Measuring the impact on medical students of participating in sexual health preclinical electives: Perceptions, beliefs and comfort levels

Sarah J.F. Bourne, B.A.; Kristina Monteiro, Ph.D.; and Susanna Magee, M.D., MPH

The Warren Alpert Medical School of Brown University

Scholarly Concentration in Medical Education

Introduction

Sexual health counseling reduces adverse sexual health outcomes such as sexually transmitted infections (STI), yet rates of counseling by physicians are low and highly variable. Studies suggest this is due to inadequate training, provider discomfort, and insufficient time and resources. If training began earlier and included experiences discussing sexual health topics, perhaps comfort levels would rise among providers. This study examines how participating in preclinical electives related to sexual health topics impacts physicians-in-training.

Methods

In September 2017, first-year medical students at Warren Alpert Medical School (AMS) of Brown University were invited to participate in an anonymous online survey consisting of Likert-scale questions to evaluate perceptions, beliefs, and comfort levels regarding a variety of sexual health topics. Demographic questions included age, gender, sexual orientation, and experience. The survey was administered after students received training in their "Doctoring I" course on how to conduct a sexual history, and after students selected their preclinical electives, but before those electives began. The same survey will be administered once the electives have ended (June 2018) to assess changes in responses.

Results

In this survey, 144 first-year medical students were invited to participate, and 42 (30%) agreed including 20 confirmed participants in AMS-based sexual health preclinical electives ("Sex Ed by Brown Med"; "Be Real"; and/or "Sexual Health"). Students either received training and taught sexual health to adolescents or participated in lecture-based seminars to learn about a variety of sexual health topics. Of the survey participants, 52% were women; 78% heterosexual; and 62% were ages 21 to 24 years. Among respondents, 29% had previously taught sexual health courses; 64% had received formal sexual health education; and 14% had never conducted a sexual history in a clinical setting (Table 1). Only a minority of students (31%), felt comfortable (very or extremely) discussing sexual health with patients; and 19% believed medical school was adequately training them to discuss sexual health topics in a clinical setting. Of students participating in a sexual health elective, 90% believed it would help prepare them to discuss sexual health topics in a clinical setting (Table 2); and 43% reported confidence across a variety of sexual health topics (Table 3).

Conclusion

A total of 42 first-year medical students participated in a survey to determine their baseline perceptions, beliefs, and comfort regarding sexual health topics. At the time of the survey administration, the results suggest that students do not feel comfortable discussing sexual health topics and have had little experience doing so, but believe participating in a sexual health elective would be helpful. A limited response rate and selection bias of those who chose to participate in the survey may affect the generalizability of these results. Results from the post-survey administered this spring after completion of the electives, will be used to make recommendations regarding preclinical sexual health curriculum and training.

Table 1. Baseline characteristics of survey participants based on participation in a sexual health elective (first-year medical students).

	All n=42 (%)	Participating in a sexual health elective n=20 (%)	Not participating in a sexual health elective n=22 (%)
Experience			
Have conducted a sexual history in a clinical setting	6 (14%)	2 (10%)	4 (19%)
Have received formal sexual health education	27 (64%)	15 (75%)	12 (54%)
Have taught sexual health	12 (29%)	7 (35%)	5 (23%)
Comfort			
Feel comfortable (very or extremely) discussing sexual health with patients	13 (31%)	8 (40%)	5 (23%)
Feel comfortable (very or extremely) discussing sexual health with adolescent patients	13 (31%)	9 (45%)	4 (19%)
Agree or strongly agree that medical school training has prepared them to discuss sexual health topics in the clinical setting	8 (19%)	2 (10%)	6 (27%)
Beliefs			
Answered correct percentage of middle school students sexually active *	17 (40%)	8 (40%)	9 (41%)
Answered correct percentage of middle school students who practice safe sex **	3 (7%)	0 (0%)	3 (14%)
Believe less than 50% of middle school students have access to accurate health information outside of school setting	38 (91%)	19 (95%)	20 (91%)
Believe it is extremely important to include sexual education in school curriculum	32 (76%)	19 (95%)	13 (59%)
Believe sexual relations before marriage are not wrong at all	28 (67%)	12 (60%)	16 (73%)
Believe sexual relations between teenagers before marriage are not wrong at all	14 (33%)	7 (35%)	7 (32%)
Strongly agree that birth control should be available to teenagers without parental consent	32 (76%)	15 (75%)	17 (77%)

* Correct percentage is 8.4 in 2015.
** Defined as condom use. Correct percentage is 60 in 2015.

Source: Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance System (YRBSS). http://www.cdc.gov/healthyyouth/data/yrbs/index.htm. Accessed October 3, 2017.

Table 2: Baseline responses on the perceived effectiveness of elective.

	Agree or strongly agree n=20 (%)
All medical students should participate in an elective like this one.	15 (75%)
Participating in this elective will help me feel more prepared to discuss sexual health topics with adolescents.	17 (85%)
I will be able to use the skills that I learned in this elective to discuss sexual health topics in the clinical setting.	19 (95%)
I will be able to use the skills that I learned in this elective to discuss sexual health topics with other age groups.	18 (90%)

Table 3: Baseline self-reported confidence in discussing specific sexual health topics.

	Very to extremely comfortable n=20 (%)
Body Image	8 (40%)
Healthy Relationships	9 (45%)
Making healthy decisions	12 (60%)
Contraceptives	10 (50%)
Abstinence	8 (40%)
Pregnancy	5 (25%)
Sexually transmitted infections	8 (40%)
Sexual violence	4 (20%)
Sexual and gender identity	7 (35%)
Engaging adolescents in discussion	11 (55%)
Asking questions to promote conversation	11 (55%)
Asking questions to gauge understanding	10 (50%)
Average confidence level across all topics	43%