Sexual Medicine, 2023, **11**, 1–7
https://doi.org/10.1093/sexmed/qfad035
Original Research

Assessing comfort with sexuality-related questions in medical students: "a little discomfort is better than a lifetime of suffering in silence"

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Abstract

Background: Sexual history–taking competence in medical students is an essential skill that they need to acquire. It requires them to learn to develop comfort in using sexuality-related language and raising the subject with patients. Sexual history exploration skills are inadequately taught in a significant number of medical schools.
Aim: We studied comfort levels in using sexuality-related language in medical students who had no training yet in history taking.
Methods: First-year medical students in a South African university engaged in an exercise in pairs—a dyad—alternating the role of interviewer and interviewee. Provided questions and answers were offered to the students, who videotaped their dyad interview and uploaded it to a safe university environment for peer review.
Outcomes: As part of the exercise, students rated their comfort in the interview for 35 questions on a 5-point Likert scale. Students then participated in online discussion forums with fellow students and tutors on their experience.
Results: Students posing the questions, the interviewers, were significantly more comfortable with the questions than interviewees. Total comfort scores over the 35 questions showed a roughly normal distribution for both. Questions with explicit sexual behavior or vocabulary were rated more uncomfortable by interviewers as well as interviewees. The total scores for interviewers showed a distribution with a longer tail toward discomfort. Female interviewees were significantly more uncomfortable than male interviewees, but this was not the case for interviewers. Dyads of 2 females were significantly more uncomfortable than mixed-gender and 2-male dyads. Qualitative data showed wide acceptance of the exercise by students, with increasing confidence and comfort in using sexually explicit terms in strong appreciation of the responder's perspective in the exercise, as well as awareness that receiving a question—the patient's position—is more uncomfortable.
Clinical Translation: Data indicate that comfort assessment in asking sexuality-related questions with expected different levels of comfort and discomfort is a valuable measure that can evaluate progress in this skill. The data also suggest the need for students to select profiles and questions to provide a trauma-informed approach, knowing that some of the medical students will have experienced sexually related trauma, as in the general population.
Strengths and Limitations: This study provides a method and student feedback in teaching sexual history elicitation and increasing comfort with sexual language in a clinical context. The study is limited to first-year medical students.
Conclusion: Histories with provided questions and answers allow for rating of comfort and provision of trauma-informed education in developing sexual history exploration clinical skills.

Introduction

Health care practitioners working with patients need to be comfortable with sexual history taking. They need to be taught clinical interviewing, and they need training in exploring a sexual history and integrating it. At a minimum, medical doctors, physician assistants, and nurse practitioners should be able to elicit sexuality-related questions in sufficient detail to make a diagnosis, answer basic sexual questions, and refer to an appropriate specialist practitioner if necessary. In describing our approach, we prefer the term "sexual history exploration" to emphasize that it is not a power-based interaction, as the word "taking" implies, but a conversation of exploration that involves the clinician and client or patient.

Many medical schools offer inadequate or no training in sexual health (only 55% of US medical schools indicated that they offer formal sexual health courses or streams).[1] Barriers to integrating sexual history exploration include discomfort with raising the topic, using the words, a lack of training, and time constraints. A major barrier to medical students learning sexual history exploration is discomfort in students and faculty. Studies indicate that medical practitioners do not elicit sexual histories, because they believe that they do not need to, they lack the time, or they are uncomfortable with raising the subject or using sexually related words or terms.[2] This last reason underscores the importance of training medical students in practicing with sexuality-related questions that contain explicit wording. In South Africa, Pretorius et al[3]

Received: March 13, 2023. **Revised:** May 31, 2023. **Accepted:** June 7, 2023
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reported that only 3% of 151 primary care visits included sexual history taking.

Burd et al[4] examined physicians' anticipated discomfort on asking patients explicit sexual functioning-related questions. They assessed >70 physicians (mean age, 38 years) in a large US teaching hospital. In their questionnaire, physicians were asked to rank their discomfort during interviews with patients of different ages, races, marital status, sexual preference, religious beliefs, and academic achievement. The physicians were more uncomfortable with patients aged <18 and >65 years, where the patient's academic achievement was below college level, and when the patient was divorced or single. There were also significant differences among physicians reporting their discomfort when interviewing males and females—specifically, greater discomfort when interviewing patients of a different sex.

