

## ORIGINAL RESEARCH—EDUCATION

## Student-Initiated Sexual Health Selective as a Curricular Tool

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## ABSTRACT

**Introduction.** Patients' sexual health functioning is important for physicians in all fields of medicine to consider; however, this topic is lacking from almost half of U.S. medical school curricula.

**Aims.** This study aims to develop, implement, and assess the feasibility of a preliminary sexual health curriculum for medical students.

**Methods.** This Sexual Health Selective (SHS) was developed and implemented by a student and faculty champion for first year medical students. Its design incorporated a number of the guiding principles and recommendations from the 2012 Summit on Medical School Education in Sexual Health.

**Main Outcome Measures.** Feasibility was measured by limited-efficacy testing and participant acceptability of the SHS. Limited-efficacy testing was accomplished by conducting descriptive comparisons of responses to a sexual health attitudes and knowledge survey. These responses were compared between (i) participants vs. nonparticipants prior to the SHS, (ii) participants immediately after vs. participants prior to the SHS, (iii) participants 3 months after vs. participants prior to the SHS, and (iv) participants 3 months after vs. participants immediately after the SHS. Participant acceptability was assessed by asking qualitatively and quantitatively whether students enjoyed the SHS, found it beneficial to their learning, and would recommend it to their classmates.

**Results.** Immediately after the SHS and 3 months later, participants reported increased comfort and open-mindedness in their attitudes toward sexual health and demonstrated an increase in accurate knowledge about sexual health issues compared with baseline. Objective follow-up also revealed that most participants enjoyed the SHS, found it beneficial to their learning, and would recommend it to their classmates.

**Conclusions.** The 1-week SHS was successfully implemented through the teamwork of a medical student and faculty champion. It resulted in more accurate knowledge and more open attitudes toward sexual health among participating medical students. Potential benefits to undergraduate medical educators are reviewed. **Johnson K, Rullo J, and Faubion S. Student-initiated sexual health selective as a curricular tool. Sex Med 2015;3:118–127.**

**Key Words.** Undergraduate Medical Education; Medical Students; Sexual Health; Curriculum

## Introduction

Sexual health medical school education is greatly lacking in the United States [1–6]. In fact, 44% of U.S. medical schools currently do not have a formal sexual health curriculum [7], and the curricula that do exist vary widely [4,8–12]. A study

by Solursh et al. in 2003 surveyed 101 U.S. medical schools and found that the majority of them provided only 3–10 hours of sexual health education, and less than half offered clinical programs that included a focus on treating patients with sexual problems and dysfunctions [3]. As recently as 2011, a survey of medical school deans

across the country indicated that the median time dedicated to teaching lesbian, gay, bisexual, and transgender-related content in the entire curriculum was 5 hours, with one-third of schools reporting zero hours during clinical years [4]. Reasons cited for this deficit in sexual health education include lack of instructional time, perceived lack of relevance to course content by faculty members, and lack of professional development on sexual health topics [1]. This deficit is alarming considering the sexual health needs of our patients and the serious negative consequences of poor sexual health [13–21]. Without adequate training in sexual health, medical students and physicians will be ill-equipped to address these important concerns [22,23].

To address this curricular deficit as well as the barrier of limited curricular time, we developed a Sexual Health Selective (SHS) for first year medical students. The SHS was developed and implemented by one medical student and one faculty champion and was offered as an optional element outside of regular medical school education. Furthermore, a number of the guidelines from the 2012 Summit on Medical School Education in Sexual Health [24] were utilized, including: (i) introducing sexual health education early in medical education training, (ii) using varied teaching methods in order to better engage students, (iii) using a multidisciplinary, biopsychosocial team approach, (iv) fostering collaboration with student and faculty champion(s), and (v) evaluating the efficacy of the curriculum.

### Aims

The primary aim of this study was to determine the feasibility of implementing a 1-week sexual health curriculum. Feasibility was measured by limited-efficacy testing and participant acceptability of the SHS [25]. Specifically, it was hypothesized that SHS participants would demonstrate increased knowledge and more open attitudes toward sexual health after completion of the selective, that these changes would persist long-term (i.e., for at least 3 months), and that participants would report strong acceptance of the SHS.

