What do osteopathic medical students "know" about contraception? Where do they learn it?

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INTRODUCTION

- **Purpose:** We trace how knowledge and attitudes evolve across 4 years of osteopathic training WesternU.
- prior research has documented limited contraceptive knowledge among primary care providers.[1-2]
- Few studies have investigated whether these gaps are affected by medical education.[1-2]
- Clinical misinformation limits access to contraception.[1-2]
- 57% of osteopathic students enter primary care residencies, but receive less formal contraceptive education than OB/GYN.[3]

METHODOLOGY

IRB-approved, anonymous, voluntary beta-tested, 16 item survey sent to all osteopathic medical students twice from January 2026-March 2026 represent 3 different groups.

OMS1= no formal teaching
OMS2= preclinical didactics
OMS3 + OMS4/5= clinical experience added

Survey Structure and Key Measures

- **Influencing Factors:** Questions assessed demographics, personal experience, faith importance, perceived confidence in counseling, primary info sources, referral intentions to provide care in practice, and belief in accuracy of common myths.
- **Objective Knowledge:** Evaluated efficacy, mechanisms of action, and common misinformation. Scored 1 (correct) or 0 (incorrect) for a total composite score (range 0-4). We were testing more controversial surrounding contraception.
- **Data Analysis:** One-tailed two-sample t-test to compare average scores for OMS1 with all other classes.

RESULTS

- 200 of the 1000 students participated (20% response rate)
- 183 of 200 respondents completed the survey entirely.

Table 1. Objective Knowledge Scores by Year

	Cohort Size (n)	Average Score Out of 4	Standard Deviation
OMS1	66	0.8	0.7
OMS2	44	1.6	0.8
OMS3	33	1.6	0.6
OMS4 or OMS5	40	1.2	0.5

Average: 1.4
Standard Deviation: 0.7

Our results demonstrated that misinformation exists across all the years, but there was a significant increase in scores after students received curricular lectures and gained clinical experience ($p < 0.001$).

Table 2. Source of Information for Contraception by Year

From which of the following sources do you get most of your information about contraceptives that you would base your patient counseling on?	OMS1	OMS2	OMS3	OMS4 or OMS5	Total
Cohort Size (n)	63	44	36	40	183
Medical school curriculum/lectures	13% (n = 8)	68% (n = 30)	50% (n = 18)	28% (n = 11)	37% (n = 67)
Clinical preceptors or faculty	3% (n = 2)	2% (n = 1)	8% (n = 3)	20% (n = 8)	8% (n = 14)
Medical Websites (e.g., PubMed, UpToDate)	29% (n = 18)	9% (n = 4)	25% (n = 9)	25% (n = 10)	22% (n = 41)
Social media/general internet (e.g., Google, Reddit, TikTok, Instagram)	22% (n = 14)	2% (n = 1)	6% (n = 2)	0% (n = 0)	9% (n = 17)
Professional Guidelines (e.g., ACOG, WHO, CDC)	17% (n = 11)	14% (n = 6)	11% (n = 9)	20% (n = 8)	19% (n = 34)
Peers	6% (n = 4)	2% (n = 1)	0% (n = 0)	0% (n = 0)	3% (n = 5)
Patients and patient experiences	5% (n = 3)	2% (n = 1)	0% (n = 0)	5% (n = 2)	3% (n = 6)

DISCUSSION

- By identifying the sources and timing of barriers to evidence-based contraceptive counseling, we can contribute to the development of early-stage educational interventions.
- As patients turn to peer and online platforms that perpetuate myths, future physicians must serve as accurate resources.

CONCLUSION

- It appears there is an impact in medical education. OMS1 scored lower than OMS2-5.
- Popular sources of information were curriculum and medical websites.
- First years preferred medical websites and social media/general internet.
- Professional guidelines were rarely cited.
- No subject scored 4/4 on these deliberately tested misconceptions.
- This affirms prior research showing that gaps in contraceptive knowledge exists.

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