the underlying secular trend, an interrupted time series with segmented regression will be utilized.

Results: Expected results will provide insights as to the incidence and types of surgery scheduling errors and effectiveness of bundled team training as an intervention to reduce the incidence of surgery scheduling errors.

Implications: This novel and innovative patient safety research, with an estimated sample of 12,000 surgery cases, is needed to identify effective patient safety strategies to minimize surgery scheduling errors and patient risk. The *expected outcome* of this research is to provide evidence that an additional layer of protection may be added to minimize the risk of wrong site surgery by strengthening the processes that occur on the front end of the patient experience beginning with surgery scheduling. The study results have the potential to influence local and national standards, guidelines, and position statements to promote safe patient care throughout the perioperative surgical continuum.

◀ ▶ go to PG.

SAFETY

Concept Analysis: Patient Safety

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Purpose: The purpose of this concept analysis was to identify the defining attributes and to present sample cases that would help distinguish the concept of patient safety from the concept of quality of care. Applicability of CALNOC indicators as empirical referents of patient safety were also explored, in preparation for future research.

Background: Since the publication of the *To err is human: Building a safer health system* report by the Institute of Medicine (IOM), various government and private sectors across the nation, including the Agency for Healthcare Research and Quality (AHRQ) and the Joint Commission, have been committed to ensuring basic patient safety, tracking progress, and investing in research and dissemination of information related to prevention of medical errors. In addition, alliances of health care organizations and providers such as the National Quality Forum (NQF), the National Center for Nursing Quality (NCNQ), the Hospital Quality Alliance, and the Collaborative Alliance for Nursing Outcomes (CALNOC) have endorsed lists of measurable indicators to facilitate collection, monitoring, and reporting of healthcare performance and patient outcomes. Unfortunately, these lists of indicators vary from entity to entity, making consistent collection and measurement of outcomes challenging. Furthermore, previous concept analyses found in nursing literature do not provide a clear explanation of the attributes and sample cases that would help distinguish the concept of patient safety from the concept of quality of care; hence, the two concepts are often used interchangeably.

Methods: A concept analysis on patient safety was conducted applying Walker and Avant's (2010) conceptual analysis process: 1) selecting a concept, 2) determining the aims/purposes of analysis, 3) identifying all uses of the concept, 4) determining the defining attributes, 5) constructing a model case, 6) constructing borderline, related, contrary, and illegitimate cases, 7) identifying antecedents and consequences, and 8) defining empirical referents. A literature search was conducted through PubMed and Cumulative Index to Nursing and Allied Health Literature Plus (CINAHL Plus) using the terms "patient safety" and "concept analysis," "attributes," or "definition" in the title and or abstract. All English-language literature published between 2002-2014 were considered for the analysis.

Results: The primary emphasis of patient safety is the prevention of the negative aspects of care that can potentially harm patients, while the emphasis of quality care is promoting the positive aspects of care. The defining attributes most frequently associated with the concept of patient safety in the reviewed literature include: 1) prevention or reduction of errors and adverse events, 2) protection of patients from harm or injury, and 3) collaborative efforts by individual healthcare providers as well as the healthcare system. The application of CALNOC indicators as empirical referents would facilitate the measurement of identified defining attributes of patient safety.

Conclusions: The defining attributes and empirical referents identified in this analysis may help facilitate consistent measurement of patient safety across healthcare organizations. The results of this concept analysis may also be used to guide development of a conceptual model and framework that can be applied in an international context, strengthening future patient safety research.

◀ ▶ go to PG.

Barcode Medication Administration: Using Root Cause Analysis to Enhance Learning

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Purpose: The purpose of this study is to engage staff in the process of improving the quality of Bar Code Medication Administration on a medical inpatient unit.

Background: The hallmark report by the Institute of Medicine “To Err is Human: Building a Safer Health System”, exposed the dramatic scope of medical error in the US Healthcare System, and adverse drug events (ADE) were singled out as one of the most frequently occurring errors (2000). The risk for ADE in an inpatient hospital setting increases along with the number of medications a patient takes, and many occur due to medication administration errors. Bar Code Medication Administration (BCMA) was designed to add an additional layer of safety by using bar codes to confirm the “5 Rights” of medication administration (right patient, right drug, right dose, right time, and right route). BCMA has been required in hospitals since 2004, but medication errors continue to occur. A microsystem assessment of an inpatient medical unit revealed that nurses’ perception of the BCMA process worked well, but many variations in the BCMA process were observed during the microsystem assessment. This study was designed to provide staff with information about best practices in BCMA, engage them in a root cause analysis of the variations in BCMA, and solicit recommendations for improvement.

Methods: Participants will be recruited from staff working on a medical floor in the northwestern United States. Information about BCMA and the microsystem assessment will be provided to the participants in an educational workshop. Participants will complete a short BCMA knowledge quiz before and after the presentation, and also engage in a root cause analysis of BCMA workarounds that were observed during the microsystem assessment. Recommendations for improvement will also be solicited during the workshop. Additional data will be collected after the workshop to assess changes from baseline scanning rates, type and frequency of BCMA workarounds after the workshop.

Results: Findings will be reported at the poster session.

Implications: Implications will be reported at the poster session.

Reference:

Institute of Medicine, Committee on Quality of Health Care in America., Kohn, L. T., Corrigan, J. M., & Donaldson, M. S. (Eds.). (2000). Errors in health care: A leading cause of death and injury. *To err is human: Building a safer health system* (pp. 26-48). Washington, DC: National Academy Press.

◀ ▶ go to PG.

SAFETY

Prelicensure Student Nurse Medication Errors: A Systematic Review of the Literature

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Purpose: The purpose of this systematic review of the literature was to identify research and quality management articles that described and examined medication administration errors and 'near misses' made by prelicensure nursing students within the clinical environment.

Background: Medication errors make up a significant proportion of medical errors that create risk for patients receiving care in health care facilities and can impede optimal patient outcomes. While much attention has been directed to the study of medication errors, little is known about the experiences of prelicensure student nurses who make medication errors or have near misses related to medication therapy. Knowledge of the characteristics of these errors and near misses made by prelicensure student nurses, factors that these individuals attribute to the occurrence of the medication errors, and the resulting patient outcomes can add to our understanding of the experience.

Methods: A broad search of PubMed, CINAHL, Cochrane Library, PsycINFO, and Web of Science using the search terms *nursing student* and *medication error* was conducted for the time period of January 2004 to October 2014. The search was limited to the English language. Research, quality management, or anecdotal articles that described some aspect of the frequency, characteristics, related factors and patient outcomes of prelicensure nursing student medication administration errors or near misses in the clinical environment were included. Reference lists of the included articles were searched for additional studies that fit this same time period. The broad search identified 360 published articles which decreased to 246 articles after duplicates were removed. Upon review of title and abstract, the number of articles was reduced further. Some articles required review of the article in order to determine inclusion. A total of 10 research and quality management articles and 3 anecdote/single case articles were included in the systematic review.

Results: While the various studies addressed different outcomes and employed different methods, it is clear that student nurses are involved in medication errors and near misses. Characteristics of the medication errors primarily involved rights violations such as right patient, right medication, right dose, right time, right technique, and omission. Factors related to the occurrence of errors and near misses included inexperience, confusing medication records or instructions, lack of knowledge and understanding, and lack of appropriate supervision. While most patients experienced no harm, a few patients required prolonged hospitalization or life-sustaining interventions, and one resulted in death.

Implications: Knowledge of prelicensure student nurse medication administration errors is particularly important for nurse educators so that current teaching practices for medication therapy can be optimized to: (1) support student learning regarding appropriate medication administration, and (2) ensure patient safety while in the care of prelicensure student nurses. There is a paucity of literature that describes this experience and further research is indicated.

◀ ▶ go to PG.

SAFETY

Cognitive Load and Influences Experienced by RNs during Medication Delivery

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Purpose: The purpose of this study is to: 1.) describe the cognitive load Registered Nurses (RNs) experience during the course of medication delivery to patients in acute care hospitals, 2.) explore the extent that interruptions and disruptions occur and add to a nurse's cognitive load, and 3.) investigate the impact of these factors on lapses in procedure and medication errors at a large, community hospital which was one site among 9 in a national research collaborative.

Background: Nurses believe there are multiple factors contributing to medication errors (Kreckler, Catchpole, Bottomley, Handa & McCulloch, 2008). These include distraction, interruption, heavy workload, inexperience and neglect (Tang et. al, 2007). Interruptions and distractions place a greater demand on memory and increase cognitive load (Agyemang & While, 2010). Increased cognitive loads lead to loss of attention, increasing the vulnerability and potential for errors. Nurses are at risk of an interruption and distraction with every medication pass (Elganzouri, et al, 2009). A better understanding of these factors as reported and observed by nurses is needed to improve system reliability, reduce risk and prevent medication administration errors among hospitalized patients.

Methods: The design is a descriptive, correlational study among a virtual network of hospitals sponsored and coordinated by the Improvement Science Research Network (ISRN). The unit of analysis is an episode of medication administration given to one patient in a medical surgical unit. Data was collected by 2 trained observers during the process of medication administration using a structured observation sheet at each site. Distractions were measured using RN self-report. RNs observed completed the NASA Task Load Index questionnaire to measure cognitive load. To analyze the hierarchical design with episodes nested in nurses and nurses nested in hospitals, multilevel regression models using maximum likelihood estimation will be used.

Results: Data analysis will be completed by November 2014**.** The type and frequency of interruptions, distractions, and cognitive load RNs reported and associations with procedural and administration errors will be presented from the site in relation to the aggregate.

Implications: Findings from this study have implications for identifying the unique and challenging demands RNs encounter delivery medications in acute care hospitals. Medication errors can take an emotional toll on nurses (Treiber & ones, 2010). Knowledge about interruptions, distractions and cognitive load can inform safeguards to prevent errors and reduce risks for both patients and nurses.

Funding: ISRN funding by NINR 1RC2NR011946-01, 01S1, 01S2; RWJF grant 63510.

◀ ▶ go to PG.

USE OF TECHNOLOGY

INNOVATIVE USE OF AVATARS TO LEARN DOCUMENTATION

Marylou V. Robinson

AN APP TO GET STUDENTS TO CLASS

Jennifer Stonecipher, Diane Katsma

TELEPHONE SUPPORT TO DECREASE READMISSIONS FOR OLDER ADULTS WITH CONGESTIVE HEART FAILURE

Juanette Clark, Shelley Hawkins, Heather Adams

OLDER ADULT WOMEN'S PERCEPTIONS OF ACTIVITY SENSORS

Blaine Reeder, Kate Lyden, Joshua Winters, Catherine M. Jankowski

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DISSEMINATION OF PATIENT DECISION-MAKING AIDS VIA A WEB-BASED PLATFORM

Amy Kijewski, Sheila Gephart

ABSENT STUDENTS: USE OF PERSONAL TECHNOLOGY AND SOCIAL MEDIA IN THE CLASSROOM

Patricia Frohock Hanes, Marilyn Klakovich

MONITORING DAILY ROUTINES OF OLDER ADULTS WITH IN-HOME SENSOR TECHNOLOGY: A CASE STUDY

Maria Yefimova, Akshay Jain, Diana Lynn Woods, Marilyn Rantz

USING TECHNOLOGY TO PROMOTE SELF-MANAGEMENT PRACTICES AMONG AGING AFRICAN AMERICAN'S WITH HEART FAILURE: A SYSTEMATIC LITERATURE REVIEW

Brendan Oluoha, Linda R. Phillips

◀ ▶ go to PG.

INCREASING NURSE SUPERVISOR'S ACCESS TO KNOWLEDGE AND SKILLS FOR MANAGEMENT OF NURSES WITH SUBSTANCE USE DISORDERS

Kathy Lopez-Bushnell, Nicole Morris, Melissa Johnson

HEALTH APPS TO IMPROVE SELF-CARE FOR OLDER ADULTS ON WARFARIN THERAPY: A PILOT STUDY

Jung-Ah Lee, Lorraine S. Evangelista, Alison A. Moore, Alpesh N. Amin, Mark Bachman, Javier Garcia-Rivas, Ryan Smith, Laura Narvaez

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PILOT TESTING A SMARTPHONE SLEEP DIARY APPLICATION

Carol A. Landis, Eun Kyoung Choe, Julie A. Kientz,
Karen A. Thomas, Gail M. Kieckhefer,
Margaret M. Heitkemper, Michael V. Vitiello

INVESTIGATING NURSE PHONE INTERVENTIONS ON PATIENTS' APPOINTMENT ATTENDANCE

Tanya GGBarney

THE INFLUENCE OF CULTURE ON OLDER ADULTS' ADOPTION OF SMART HOME MONITORING

Roschelle L. Fritz, Roxanne Vandermause, Cindy Corbett, Diane Cook

◀ ▶ go to PG.

USE OF TECHNOLOGY

Innovative Use of Avatars to Learn Documentation

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Purpose: To evaluate whether the integration of avatar software will increase student skill in writing clinical notes.

Background: Avatar software (Shadow Health) has been used by over 140 universities to help teach physical assessment skills, history taking and documentation. A major benefit is the student's ability to review content until mastery (Kelley, 2013). Our program has recognized the need to improve documentation skills in advanced practice nurses before starting clinical rotations. The Shadow Health system requires students to complete a weekly SOAP note for virtual visits completed with an adult avatar which has multiple medical problems.

Method: Students purchase the software from Shadow Health website as a "textbook" in the course. Students complete a focused health history interview and physical examination on the Avatar with a clinical note every week prior to going to physical assessment lab. Upon clinical note submission, a model documentation note is provided for review within the software and a student self-reflection paragraph is prompted concerning their own documentation skill. Two major assignments include a comprehensive history and a focused SOAP note. Pre and post course surveys elicited student perceptions of the avatar learning experience. Faculty determination of the caliber of documentation will be measured by retrospective comparison of grades on a comprehensive history and focused SOAP note assignment from a previous semester.

Outcomes: Pre-test surveys demonstrated a wide range of opinions concerning learning with avatars. Many were hesitant to use technology, others welcomed the opportunity to have repetitive encounters with a "patient" in a risk-free learning environment. Comparative thematic analysis of pre and posttest opinion will monitor for trends in acceptance and usefulness of the learning with Avatars. Documentation grades will be compared using inferential statistics during January 2015 using SPSS 20.

Implication: Clinical documentation is a critical skill in advanced practice for communication, legal reasons and determination of reimbursement rates. Traditionally, preparation for clinical documentation has been limited to only a few assignments. Increased practice is intended to improve student skill and competence in creating a complete clinical note.

◀ ▶ go to PG.

An App to Get Students to Class

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Purpose/Aims: The purpose of this teaching practice was to determine if Socrative, a free app for assessing student learning, for in-class quizzing over the reading material would improve student attendance in an RN to BSN research course.