### Methods

#### *Concept of the SHS*

The concept for the project came from the student leader (KJ) who organized the selective as a final

project for the 2012–2013 Sexual Health Scholars Program (SHSP) offered by the American Medical Student Association (AMSA) [26]. Selectives are 1-week, extra-curricular blocks offered throughout the school year at the institution where this study took place. During selective weeks, students are required to engage in career exploration or skill development of their choice. Many selectives are offered from which students can choose, or students may create their own selective experiences under the guidance of a faculty mentor. For example, a student may choose to volunteer in a healthcare capacity 1 week, shadow in a desired specialty another week, and work on a research project during a third selective week. Some selectives are geared toward specific skill development or knowledge enhancement, such as learning surgical techniques, attending ride-alongs with the local ambulance service, or learning about domestic violence in the community. The SHS was introduced as a selective of this type, in which interested students could expand their clinical skills and knowledge in the domain of sexual health.

The curriculum was developed by a medical student (KJ) in conjunction with a faculty champion (SF). It took place in the context of the first year medical school curriculum, which was made up of 3- to 7-week block courses including subject matter such as public health, biochemistry, genetics, histology, anatomy, pathology, immunology, microbiology, pharmacology, and supplemental courses in patient communication, history-taking, and how to perform a physical exam. By virtue of its condensed 1-week integrative format, the SHS was distinct from student interest groups, which typically hold multiple stand-alone events throughout the year, and from the SHSP [26], which is a 6-month online program run by AMSA designed to enrich medical students' knowledge about sexual health. The curriculum did, however, draw from elements of the SHSP curriculum, as the student leader (KJ) was a recent graduate of this program.

#### *Development and Implementation of Curriculum*

In keeping with the 2012 Summit [24] principle of introducing sexual health education early in medical education training, this curriculum was developed specifically for first year medical students. Key early steps in planning included identifying a faculty champion for the project (SF) and securing dates, times, and locations for the curriculum to take place. These early steps were completed with support from the selectives coordinator and the administrative staff at the medical

**Table 1** Sexual health selective curriculum

Day	Theme	Activities
Day 1	Skills and perspectives	12–1 PM: “How We Think and Talk About Sex” Led by student leader (KJ) 1–2:30 PM: “How Should We Talk to Children About Sex?” Led by pediatric faculty 3–4 PM: “Responding to Sexual Assault” Led by Sexual Assault Nurse Examiner (SANE) 4–5 PM: “Transgender Perspectives in Health Care” Led by patient
Day 2	Sex across the age and health spectra	1–2 PM: “Sexuality Concerns During Chemotherapy and End of Life Care” Led by oncology/palliative care faculty 2–3 PM: “Making Love Again” Led by authors of a book on sexual health challenges after prostate cancer surgery 3–4 PM: “What’s Eating Humbert Humbert? A Closer Look at Fetishes, Pedophilia, and Compulsive Sexual Behavior” Led by psychiatry faculty 4–5:30 PM: Viewing of <i>The Sessions</i> (2012) A film exploring sexuality, disability, and religion
Day 3	Shadowing	Students complete full or half-day of shadowing with a provider, and write a short reflection on the experience.
Day 4	What patients are (and aren’t) asking	12–1 PM: “Taking a Sexual History” Led by faculty champion (SF) 1–2 PM: Practice taking sexual histories One-on-one role play 2:15–3 PM: “What is “Normal” and Does it Matter?” Led by student leader (KJ) 3–4:30 PM: Viewing of <i>The Perfect Vagina</i> (2008) A documentary about female genital cosmetic surgery, followed by discussion
Day 5	Show what you know	12–1 PM: Sexual Health Jeopardy Led by a volunteer SHS participant 1–2 PM: Sexual Health Board Game Led by student leader (KJ) 2–5 PM: SHS student presentations On various topics relating to sexual health

Outline of the 1-week SHS curriculum, as designed by the student and faculty champions.

school. The SHS was offered outside the regular medical school curriculum in order to address the barrier of limited curricular time. During the 5 months prior to the selective, first year medical students were made aware of the SHS as an option to fulfill one of their required extracurricular elements; this was achieved with e-mail and face-to-face communication.

