

1



2



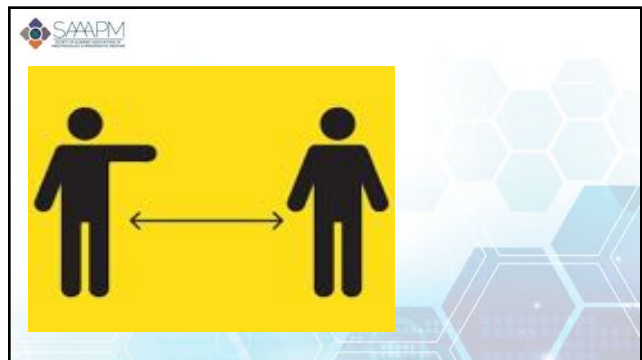
3




4



5



6



What will "social distancing" and other restrictions do to us?

What is known about the short term and long-term effects of Isolation & Loneliness?

Who's most at risk?

How might this influence public health, and society long term?

7

Social Isolation and Loneliness were public health concerns before the Pandemic

8



"Social Isolation is a major public health concern"



The National Academies of SCIENCES ENGINEERING MEDICINE




9



OUTLINE


-  Define the issue
-  State of our Knowledge
-  Gaps
-  Translation

10



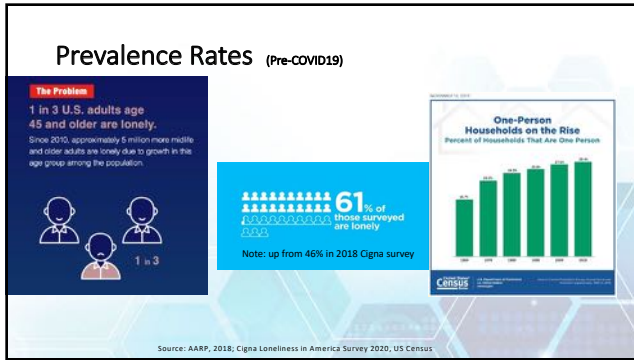
- **Homebound:** never or rarely leaving the home over the past month
- **Social Isolation:** Is objectively being alone, having few relationships, or infrequent social contact.
- **Loneliness:** Is subjectively feeling alone. The discrepancy between one's desired level of connection and one's actual level.

11

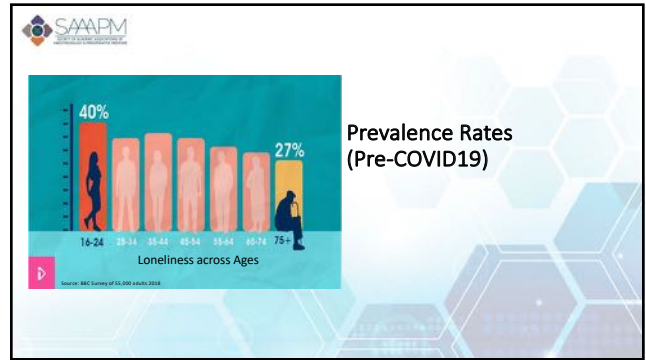


What is the size of the problem?

12



13



14

NIHR | National Institute for Health Research

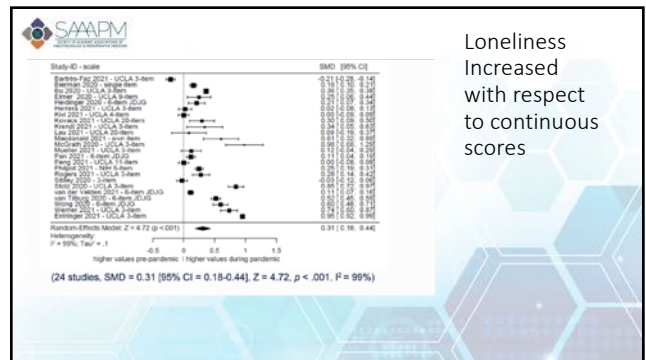
PROSPERO International prospective register of systematic reviews