Rationale/Background: RN to BSN students have busy lives that often interfere with getting to class. In a recent Professional Nursing course of 24 RN to BSN students over 9 weeks there were 39 tardies or absences, an average of 4.33 per week. This is despite giving one point of extra credit each week for being on time.

Best Practice: Instead of quizzing students over reading material on a student learning platform such as Blackboard prior to class, students were given an in-class quiz at the beginning of each class session using the Socrative app. Students were oriented to Socrative the first day of class, and a practice test was given. They were also given a choice of using the Socrative app or taking a pen and pencil scantron quiz. This teaching strategy had built-in flexibility for students. The two lowest quiz scores could be dropped, and the 15 minutes timeframe to complete the quiz allowed for minor delays in getting to class.

Outcomes Achieved: Slightly over 75% of the class used the Socrative app on their smart phones/iPads/laptops to take the quiz each week. After nine weeks of the semester in a class of 29, only one student was tardy and eight students were absent. For the students who chose to use Socrative, there were no reported problems. The faculty teaching the course found the Socrative app simple to use, and reports of the class performance, as individuals and as a whole, were easily emailed to the instructor for record keeping.

Conclusions: The Socrative app is an easy-to-use free technological tool that can be used in a variety of ways in the classroom, one of which is to facilitate in-class quizzes as a strategy to encourage students to come to class and to be on time. Designated instructional support technicians dedicated to school of nursing units are valuable in assisting faculty in finding and using appropriate technology that might enhance learning. Future research might assess how additional classroom uses of Socrative enhance learning outcomes as well as studies that assess other apps that potentially impact student learning.

go to PG.

USE OF TECHNOLOGY

Telephone Support to Decrease Readmissions for Older Adults with Congestive Heart Failure

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Purpose: The purpose of this evidenced based practice project is to evaluate the effectiveness of Discharge Follow-up Calls (f/u) for older adult Congestive Heart Failure (CHF) patients recently discharged from a private hospital in southern California.

Background: CHF is the number one discharge diagnosis among patients 65 years and older, affecting 5.8 million people in the United States and an estimated 23 million people worldwide. CHF totals (1) million yearly admissions and 27% are readmitted within 30 days of discharge. Re-hospitalizations are associated with high mortality rates and estimated at $13,000 per patient, contributing to the annual $33.7 billion dollar cost. Beginning in 2012, The Centers for Medicaid and Medicare initiated the Hospital Readmission Reduction Program, where 30-day readmissions would no longer be compensated. Patients with CHF and frequently their caretakers are overwhelmed due to lack of knowledge and skills regarding self-care management. In addition, the variations between acute care therapy and homecare regimens contribute to readmissions. Extensive research on CHF reinforces the use of f/u calls as the intervention of choice to prevent early readmissions as evidenced by a reduction of 30%. In fact, benchmark data retrieved from past research confirms a clinical and statistical significance when using STS. In the project facility, the average readmission rate for CHF patients is 8%.

Practice Change: The purpose of this evidence-based practice project is to reduce the number of CHF patient readmissions by 20%. The Iowa Model of Evidence Based Practice will be used as a framework for the project. CHF patients recently discharged will be identified in collaboration with the hospital's Health Information Management and Quality Assurance / Improvement Departments. Using the Valley Care Health System Education Heart Failure call back form, patients will be contacted post discharge at 24-48H, day 10-15, day 20-25, and day 30-31. During each call, data collection will focus on clinical measurements including daily weight and symptoms of CHF exacerbation along with diet modification and medication compliance. Concurrently, symptomatic patients will be referred to their PCP for evaluation. At the conclusion of this project, a chart review will be conducted to calculate the percentage readmissions and an internal evaluation performed to assist in creating a job description for the "Nurse Navigator," hired to sustain the CHF project.

Results: In progress: It is anticipated that there will be a 20% reduction in the number of readmissions following the use of discharge follow-up calls.

Conclusion/Implications: If shown to be effective in minimizing readmissions, telephone follow-up should become standard procedure in the setting. CHF patients, who are educated about their disease process, compliant with medications, and participate in self-care management typically, have improved outcomes. Since patient access to primary care is challenging due to provider shortage, Advanced Practice Nurses play an integral role in the health care system to enhance CHF patient outcomes and reduce the healthcare costs associated with this patient population.

◀ ▶ go to PG.

USE OF TECHNOLOGY

Older Adult Women's Perceptions of Activity Sensors

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Aim: The aim of this presentation is to characterize perceptions of body-worn and home-installed activity sensors through preliminary analysis of ten interviews with healthy post-menopausal women.

Background: Body-worn activity sensors and home-installed motion sensors are widely used in studies of physical activity with older adults. Technology acceptance is an important determinant of technology adoption if informatics-supported interventions are to translate from research settings to everyday living. However, older adult women's perceptions of body-worn sensors remain largely unexplored in health-related research. Further, there are very few studies that characterize older adults' perceptions of worn and installed activity sensors in the same study.

Methods: We conducted semi-structured interviews to characterize technology perceptions of three different activity sensors with ten women between the ages of 57 and 70 (average age: 64.6 years) from March-April 2014. Interview questions were derived from the Technology Acceptance Model, a technology obtrusiveness framework**,** and investigator experience. During interviews, participants were presented with two different accelerometers (ActiGraph^{TM}, worn on the waist; activPAL^{TM}, worn on the thigh) and a passive infrared motion sensor (X10 ActiveHome^{TM}, designed for residential installation). Each sensor was shown separately, its function explained, and participants were asked about their perceptions and potential issues related to technology use. Interviews were audio-recorded and lasted between 20-35 minutes. We conducted a preliminary analysis to identify themes related to technology acceptance, perceived usefulness, and privacy from transcribed interviews. Preliminary results are reported below.

Results: All participants perceived body-worn and installed sensors as acceptable for personal activity data collection. All participants noted that choice of body-worn or home-installed sensors would be highly dependent on lifestyle. Most participants observed a body-worn sensor would be more useful to them given their high levels of activities outside the home. For personal activity data sharing, participants had few concerns about giving access to family members or health care providers. However, some participants raised privacy issues related to potential unwanted disclosure of home activity levels due to perceived risk for break-ins or personal safety during sleep times. On this topic, one participant stated: "*It's nobody's business whether I'm home or not.*" Most participants identified potential challenges about remembering to wear, or properly wearing, a sensor in everyday life. Some participants noted that device aesthetics would play a role in whether they decided to wear a sensor out of the house. Participants varied in their reported desires to see their own activity data with preferences ranging from weekly, seasonally, or just twice a year.

Implications: This study is an early step toward understanding older adult women's perceptions of different types of activity sensors to inform informatics interventions for independent living. Individual studies of body-worn or home-installed sensors show device acceptability with older adults. A fall detection study with a single 81-year-old male found the he preferred installed sensors over an accelerometer. Our preliminary results suggest healthy post-menopausal women prefer body-worn sensors to home-installed sensors in side-by-side comparison of devices.

◀ ▶ go to PG.

Dissemination of Patient Decision-Making Aids via a Web-based Platform

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Purposes/Aims: The Patient Protection and Affordable Care Act includes a provision promoting shared decision making and the use of patient decision support interventions, but this has yet to be implemented in the United States. Clinicians cite a wide variety of financial, cultural, scientific and pragmatic barriers to utilizing shared patient decision support interventions in their daily practice. Decision-making aids are evidence-based tools that complement clinician counseling by listing available treatment options, information about generalized risks/benefits/outcomes, and clarifying the patient's personal values. The aim of this study is to create and evaluate a web-based brokerage of patient decision-making aids to increase patient participation in care planning and support the shared decision-making efforts of clinicians.

Rationale/Background: Adult patients in primary care settings frequently report confusion and a lack of knowledge about medical treatment options, hindering their ability to fully participate in healthcare decision-making. Clinicians report frustration when discussing treatment options with patients who have already received information from unreliable internet sources, such as Wikipedia and weblogs. Over 500 evidence-based decision aids are currently available on the internet, but are scattered across dozens of websites and not well advertised to the general public. Creation of a web-based decision-aid platform would utilize the existing information-seeking habits of patients, but provide them with evidence-based information to aid them in evaluating treatment options with their healthcare providers. Currently, no such platform exists in the United States for patients to freely access.

Methods: Using a descriptive dissemination design, and informed by the Institute of Healthcare Improvement and Plan-Do-Study-Act models of quality improvement, the effect of a pilot decision-aid brokerage website on satisfaction and shared decision making will be measured. Exemplars will be chosen from the 563 decision aids published by numerous organizational and private authors in the Ottawa Research Institute database. *Data Collection:* Before and after accessing each decision aid, participants will be asked questions about treatment concepts to highlight areas they may want to further discuss with their clinician on their next office visit. Demographic information will be collected from each website user. Open-ended questions about website usefulness will be asked. *Data Analysis:* Descriptive statistics analyzed to describe the population utilizing the platform. Qualitative content analysis will explore participants' perceptions of usefulness of the website to support shared decision-making.

Conclusions/Implications for Practice: Having access to high-quality, evidence-based educational materials is vital to improving health outcomes. This study supports shared decision making between provider and patient by increasing access to readily available decision aids and educational materials. A web-based platform is in development to disseminate decision aids broadly, including to those areas traditionally underserved.

◀ ▶ go to PG.

Absent Students: Use of Personal Technology and Social Media in the Classroom

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Background/Problem: Students in face-to-face classrooms (F2F) are using multiple technologies, communicating on social media, and surfing the web while listening to the professor. Faculty allow their adult learners to self-regulate use of information and communication technologies (ICTs). Faculty themselves use technology and social media in the classroom in the hopes that it will engage students and enhance their learning. The problem we are examining is: Are we tacitly encouraging students' intellectual "absence" by allowing use of multiple technologies and social media in the classroom?

Conceptual Frameworks: The theory of situated action, gratifications theory, theories of cognition, media theories, and Bloom's taxonomy and composite cognition were used in this study.

Methods: Exploratory research. A review of the literature was conducted using the following search terms: social media, multi-tasking, technology, nursing, students, presence, attention, and distraction. Articles were limited to those from 2010 and later involving higher education in a F2F format. Disciplines represented in the articles included nursing, computer science, cognitive psychology, education, communication, marketing, media studies, neuroscience, and academic development. A survey was conducted asking nursing students about personal technology use in the classroom.

Results: Review of the literature revealed that although several large-scale studies have been conducted with non-nursing populations, little was found related to nursing students' use of technology in the classroom. Key findings were that multi-tasking degrades learning and increases learning time, decreases student engagement, and lowers GPA. Use of technology not only has a negative effect on those students using the technology, but also negatively affects the learning of those around them. Furthermore, students may find technology "biologically impossible to resist" (Strauss, 2014, p. 5). Students revealed that they engage in multiple technology use, unrelated to course content, during class time, and that this use disengages them from the class and inhibits learning. Students admit to being distracted by neighbor's use of social media, technology, and devices such as cell phones, laptops, and tablets.

Conclusions and Implications: There are multiple entities competing for students' attention in today's F2F classroom. The role of the professor is to limit outside distractions and encourage delayed gratification (learning) versus immediate gratification (technology use). Teaching strategies need to be interactive versus passive. Further studies are needed with larger samples of nursing students and incorporating both qualitative and quantitative data with NCLEX pass rates as an outcome variable. Further research is also needed on effective teaching strategies related to technology, social media use, and learning outcomes.

Reference:

Strauss, V. (2014, Sept 25). Why a leading professor of new media just banned technology use in class. *Washington Post.* Retrieved from http://www.washingtonpost.com/blogs/answer-sheet/wp/2014/09/25/why-a-leading-professor-of-new-media-just-banned-technology-use-in-class/.

go to PG.

USE OF TECHNOLOGY

Monitoring Daily Routines of Older Adults with In-Home Sensor Technology: A Case Study

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Background: The boom of in-home monitoring technology offers unprecedented information about an individual's interaction with the environment, as they experience changes in health. A variety of low cost sensors can continuously and unobtrusively collect information about various activities in the living space. Capturing and analyzing changes in the daily routines of vulnerable older adults residing in these "smart homes" may allow clinicians to identify changes in functional status and predict negative health consequences.

Purpose: To identify features of daily routines that are most sensitive to changes in health, using a currently developed in-home environmental sensor network.

Methods: A collaborative, multi-campus project between the Schools of Nursing and Department of Electrical and Computer Engineering analyzed sensor data from an aging-in-place community. The apartments were equipped with a wireless network consisting of motion, depth and hydraulic bed sensors that collected continuous information about resident's activity. This descriptive retrospective single case examined the change in daily routines of an 88-year-old female resident who experienced dramatic health changes in the last two months of her life. Ten features of duration, frequency and timing of apartment activity, extracted from the sensor data were inspected for trends. These trends were examined for association with clinical assessments and nursing notes extracted from the electronic health record.

Results: The resident experienced six health changes in the two month period prior to a prolonged hospitalization culminating in her death. Two trends were noted from the extracted features. There was a sudden dramatic increase in time spent in the bedroom from an average of 8 hours/day to 12 hours/day two days prior to hospitalization. A long-term trend was noted in the decreased frequency and increased duration of activity in the bathroom/closet area of the apartment 30 days prior to hospitalization.

Implications: Abrupt changes in time spent in bedroom may signal a need to monitor the individual more closely to assess the reason for the change and to intervene. Long-term changes in bathroom activity parallel the deteriorating functional status of the resident. Passive in-home monitoring provides objective information about the older adult's activity that can supplement nursing assessments. As the cost of technology adoption decreases, nurses can use these innovative tools to coordinate care and intervene early to prevent or mitigate the functional decline associated with vulnerable older adults.

Funding: John A. Hartford Foundation's NHCGNE Award Program.

◀ ▶ go to PG.

USE OF TECHNOLOGY

Using Technology to Promote Self-Management Practices among Aging African American's with Heart Failure: A Systematic Literature Review

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Aim: To examine current literature on the use of technology to promote self-management practices among African American seniors with heart failure.

Background: According to the Centers of Disease Control and Prevention (CDC) African Americans (AA) and older individuals are at high risk for cardiovascular disease (CVD). Nearly 44% of AA men and 48% of AA women have some form of CVD including heart failure. Assuring the best outcomes for heart failure requires patients to active engage in self-management practices. Yet, sustained engagement with self-management practices remains a challenge. Both self-management practices and clinical outcomes differ by race, with the poorest self-management and clinical outcomes reported in AAs. Some intervention studies on self-management have used technological innovations, such as text messaging, social networking, and online learning platforms. The degree to which these innovations have been studied among older AAs with heart failure is unknown.