Next, an outline of the 1-week program was designed. One priority of the SHS curriculum, in keeping with the 2012 Summit [24] recommendations, was to utilize varied teaching methods in order to better engage students. The selective itself consisted of a 5-day curriculum (see Table 1). The first 2 days consisted of didactic sessions, including an introduction by the student leader, presentations by a variety of specialists, and discussions with patients and community members who shared their experiences pertaining to sexual health care. These sessions were followed by review and discussion of pertinent films and documentaries, shadowing experiences with medical

professionals from a variety of specialties, interactive sessions on sexual history-taking, and educational games. On the last day, each participant gave a brief presentation to the group on a sexual health topic of their choice. Throughout the SHS, the medical student leader (KJ) facilitated all classroom discussions, presentations, and exercises.

A second priority of the SHS was to use a multidisciplinary, biopsychosocial team approach. This was achieved with the participation of speakers from a variety of backgrounds and medical specialties. As the outline of the course was developed, institutional and community resources were used to identify potential experts in the area who could speak on topics pertaining to sexual health, both from the provider and patient perspectives. Specialists in pediatrics, emergency medicine, oncology/palliative care, psychiatry, and women’s health led presentations highlighting not only the biology of sexual functioning, but also important psychological and social factors contributing to sexual health. For example, the Sexual Assault

Nurse Examiner described the timing and method of sample collection as well as the specific communication techniques used when interacting with victims of sexual assault. Supplementing the psychosocial aspects of the curriculum were the live patient presentations, the film and documentary viewings, and the one-on-one shadowing experiences.

A third priority of this selective was to foster collaboration between student and faculty champion(s). This was achieved in several ways. First, the curriculum was formulated through a joint effort between the student leader (KJ) and faculty champion (SF), who worked as a team to develop the curriculum. In addition, SHS participants had the opportunity to engage with champions of sexual health in small group settings during the curriculum. Finally, the shadowing experiences allowed students to interact with physicians individually to understand the importance of sexual health in their respective medical specialties.

### *Participants*

Participants in the selective included eight men and five women (age range 23–39 years), with a variety of ethnicities and cultural backgrounds. All participants were first year medical students from the same institution. This study was reviewed by the Institutional Review Board (IRB) and was deemed formally exempt from IRB oversight.

### **Main Outcome Measures**

#### *Limited-Efficacy Testing*

During the week prior to the SHS, a voluntary, anonymous survey was e-mailed to all first year medical students ( $n = 48$ ) to assess their attitudes and knowledge about sexual health (see Appendix). A total of 33 medical students completed and returned the survey. Of these 33 respondents, 20 survey respondents did *not* enroll in the SHS; the remaining 13 voluntarily registered for the SHS.

The survey consisted of 25 questions: 10 attitude questions answered via a 10-point Likert scale and 15 knowledge questions answered in a multiple choice or true/false format (see Appendix). Attitude questions reviewed students' comfort levels with the following: discussing sexual health with peers and patients of different sexual orientations and gender identities, viewing patients' genitalia in the setting of a medical examination, taking a sexual history, using accurate anatomical terms when communicating with children about sexual

development, and addressing the sexual concerns of cancer patients and those with disabilities. Knowledge questions covered topics such as: the rates of sexually transmitted infections in different settings, the medical concerns of lesbian, gay, bisexual, transgender, and intersex (LGBTI) patients, sexuality in the elderly and those with disabilities, reproductive anatomy, contraceptive methods, and sexual health resources.

Surveys were either returned to a designated drop-off location or via e-mail. Those that were returned by e-mail were de-identified and stored in a secure location. At the completion of the selective and again 3 months later, participating students filled out an identical survey, which was sent via e-mail and returned in the same fashion as the initial survey. Surveys were returned by all SHS participants ( $n = 13$ ) at all three survey points (i.e., prior to the selective, immediately after the selective, and 3 months later). All survey responses were recorded in an Excel database, and the average Likert responses (for attitudes questions) and proportion of correct responses (for knowledge questions) were used to compare (i) participants vs. nonparticipants prior to the SHS, (ii) participants immediately after vs. participants prior to the SHS, (iii) participants 3 months after vs. participants prior to the SHS, and (iv) participants 3 months after vs. participants immediately after the SHS.