A systematic review with meta-analysis and -regression on changes in loneliness before and after the outbreak of the COVID-19 pandemic

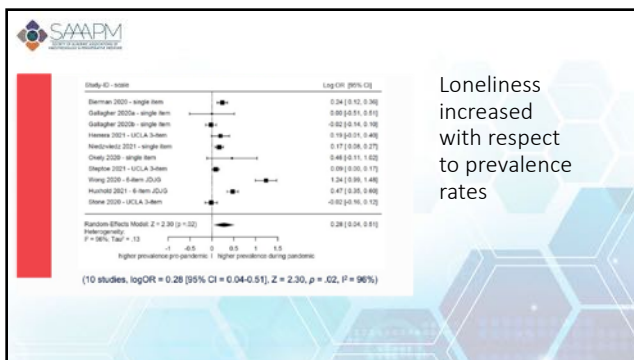
Mareike Ernst, Antonia M. Werner, Daniel Niederer, Einar Brähler, Manfred Beutel

Citation
Mareike Ernst, Antonia M. Werner, Daniel Niederer, Einar Brähler, Manfred Beutel. A systematic review with meta-analysis and -regression on changes in loneliness before and after the outbreak of the COVID-19 pandemic. PROSPERO 2021; CRD42021246771. Available from: https://www.crd.york.ac.uk/prospERO/display_record.php?ID=CRD42021246771

15



16



17

Evidence suggests a significant portion of the population lacks social connection