Method: A literature search was conducted using CINAHL, PubMed and Google Scholar databases. The following keywords were used: African Americans, Blacks, Heart disease, Heart failure, Technology, Lifestyle changes, Self-management, Self-care, Technology, Text messaging, Telemedicine, e-Health, m-Health, Email, Internet, Web, Cell phone, Mobile technology, Patient education, Social networking, and Social support. Data were analyzed for methodological strengths and for focus on elder AAs with heart failure

Results: Few studies evaluated use of technology for self-management in AA. The consensus of the literature review was that social norms, cultural beliefs, and cultural preferences significantly influence self-care practices of many AAs. Although there were similarities, findings and generalizability differed significantly. Because two studies had small convenience samples and did not include control groups, conclusions from these intervention studies cannot be generalized. One study included randomization and a control group, but the short study duration (30 days) did not allow for evaluation of treatment sustainability. Despite these limitations, the studies suggest significant implications for the future of research regarding using technology to facilitate heart failure self-management in AAs. The findings were useful in the process of evaluating effect on outcomes such as function, mood and disease progression, as well as acceptability and feasibility of use.

Conclusion: The literature specific to AA is limited. Interventions such as text messaging programs, online programs for education and monitoring, and social networking platforms provide synchronous and asynchronous education and support that are necessary for successful heart failure self-management. They may also significantly enhance patient and caregiver engagement and improve clinical outcomes. However, the feasibility and acceptability of technology use among older AA or those living in poverty still requires elucidation.

Implications: Using technology may increase compliance with self-management plans in AAs with heart failure. Receiving emails or text messages may increase the patient's ability to remember exact timing of medications and daily blood pressure screenings. Nurses can take an active role in loading the technology into the gadgets and educating patients how to use it effectively. More studies are needed to determine how to remove barriers for AAs living in poverty who may not have access to computers, phones, or other technology health tools.

◀ ▶ go to PG.

Increasing Nurse Supervisor’s Access to Knowledge and Skills for Management of Nurses with Substance Use Disorders

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Purpose/Aims: The main purpose of this research was to demonstrate improved nurse leader knowledge about substance use disorders (SUD), increased confidence and willingness to take action for nurses with employee performance problems potentially related to SUD and reduced stigmatized attitudes toward nurses with SUD. The second objective is that nurse leaders who participate in the “Fit to Perform” program will refer nurses with SUD to the NM BON Diversion Program that supports nurses in recovery and return-to-work adjustments.

Rationale/Background: Nurses are the center of hospital care teams and it is their responsibility to assure safe and effective nursing care in the health care system. Their function has profound influence on the quality of patient outcomes and there is a serious problem when nurses use substances that impair their performance and may result in patient harm.

Patient safety may be jeopardized when nurses have SUD which can impact performance via slower reaction time, diversion of prescription drugs, patient neglect, and medication and other SUD is defined as the “persistent usage of alcohol or drugs and functional impacts caused by this usage.” The performance of nurses with SUD is not only a threat to patient safety, but also a threat to their own health. Thus, it is the ethical and legal responsibility of nurse leaders and co-workers to have the knowledge and skills to recognize and report the problem so that the nurse can obtain effective help for his or her SUD.

Yet, there are powerful barriers to nurse leaders gaining the necessary knowledge and skills for recommending SUD intervention. In the workplace, many nurses choose to remain silent about a co-worker who may have an SUD because of “loyalty, fear of being a hypocrite, guilt, or fear of jeopardizing a colleague’s license to practice.” Nurses and the American public view SUD as a “moral failure of lack of will power” (Trossman, S. 2003). Furthermore, the persistence of negative stereotypes and ongoing stigma towards SUDs (Cadiz, D., Truxillo, D., O’Neill, C. 2012) make nurses even more.

Methods: This was an IRB approved research that randomized 116 Hospital Nurse leaders into two groups who attended a four hours “Fit to Perform” classroom training to measure the significant mean changes in knowledge, self-efficacy, and substance abuse stigma

Conclusions: The results suggest that classroom training, of “Fit to Perform” positively affects knowledge, self-efficacy, and reduces stigma and adds another effective training resource for supervisors managing nurses with substance use disorders.

◀ ▶ go to PG.

USE OF TECHNOLOGY

Health Apps to Improve Self-Care for Older Adults on Warfarin Therapy: A Pilot Study

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Background: Mobile health applications (apps) have been found to improve self-management in patients with chronic conditions, particularly children and adults. Older adults are a group that can potentially benefit from mobile health interventions.

Objectives: The goal of the pilot study was to design and test the feasibility and acceptability of Mobile Applications for Seniors to enhance Safe anticoagulation therapy (MASS). The MASS is a mobile-based health technology intervention, composed of several culturally appropriate and age-sensitive tools and components to promote independence and self-care in older adults (including Hispanic elders) on oral anticoagulant (i.e., warfarin) treatment. The specific aims are to 1) assess changes from baseline (pre-test) to 3-months (post-test) of three primary outcomes: a) cognitive function (knowledge, attitudes); b) emotional well-being (quality of life, depression, anxiety); and c) adherence to medications. Additionally, changes in secondary outcomes from baseline to 3-months a) adverse outcomes (e.g., bleeding, thromboembolic events) and b) treatment efficacy (keeping therapeutic INR) were evaluated.

Methods: The pilot study used a single-arm, experimental, pre-post design to assess the feasibility of a 12-week intervention using the MASS in 20 older adults (>=55 years) taking warfarin by examining changes in primary and secondary outcomes.

Preliminary Results: The MASS app development (English and Spanish) was completed. The components of the MASS app include 1) education about anticoagulation therapies and safety tips, 2) medication self-monitoring and reminders, 3) vitamin K content of foods including common Hispanic foods, 4) monitoring of signs and symptoms of bleeding, 5) monitoring INR, 6) connecting with people whom older adults trust (e.g., family caregivers, friends), and 7) resources. Currently 7 participants are enrolled and the recruitment has progressed. The preliminary results of this feasibility study including three month follow-ups will be presented at the conference.

Conclusion: These preliminary results will be used to modify the health app to make the design more elder-friendly and to identify challenges and benefits in using the health app for chronic disease self-management. In light of the increasing incidence and prevalence of conditions requiring anticoagulation therapy, the results of the study may offer important information in the use of information technology alternatives to meet the rising need for self-management in increasing numbers of patients and patient care-givers.

Funding: NIH support through University of California- Los Angeles, RCMAR/CHIME (P30-AG021684) and UCLA-CTSI (UL1TR000124) Pilot Study Award 2013-2014.

go to PG.

USE OF TECHNOLOGY

Pilot Testing a Smartphone Sleep Diary Application

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Aims: The purpose of this pilot study was to test the feasibility and acceptability of a smartphone sleep diary application.

Background: Diaries that capture daily activities and factors related to sleep disturbance are essential instruments frequently are employed in paper-and-pencil format in sleep research and clinical practice. We developed and pilot tested a smartphone phone application, designed for use with an Android platform that records information routinely incorporated in standard sleep diaries.

Methods: A convenient sample of 21 adults (mean age 49.9 years [11.9], 3 males) participated and completed the smartphone diary twice daily for one week. Specific time intervals were set (wake-up 3AM-12 PM; bed-time 8PM-3AM) and data were saved immediately upon entry to a UW server. Set times prohibited 'back filling' of diary entries. Subjects completed a 9 item acceptability survey with items rated 'strongly agree = 5' to 'strongly disagree = 1' and provided open ended written comments.

Results: Participants rated the smart phone application easy to use; instructions were adequate; they would use the application downloaded to a personal phone; and would use feedback from a diary recording to improve sleep. The prompt to record data was not disruptive; entering data was not a hassle; they would not prefer using a paper and pencil diary; using a loaned phone did not cause concern about loss; and they did not have concerns about others seeing their recorded information. Seventy-one percent (15/21) had at least 6 days of recorded data (matching bedtime/waketime diary time stamps); 3 subjects had complete data for 5 days and 3 for four days.

Implications: Participants in this pilot study found using a smartphone application for recording daily entries in a sleep diary highly acceptable. Using set entry intervals provides potential for complete and accurate recordings.

◀ ▶ go to PG.

USE OF TECHNOLOGY

Investigating Nurse Phone Interventions on Patients' Appointment Attendance

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Purpose/Aims: Access to quality healthcare in the United States has become a significant problem. Decreased patient adherence to attending clinic appointments reduces available slots, limits the number of patients served, and adds expense, inefficiency, and frustration to health professionals. Literature review yielded multiple studies investigating attendance of medical appointments and possible improvements; however, none of the studies included registered nurses who provided personalized education, and encouragement via the telephone. This study, a quantitative, quasi-experimental design, sought to explore what effect nurse interventions had on patients' motivations to attend their medicine specialty clinic appointments.

Rationale/Conceptual Basis/Background: The Emergency Department sees patients for non-emergent, acute symptoms and for chronic conditions not managed by primary care providers. Literature supports that medical centers globally suffer similar overuse of Emergency Departments. In this institution, the emergency physicians refer many patients to specialty care via the Physician Access Line asking providers to overbook patients into already booked clinics. Many of these no-show and are lost to follow-up until they return to the Emergency Department seeking care. If patients would attend every scheduled appointment, practitioners could increase clinic sessions. Patients may not need to utilize the Emergency Department for non-emergent health care needs, and access may be improved.

Methods: During the three-week study period, the RN utilized telephonic contact with 387 patients who had upcoming appointments to obtain consent, provide education regarding clinic processes, conduct semi-structured interviews, and gather data. The information was used to determine if the patients in the study group arrived more frequently for the appointments in comparison to a control group who did not receive the education and with the previous year's no-show rates. Data were analyzed in respect to education, attendance and no-show rates, transportation plans, reasons for reschedule or cancellation, and ability to contact. Fisher's Exact Test verified significance of the study.

The research question was, "What are the results of an established relationship between the specialty nurse and the diabetes care, pulmonary, or rheumatology patient via pre-appointment telephone interview on patient appointment adherence?"

Results: This study determined that patients who were reached and educated attended medicine specialty appointments at a significantly higher rate than ones who were not. No-show rates decreased in the study group as compared to the control group and to last year's no-show rates. Patients were reached more frequently than anticipated, most had transportation plans, lack of transportation and financial issues caused cancellations, and patients needed further medication education.

Implications: Recommendations include expansion of the study to other clinics and focusing on the RN to patient relationships in future investigations. This process has the potential to contribute to increased patient and nurse satisfaction, enhanced patient education, understanding, and adherence, and improved healthcare access.

◀ ▶ go to PG.

The Influence of Culture on Older Adults' Adoption of Smart Home Monitoring

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Purpose/Aim: The purpose of this study is to determine the influence of culture on older adults' decisions to adopt smart home monitoring. Aims are to: (1) explicate older adults' knowledge, perceptions and descriptions of smart home monitoring as these relate to self-identified culturally based expectations, and (2) understand the influence of socially constructed predictors and barriers on smart home monitoring adoption.

Rationale/Conceptual Basis/Background: This interdisciplinary study focuses on innovative and potentially cost effective solutions for improving choice for residential living, safety, and quality of life in the growing aging population. It explores older adults' decisions regarding the adoption of smart home monitoring and the influence of one's culture on a decision to allow in-home monitoring, a question that has not previously been asked. Although various smart home technologies are market ready, this study specifically focuses on smart home monitoring using artificial intelligence capable of learning human patterns of motion with applied software algorithms that identify anomalies and predict or identify changes in health status and alert caregivers or professionals.

Methods: This qualitative descriptive study involves 20-25 participants, recruited via purposive sampling. Data is collected by email interview exchanges, including both discrete and unstructured text-based solicitations from participants. Content analysis is used to analyze transcripts in iterative fashion, resulting in developing themes and representations with low inference. Simple summaries of identified themes supported with participants' own words provide a rich description that remains close to the original source. Descriptions will be used to inform question development for a psychometrics email survey which will be used in a large survey study.

Results: Formative results are revealing novel understandings about the influence of cultural values on potential adoption. Completed analysis will be reported in this presentation.

Implications: This innovative research is the first to examine culture as a potential influencing factor on adoption of in-home ambient monitoring. It is important that nurses understand how older adults receive such technology so that they can develop effective ways to implement its use to serve the needs of a growing aging population.

Funding: This research is funded by the National Science Foundation's Integrative Graduate Education and Research Training (IGERT) Program. Grant Number DGE-0900781.

go to PG.

go to PG.

UTAH STATEWIDE ACTION COALITION: INCREASING EDUCATIONAL ACCESS AND CAREER OPPORTUNITIES

BREAKTHROUGH TO BACCALAUREATE INITIATIVE: INCREASING ACCESS AND CAPACITY

Linda C. Hofmann

CULTIVATING LEADERSHIP THROUGH ASSET AND OPPORTUNITY MAPPING

Katarina Friberg Felsted

CREATING A STATEWIDE NETWORK OF RN RESIDENCY PROGRAMS

Tammy Richards, Joan Gallegos

RN EARLY ASSURANCE PROJECT: REMOVING BARRIERS AND ENSURING CONTINUATION

Sheryl Steadman

CAPTURING DATA AND MEASURING PROGRESS STATEWIDE

Bob Wong, Joan Gallegos

◀ ▶ go to PG.

UTAH STATEWIDE ACTION COALITION: INCREASING EDUCATIONAL ACCESS AND CAREER OPPORTUNITIES

Breakthrough to Baccalaureate Initiative: Increasing Access and Capacity

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Purpose: To describe our efforts in Utah to achieve the Institute of Medicine recommendation that 80% of the RN workforce have at least a baccalaureate degree by the year 2020. This presentation will describe the ground work, readiness assessment and key strategic steps in moving to increase the number of baccalaureate prepared nurses in the larger health care delivery system and nurse employer in the state.

Background: Intermountain Healthcare is a twenty-three hospital system with over 8,000 nurses. Approximately 50% of the RNs have a BS or higher degree. Over 3,000 of bedside nurses or direct care nurses have an associate degree in nursing. Over the past two years Intermountain has partnered with the Utah Action Coalition for Health (UACH) to lead the state in our efforts to increase the educational level of nurses. Our goal is to increase access and remove the real and perceived barriers to nurses being able to return to school to complete their baccalaureate education.

Brief Description: We will describe the process used in assessing organizational readiness and building support for this major intuitive. The approach and methods employed included: 1) collaborating with the schools of nursing to form student cohort and create more accessible and flexible RN to BS programs, 2) holding dialogue sessions with organizational leaders to gain buy-in and support for increased tuition reimbursement and 3) strategically planning a grassroots information and marketing campaign to inform, motivate and support nurses in their efforts to return to school for their BS degree.

Outcomes: The achievements to date have been achieved through a high degree of statewide collaboration and organizational readiness. A new policy has been approved that requires newly hired RNs achieve a BS in Nursing in 5 years from hire date. Current Non BS prepared RNs will be grandfathered in their current level of position and provided information and support regarding BS completion programs. Key messages for the “Breakthrough to Baccalaureate” campaign have been developed, based on focus groups representing the 3,000 RNs that are non BS prepared. A survey is also being conducted to find out education and career plans of these nurses.