#### *Acceptability Measures*

Post-SHS, all participants ( $n = 13$ ) were e-mailed an online survey link to a brief questionnaire about their reactions to the SHS. All responses were anonymous. Participants were asked on a 5-point Likert scale ("Not at all" to "Extremely") how much they enjoyed the SHS, whether they believed the SHS was beneficial to their medical school education, and whether they would recommend the SHS to their classmates. Participants were also given the option to provide qualitative feedback about the SHS.

### **Results**

#### *Limited-Efficacy Knowledge Measures*

All outcome measures are reported descriptively. The percent of students responding correctly to knowledge measures at each survey point is summarized in Table 2. Prior to the SHS, participants reported 100% accuracy on 7 out of 15 knowledge measures and accuracy ranging between 23% and

**Table 2** Percent of students responding correctly to sexual health knowledge questions\* (n = 13)

Knowledge question	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Nonparticipants before SHS	20%	90%	80%	35%	75%	95%	100%	100%	75%	30%	85%	100%	90%	75%	85%
Participants before SHS	23%	100%	85%	31%	62%	85%	100%	100%	62%	38%	92%	100%	100%	100%	100%
Participants after SHS	77%	100%	100%	100%	77%	92%	100%	100%	92%	85%	100%	100%	100%	77%	100%
Participants 3 months after SHS	85%	100%	92%	38%	54%	100%	100%	100%	100%	69%	100%	100%	92%	100%	100%

\*All items were multiple choice or true/false. Question numbers correlate to items #11–25 in Appendix. Percentages represent the % of students in each group with correct responses to each of the 15 questions.

**Table 3** Average responses to sexual health attitude questions\* (n = 13)

Attitude question	1	2	3	4	5	6	7	8	9	10
Nonparticipants before SHS	6.95	6.90	6.10	5.30	6.40	7.25	7.40	8.20	6.00	8.30
Participants before SHS	7.77	7.92	7.38	6.38	7.46	8.08	8.15	9.23	6.31	9.15
Participants after SHS	9.15	8.54	8.62	8.15	9.00	9.38	9.38	9.69	6.92	9.46
Participants 3 months after SHS	8.77	8.08	8.31	7.62	8.54	9.15	9.23	10.00	6.69	9.38

\*Items were scored on a 1–10 Likert Scale, with higher scores indicating more open attitudes toward sexuality and sexual health. Question numbers correlate to items #1–10 in Appendix. Item nine was reverse coded.

92% on the remaining eight items. Participants scored higher than nonparticipants on eight of the 15 knowledge measures and scored either lower or the same as nonparticipants on 7 of the 15 knowledge measures. Immediately after the SHS, the accuracy of participants’ knowledge about sexual health issues was increased compared with baseline on 8 of the 15 knowledge measures, decreased on 1 of the 15 knowledge measures, and was 100% at both baseline and reassessment on 6 of the 15 knowledge measures (see Figure 1). At 3 months, knowledge about sexual health was increased compared with baseline on 7 of the 15 knowledge measures, decreased on 2 of the 15 knowledge measures, and was 100% at both baseline and reassessment on 6 of the 15 knowledge measures.

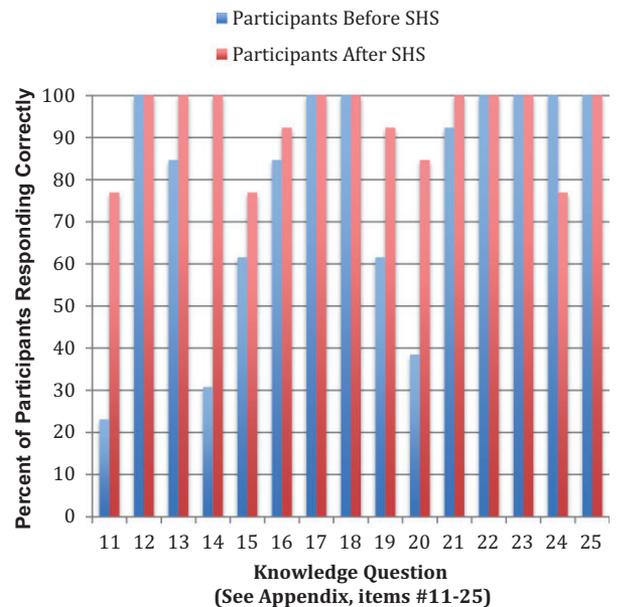
**Limited-Efficacy Attitude Measures**

The average student responses to attitude measures at each survey point are summarized in Table 3. Before the SHS was implemented, participants scored higher—indicating more comfort and open-mindedness toward issues pertaining to sexuality—than nonparticipants on all 10 attitude measures (see Figure 2). Immediately after the SHS and 3 months later, participants’ average responses were increased compared with baseline on all 10 attitude measures, indicating further increased comfort and open-mindedness toward issues related to sexuality and sexual health (see Figure 3).