In another study from the United States, Wimberly et al[5] surveyed 416 physicians in obstetrics and gynecology, internal medicine, family practice, and pediatrics. Approximately half the sample were male and half were White. Although only 56% felt that they had been given adequate training in sexual history taking, 79% said that they felt comfortable taking sexual histories. Wimberly et al noted that while participants took sexual histories if the complaint related to a sexual issue, it was far less common as part of a routine preventive health history. It is uncontested in studies of sexual history taking in medical settings that the major reasons for not exploring sexual histories are discomfort, lack of training, lack of time, and lack of an explicit sexual concern expressed by a patient.[3–5]

Ross et al[6,7] have reported on the importance of training medical students in taking sexual histories and some of the technologies that can facilitate this in online and in-person teaching. Medical students are almost invariably enthusiastic about this training. In training, comfort in sexual history exploration is one of the major variables targeted, as well as the provision of information on sexual function and dysfunction. Yet, very little is published about the process of training in sexual history exploration, beyond the use of such models as the PLISSIT model and letting students role-play cases that may advance in complexity as the course progresses. Feedback on role-playing, including video playback, can provide guidance, but it is implicitly believed that the more students use sexual terms in practice settings, the more comfortable they will become. An implication of such repetition is that there is a benefit in reducing student anxiety by starting with phrases or questions that are minimally anxiety provoking and working up to those that provoke greater anxiety. This assumes that we know what questions are associated with levels of anxiety or discomfort; however, we could find no data published on this.

What is not known in teaching sexual history exploration are the levels of discomfort when taking sexual histories, the types of questions associated with discomfort, and how medical students perceive discomfort and react to asking questions and receiving answers that may make them feel uncomfortable. We sought to provide data on these gaps in knowledge to assist in the creation of training materials to develop and improve sexual history exploration in medical students.

Our research questions were as follows:

- What questions were minimally and maximally uncomfortable?
- Did these fall on a single continuum or cluster in particular content areas?
- Was there a difference in gender or between interviewer and interviewee on comfort levels?
- For qualitative data, what experiences, positive and negative, did students describe to provide depth to understanding the comfort or discomfort levels?

We report on an evaluation of students working in pairs (dyads) practicing sexually related questions using provided answers based on examples given by our community partners. The exercises, which did not require any personal history input by students, were conducted with medical students at a large South African medical school.

Methods

A total of 289 first-year medical students viewed a learning materials package of 7 short videos to become aware of the range of views of different experts and roles on sexuality in communities and patients and to become aware of the biopsychosocial influences.

Themes of these 7 interview-format videos were as follows: law and ethics, professional attitudes toward sexuality, mind and body, Bible and sexuality, hopes for one's children, social influences on sexuality, and community sexual health education. After having watched each interview, students were asked 5 to 7 questions on "What did you hear that was being said in this video?"

We expected the following outcomes from students after having done sexual health education for professionals scale (SHEPS) and this sharable content object reference model (SCORM) package: (1) describe human sexuality in terms of the different aspects of the biopsychosocial model of care, (2) recognize and distinguish perspectives on sexuality and sexual health, (3) associate with certain viewpoints and accept the complexity around sexuality, and (4) formulate their own viewpoints in relation to expert viewpoints about sexuality.

Practicing in dyads of peers, with minimal pressure, is an important part of learning and applying sexual history exploration skills. Dyad partners were chosen by students themselves, and they arranged a time to meet online on Microsoft Teams with their chosen partners. The student in the interviewee role chose a profile with answers to the questions from a selection of 5 prefabricated profiles (3 female and 2 male). They chose from a selection of profiles in case a particular profile contained triggering material. Profiles included the list of answers to the questions; these were developed by a sexual health nongovernmental organization, Partners in Sexual Health, based on profiles involving young adults (<25 years) working with our community partner, who answered the questions themselves. The profile was not a "case" in that there was no sexual problem, concern, or dysfunction. There was no other reason for the interview questions other than for the interviewer to practice asking sexual health–related questions: the responses were not graded, although the exercise was obligatory.

The objective was clearly stated to practice exploring questions involving sexual health and sexuality-related language and not to make a diagnosis. The dyad pairs were asked to video their history-taking activity and upload it where faculty could view it. A divided screen view format was used where interviewer and interviewee were visible for the participants to get feedback on their body and verbal language. One other

student—who was neither the interviewer nor the interviewee—peer reviewed the video and made useful observations as part of a self-study exercise. Two sample videos were provided as a model beforehand, where third- and fourth-year medical students conducted a dyad interview.