Conclusion: When challenged with increasing the number of baccalaureate prepared nurses in your state we have several lessons learned and implications for both education and practice. It is important to assess change readiness and address the questions that came forward from staff and other professional leaders. Our process indicated a need for educational barriers to be removed and organizational understanding to be increased.

◀ ▶ go to PG.

UTAH STATEWIDE ACTION COALITION: INCREASING EDUCATIONAL ACCESS AND CAREER OPPORTUNITIES

Cultivating Leadership through Asset and Opportunity Mapping

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Purpose: To address the IOM Future of Nursing recommendation 7: “Prepare and enable nurses to lead change to advance health”, by increasing the participation of nurses on boards statewide.

Background: A critical need exists for nurse governance. Nurses currently fill between two and six percent of board seats, as compared to twenty percent by physicians. This is a distorted distribution, particularly when one considers the expertise and impact nurses have. Nurses understand the patient experience, they have contact with not only the patient but the family and the doctors, and they represent the largest part of a hospital workforce. It is essential to increasing nurses’ visibility.

Brief Description: This is an interpolative partnership among the Jonas Nurse Leader Scholar Program, the Robert Wood Johnson Foundation Action Coalition, the Utah Action Coalition for Health (UACH), HealthInsight, the Utah Organization of Nurse Leaders, and the Academic Leadership Committee. The intervention consists of three parts: collecting information on nurses who are willing and able to serve, identifying leadership opportunities on boards and other governance bodies, and matching competencies with needs.

Outcomes: The valuable knowledge, insights, and perceptions that increased nurse governance brings additionally results in improved organizational awareness, influence, and effectiveness. The asset and opportunity mapping addressed in these partnerships is piloted in a REDCap database, built to connect stakeholders on both sides of the equation. Nurse leadership not only engenders public trust and confidence but also brings increased effectiveness in board decision making.

Conclusions: The IOM’s Future of Nursing report states that “public, private, and governmental health care decision makers at every level should include representation from nursing on boards, executive management teams, and in other key leadership positions”. We must continue to provide ways for nurses to identify leadership opportunities. Future undertakings include mentoring nurses to prepare them for a variety of leadership and governance prospects, examining what part gender disparities may play, and supporting additional nurse advocacy efforts.

◀ ▶ go to PG.

UTAH STATEWIDE ACTION COALITION: INCREASING EDUCATIONAL ACCESS AND CAREER OPPORTUNITIES

Creating a Statewide Network of RN Residency Programs

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Purpose: The development and implementation of successful, sustainable nurse residency programs, was identified by the Utah Action Coalition as the number one priority for the future of the Utah nursing profession. All acute care hospital corporations were targeted to begin nurse residency programs by 2014. To implement a statewide program of this size, all acute care corporations were to be included in the initiative. To accomplish this goal, a broad-based community planning model was needed. Sensitivity to the unique needs of each hospital in the design of their nurse residency programs while creating some consistency in the nurse residency programs was also a challenge to be addressed.

Background/Rationale/Best Practices: Key representatives from the state's major healthcare providers and academic institutions were selected to be nurse residency sites. Currently there are seven nurse residency sites operational, with an additional site planned in January 2015. The partnership between each hospital site and an academic program created a seamless transition between the capstone experience and the residency programs which infused the curriculum with educational expertise and tested academic methods. A steering committee was formed which consisted of representatives from hospitals, the Board of Regents, and other health care providers and nursing leaders. A neutral community health care convener, HealthInsight, was selected to lead the project. The nurse residency programs were developed to reduce nursing turnover, increase nurses' job satisfaction and skill level, and ultimately improve the quality of care given to hospital patients. Several best practices emerged from the program: sharing of nurse residency curriculum best practices, collecting data on core indicators, such as nurse satisfaction, demographics, nurse resident competency, evaluation of preceptors, and fostering practical solutions to increase the gender, racial, and ethnic diversity of the nursing workforce.

Outcomes Achieved: Although Utah's nurse residency programs are still in the data collection phase, some positive outcomes are already being documented: 1) reduced nursing turnover with all but one program showing 100% retention, 2) increased job satisfaction, 3) increased nursing skills competencies, and 4) improved gender, racial, and ethnic diversity of the nursing workforce. All hospitals corporations are now fully committed to the value of nurse residency programs.

Conclusions/Implications for Clinical and Educational Practices: To launch nurse residency programs across all state hospital corporations requires a planning model that rewards individual best practices and is sensitive to the unique operational requirements of the individual hospital. The education-practice model is a sound way to ensure a smooth, seamless transition of the newly graduated nurse to a fully practicing registered nurse. Utah's unique model created the environment for sharing of curriculum and data across all hospitals, resulting in significant improvement in all of the nurse residency programs in the state.

◀ ▶ go to PG.

UTAH STATEWIDE ACTION COALITION: INCREASING EDUCATIONAL ACCESS AND CAREER OPPORTUNITIES

RN Early Assurance Project: Removing Barriers and Ensuring Continuation

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Purposes/Aims: In Utah, over 50% of the RN workforce has been prepared by associate degree programs. Only 33% have a baccalaureate degree. One of the eight recommendations issued by the Institute of Medicine: Future of Nursing (IOM) report is to have an 80% baccalaureate-prepared nursing workforce by 2020. In the state of Utah, through the combined efforts of the Utah Action Coalition for Health (UACH), the Utah Organization of Nurse Leaders' Academic Leadership Committee (UONL-ALC), and Westminster College (WC), institution specific strategies were put in place that would provide options for RNs going back for baccalaureate nursing degrees. Westminster College's School of Nursing and Health Sciences (SONHS) wanted to remove identified barriers and provide an option for RNs who obtained associate nursing degrees from nationally accredited institutions to be able to obtain baccalaureate degrees from a regionally accredited institution in three semesters.

Rationale/Background: The online-hybrid program provided a way for RNs to remain in their current work setting while obtaining a baccalaureate degree in nursing. One primary barrier for RNs is that they received nursing degrees from nationally accredited institutions. This restricted credit transfer and increased the need to repeat or take additional courses prior to application. Often, in order for RNs to qualify for admission, an additional 2-4 semesters of course work were required. For many RNs, this barrier led to reconsideration in advancing their degree.

Process: WC SONHS developed institution-specific strategies to improve availability for RNs wishing to obtain a baccalaureate degree: (1) conducting information sessions about the state of the RN workforce in Utah and the 2020 goal of an 80% baccalaureate nursing workforce with key strategic offices and departments on campus, (2) orchestrating logistics discussions with the Admissions and Registrar's offices, (3) exploring options for second degrees in terms of financial aid, (4) hiring a program director with expertise in online learning, (5) developing individualized advising practices with the program coordinator, (6) offering more general education courses online, (7) creating the technological infrastructure necessary to support online learning, and (8) developing cohort pricing for healthcare organizations and agencies to support continuing education for their employees.

Outcomes Achieved: WC SONHS has identified ised as necessary. arning. the liberal/general education requirements and pinnovative ways to address the needs of the RNs returning for a baccalaureate degree in nursing. Articulation agreements with identified institutions has allowed WC to evaluate program curricula and accept students into the RN/BS program pending successful licensure.

Conclusions: Barriers have been assessed and removed to ensure seamless movement from nationally accredited institutions to regionally accredited institutions. Future endeavors will include: (1) early identification of top students in associate programs prior to graduation, (2) evaluating option to have dual registration between the institution and WC, (3) advise students to take required prerequisites and LEs to meet established criteria for admission, (4) assess prior learning skills as transfer credit, and (5) continue to work with employers to insure access to baccalaureate education for employees.

◀ ▶ go to PG.

UTAH STATEWIDE ACTION COALITION: INCREASING EDUCATIONAL ACCESS AND CAREER OPPORTUNITIES

Capturing Data and Measuring Progress Statewide

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Purpose: Data on Utah's nursing profession is critical to measuring our state's progress in meeting the Institute of Medicine's goals on the future of nursing. Prior to 2013, there was no centralized tracking of nursing data and data was collected ad hoc by different groups for varying purposes. A Nursing Data Center was needed to house the nursing data and to update the data being collected on a timely basis. At the same time, implementing nurse residency programs in Utah was identified as the number one priority by the Utah Action Coalition for Health (UACH). UACH members hypothesized that nurse residency programs would reduce the nursing turnover rate, increase job satisfaction, and improve the skill level of newly graduated nurses. A data collection system had to be developed that was easy for nurses to use and collected key metrics to evaluate the effectiveness of the nurse residency programs.

Background/Rationale/Best Practices: In 2014, the Utah State Legislature approved the creation of the Utah Nurse Data Center as part of the Utah Medical Education Council (UMEC). The Utah Nurse Data Center was created through broad-based efforts of the state nursing associations convincing legislators of the need for a centralized nursing data repository. With the support of UACH, UMEC has expanded their analytic capabilities and applied for the designation as the nationally recognized Utah Nurse Data Center. The Utah Nurse Data Center has developed data sets for the RN and APRN profiles in Utah, including supply and demand data.

To collect data on the effectiveness of the nurse residency program, a data collection system "REDCap", based on a model by Vanderbilt University, was used to track nurse demographics, job satisfaction and skill competencies. A nationally recognized survey tool, the Casey-Fink scale, was used to track the above variables. This data system, easy to use by nurse residents, has provided Utah with a wealth of data on nurse residency program outcomes.

Outcomes Achieved: Utah now has a wealth of statewide nursing data, housed in the UMEC Nursing Data Center, capturing RN and APRN analytics in the following areas: 1)existing supply and pipeline data, 2) current workforce profile and projected workforce needs. The nurse residency programs currently have data on nurse residents' demographic profiles, Casey-Fink data at baseline, 6 months, and annually, and evaluation of nurse resident's competencies by their assigned preceptors at 6 months and annually.

Conclusions/Implications for Clinical and Educational Practices: To create a statewide repository for the RN and APRN data necessitated a centralized data source be created that was recognized and sanctioned by the Utah State Legislature. Different agencies could provide this function in other states as long as broad-based support from the state's nursing organizations was achieved. To demonstrate the effectiveness of nurse residency programs, a simple to use data system, such as REDCap, is essential to a sound data collection system.

◀ ▶ go to PG.

WOMEN'S HEALTH

RECRUITMENT AND RETENTION OF WOMEN WITH PHYSICAL DISABILITIES IN HEALTH RESEARCH

Dena Hassouneh, Laura Mood, Elizabeth McNeff

EQUITY IN TIMELY TREATMENT FOR WOMEN WITH CARDIAC DISEASE

MaryAnn Daly England, Jane Carrington

PROTECTIVE BUFFERING AS A MEDIATOR OF DEPRESSIVE SYMPTOMS IN WOMEN WITH FIBROMYALGIA

Lyndsey M. Miller, Kim D. Jones, Rob M. Bennett, Karen S. Lyons

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THE JOYS AND CHALLENGES OF MIDLIFE WOMEN

Annette J. Thomas

WOMEN IN RESETTLEMENT: DEVELOPMENT OF AN AT-RISK ASSESSMENT TOOL

Olivia Catolico

LIFE WITH FEMALE URINARY INCONTINENCE: ARE INTIMATE PARTNERS IN AGREEMENT?

Lori S. Saiki

DEPRESSION, FATIGUE, COGNITIVE FUNCTION & UNCERTAINTY IN MULTIPLE SCLEROSIS

Cheri Roseberry

DECREASING UNNECESSARY PAP TESTS AND COLPOSCOPIES USING 2012 ASCCP GUIDELINES

Michelle M. McCormick, Mary Barger

◀ ▶ go to PG.

IMPROVING HPV VACCINATION IN MILITARY WOMEN

Sarah Wedel, Joseph Burkard,
Rebecca Navarrete, Alisha Keating

AMERICAN INDIAN WOMEN'S HEALTH PERCEPTIONS AND HEALTH PROMOTION BEHAVIORS

Sharon Boothe-Kepple

MULTIVARIABLE ANALYSIS OF FEMALE HPV VACCINATION RATES IN THE INTERMOUNTAIN WEST

Djin Lai, Qian Ding, Echo Warner, Julia Bodson, Deanna Kepka

LATINA MOTHERS' PERCEPTION OF CARE COORDINATION FOR CHILDREN WITH DEVELOPMENTAL DELAY

Eileen K. Fry-Bowers, Jackie Touch

HORMONE THERAPY DECISION MAKING IN OLDER WOMEN: REPORT OF A PILOT STUDY

Mary M. Hunter

◀ ▶ go to PG.

WOMEN’S HEALTH

Recruitment and Retention of Women with Physical Disabilities in Health Research

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Purpose: To examine evidence on recruitment and retention of women with physical disabilities (WPDs) in research and present four principles to guide investigators seeking to recruit and retain this population.

Background: Inadequate participant recruitment and retention practices can affect sample representativeness and thus the generalizability of findings. Retention of participants has been examined within the literature; however, there is no consensus on best practice. Furthermore, there is a gap in understanding how to engage and retain WPDs in research.

Methods: We searched PubMED, Medline, PsychINFO, CINAHL, SCOPUS, and Google Scholar using key words *recruitment*, *retention*, *attrition*, and *dropout*. We strung key words in various arrangements including *human subjects*, *research participants*, *women*, *clinical trial*, *research design*, *prospective research*, *best-practice*, *strategies*, *disability*, and *community-based research*. Search limits were used to specify journal articles, systematic reviews, meta-analyses, and evaluation studies published from 2007-2014. Returned citations were generally disparate in their relevance to the recruitment and retention of WPDs in research. Thus, it was necessary to conduct a hand-search of each citation to identify articles.

Outcomes: Our review revealed that retention of research participants has been studied in specific populations, often related to certain health-illness conditions. Methods to promote retention of research participants are diverse and highly specific to individual studies. Although retention strategies have been explored systematically, in some cases these reviews indicated that retention efforts and outcomes are generally poorly reported, and that the diversity of strategies used by researchers makes it difficult to assess the impact of any strategy or set of strategies on retention outcomes. Furthermore, information on maximizing the retention of participants is sparse. Of note, no reviews or single studies have examined efforts to retain WPDs in prospective health research. In light of this gap we offer four principles to investigators seeking to recruit and retain WPDs. We developed these principles based on prior research experience with WPDs and tested them in a clinical trial. These principles are: 1) community-based participatory research is most effective in identifying the health-related needs of WPDs; 2) research teams that are fluid and dynamic in their membership and consistently promote the full inclusion of persons with disabilities are best situated to develop, implement, and evaluate programs impacting the health of WPDs; 3) consumer-driven interventions promote independence of WPDs in research; and 4) culturally sensitive and person-centered research implementation supports the engagement of WPDs in studies and thus their retention in research. Using these principles we achieved a retention rate of 95% in our intervention group and 67% in our control group over a period of more than one year.