**Acceptability Measures**

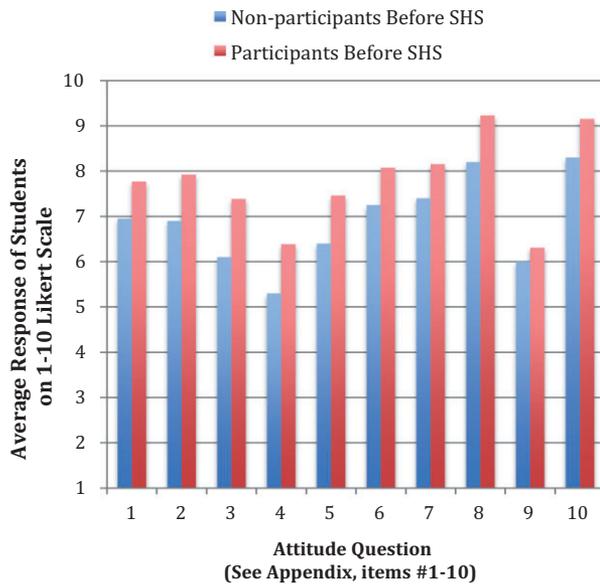
Eight of the 13 SHS participants completed and returned the acceptability survey. The average

responses to the questions, “How much did you enjoy the SHS?,” “How beneficial did you find the SHS in your medical school education?,” and “Would you recommend the SHS to classmates?” were 4.125, 3.75, and 4.125, respectively, on a 5-point Likert scale with 1 indicating “Not at all” and 5 indicating “Extremely.”



**Figure 1** Percent of participants responding correctly to sexual health knowledge questions\* (n = 13).

\*All items were multiple choice or true/false. Question numbers correlate to items #11–25 in Appendix. Percentages represent the % of students in each group with correct responses to each of the 15 questions.



**Figure 2** Participant ( $n = 13$ ) vs. nonparticipant ( $n = 20$ ) average responses to sexual health attitude questions\*. \*Items were scored on a 1–10 Likert Scale, with higher scores indicating more open attitudes toward sexuality and sexual health. Question numbers correlate to items #1–10 in Appendix. Item nine was reverse coded.

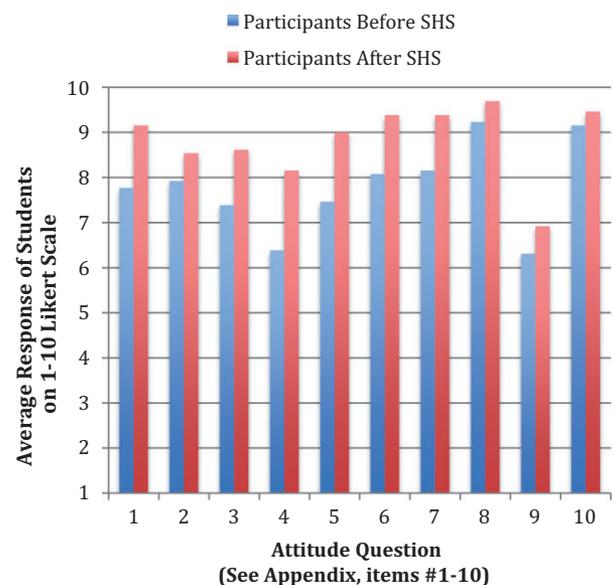
## Discussion

The SHS curriculum demonstrated feasibility potential in both limited-efficacy testing and acceptability measures. Limited-efficacy testing suggested that the SHS was associated with more open attitudes and more accurate knowledge about sexual health among participants. After the SHS and 3 months later, participants' attitudes increased in openness, and accurate knowledge increased on about half of the survey questions. These findings are consistent with the existing literature on medical school sexual health education [27–29].