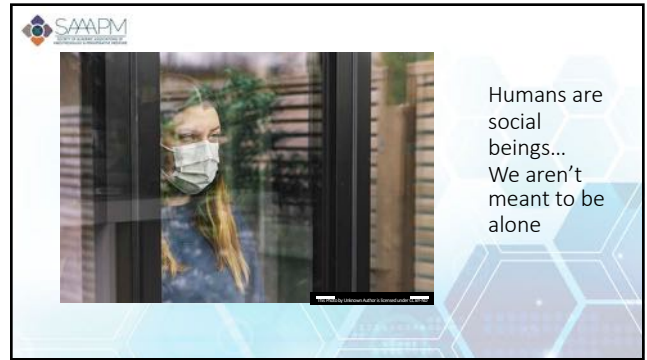
... And it appears to be increasing

GAPS: Need for systemic measurement in clinical and population health surveys

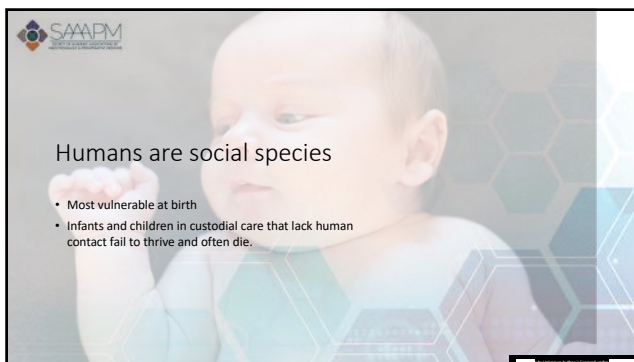
18



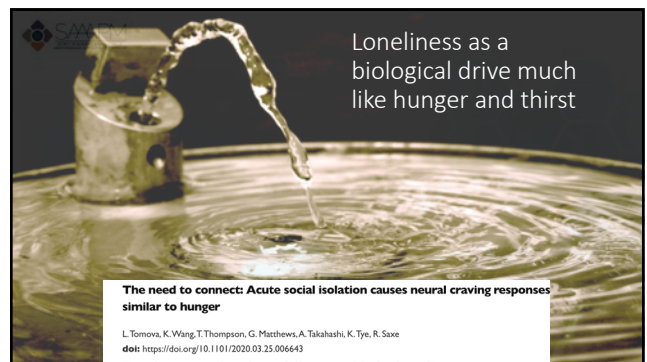
19



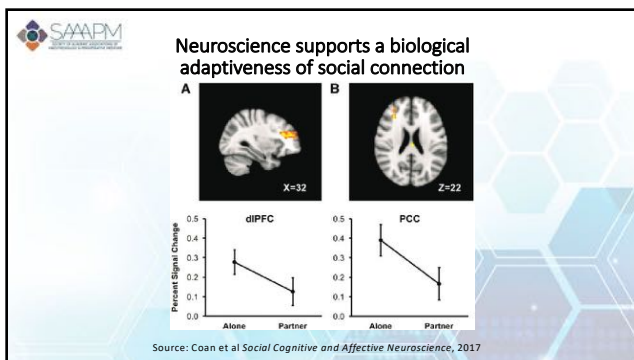
20



21



22



23



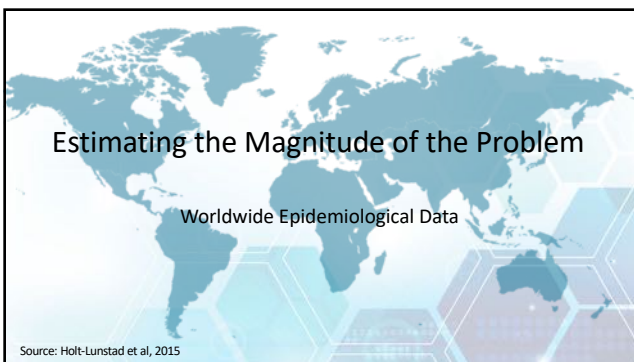
24



25



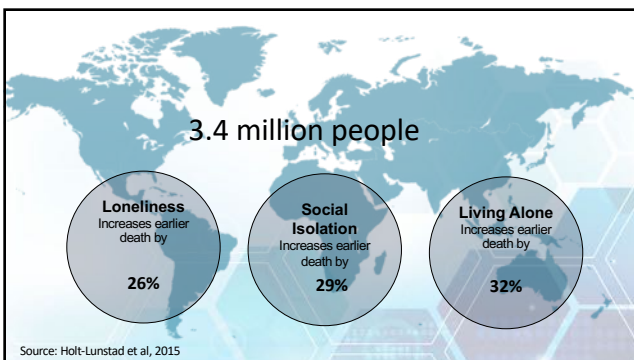
26



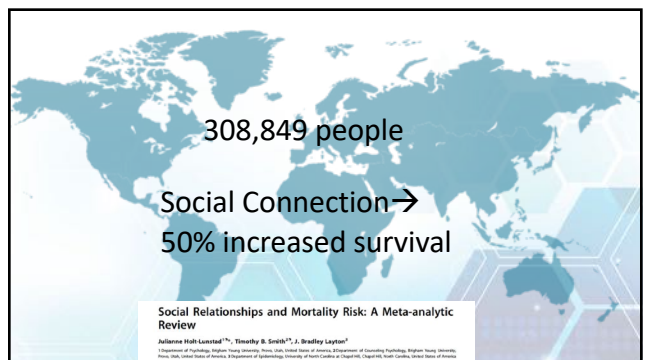
27



28



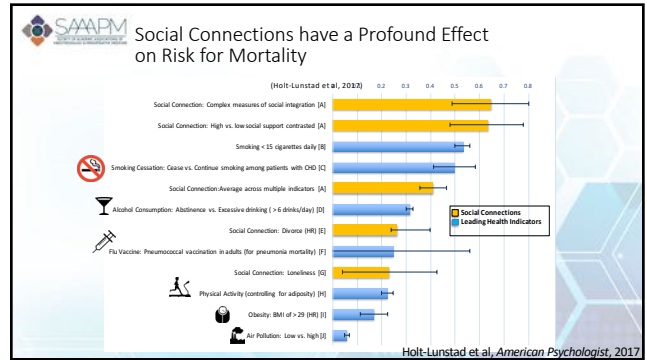
29



30



31



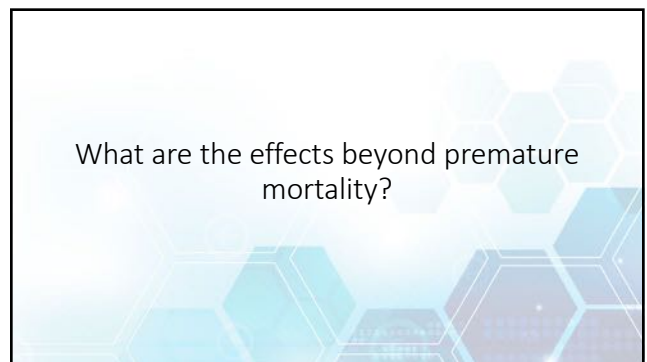
32

GAPS in Existing Data

Fewer prospective studies . . .

- Examine younger ages/developmental course
- Are from developing countries
- Examine cultural/ethnic/economic differences
- Include indicators of relationship quality
- Assess multiple components, and even fewer examine their synergistic effects

33



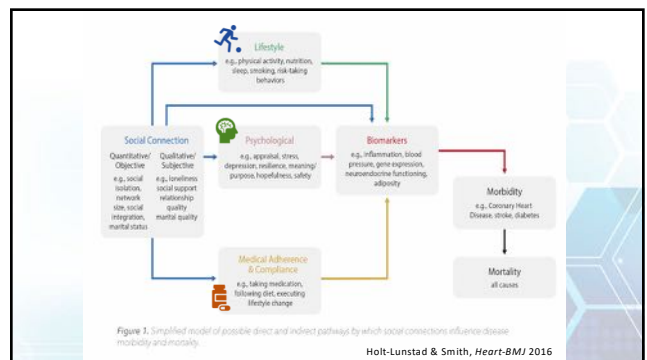
34

The Influence of Social Isolation on Health and Economy