Conclusions/Implications: Factors contributing to sampling bias can be minimized via the implementation of strategies geared toward promoting the retention of representative samples. Based on our prior experience, we outline four principles useful in doing research with WPDs. In our clinical trial, attention to the research approach; team composition; intervention relevance and feasibility; and implementation of culturally sensitive and person-centered research strategies were critical success factors that helped us engage and retain participants.

Funding: Work supported by the National Institute of Disability and Rehabilitation Research.

◀ ▶ go to PG.

WOMEN’S HEALTH

Equity in Timely Treatment for Women with Cardiac Disease

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Purpose/Aims: More than 233,000 or one in four women die each year due to cardiac disease. The purpose of this presentation is to introduce a cardiac risk stratification tool to assist practitioners in identifying acute and prodromal symptoms in women increasing quality care and patient safety.

Rationale/Background: Men have benefitted more than women with advances in cardiac disease diagnostics. In the United States, women die of cardiac disease more frequently than men. This is especially troubling when, compared to women, men present with more acute myocardial infarctions. Cardiovascular disease is still the leading cause of mortality and morbidly for women. Women under 50 years of age have twice the mortality of men after an acute myocardial infarction and women have a higher incidence of sudden cardiac death. These disparities may be the result of a delay in treatment by practitioners who do not recognize prodromal symptoms or their importance in risk stratification. This component is a modifiable factor in decreasing the disparity in mortality and morbidity of women. Furthermore, this disparity expands ethnic lines including Black and Hispanic women having greater disparity over White women in cardiac event recognition and timely treatment.

Description of the Undertaking/Best Practice: A standardized tool that assists practitioners to identify and efficiently treat women with cardiac disease may decrease disparities between men and women and increase patient safety and quality. The tool will provide stratification of women’s cardiovascular acute and prodromal symptoms assisting the practitioner’s ability to categorize cardiac risk and initiate cardiac diagnostic and treatment pathways. Using gender specific risk stratification along with cluster analysis of acute and prodromal symptoms, risk groups will be established. Specific characteristics such as body mass index, race, smoking, age and personal history of cardiovascular disease will be incorporated.

Practice Outcomes: This tool will be implemented in a clinical practice as part of a quality improvement project. Our anticipated outcomes include provider and patient satisfaction and effective decision making in assessment and timely treatment of women who present with acute and prodromal cardiac symptoms.

Conclusions: Women are still subject to gender inequities by being under-diagnosis and under-treated. Women who present with prodromal cardiac symptoms challenge practitioners. Research in gender inequities and prodromal clustering can assist practitioners in reaching a cardiac etiology earlier. Early application of risk stratifications are a pivotal link between patient presentation and treatment initiation timelines. Applying a standardized tool will decrease gender inequities in treatment, improving mortality and morbidly for women.

◀ ▶ go to PG.

WOMEN'S HEALTH

Protective Buffering as a Mediator of Depressive Symptoms in Women with Fibromyalgia

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Purpose: To determine the mediating effects of protective buffering in the relationships between (1) pain severity and depressive symptoms, and (2) relationship quality and depressive symptoms.
Background/Framework: Fibromyalgia is a common chronic pain illness with a 6:1 female/male predisposition (Lawrence et al., 2008). In addition to daily pain, patients with fibromyalgia have three times the odds of experiencing an episode of major depression as the general population (Fuller-Thomson, Nimigon-Young, & Brennenstuhl, 2012). Drawing upon the developmental-contextual model of couples coping with chronic illness (Berg & Upchurch, 2007), we hypothesized that, in addition to chronic pain, interpersonal factors (relationship quality, social support, and protective buffering) would influence depressive symptoms in women with fibromyalgia.
Methods: Using structural equation modeling, we conducted a secondary analysis of data from 204 women with fibromyalgia in order to simultaneously model the mediation effect of protective buffering in the two relationships of interest–pain and depressive symptoms; relationship quality and depressive symptoms–using a partially latent structural regression model.
Results: The final model provided a good fit to the data (χ2 test of model fit = 12.38, p = .336; comparative fit index = .995; Tucker-Lewis index = .991; root mean square error of approximation = .025, 90% CI: .00, .08; χ2 (20) = 314.33, p < .0001; standardized root mean square residual = .041). Greater pain severity was related to more protective buffering (β = 0.45, p = .004, 95% CI = .14, .77), and more protective buffering was related to greater depressive symptoms (β = 0.71, p = .003, 95% CI = .24, 1.18). After accounting for the mediating effect of concealment, there remained a direct relationship between pain and depressive symptoms (β = 1.55, p < .001, 95% CI = .78, 2.32), but the indirect effect of pain through concealment on depressive symptoms was significant (β = .32, p = .04, 95% CI = .02, .62). Thus, protective buffering partially mediated the relationship between pain and depressive symptoms. Relationship quality was inversely related to protective buffering (β = -10.57, p < .001, 95% CI = -13.22, -7.92), and was not directly related to depressive symptoms (β = -4.43, p = .30, 95% CI = -12.76, 3.91). However, the indirect effect of relationship quality through concealment on depressive symptoms was significant (β = -7.47, p = .004, 95% CI = -12.53, -2.41). Thus, concealment fully mediated the influence of relationship quality on depressive symptoms. Additionally, higher levels of social support from friends was linked to greater relationship quality (β = .79, p < .001, 95% CI = .49, 1.13), and also inversely associated with depressive symptoms (β = -.54, p < .001, 95% CI = -.75, -.33).
Implications: These results add compelling evidence that interpersonal factors are influential on depressive symptoms. Nurses assessing for risk factors of depression among women with fibromyalgia should take into account the patients' spousal relationship and other social support systems, as well as the patients' method of communicating symptoms of their illness to the spouse (i.e. protective buffering).

Funding: This study was supported by a grant from the National Institute of Arthritis and Musculoskeletal and Skin Diseases [5R21AR053597; PI: Lyons, K.S.].

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◀ ▶ go to PG.

WOMEN'S HEALTH

The Joys and Challenges of Midlife Women

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Purpose/Aims: To examine how midlife women experience joyful events and challenges, to determine how, if at all, midlife women use joyful events to increase their resilience for their challenges, and to investigate how women experience the menopausal transition (MT).

Background: Women in midlife who have a lot of responsibilities and severe menopausal transition symptoms may also have higher levels of stress. Disease states often occur after having chronic, high levels of stress, often with sustained high cortisol levels and self-reports of perceived stress. It is not only important to learn what kind of experiences midlife women have that increase their stress levels and what they do to moderate the stress response, but also to explore the joyful experiences they have. Learning about their joyful experiences may provide an insight into how these joyful experiences balance their lives. Everyone has stress in her life, but being able to be joyful may be the difference between high, chronic stress that leads to disease and low stress that can be managed effectively.

Theoretical Framework: Both internal and external stressors contribute to allostatic load. Allostatic load refers to the burden of chronic stress and altered personal behaviors that result from the effects of overuse (McEwen, 1998). Women in midlife are at risk of allostatic load, since their stress levels tend to be very high, especially if these women have limited support and negative coping mechanisms.

Methods: The study design utilized qualitative research with grounded theory. The population involved a purposeful sample comprised of three women who answered flyers posted in local coffee shops. The data analyzed consisted of field notes and audio recordings of the individual interviews and drawings that the women made. These three data types gave rise to method triangulation providing a consistent and coherent understanding of the topic.

Results: In reviewing transcripts and drawings, the following themes emerged divided into two categories, joyful themes and challenging themes. The joyful themes were "Taking Care of Yourself," "Seeking Companionship," and "What's Next?" The challenging themes were "Dealing with Aging," "Sacrifices," and "Curve Balls."

Conclusions/Implications: In reference to McEwen's allostatic load theory, the positive coping mechanisms that prevent allostatic load fall under the joyful themes of "Taking Care of Yourself" and "Seeking Companionship." The stress part of the theory gives rise to the challenging themes of "Sacrifices" and "Curve Balls." "Dealing with Aging" involves the MT and midlife changes. The joys that midlife women have may help buffer the stress associated with the challenges and prevent allostatic overload. In this way, primary care providers and researchers will be informed of what resources these women need, how to address their lack of joy, and what interventions to prescribe in order to decrease allostatic load that may result from challenges leading to future disease states.

◀ ▶ go to PG.

Women in Resettlement: Development of an At-Risk Assessment Tool

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Purposes: The purposes of this initial pilot study are to: (1) develop an at-risk assessment instrument for women in resettlement that is grounded in research, and (2) to establish the instrument's content validity.

Background: Varied and scarce evidence persists about the reliability and validity of assessments used to guide treatment and care decisions with resettled refugee populations. These tools often do not account for the migration experience and its impact on the health and wellbeing of resettled persons. Timely and appropriate services remain fragmented, widening the healthcare disparity gap. Women-headed households are particularly at risk, as they lack social and economic resources. Multifaceted programs in host communities focus on societal integration and productivity of resettled refugees. However, research indicates that refugee groups of diverse ethnicities experience post-resettlement difficulties long after migration (Wong, et. al, 2010, Gordon, Taylor, & Sarkisian, 2010; King, Welch, & Owens, 2010; Mirza & Heinemann, 2011; Anjum, Nordqvist, & Timpka, 2012; Sulaiman-Hill & Thompson, 2012).

Established tools such as the Harvard Trauma Questionnaire (Mollica, Caspi-Yavin, Bollini, Truong, Tor, & Lavelle, 1992) and the Hopkins Symptom Checklist (Lipman, Covi, Shapiro, 1979) provide a Western medical perspective of diagnosis and treatment. While useful for initial symptomatology screening, they may not be valuable in long-term, follow-up care post-resettlement.

Methods: A theoretical model of seeking life balance, developed from a qualitative study of resettled refugee women, is the foundation of the tool (Catolico, 2013). Essential interrelationships throughout the continuum of migration--displacement, transition, and resettlement--resulted in a positive consequence, "harmony", a turning point. Conversely, the absence of interrelationships resulted in a negative consequence, "disharmony". The tool items integrate the migration continuum and its consequences upon the health and wellbeing of persons in resettlement. An inter-professional expert panel of clinicians, educators, and researchers who work closely with resettled populations, particularly women and their families, will establish concurrent validity and a concurrent validity index of the tool items.

Outcome: An intended outcome of this initial pilot is the resettlement assessment tool will provide evidence to guide timely decision-making, which may further mitigate disparities in the care of women in resettlement.

Conclusions and Nursing Implications: Development, implementation, and evaluation of this assessment tool in its formative phases may identify other important items for inclusion. Additionally, the assessment tool may facilitate the provision of vital linkages between women in resettlement and needed support and resources for their health, well-being, and self-sufficiency.

◀ ▶ go to PG.

WOMEN'S HEALTH

Life with Female Urinary Incontinence: Are Intimate Partners in Agreement?

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Purpose: Presented is a preliminary comparative analysis of intimate partners' perceptions of their relationship when the woman has urinary incontinence. Responses from midlife women (aged 45 – 65) who are living with urinary incontinence regarding their perceptions of the quality of their intimate relationship will be compared with the responses from their partners. The specific aims of this study are to explore: a) women and partner responses on measures of select relationship factors for congruence, and b) the woman and her partner's expressed perceptions of the impact of midlife female urinary incontinence on the intimate relationship. Corbin and Strauss' Collaborative Chronic Illness Trajectory Model (1984; 1988) was used to guide this inquiry.

Rationale: Female urinary incontinence is a significant source of morbidity for midlife U.S. women, with reported incidence rates ranging from 15 – 56.9%. Female urinary incontinence has been associated with lower levels of self-esteem, quality of life, emotional health, and sexual function. Corbin and Strauss' Collaborative Chronic Illness Trajectory Model proposes that these psychosocial factors have the potential to significantly affect interpersonal relationships, including the intimate relationships of women and their partners. How partners jointly cope with the woman's urinary incontinence symptom management and the impact of urinary incontinence symptom burden on the relationship are not well understood.

Methods: Through purposive convenience/snowball sampling, midlife women with urinary incontinence were recruited and offered the opportunity to invite their partners to participate. Participants completed questionnaires comprised of established, validated and reliable measures of the following relationship factors: relationship satisfaction, relational ethics (a sense of trustworthiness and fairness), sexual quality of life, and illness communication (regarding incontinence). Participants were also given the opportunity to respond to open-ended questions about their perceptions of incontinence symptom impact on the relationship and about coping strategies used by the couple as they live with chronic female urinary incontinence.

Results: Paired-sample t-tests will be used to test for congruence between women and their partners on these measures of relationship factors ($n \geq 35$ intact dyads, $p < .05$, two-tailed; per G-Power analysis, target sample size of 34 dyads results in adequate power [0.80] when $\alpha = 0.05$ and effect size = 0.05). Also presented will be a preliminary content analysis of themes revealed in both the woman and her partner's responses to open-ended questions about perceptions of coping as a couple with female urinary incontinence.

Implications: As a chronic condition, urinary incontinence potentially requires couples to engage in negotiation and ongoing relationship work in order to maintain the quality of the relationship. The nurse's ability to provide support to women who seek care for urinary incontinence may be improved by an awareness of both women and their partners' perspectives of symptom impact on the intimate relationship.

Funding: This study is partially funded by Sigma Theta Tau International, Gamma Sigma Chapter.

◀ ▶ go to PG.

WOMEN'S HEALTH

Depression, Fatigue, Cognitive Function & Uncertainty in Multiple Sclerosis

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Purpose: The purpose of this study was to describe the relationships among common signs/symptoms (depression, fatigue, declines in cognitive function) in women with multiple sclerosis (MS) using a modified version of Braden's Learned Response Chronic Illness Self Help Model (LRCISHM) and to evaluate whether depression, fatigue, declines in cognitive function and uncertainty, enabling skills and self-management influenced quality of life outcomes in women with MS.

Background: First discovered in the 19th century, MS is a chronic disease of the central nervous system. While most people are diagnosed between the ages of 20 and 40, disease severity is not age dependent and the lifetime expectancy for this population remains normal. MS is recognized as a leading cause of neurological disability among young adults and is the most prevalent neurological disease among young and middle-aged adults in certain parts of the world. In the United States alone, healthcare costs associated with MS are estimated at over $10 billion annually. While prior research has been undertaken with regards to the common symptoms of MS, uncertainty, enabling skills, self-management and quality of life, there have been no studies undertaken that involved all of them. This cross-sectional descriptive study was the first to explore all of these relationships simultaneously using Braden's LRCISHM.

Methods: Measurement tools utilized in the study included: 1) Demographic and Illness Characteristics, 2) The Modified Fatigue Impact Scale, 3) Perceived Deficits Questionnaire, 4) Patient Health Questionnaire-9, 5) Mishel's Uncertainty in Illness Scale-Adult, 6) Rosenbaums' Self-Control Scale- Modified, 7) COPE Inventory- Brief, and 8) SF-36 Health Status Questionnaire. Data analysis involved descriptive statistics, correlations and linear regression to answer the specific aims.