The interviewer was provided with a list of 35 questions (Table 1) and the interviewee, a corresponding list of 35 answers—that is, no free-form responses were requested. The interview was uploaded to a firewalled and password-protected university site. Students had the opportunity to re-record and upload their best sexual history exploration video. The video had to be uploaded by each interviewer. The questions and answers were grouped into 6 themes in the exercise design to enable the researchers to see if any of the themes were related to comfort ratings.

- Introductory demographics: background and gender
- Needs and/or pleasure from sexuality
- Sexuality-related social/physical setting and opinions
- Consent and benefits of sexuality, individually or interpersonally
- Sexual rights: access to sexual health care
- Sexuality education history

After the interview was conducted, the interviewer and interviewee completed and uploaded a survey rating their comfort levels on each question using a 5-point Likert scale (very uncomfortable, uncomfortable, neither, comfortable, very comfortable) (Table 1). While questions or answers could be "passed over" by students, there was no data field to record this (a comfort score was still recorded). Faculty tutors, who were available for questions and if students experienced personal issues, did not grade or give feedback on the videos: the activity was described as self-study. There was an option for students to access the university counseling service, independent of the medical school, if any felt the need for help. The faculty would not know if this was utilized or not, as it was independent of the study.

A pilot study was done with 6 more senior MBChB students (third-fourth year), and their feedback led to some minor adjustments. The interview was recorded within a given time frame (mean, 7 minutes; interview and comfort survey, 15-25 minutes), which included the ability to pause and resume interviews. The interviewer took the lead in asking about the interviewee's level of comfort and filled in the comfort survey.

Each student was asked to act as interviewer and interviewee, switching roles with a new profile from the selection of 5 profiles. To provide feedback on the process, students were asked to make 2 online posts on the discussion forum, as well as 2 comments on other students' posts. The questions on the forum were formulated around what they learned from doing the interview and filling out the comfort survey. All comments were downloaded and reviewed by 2 authors for major emergent themes. Peer reviews could be read by the interviewer and interviewee. The study was approved with a consent waiver by the Stellenbosch University Institutional Review Board.

Data analysis

Data from 292 comfort surveys were entered by 266 students: 23 did not submit a comfort survey but did do the dyad interview. Twenty-six entered comfort scores twice, and second comfort scores were removed for most analyses apart from a specific comparison between first and second scores. Remaining comparisons were based on 266 unduplicated responses. Of the 266, 30 were interviewer and 16 interviewee: 222 swopped roles within the same dyad, while 14 had roles as interviewer and interviewee but with a different person.

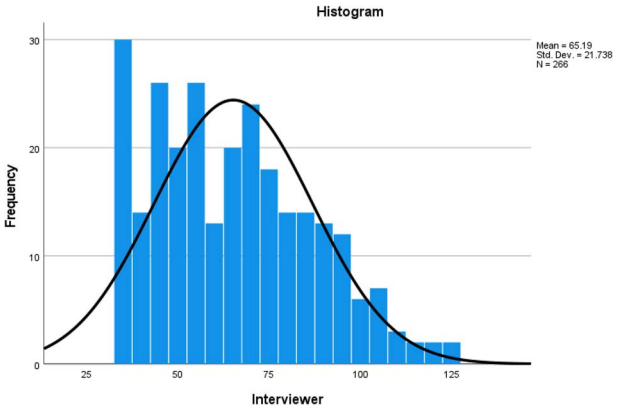

Figure 1. Distribution of comfort scores in students playing the role of interviewer.

Data were analyzed in SPSS version 27 (IBM). To produce a scale of comfort levels, means and standard deviations were computed for students acting as interviewer and interviewee and paired *t*-tests calculated (separate variance estimates). Independent *t*-tests were calculated between females and males (separate variance estimates used if *F* values were significant).

To determine if there were different themes emerging from the 35 questions, factor analysis was carried out (principal components followed by direct oblimin rotation, $\Delta = 0$), and 2 factors with eigenvalues >1 were extracted.

To compare the difference by variables, including dyad sex composition, and those interviews that were repeated, overall scores for interviewer and interviewee were computed. One-way analysis of variance (ANOVA) was performed to compare the effect of dyad sex composition on interviewer and interviewee total comfort level scores, with post hoc least significant difference comparison. Among the 23 students (9.8%) who chose to repeat and resubmit the surveys, comfort scores on the first and second submissions were compared with Cohen's *d*. All tests were 2-tailed at a significance level of $P < .05$.