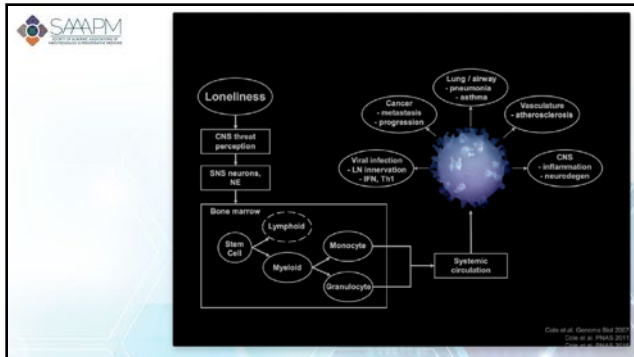
Health Category	Associated Conditions/Outcomes
Physical Health	Cardiovascular Disease, Stroke, Type 2 Diabetes
Mental & Behavioral Health	Depression & Anxiety, Suicidality, Addiction
Cognitive Health	Cognitive decline, Dementia, Alzheimer's Disease
Economic Health	\$6.7B in Medicare Spending, Lower productivity, More Absenteeism, Lower quality of work

Sources: Holt-Lunstad et al., 2015; NASEM, 2020; AARP, 2017; CIGNA, 2020

35



36



37

Chronic Inflammation

- Social Factors**
 - Loneliness
 - Social Connection
- Physical Health Outcomes**
 - Cardiovascular, Cancer, Diabetes
- Cognitive Health Outcomes**
 - Alzheimer's Disease
- Mental Health Outcomes**
 - Depression

38

Problematic Behaviors

Substance Use Poorer Sleep Poorer eating

39

Conclusion:

Substantial evidence that social isolation and loneliness are associated with

- poorer health
- Increased risk for premature mortality

40

What about Viruses?