Results: The major findings for this study were that depression, declines in cognitive function, fatigue and uncertainty, enabling skills and self-management were all associated with each other. Greater uncertainty was associated with lower physical health, lower mental health and poorer quality of life (QOL). Higher depression scores, greater perceived declines in cognitive function and higher fatigue scores were associated with lower physical health, lower mental health and poorer QOL. The study findings also indicate using a modified version of Braden's LRCISHM is appropriate in a population of women with MS. Furthermore, aspects of stages I, II, III and IV of Braden's LRCISHM did relate to Stage V, identified in this study as QOL: physical health and QOL: mental health.

Implications: The research findings suggest a symptom cluster for this population: depression, fatigue and declines in cognitive function. Interventions for healthcare providers should be aimed at assessing for all three symptoms. The research findings indicate that use of Braden's LRCISHM is appropriate for an MS population and successful in showing a relationship between the variables of Stage I and QOL in Stage V. Future research aimed at exploring the relationship between Stage I and Stage V could provide insight on how the disease characteristics may directly impact QOL in other chronic illness populations as well as how to approach and manage these symptoms in the clinical setting.

◀ ▶ go to PG.

WOMEN'S HEALTH

Decreasing Unnecessary Pap Tests and Colposcopies Using 2012 ASCCP Guidelines

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Purpose: The purpose of this evidence-based project is to decrease unnecessary procedures using provider education and user friendly tools to apply the 2012 American Society for Colposcopy and Cervical Pathology (ASCCP) Guidelines at a Military Treatment Facility Family Practice Clinic.

Background: Currently, in the United States, despite clear cervical cancer screening guidelines, it is reported that 58% of women over the age of 65 have had a Pap test in the past 3 years and 34% of women with a hysterectomy report a Pap test within the past 1 year. Additionally, 57% of adolescents age 18-21 were still receiving Pap testing as of 2011. Women are continuing to have annual Pap testing regardless of negative HPV status, partly because 31% of providers are still recommending annual testing to their patients. This over screening can result in an increase in false positive results, leading to rising healthcare costs, additional office visits, and psychological stress to the patient with annual exams or incorrect procedures that yield little useful information or decrease in morbidity. Although consensus guidelines and algorithms detailing screening guidelines, management and follow up recommendations have been published by the ASCCP, providers are still performing unnecessary colposcopies, biopsies, and repeat Pap tests prior to recommended follow up.

Methods: This project will utilize the Catalyst Model by Brown & Ecoff, also referred to as the Evidence Based Practice Institute Model. According to this model, after identifying the catalyst and describing why the problem is important, we develop a PICO question, search the literature for evidence, and appraise the evidence to determine if there is enough to support a practice change. Problem assessment in the setting will be done by identifying unnecessary procedures by comparing management of abnormal PAP results over 3 month period to the 2012 ASCCP guideline recommendations. Next, provider's knowledge and comfort level with guidelines will be assessed using a survey on the frequency of screening, use of co-testing with HPV, and management of abnormal cytology results. Once this data is obtained, the data will be applied by outlining the practice to be changed, identifying desired outcomes, and implementing change into practice through provider education. Educational sessions will be developed and conducted using multiple tools to help providers apply the algorithms for abnormal cytology algorithms including a web-based tool, mobile app, and simplified one-page algorithm.

Outcomes Achieved: A second chart review will be conducted 3 months after the intervention in the same manner to identify the number of inappropriate management of PAP results according to the ASCCP guidelines.

Conclusions: If successful, implementation will increase provider comfort level and knowledge of the guidelines, which will in turn lead to decreased numbers of appointments and follow-up procedures, therefore a decrease in cost to the clinic. It may also increase patient satisfaction by decreasing unnecessary patient anxiety.

◀ ▶ go to PG.

Improving HPV Vaccination in Military Women

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Project Purpose: The purpose of the project was to implement Human Papillomavirus (HPV) patient education during every well woman exam (WWE) to improve patient knowledge and HPV vaccination rates in military women aged 18-26 years.

Background: The Human Papillomavirus (HPV) has been identified as the biggest risk factor for cervical cancer and, despite the availability of a vaccine, HPV continues to be the most common STI in the U. S. (American Cancer Society, 2013). Approximately 79 million Americans are currently infected with HPV, and 14 million individuals will become infected annually, leading to more than 10,000 cases of cervical cancer each year (Centers for Disease Control and Prevention, 2014). Most cases of HPV are asymptomatic and people are unaware they are infected; thus, patient education and vaccination are key elements to battling the problem. Significant reductions in new HPV infections and reinfection rates are possible with patient education and vaccine recommendation by health care providers.

Project Plan: The health care provider responsible for all women's health visits in an active duty military treatment facility will provide patient education during regularly scheduled annual and/or initial well woman exams. Patients will also receive an educational handout and a verbal recommendation for the HPV vaccine. Immunizations can be provided at the close of the visit, if desired. Project effectiveness will be evaluated based on changes in HPV immunizations rates before and after the project.

Outcomes: Data collection is currently in progress, however it is expected that there will be an increase in vaccination rates among the women receiving patient education.

Conclusions: To be determined following review and analysis of results. It is anticipated that patient education during regularly scheduled well woman exams will increase HPV vaccination rates. If successful, a decrease will be seen in HPV infection rates, re-infection rates, and cervical cancer incidence.

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◀ ▶ go to PG.

WOMEN'S HEALTH

American Indian Women's Health Perceptions and Health Promotion Behaviors

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Background: Most problems affecting the health of American Indian women are directly related to their lifestyles and health-related behaviors (Carter, Morse, Giruad, & Driskell, 2008; Linsley, Kane, & Owen, 2011). Understanding their health promotion behaviors could possibly decrease or prevent a number of chronic diseases that afflict the American Indian population. Furthermore, as this population ages, Medicare will fund their healthcare. In 2013, the Centers for Disease Control and Prevention (CDC) reported 75% of healthcare expenditure were for chronic disease care.

Purpose: The purpose of this study is to understand and develop knowledge about the health perceptions and health promoting behaviors of American Indian women residing in Oklahoma.

Design and Methods: The qualitative method of grounded theory will generate a conceptual model that advances the understanding of American Indian women's health perceptions and health promoting behaviors in terms of underlying meaning and change over varying circumstances and over time. Focus group interviews will be conducted with registered American Indian women residing Oklahoma. Research questions to be addressed include:
1) How do American Indian women define and describe health and wellness?
2) How do they describe their efforts to promote health?
3) What positive and negative health promotion behaviors do AI women engage in?
4) What barriers do they face in promoting their health?

Data Analysis: Audio-recorded focus group interviews will be transcribed verbatim and analyzed according to the methodologies of Glaser and Strauss (1967) using comparative analysis. The indicator concept model allows the researcher to simultaneously code and analyze data to develop concepts. The second strategy is theoretical sampling whereby new participants are selected to expand and support emerging concepts until theoretical saturation is achieved.

Results: Data collection is currently in process.

Implications: Developing new knowledge might possibly assist in alleviating chronic diseases within this population, as little is known about how American Indian women perceive illness, how they promote their health within the context of their culture, and the barriers they face.

◀ ▶ go to PG.

WOMEN'S HEALTH

Multivariable Analysis of Female HPV Vaccination Rates in the Intermountain West

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Research Analyst[1]

Julia Bodson
Research Analyst[1]

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Investigator[1]

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Purposes/Aims: The purpose of this study is to investigate sociodemographic factors associated with HPV vaccination rates among females aged 13-17 in the Intermountain West.
Background: The HPV vaccine protects against cervical, anogenital, and oropharyngeal cancers as well as genital and oropharyngeal warts. Yet, rates of vaccination in the US remain poor compared to other developed nations such as parts of Canada, the United Kingdom, and Australia. To date, few studies have investigated factors of HPV vaccination in the Intermountain West. Understanding the influence of various sociodemographic characteristics on HPV vaccination rates will inform future studies and intervention planning in the region.
Methods: Multivariable analysis of the 2012 National Immunization Survey-Teen (NIS-Teen) dataset was conducted in Stata 13.1. Sociodemographic factors included maternal age, adolescent grade in school, and adolescent vaccination history (receipt of influenza, meningococcal, and TDAP immunizations). Survey weighted Pearson chi-square tests and multivariable weight Poisson regression were conducted. Adjusted prevalence ratios (PR) with 95% confidence intervals (CI) were reported.
Results: Older maternal age (> 45 years) was associated with lower rates of HPV initiation (PR=0.71, 95% CI=0.58-0.87, p=0.001) and completion (PR=0.67, 95% CI=0.46-0.97, p=0.032) compared to mothers < 35 years of age. Additionally, female 9th to 12th graders were more likely to initiate (PR=1.51, 95% CI=1.25-1.83, p<0.001) and complete (PR=2.42, 95% CI=1.72-3.40, p<0.001) the HPV vaccination series than those in 6th to 8th grade, the targeted age group for the HPV vaccine. Recipients of an influenza immunization were more likely to also begin the 3-dose HPV vaccine series (PR=1.51, 95% CI=1.29-1.77, p<0.001) and complete it (PR=1.73, 95% CI=1.37-2.18, p<0.001). Likewise, receipt of a meningococcal immunization was positively associated with HPV vaccination initiation (PR=1.97, 95% CI=1.53-2.54, p=<0.001) and completion (PR=2.56, 95% CI=1.66-3.96, p=<0.001) while TDAP immunization was not associated with HPV vaccination.
Implications: The CDC recommends that adolescents receive the HPV vaccine at 11 or 12 years of age; however, our results indicate that fewer female adolescents are receiving the vaccine at the recommended ages. These findings suggest that recommending the HPV vaccine in visits where other adolescent vaccines are administered may be fruitful in increasing HPV vaccination rates. Younger maternal age is associated with HPV vaccination in nation-wide analyses of the NIS-Teen dataset, however, racial and income demographics were not shown to be significant in this region. Interventions are needed to increase low HPV vaccine initiation and completion in the Intermountain West.

Funding: This research was supported by University of Utah's College of Nursing, the Huntsman Cancer Institute Foundation, the Beaumont Foundation, and the National Center for Advancing Translational Sciences of the National Institutes of Health (Award Number 1ULTR001067).

◀ ▶ go to PG.

Latina Mothers' Perception of Care Coordination for Children with Developmental Delay

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Purpose: The purpose of this qualitative study is to improve understanding of the perceptions of, and expectations for, care coordination among low-income Latina mothers of young children, who have or are at risk for developmental disability, which has not been previously explored.

Background: The Patient Protection and Affordable Care Act (ACA) emphasizes care coordination as a key strategy for improving the quality and cost effectiveness of health care. Care coordination has the potential to increase satisfaction with and engagement in care, support the continuity of care, and improve health outcomes. These benefits are particularly important for children with special health care needs (CSHCN), especially those children who have developmental disabilities. Latino families however, find it extremely difficult to navigate the funding and eligibility processes for the array of primary, specialty and other support services needed for their CSHCN. Consequently, these families frequently report unmet care coordination needs. Importantly, very little is known about how these parents, specifically Latina mothers, define care coordination, how they experience the processes of care coordination, and what they expect from care coordination.

Methods: Participants include English-speaking Latina mothers of children aged 0 to 36 months who have been identified to have or be at risk for developmental delay, and who will be recruited from an Early Developmental Assessment Center and a High Risk Infant Clinic at two regional Children's Hospitals. Adhering to constructivist grounded theory methods, data will be obtained using individual semi-structured interviews. The semi-structured interview guide will be evaluated prior to use by a focus group of Latina mothers who meet study inclusion criteria to ensure culturally sensitive questions and interview techniques. A brief descriptive demographic survey will also be administered.

Results: Data will be analyzed using constant comparative analysis in accordance with constructivist grounded theory methods. When complete, data, categories, interpretations and conclusions will be confirmed with a subset of participants to ensure truthful representation of participants' experiences.

Implications: Maternal expectations of care coordination, as well as psychosocial, cognitive, cultural and language characteristics which facilitate or impede care coordination for this vulnerable population will be identified and explored. An improved understanding of Latina mothers' perceptions of care coordination for young children at risk for or who have developmental disability can support the design of more effective instructional, communication and coordination strategies for use with this population to improve engagement in and satisfaction with care, and support child health outcomes.

Funding: Sigma Theta Tau International Small Grants/Rosemary Berkel Crisp Research Award.

◀ ▶ go to PG.

WOMEN’S HEALTH

Hormone Therapy Decision Making in Older Women: Report of a Pilot Study

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Purpose/Aims: The purpose of this study is to increase the understanding of reasons why women chose to continue using menopausal hormone therapy beyond treatment guidelines.

Rationale/Conceptual Basis/Background: Evidence supports the finding that use of hormone therapy (systemic estrogen with or without a progestin) for more than three to five years after the cessation of menses puts women at increased risk for breast cancer, coronary heart disease, ischemic stroke, thromboembolism, gallbladder disease, incontinence, and dementia. For this reason, prescription of hormone therapy is not recommended beyond this therapeutic window except in rare circumstances, such as for osteoporosis that cannot be treated with bisphosphonates. Nevertheless, more than a quarter of prescriptions for hormone therapy are written for women over the age of 60, which raises the question of why. Surveys of women approaching menopause have found that hormone therapy decisions are strongly influenced by health care providers, the prescribers. A belief that estrogen has cosmetic, youth-prolonging benefits has been shown to be a predictor of estrogen use among women in their 40s and early 50s. Limited research on hormone therapy decision making by women over 60 years of age was found in the literature, and these processes may differ from those of younger women. For example, older women may perceive the risks and benefits of hormone therapy differently due to age- or cohort-specific medical or personal histories. It is also not clear whether hormone users or their providers are the primary drivers of hormone use in this population. This study uses a qualitative design to examine hormone therapy decision-making processes of women 60 years and older, women who are at the greatest risk for hormone therapy related diseases.

Methods: Grounded theory methodology was employed to explore the questions: “What factors influence older women to use hormone therapy beyond the menopause transition?” and “How do older women weigh the risks and benefits of hormone therapy?” In-depth interviews were conducted with women who are long-term users of systemic estrogen therapy. Interviews explored the women’s knowledge, beliefs, and attitudes about hormone therapy and aging. Perceptions of risk, both embodied risk (such as for osteoporosis) and risks related to using hormones were explored.

Results: Final study results and conclusions are not reported here, as this poster depicts a pilot study with interviews of only five women. The pilot interviews suggest that women share similar concerns and fears. Key verbatim quotes are presented.

Implications: Research findings will help clinicians address patient’s concerns about aging. It will help build a body of knowledge that can be used to help women make informed decisions about their use of hormone therapy. Theory generated from this formative study will be tested in future research and used to guide development of an intervention, such as a decision tool, to facilitate informed decision making about long-term use of hormone therapy.

◀ ▶ go to PG.

◀ ▶ go to PG.

RESEARCH & INFORMATION EXCHANGE

The Research & Information Exchange includes posters of research conducted by faculty, students, and nurses in clinical practice. These posters have been selected by, and submitted from, WIN member agencies.