Results

Quantitative data

Quantitative results are presented in Table 1 and Figures 1 to 3. The class consisted of 289 first-year medical students in a 6-year MBChB medical program at a large South African medical school; the median age was 18 years; and the sample consisted of 217 female and 72 male students.

The 35-item comfort scale questions are presented in Table 1 for interviewers and interviewees. Comfort scores overall were significantly higher for interviewees than interviewers ($t = 2.77$, $df = 430$, $P < .006$). Distributions indicated a floor effect with interviewer comfort, where the modal score was "very comfortable" on all questions, as well as a positively skewed curve (range, 35-127; mean ± SD, 66.15 ± 22.20; skewness, 0.46; Figure 1). There was a much less pronounced floor effect and more normal distribution on comfort score for interviewees (range, 35-136; mean, 71.05 ± 21.69; skewness, 0.27; Figure 2).

Table 1. Interviewer and interviewee comfort in asking sexuality-related questions of a role-playing partner in a dyad (N = 266).

Questions	Mean ± SD[a]	
	Interviewer	Interviewee
1. What is your name?	1.10 ± 0.50	1.14 ± 0.58
2. Where are you from (rural/city/ethnicity)?	1.10 ± 0.52	1.12 ± 0.50
3. Do you consider your thoughts about sexuality to be influenced by your background?	1.31 ± 0.69	1.41 ± 0.76*
4. If so, can you specify?	1.61 ± 0.89	1.77 ± 0.98*
5. What do you consider to be your gender identity (male/female/other)?	1.18 ± 0.60	1.17 ± 0.53
6. Do you ever doubt about what sort of person you are attracted to?	1.25 ± 0.57	1.33 ± 0.71
7. What in your opinion makes sex a good experience for both needs and/or pleasure from sexuality?	1.87 ± 1.05	2.08 ± 1.10*
8. If you have experience with it, was kissing for you a good experience?	1.52 ± 0.75	1.68 ± 0.85*
9. If you have experience with it, was being petted for you a good experience?	2.51 ± 1.30	2.82 ± 1.35*
10. Do you consider your sexual thoughts and fantasies normal?	2.22 ± 1.22	2.40 ± 1.24*
11. Do you know what ways of being touched you prefer?	2.59 ± 1.32	2.73 ± 1.36*
12. Have you got the opportunity for masturbation in your living conditions?	3.08 ± 1.45	3.26 ± 1.42*
13. In what sort of relationship are you now? For instance married, single, in love, living apart or together, otherwise.	1.22 ± 0.61	1.29 ± 0.63*
14. Do you think being a virgin is important if you want to marry?	1.54 ± 0.89	1.61 ± 0.82
15. How can you be sure if a person is a virgin?	2.96 ± 1.18	2.13 ± 1.23*
16. Do you consider 25 too old or too young to have intercourse for the first time?	1.59 ± 0.53	1.76 ± 1.01*
17. What could be reasons for circumcision?	1.53 ± 0.84	1.66 ± 0.90*
18. If you have had a STD did you tell anybody?	1.87 ± 1.16	2.15 ± 1.25*
19. Why did you or why did you not (tell anyone if you had an STD)?	1.95 ± 1.11	2.34 ± 1.24*
20. Do you believe that in sexual violence a victim is at least partly to blame?	1.75 ± 1.17	1.75 ± 1.14
21. Do you think masturbating every day is healthy or unhealthy for one?	2.44 ± 1.35	2.67 ± 1.31*
22. Do you think watching pornography helps or is bad for your own sexual desire?	2.48 ± 1.32	2.71 ± 1.32*
23. If experience with a sexual relationship, do/did you know your partner's preferences?	1.87 ± 1.03	2.00 ± 1.07*
24. Would you like to be asked about your preferences in a sexual relationship?	1.74 ± 1.02	1.93 ± 1.15*
25. Do you enjoy kissing and petting the genitalia of your sex partner?	3.36 ± 1.46	3.51 ± 1.39*
26. Does your partner enjoy kissing and petting your genitalia?	3.41 ± 1.43	3.60 ± 1.34*
27. If you have been in love, was the "being in love" mutual?	1.35 ± 0.74	1.45 ± 0.76*
28. What do you think gives a person greatest pleasure during intercourse?	2.32 ± 1.37	2.53 ± 1.32*
29. Are you capable of having an orgasm in proximity to your sex partner?	2.73 ± 1.47	2.95 ± 1.44*
30. If a person has an unpleasant sexual experience, can you advise them what to do?	1.44 ± 0.70	1.64 ± 0.83*
31. Do you consider it ok to not want intercourse after you have been petting?	2.05 ± 1.20	2.14 ± 1.26
32. If you have an STD, would you personally like adequate advice/help/treatment with this experience?	1.36 ± 0.64	1.53 ± 0.77*
33. Do you know any professional that offers help for sexual problems/uncertainties? For instance, advice about uncertainties around genitalia.	1.36 ± 0.66	1.42 ± 0.70
34. Did you get any useful information for yourself from parents/school/peers/partner about sexuality?	1.23 ± 0.50	1.31 ± 0.50*
35. If so, can you specify this?	1.31 ± 0.65	1.41 ± 0.76*