41

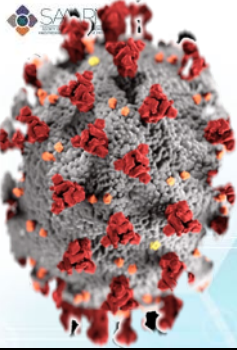
Psychosocial Vulnerabilities to Upper Respiratory Infectious Illness: Implications for Susceptibility to Coronavirus Disease 2019 (COVID-19)

Sheldon Cohen

First Published July 8, 2020 | Research Article | <https://doi.org/10.1177/1745691620942516>

- Decreased risk included social integration and social support
- Increased risk associated with social isolation and loneliness
- Flu Vaccine Studies
 - greater social support more likely to mount an effective immune response.


42



Additional Health Implications of Social Isolation for the Current Pandemic

- Susceptibility to the virus
 - EHR data on mental health and Covid19 infection, hospitalization, & mortality (Wang et al, *World Psychiatry*, 2020; Tachet et al, *Lancet Psychiatry*, 2020)
- Short term effects on biological responses that may precipitate or exacerbate other health conditions

43



GAP: How long does it take for health effects to appear?


It isn't clear the time course from short term biological markers to disease onset

Pandemic provides an opportunity to examine and address this gap


44

THE PROBLEM IS URGENT
THE PROBLEM IS SERIOUS


45



Loneliness is a biological cue like thirst:
Unique Challenges to Reducing Isolation and Loneliness



46



GAPs:
Tech Based Solutions

- Evidence is primarily based on in person contact
- Complex data
- Preliminary data suggest caution
- Barriers to reaching those most in need
- Evaluation of effectiveness

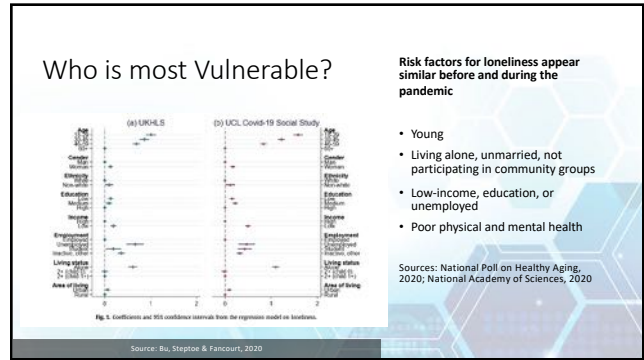
47

Solutions to Reduce Risk

48



49



50

International Journal of Environmental Research and Public Health

Article

Impact of the COVID-19 Pandemic on Loneliness and Social Isolation: A Multi-Country Study

Roger O'Sullivan ^{1,2,*}, Annette Burns ^{1,2}, Gerard Leavy ^{3,4}, Iracema Leroi ⁵, Vanessa Burholt ^{4,6}, James Lubben ⁷, Julianne Holt-Lunstad ^{7,8}, Christina Victor ⁹, Brian Lawlor ⁹, Mireya Vilar-Compte ⁹, Carla M. Perissinotto ¹⁰, Mark A. Tully ^{11,12}, Mary Pat Sullivan ¹², Michael Rosato ⁹, Joanna McHugh Power ¹³, Elisa Tiilikainen ¹⁴ and Thomas R. Prohaska ¹⁵

Severe Loneliness:

- Greater financial concerns
- Mental health
- Living alone
- Dissatisfaction with video calls

51

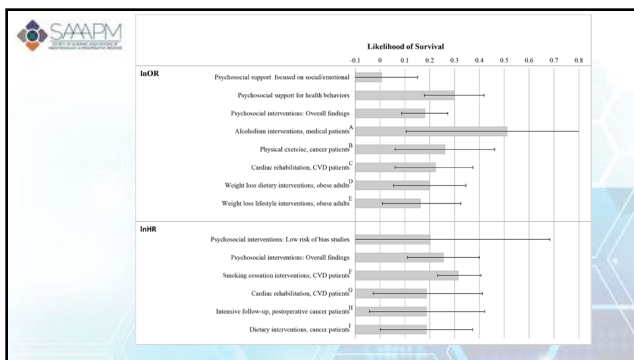
Meta-analysis of Psychosocial interventions in medical Settings