ARIZONA STATE UNIVERSITY COLLEGE OF NURSING AND HEALTH INNOVATION

Phoenix, AZ

THEORY ANALYSIS OF HEALTH EMPOWERMENT THEORY

Ramesh Thakur

NAVIGATING THE PATIENT ROOM: CRITICAL CARE NURSES' INTERACTION WITH THE DESIGNED PHYSICAL ENVIRONMENT

Kirk Hamilton

REGISTERED NURSES' PERCEPTIONS OF NURSE-NURSE INCIVILITY AND NURSING PROFESSIONAL COMPORTMENT

Kenneth Oja

PREPARING FOR PATIENT CENTERED HEALTH INFORMATION TECHNOLOGY: AN EXPLORATORY STUDY OF FACTORS INFLUENCING ENGAGEMENT OF OLDER ADULTS WITH THEIR PLAN OF CARE

Karen Jiggins Colorafi

WELL-BEING AFTER SEXUAL ASSAULT

Pamela Wadsworth

A FEASIBILITY STUDY OF NEAT MOVES TO DECREASE SEDENTARY BEHAVIOR IN MIDLIFE WOMEN

Tanie Sherman

ACCELERATED NURSING STUDENTS INTEGRATION: THEORETICAL FRAMEWORKS DEFINED

Judy Mueller

PREDISPOSING FACTORS AND PRECIPITATING CHARACTERISTICS OF GESTATIONAL DIABETES IN LATINAS: AN INTEGRATIVE REVIEW

Blanca-Flor Jimenez

◀ ▶ go to PG.

THE INFLUENCE OF MATERNAL DIET ON IN UTERO AND POSTNATAL ADIPOSITY AMONG DIVERSE PREGNANT ADOLESCENTS

Autumn Argent

BOISE STATE UNIVERSITY SCHOOL OF NURSING

Boise, ID

EASING THE TRANSITION FROM CLINICIAN TO NURSE EDUCATOR: AN INTEGRATIVE LITERATURE REVIEW

Andrea Lambe, Jane Grassley

THE EFFECTIVENESS OF AROMATHERAPY AND HEALING TOUCH IN REDUCING TEST ANXIETY AMONG NURSING STUDENTS

Alia Crandall, Margaret Downey

ACUPUNCTURE FOR LABOR PAIN MANAGEMENT

Whitney James, Melissa Vera, Cara Gallegos

ESTABLISHING INTER RATER RELIABILITY USING THE BEHAVIORAL ASSESSMENT TOOL AS AN UNDERGRADUATE RESEARCH ASSISTANT

Sarah Harding, Janet Willhaus

HIGH FIDELITY SIMULATION IN BSN NURSING PROGRAMS

Kristy Meyer, Autumn Pledger, Cara Gallegos

PILOT EVALUATION OF IDAHO HIGH FIVE CHILDREN'S HEALTH COLLABORATIVE

Hillary Dorsey, Bradley Goll, Mark Siemon

CALIFORNIA STATE UNIVERSITY, LONG BEACH SCHOOL OF NURSING

Long Beach, CA

INTERDISCIPLINARY TEAMWORK AND PERCEPTIONS OF PALLIATIVE CARE QUALITY

Joy R. Goebel, William Guo, Kelly Chong

◀ ▶ go to PG.

PREVENTION AND MANAGEMENT OF NAUSEA/VOMITING FOLLOWING CESAREAN DELIVERY

YaGiun Chao, Ahlam Jadalla

ALCHOHOL DISORDER-RELATED COSTS/LENGTH OF STAY FOLLOWING HIP/KNEE SURGERY

Elisa M. Vidal, Loucine M. Huckabay, Ahlam Jadalla

THE IMPACT OF CHEMOTHERAPY/RADIATION ON PATIENTS WITH HEAD & NECK CANCER

Rhonda Hjelm, Ahlam Jadalla, Brian Kim

NCCN GUIDELINES IN ACTION: A REPORT FROM A COMMUNITY HOSPITAL INITIATIVE

Karen Herold, Allyson Brooks, Ahlam Jadalla

THE ONCOLOGY ORAL CARE PROTOCOL: AN EVIDENCED-BASED PRACTICE PROJECT

Chandra M. Kinney, Ahlam Jadalla, Jessica L. Kozuski

CAREGIVERS OF PATIENTS WITH HEMATOLOGIC CANCERS – QOL, DEPRESSION, & BURDEN

Ahlam Jadalla

ARAB AMERICAN WOMEN HEALTH PROMOTING LIFESTYLE BEHAVIORS

Kholoud Hardan-Khalil

CHILDREN'S HOSPITAL COLORADO

Aurora, CO

LET'S STOP REINVENTING THE WHEEL: AN INNOVATIVE JOURNAL CLUB PLATFORM

Diedre Bricker

EVERYONE GETS A GIFT CARD: APPLYING EVIDENCE TO SURVEY RESPONSE RATES

Diedre Bricker, Ricci McManaman, Jeanine Rundquist, Marissa Kaesemey

PEDIATRIC INTRAVENOUS EXTRAVASATION: ADOPTION & IMPLEMENTATION OF A SYSTEM

Royanne Lichliter, Jessica Perdue, Nicki Shonka, Diedre Bricker

◀ ▶ go to PG.

REDUCING SYMPTOMS DURING PEDIATRIC HEMODIALYSIS: A NURSE DRIVEN QI PROJECT

Suzan Stephens, Ashley Riley, Heather Finley, Laurel More

IMPROVING PERIPHERAL STEM CELL COLLECTIONS IN PEDIATRIC NEUROBLASTOMA

Eileen Jata Schwartz

IDAHO STATE UNIVERSITY SCHOOL OF NURSING

Pocatello, ID

NURSES ON HEALTH BOARDS: IMPLICATIONS FOR DOCTORAL STUDENTS

Tamara Rose, Mary Nies

LOMA LINDA UNIVERSITY SCHOOL OF NURSING

Loma Linda, CA

SCRIPTED HOURLY ROUNDING: A PILOT PROJECT

Elsie Crowninshield, Gina S. Brown

HOME HEALTH NURSE EDUCATION ON HEART FAILURE SELF-CARE USING TEACH-BACK METHOD

Joyce Ekong, Gina S. Brown

THE PSYCHOMETRIC EVALUATION OF THE SELF-CARE SELF-EFFICACY ASSESSMENT TOOL

Cherie Lou J. Pefanco, Kendal C. Boyd

IMPLEMENTING AN ELECTRONIC HANDOFF TOOL FOR PACU TO SURGICAL UNIT TRANSFER

Elizabeth Scharfe, Ellen D'Errico, Patti Radovich

MAYO CLINIC

Phoenix, AZ

LEVERAGING INSTITUTION SUPPORT FOR BUDDING NURSING RESEARCHERS

Brenda Tyler, Jocelyn Pearson, Kara Mangold, Noël Arring

UTILIZING EVIDENCED BASED PRACTICE TO PROMOTE SELF-CARE MANAGEMENT TO HEART FAILURE PATIENTS THROUGH DAILY WEIGHT MONITORING: A NURSE'S STORY

Victoria Mavunga, Cindy Chambers

◀ ▶ go to PG.

MONTANA STATE UNIVERSITY COLLEGE OF NURSING

Bozeman, MT

ACTING ON INCIVILITY: A COMPARATIVE ANALYSIS OF FOCUS IN HEALTHCARE AND INDUSTRIAL WORKPLACES

Jiff McAnally

PHYSICAL ACTIVITY AND NUTRITION PROGRAMS FOR RURAL PK-8 STUDENTS IN MONTANA

Lauren Addison, Charlene Winters, Nancy Findholt, Deanna Babb

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NEW MEXICO STATE UNIVERSITY SCHOOL OF NURSING

Las Cruces, NM

STUDENT-CENTERED GUIDES: FACILITATING LEARNERS INPUT INTO UNDERGRADUATE EDUCATION

Jennifer Drexler

OREGON HEALTH & SCIENCE UNIVERSITY SCHOOL OF NURSING

Portland, OR

RETROSPECTIVE DIABETES REGISTRY REVIEW IN THREE CLINICS

Liz Heth, Mandy McKimmy

POSITIVE PERSUASIVE TECH: IMPACT ON STUDENT APRNS' RURAL PRACTICE INTEREST

Laura L. Van Auker

PROVIDENCE HEALTH & SERVICES

SIMULATION TRAINING FOR IMPROVING FIRST TIME SUCCESS (FTS) FOR PEDIATRIC IV PLACEMENT

Marie Curley

HEALTH LITERACY AND HEART FAILURE, EVOLUTION OF INPATIENT HEART FAILURE TEACHING

Svitlana Kostyuk, Tenzin Dolkar, Katherine Munson

◀ ▶ go to PG.

ACCELERATING CLINICAL INQUIRY AT THE BEDSIDE UTILIZING A SHARED DECISION MAKING MODEL

Creta Larson, Jannaeah Duncan, Cecilia C. Frey, Christina Crainic, Donna-Lee Moore-Stout, Zoe Anastas, Heather Ochan

USING RELEASING TIME TO CARE TOOLS TO CREATE A SAFE READY ROOM FOR PATIENTS

Megan Champagne, Katie Thom, Lisa McKerlick

UTILIZING LIBERATING STRUCTURES TO INCREASE NURSE EFFICACY FOR FALLS PREVENTION

Hope Ballew, Lauren Swanson

SECURING ENDOTRACHEAL TUBES: A MULTIDISCIPLINARY APPROACH

Nicole Marks, John Bleicher, Carrie Munro, Walt LeFever

INTERPROFESSIONAL RESUSCITATION TEAM TRAINING USING HIGH-FIDELITY SIMULATION

Carin E. Hotelling

LACTATION EDUCATORS AND A TELEPHONE-BASED INTERVENTION AMONG LOW-INCOME HISPANICS

Merav W. Efrat, Salvador Esparza, Sherri Mendelson, Christianne J. Lane

GIVE ME A BREAK: A STUDY ON IMPLEMENTATION OF A BREAK RELIEF NURSE

Bilma Pellissery, Jenny Carrillo, William Lim

SAVE A LINE, SAVE A LIFE: REDUCING UNPLANNED EXTUBATIONS IN THE NEURO ICU WITH EDUCATION

Arika Duchene

IMPLEMENTATION OF POSTOP GLUCOSE MANAGEMENT FOR VASCULAR SURGERY PATIENTS

Naomi Peterson, Tonia Wells, Deborah Cameron, Katherine Griffing, Ruth Bryant

NURSES PERCEPTIONS AND KNOWLEDGE ABOUT ALARM UTILIZATION IN PEDIATRICS

Katrina Munro, Melody Headrick

◀ ▶ go to PG.

THE UNIVERSITY OF ARIZONA COLLEGE OF NURSING

Tucson, AZ

PRIMARY CARE PROVIDER ADHERENCE TO HEART FAILURE GUIDELINES

Masresha Akalu, Shu-Fen Wung, Carrie Merkle, Anne G. Rosenfeld

BEST PRACTICE RECOMMENDATIONS: CARING FOR MALE SEXUAL ASSAULT SURVIVORS

Kevin M. Cornett, Melissa Goldsmith

SUDANESE REFUGEE WOMEN'S HEALTHCARE ACCESS AND USE

Elizabeth O. Okegbile, Melissa M. Goldsmith, Audrey Russell-Kibble

LINKING CONCEPT AND THEORY TO DEVELOP A THEORY OF RESILIENCE

Penny Morgan Overgaard, Susan R. Merian-Tresch, Patrick C. Conlon, Karina C. Bechtold, Marylyn M. McEwen

NURSE SELF CARE: CURRENT DEFICITS AND PROPOSED BEST PRACTICE INTERVENTIONS

Kaitlyn C. Parks, Melissa Goldsmith

USES OF VA CORPORATE DATA: IMPLICATIONS FOR NURSING RESEARCH AND PRACTICE

Lauren E. Price, Kimberly Shea, Sheila Gephart

ACCEPTANCE OF MOBILE TELEDERMOSCOPY BY NURSE PRACTITIONERS IN ARIZONA

Delaney Stratton, Lois J. Loescher

UNIVERSITY OF CALIFORNIA, DAVIS
BETTY IRENE MOORE SCHOOL OF NURSING

Sacramento, CA

STUDENT NURSES' PERCEPTION OF SELF-EFFICACY, READINESS & CLINICAL JUDGMENT

Laura Corson, Charlie Dharmasukrit

ASSESSING THE INFLUENCES ON RURAL WOMEN'S REPRODUCTIVE LIFE PLANS

Lori Jagoda

◀ ▶ go to PG.

THE NEIGHBORHOOD NURSE: THE INFORMAL ADVISORY ROLES OF RNS IN THE COMMUNITY

Rochelle Lonn

A SELF-MANAGEMENT TOOLKIT FOR YOUNG ADULTS WITH SICKLE CELL DISEASE

Natalie Merilus

MOTIVATIONS AND PERCEIVED CHALLENGES OF SECOND CAREER NURSING STUDENTS

Robert Montgomery

UNIVERSITY OF CALIFORNIA, LOS ANGELES SCHOOL OF NURSING

Los Angeles, CA

A PROFILE ASSESSMENT OF AGING BLACKS IN PAIN PRESENTING TO A HEALTHCARE PROVIDER

Sharon Cobb, Janet Mentes

SYMPTOM BURDEN IN CHRONIC HEART FAILURE

Patricia Leads

UNIVERSITY OF COLORADO – DENVER COLLEGE OF NURSING

Aurora, CO

PAIN & ACCEPTABILITY OF A JUMPING PROTOCOL IN HEALTHY POSTMENOPAUSAL WOMEN

Rachel Hilgendorf

ANALYSIS OF CHEMOTHERAPY INDUCED ALOPECIA IN YOUNG BREAST CANCER PATIENTS

Elizabeth Manthey

EVALUATION OF EXISTING SBIRT DATA IN A WESTERN CO OUTPATIENT HIV CLINIC

Lucy Graham

IMPROVING ENGAGEMENT IN HIV CARE IN LOW INCOME, URBAN POPULATIONS

Jami Mignano

◀ ▶ go to PG.