Acceptability measures supported the feasibility of this extracurricular option by showing that the selective was well-received by first year medical student participants and that they would recommend it to their classmates. However, only 8 of 13 participants completed the postcurriculum acceptability questionnaire. It is unknown if a difference exists between those who did and those who did not complete this questionnaire, and if that difference would change our acceptability conclusions. The authors offer the following explanations for this low response rate: First, the acceptability survey was a voluntary survey sent at a time late in the academic year, after students had completed several rounds of course evaluations and questionnaires for various research projects. Thus, failure

to complete the survey may have been due to “survey fatigue” among students. Second, the acceptability questionnaire—unlike the limited-efficacy questionnaire—was sent at a time when students were preparing for their board exams, and thus, could have been viewed as lower priority for students.

A major strength of this curriculum is that it was developed and implemented by a medical student with guidance and support from a primary faculty champion. The strength of the collaboration developed was such that two faculty champions (SF and JR) and two new first year medical students volunteered to take the lead on implementing the SHS the following year. At the time of publication, the second implementation of the SHS had been completed under the guidance of this new leadership group. The second version of the curriculum maintained several key elements of the original curriculum (see Table 1). In addition, it incorporated several new presentations and discussions, including topics such as sexual function, erectile dysfunction, biases in health care for LGBTI patients, psychological concerns of patients with infertility, the concept of sex-negativity, and myths about virginity. A small, informal survey of participants in the second year of the SHS implementation



**Figure 3** Participants' average responses to sexual health attitude questions immediately before and after the SHS\* ( $n = 13$ ).

\*Items were scored on a 1–10 Likert Scale, with higher scores indicating more open attitudes toward sexuality and sexual health. Question numbers correlate to items #1–10 in Appendix. Item nine was reverse coded.

revealed that all sessions were rated as “Good” or “Excellent” by the respondents ( $n = 3$ ), and no sessions were rated as “Fair” or “Poor.” Faculty champions reported minimal time burden in the second year of implementation. Student champions reported minimal time burden for curriculum development but moderate time burden for schedule coordination of SHS speakers. Thus, faculty champions have secured an education administrator to help with speaker scheduling for the third implementation of the SHS. We believe that student–faculty collaborative effort was foundational to the success of the SHS and is a potential first step toward addressing the lack of sexual health curricula in medical schools. This is consistent with the 2012 guideline from the Summit on Medical School Education in Sexual Health [24], which encouraged collaboration between student and faculty champion(s).

Interestingly, prior to the SHS implementation, those who chose to participate reported more open attitudes toward sexuality but not more sexual health knowledge than nonparticipants (see Table 2 and Figure 2). This is not surprising, given that those who volunteer for sexuality-related research tend to have more positive attitudes toward sexuality [30]. If sexual health curricular elements remain optional, however, they may primarily attract students who have more open attitudes toward sexuality, whereas those with more limited views (i.e., those who may benefit most from this education) will miss this clinically important information. The benefits of a program such as the SHS are limited by the extent to which participation is required. If we wish to train future physicians who are competent in sexual health issues, sexual health curricula must be a required element for all students in undergraduate medical education.

Despite the success in development and implementation of this curriculum, this descriptive study has several limitations. First, both the curriculum itself and the assessment tool used to evaluate knowledge and attitudes were not validated. Although validated sexual health curricula did exist at the time of this study [7,26], the available curricula did not fit the SHS 1-week format and also contained a great deal of information (i.e., anatomy, physiology, and pathology) that was already covered in other aspects of the existing medical school curriculum. Validated sexual health surveys were also available at the time of this study; however, many of them were either targeted toward adolescents [31], were too broad for the purposes of the curriculum being tested [32],

and/or included sections on personal behaviors (which was not the purpose of this study) [32]. For these reasons, an assessment tool was created specifically for this study that aligned with the goals of the selective curriculum.

A second limitation of this study was that it included a small number of self-selected students from one medical school in one particular year, among whom confounding variables such as prior exposure to or experience with sexual health education were not examined. This limits the generalizability of the findings.

Third, with regard to implementation of the SHS, we found it necessary at our institution to appoint new student leaders each successive year due to scheduling and curricular constraints, which may limit the consistency and efficient development of the curriculum from year to year. On the other hand, the continued involvement of the initial faculty champion (SF) as well as an additional faculty champion (JR) in both the creation of the selective and delivery of key selective sessions such as sexual history-taking and sexual function has helped maintain curricular consistency from year to year. In addition, each set of leaders meets with the succeeding leaders in order to provide a general outline and guidance for development of the selective.