106 RCTs with 40,280 patients

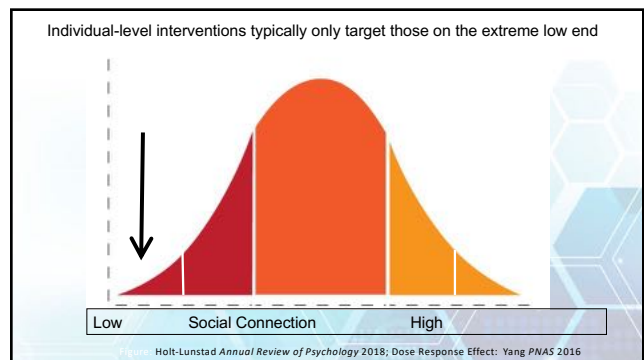
Compared to control groups, those receiving a psychosocial intervention were on average 20% more likely to be alive at study conclusion and had 29% increased likelihood of longer survival

Smith et al, *PLoS Medicine* 2021

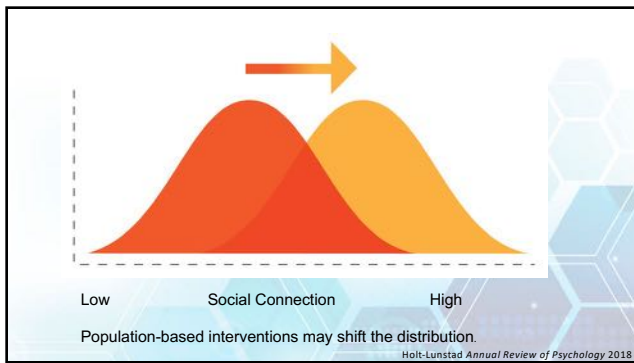
52



53

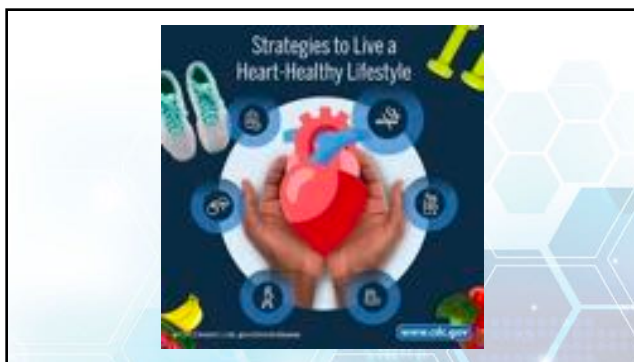


54



55

56



57

58

What can you do for your patients?

Lend a listening **EAR**

- **Educate** yourself and your patients
- **Assess** the risk level of your patients
- **Respond** refer patients to local sources, tailored to their needs, reassess

59

ACL National Resource Center

COMMIT TO Connect

Commit to Connect
COMBATING SOCIAL ISOLATION AND LONELINESS IN ALL COMMUNITIES

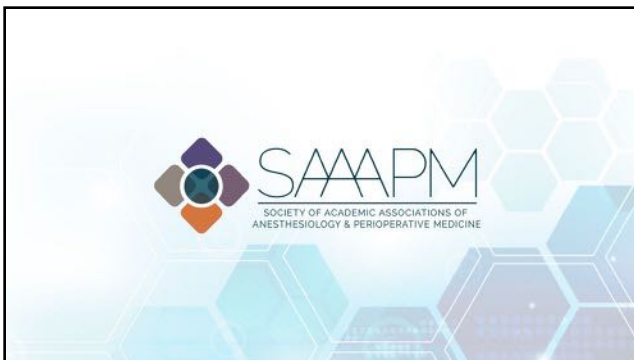
60



61

<https://www.nap.edu/resource/25663/Social%20Isolation%20and%20Loneliness%20Report%20Highlights.pdf>
<https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1000316>
<https://www.ncbi.nlm.nih.gov/pubmed/25910392>
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5598785/>
 More about my work on Social Connection/Isolation:
<http://julianneholtunstad.byu.edu/>
 Twitter: @jholtunstad

62



63