MEASURING NURSE ATTITUDES ABOUT CHILDBIRTH

Martha Levine

EXAMINING NURSE MANAGER PRACTICE ENVIRONMENT USING DONABEDIAN'S FRAMEWORK

Martha Grubaugh

PAP SMEAR GUIDELINE ADHERENCE AMONG NON-IMMIGRANT WOMEN OF MEXICAN ORIGIN

Dulce Mia Warren

USING MARKOV MODELS TO EXAMINE ASTHMA PATIENT FLOW IN AN ED

Oliwier Dziadkowiec, Tiffany Callahan, Mustafa Ozkaynak

UNIVERSITY OF NEVADA, LAS VEGAS SCHOOL OF NURSING

Las Vegas, NV

CONCEPT ANALYSIS: CLINICAL SAFETY

Sara Miles

ONLINE MODEL TO PREPARE NURSE EDUCATORS TO TEACH LGBT CONTENT

Paul Smith

THE LIVED EXPERIENCE OF NURSES WITH SUBSTANCE USE DISORDER WHO COMPLETE AN ALTERNATIVE TO DISCIPLINE PROGRAM (ADP) THROUGH A STATE BOARD OF NURSING

Susan M. Ervin

THE PREDICTORS OF CULTURAL COMPETENCE AND BACCALAUREATE DEGREE NURSING CURRICULUM

Angela Silvestri

CONCEPT ANALYSIS OF LEARNER MOTIVATION

Delene Volkert

APPLYING THE TRANSTHEORETICAL MODEL: ASSESSING EXERCISE BEHAVIOR IN BLACKS IN A CHURCH SETTING

Robin M. White

◀ ▶ go to PG.

UNIVERSITY OF NEW MEXICO COLLEGE OF NURSING

Albuquerque, NM

POLITICAL PARTICIPATION OF PENNSYLVANIA NURSES

Kelly Nestor, Beth Tigges

USING GIS IN HEALTH POLICY RESEARCH

Nicole Adams, Marie L. Lobo

ROLE DISCREPANCY, MATERNAL HARDINESS AND DEPRESSION IN MOTHERS OF TODDLERS

Angela DelGrande, Marie L. Lobo

PROSTATE CANCER TREATMENT DECISION MAKING BY BLACK MEN

Linda Ottley, Jennifer Averill

CONSENT FORM FUNCTION AND READABILITY: ATTITUDES OF NURSING, MEDICAL, AND LAW STUDENTS

Ashley Affentranger, Carrie Klaurens, William Kunkel, Geoff Shuster

NURSING MANAGEMENT OF EARLY PREGNANCY LOSS

Amy J. Levi, T. Cardinal

IMPLEMENTATION OF MENTORSHIP MODEL TO INFLUENCE ACADEMIC SUCCESS

Kimberly Madden, Shandra D. Burton

UNIVERSITY OF NORTHERN COLORADO SCHOOL OF NURSING

Greeley, CO

COMMUNITY BASED PEER MENTORSHIP PROGRAM FOR PERSONS WITH TYPE II DIABETES

Dawn Fetzko

ESTABLISHING THE VALIDITY AND RELIABILITY OF THE FAIRNESS OF ITEMS TOOL (FIT)

Nikole Hicks, Janice Hayes, Faye Hummel, Lisa Rue, Jun Ying

◀ ▶ go to PG.

UNIVERSITY OF SAN DIEGO
HAHN SCHOOL OF NURSING AND HEALTH SCIENCE

San Diego, CA

SYMPTOM BURDEN & HEALTHCARE UTILIZATION IN PULMONARY ARTERIAL HYPERTENSION

Catherina Madani

PSYCHONEUROIMMUNOLOGY AND CHRONIC PAIN

Sarah E. Giron

CLINICAL PERCEPTIONS OF PEDIATRIC HOSPITAL DEATHS, SUPPORTS, AND STRESS

Carmen Spalding

SLEEP DISORDERED BREATHING: PREVALENCE AND PREGNANCY OUTCOMES AT DELIVERY

Ryan L. Nations

PSYCHIATRIC EMERGENCY SERVICE SUITE: DESIGN & IMPLEMENTATION IN THE ED

Jacqueline L. Saucier

PERINATAL POST TRAUMATIC STRESS DISORDER (PPTSD): A CONCEPT ANALYSIS

Julie Vignato

HEALTH LITERACY IMPLICATIONS IN DIABETIC VETERANS

Mark R. Malebranche

IDENTIFYING PATIENT PERCEPTIONS OF OBESITY IN A SPINA BIFIDA POPULATION

Mark R. Malebranche

MANAGING END-OF-LIFE PAIN USING A RECTAL MEDICATION ADMINISTRATION DEVICE

Yen Tse

EFFECTIVENESS OF WEIGHT MANAGEMENT PROGRAMS AMONG VETERANS

Elen Yip

IMPROVING ASTHMA SYMPTOMS USING ASTHMA ACTION PLANS

Ryan Thebo

◀ ▶ go to PG.

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO SCHOOL OF NURSING

San Antonio, TX

METHODS FOR CONCEPT CLARIFICATION OF IMPAIRED MEMORY AND CHRONIC CONFUSION

Priscilla Alfradique De Souza, Kay Avant, Andrea E. Berndt

UNDERSTANDING NURSE'S PERCEPTIONS AND THEIR EFFECT ON QI ADHERENCE

Michaleen Christ Herrera

PAIN ASSESSMENT AND MANAGEMENT IN ELDERLY PATIENTS WITH DEMENTIA

Lone Engledowl

DEVELOPMENT OF A SUPPORT GROUP FOR ACTIVE DUTY OSTOMATES

Shanna Fraser

BLACK GRANDMOTHERS BREASTFEEDING BELIEFS

Kelly McGlothen

EXPLORING PREDICTORS OF COGNITION IN HISPANIC ELDERS

Ayomide Okanlawon, Andrea E. Berndt

RELATIONSHIP OF BMI & DEVELOPMENT OF A PRESSURE ULCER

Mary Lee Potter

DOES PRESSURE MAPPING MONITORING REDUCE THE INCIDENCE OF PRESSURE ULCERS?

Annabella B. Prince

COMPARING STUDENT PERCEPTIONS IN DEU AND TRADITIONAL CLINICAL SITES

Gabriela Zaragoza, Andrea E. Berndt

UNIVERSITY OF UTAH COLLEGE OF NURSING

Salt Lake City, UT

NUTRITIONAL REHABILITATION & CARDIAC CACHEXIA: A REVIEW OF LITERATURE

Mandy Snyder

◀ ▶ go to PG.

FALL-RELATED SELF-EFFICACY AND FEAR OF FALLING AMONG OLDER ADULTS: BLURRED CONCEPTS

Rumei Yang

CHALLENGING AND STRATEGIC PROCESSES FOR PEOPLE WITH PD

Terrie Vann-Ward

UNIVERSITY OF WASHINGTON SCHOOL OF NURSING

Seattle, WA

INSPIRE, IGNITE, AND INTEGRATE TECHNOLOGY IN TEACHING AND LEARNING

Janet Lenart, Minhui Liu

PATIENT COACHING: A FORMAL CONCEPT ANALYSIS

Minhui Liu, Frances M. Lewis, Yuting Lin

SLEEP INSTRUMENT EVALUATION FOR IN-CENTER HEMODIALYSIS PATIENTS

Sarah E. Llewellyn

A CONCEPTUAL ANALYSIS OF LONG TERM CARE

Janet Pohl, Barbara Cochrane

HIV-STATUS DISCLOSURE AMONG OLDER AFRICAN AMERICAN MSMW

Steven Simpkins

USE OF EVOLVING CASE STUDIES TO SUPPORT INTERPROFESSIONAL EDUCATION

H. J. Thompson, J.T. Fathi, L.A. Mike, P. Kritek, K. Ro, P. Christianson, J. Lenart, M.R. Levy

UNIVERSITY OF WYOMING
FAY W. WHITNEY SCHOOL OF NURSING

Laramie, WY

WHAT DOES IT MEAN TO BE AT RISK OF DEVELOPING TYPE 2 DIABETES?

Mariah Kepler, Samantha Baker, Jordan Calmes, Brent Burton, Kelsey Kazmar, Jenifer Thomas

◀ ▶ go to PG.

DEPRESSION SCREENING IN PRIMARY CARE AND IMPACT ON SUICIDE PREVENTION

Anne-Marie Mann

UNDERSTANDING PATIENT PERCEPTIONS AND RISK FOR HEPATITIS C SCREENING

Sheriedan Grannan

WESTERN WASHINGTON UNIVERSITY RN-TO-BSN PROGRAM

Bellingham, WA

HOW TO SUSTAIN FALL PREVENTION PROTOCOLS TO DECREASE FALLS WITH INJURY IN THE ACUTE CARE SETTING

Aileen Sena, Joseph White, Jerilee Gudmunson, Terry Sanzo

DEDICATED EDUCATION UNITS: STAFF AND STUDENT SATISFACTION

Corey Haas, Cheryl Williams, Grace Parks, Geri Van Dyken

HOURLY ROUNDS OR BEDSIDE REPORTS: IMPACT ON PAIN MANAGEMENT SATISFACTION

Victoria Swenson, Sukhdev Bilg, Elizabeth Diaz, Lyle Dollarhide

TRAINING HOSPITAL NURSES FOR A WORKPLACE RESPONSE TO DISASTER

Danielle Hanson, Patrice Tacker, Joseph MacEachern, Renea Clark

EDUCATING NEW NURSES ON EBP STRATEGIES TO REDUCE HORIZONTAL VIOLENCE

Alanna Steele, Rachel Garcia, Michelle "Shelly" Cousins, Sarah Lee

go to PG.

WIN HONORS

The Western Institute of Nursing proudly recognized outstanding Western members and friends with the following awards and honors in 2015.

DISTINGUISHED RESEARCH LECTURESHIP AWARD

The Distinguished Research Lectureship recognizes a senior researcher whose research efforts have made significant and sustained contributions to nursing. The 2015 award recipient was:

Judith Gedney Baggs, PhD, RN, FAAN, Elizabeth N. Gray Distinguished Professor, Interim PhD Program Director, School of Nursing, Oregon Health & Science University, Portland, OR.

CAROL A. LINDEMAN AWARD FOR A NEW RESEARCHER

The New Researcher Award was established in 1976 by Carol A. Lindeman to support nursing researchers early in their careers. In 1987, the award was renamed to recognize Dr. Lindeman for her contributions and support of colleagues. The 2015 award recipient was:

Moonju Lee, PhD, RN, Assistant Professor, School of Nursing, University of Texas Health Science Center at San Antonio, San Antonio, TX.

JOHN A. HARTFORD FOUNDATION/WESTERN INSTITUTE OF NURSING REGIONAL GERIATRIC NURSING EDUCATION AWARD

The Western Institute of Nursing and the John A. Hartford Foundation make annual awards to a senior researcher and to a new researcher to recognize outstanding nurse researchers and to foster and showcase geriatric nursing research. The recipient of the new researcher award in 2015 was:

New Researcher:
Linda S. Edelman, PhD, RN, Assistant Professor, John A. Hartford/Atlantic Philanthropies Claire M. Fagin Fellow 2010-2012; Associate Director, Hartford Center of Geriatric Nursing Excellence, College of Nursing, University of Utah, Salt Lake City, UT.

ANNA M. SHANNON MENTORSHIP AWARD

The Anna M. Shannon Mentorship Award was established in the name of the former Dean and Professor of the College of Nursing, Montana State University – Bozeman who unselfishly supported and promoted the professional growth of other nurses in the West. The 2015 award recipient was:

Anne G. Rosenfeld, PhD, RN, FAHA, FAAN, Professor and Director, PhD Program, College of Nursing, The University of Arizona, Tucson, AZ.

◀ ▶ go to PG.

JO ELEANOR ELLIOTT LEADERSHIP AWARD

In 1988, Jeanne Kearns, formerly Executive Director of WIN, established the Jo Eleanor Elliott Leadership Award. This award honors Jo Eleanor Elliott for outstanding leadership while serving as the Director of Nursing Programs at WICHE and the Executive Secretary of WCHEN from 1957-1980. The 2015 Award recipient was:

Ginette A. Pepper, PhD, RN, FAAN, Professor, Helen Bamberger Colby Presidential Endowed Chair in Gerontological Nursing, Associate Dean for Research & PhD Studies,
Director, Hartford Center of Geriatric Nursing Excellence, College of Nursing, University of Utah, Salt Lake City, UT.

WIN EMERITI

The honorary designation of WIN Emeriti was established in 1984 by the Western Council on Higher Education for Nursing (WCHEN). The Western Institute of Nursing (WIN) has continued this honorary designation to recognize retired nurses or other individuals who have demonstrated distinguished service to WIN or its predecessor, WCHEN. The individual on whom the honorary designation was bestowed in 2015 was:

Carol A. Ashton, PhD, RN, Professor Emeritus, School of Nursing, Idaho State University, Pocatello, ID.

WESTERN ACADEMY OF NURSES

The Western Academy of Nurses recognizes and honors nurses who have demonstrated excellence in nursing practice and who have advanced nursing in direct care, education, or research. Inducted into the Academy in 2015 were:

Bronwynne C. Evans, PhD, RN, FNGNA, ANEF, FAAN, Director, PhD Program and Professor, College of Nursing and Health Innovation, Arizona State University, Phoenix AZ.

Jane H. Lassetter, PhD, RN, Associate Professor, College of Nursing, Brigham Young University, Provo, UT.

Carolyn (Carrie) J. Merkle, PhD, RN, FAAN, Associate Professor, College of Nursing The University of Arizona, Tucson, AZ.

◀ ▶ go to PG.

AMERICAN NURSES FOUNDATION/WESTERN INSTITUTE OF NURSING SCHOLAR AWARD

The American Nurses Foundation (ANF) and the Western Institute of Nursing (WIN) jointly sponsor a research grant to a WIN member selected through the ANF selection process. The 2014 award recipient was:

Tracy A. Klein, PhD, FNP, ARNP, FAANP, FAAN, College of Nursing, Washington State University, Vancouver, WA.

SIGMA THETA TAU INTERNATIONAL/WESTERN INSTITUTE OF NURSING RESEARCH GRANT

Sigma Theta Tau International (STTI) and the Western Institute of Nursing (WIN) jointly sponsor a research grant to encourage qualified nurses to contribute to the advancement of nursing through research. The 2015 grant recipient was:

Carmen Spalding, PhD(c), RN, Doctoral Student, University of San Diego, San Diego, CA.

◀ ▶ go to PG.

◀ ▶ go to PG.

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◀ ▶ go to PG.

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◀ ▶ go to PG.

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go to PG.

Author Index

◀ ▶ go to PG.

◀ ▶ go to PG.

◀ ▶ go to PG.

go to PG.

Abbreviations

ARSMA-II=Acculturation Rating Scale for Mexican Americans
CAM=Complementary and Alternative therapies
CBPR=Community-Based Participatory Research
COPD=Chronic Obstructive Pulmonary Disease
EBP=Evidence-Based Practice
FQHC = Federally Qualified Health Centers
GERD=GastroEsophageal Reflux Disease
IPV=Intimate Partner Violence
LGBT=Lesbian, Gay, Bisexual, Transsexual
MACVS=Mexican Americans Cultural Values Scale

◀ ▶ go to PG.

Subject Index

◀ ▶ go to PG.

◀ ▶ go to PG.

◀ ▶ go to PG.

go to PG.

go to PG.

◀ ▶ go to PG.