Fourth, the statistics reported in this study are only descriptive in nature. Because all questionnaires were returned anonymously to preserve confidentiality, formal statistical tests could not be performed and the significance of changes in sexual health knowledge and attitudes could not be determined.

Finally, the control group was surveyed only at initiation of the study and not at completion or at 3 months. Therefore, it is unclear whether the changes reported by participants are the result of the curriculum or perhaps another unknown factor.

Future research in this area would benefit from the use of a validated assessment tool, a larger cohort of students, consistent student leadership, a more rigorous statistical assessment of curricular efficacy, and a controlled trial in which the control group is surveyed at identical time points to the participant group.

## Conclusions

The SHS was a student-initiated, successfully implemented extracurricular element that enhanced the sexual health education of a group of first year

medical students despite limitations in undergraduate medical curricular time. It utilized several key principles and recommendations from the 2012 Summit on Medical School Education in Sexual Health [24], including: (i) introducing sexual health education early in medical education training, (ii) using varied teaching methods in order to better engage students, (iii) using a multidisciplinary, biopsychosocial team approach, (iv) fostering collaboration between student and faculty champion(s), and (v) evaluating the efficacy of the curriculum.

The need for increased sexual health education in medical schools is significant, yet the available curricular time for incorporating such elements is limited. The SHS may be a stepping stone for medical educators who are interested in increasing sexual health education at their institutions. Medical educators may benefit from this manuscript by reviewing the strengths and weaknesses of the SHS as implemented at our institution and considering how a similar program may be incorporated into their own undergraduate medical education curricula. If a window of extracurricular time does exist to implement an SHS, the first step for a medical educator is to identify a student champion (e.g., an AMSA Sexual Health Scholar would be one possible student champion), secure an education administrator to assist with scheduling, and then utilize this manuscript as an outline to develop and implement an SHS together. Our experience indicates that if just one student and one faculty champion can develop an SHS, their foundational work can easily continue to be implemented by future student champions, with minimal faculty and student time burden. Ultimately, sexual health education needs to be a required curricular element for all undergraduate medical students; however, an SHS is a feasible first step toward this goal.

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*Conflict of Interest:* The author(s) report no conflicts of interest.

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12. Which of the following is currently true of retirement homes in the United States:
  - a. Sexually transmitted infection (STI) rates are falling
  - b. STI rates are stable
  - c. STI rates are rising
13. Which of the following is true about homosexual females in the context of medicine:
  - a. They are generally up front with their doctors about having a same sex partner; it comes up early in the patient interview
  - b. They are generally uninterested in having children
  - c. They are not at risk for most STIs because they are not having penile-vaginal intercourse
  - d. They tend to have higher rates of depression, drug abuse, and alcoholism
14. The rates of teen pregnancies and teen births in the US are about \_\_\_\_\_ the rates in France and the Netherlands.
  - a. Half
  - b. Double
  - c. Three times
  - d. Four times
15. The average length of an erect penis is closest to:
  - a. 4.5 inches
  - b. 5.5 inches
  - c. 6.5 inches
  - d. 7.5 inches
16. True or False: It is generally safe for a patient undergoing chemotherapy to have sex.
17. True or False: People with disabilities are generally uninterested in sex.
18. True or False: A transsexual man can get breast cancer.
19. True or False: A transsexual woman should be screened for prostate cancer.
20. True or False: A transsexual man should be screened for prostate cancer.
21. True or False: Homosexual men are at higher risk for depression and eating disorders than heterosexual men.
22. True or False: Most people over the age of 50 are not sexually active.
23. True or False: Human papillomavirus (HPV) can cause anal cancer and genital warts in a bisexual male.
24. True or False: One reason the United States has higher rates of teen pregnancies and abortions is because we are more sexually open (i.e. less private in our discussions of sex and sexuality) than countries like France and the Netherlands.
25. True or False: Hormonal birth control methods such as the Mirena intra-uterine device (IUD) and oral contraceptive pills are effective at protecting against STIs.

<sup>1</sup>This item was reverse-coded.