Abbreviation: STD, sexually transmitted disease. [a] 1 = very comfortable, 2 = comfortable, 3 = neither comfortable nor uncomfortable, 4 = uncomfortable, 5 = very uncomfortable. * $P < .05$.

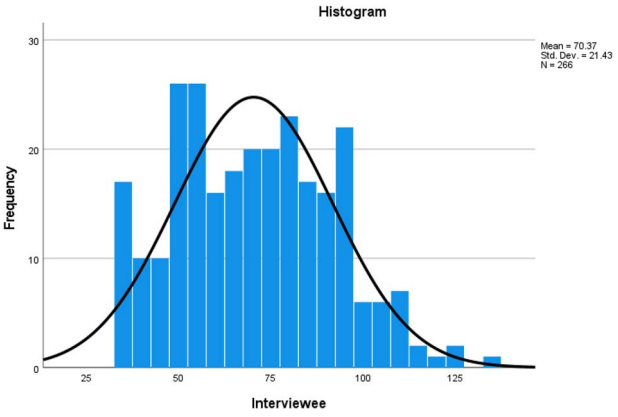

Figure 2. Distribution of comfort scores in students playing the role of interviewee.

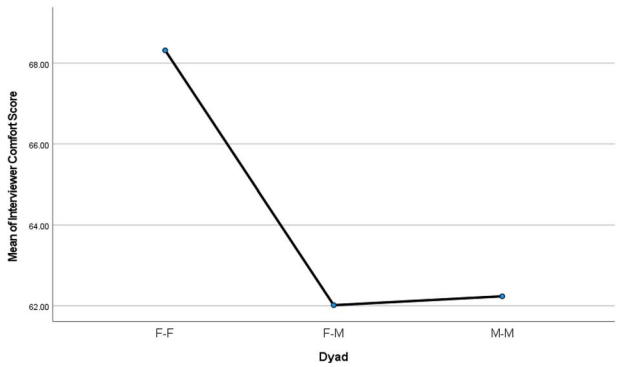

Figure 3. Differences in interviewer comfort score among all-female, mixed, and all-male dyads.

Broken down by gender, comfort scores for interviewers were not significantly different (male, 62.73 ± 23.41; female, 65.96 ± 21.19; $t = 1.03$, $df = 264$, $P = .30$). For interviewees, however, males were significantly more comfortable (male, 65.75 ± 20.03; female, 71.72 ± 21.68; $t = 1.91$, $df = 264$, $P = .05$).

The analyses by dyad composition revealed a small but significant difference in dyads of different sex compositions. One-way ANOVA revealed a marginally significant difference in interviewer total comfort rating score between at least 2 of the 3 dyad groups (all female, mixed sex, or all male; $F = 2.60$ [between groups, $df = 2$; within groups, $df = 283$], $P = .07$). An additional 1-way ANOVA revealed no significant difference in interviewee total comfort rating score between

at least 2 groups ($F = 1.56$ [between groups, $df = 2$; within groups, $df = 263$], $P = .21$).

The least significant difference test for multiple comparisons found that the mean value of interviewer total comfort rating score was significantly different among dyads composed of all females, mixed sexes (male-female), and all males ($P = .04$; 95% CI, 0.11-12.50). There was no statistically significant difference among mixed dyads or all male dyads (Figure 3).

Factor analysis identified 2 dimensions on the comfort scale: factor 1 was based on questions with sexual behavior vocabulary, which were more explicit; factor 2 was based on questions without sexual behavior vocabulary, which were less explicit. These dimensions were correlated 0.50 and together accounted for 49.5% of the total variance. There was no evidence that there were separate dimensions by theme of the question.

While the 23 students who chose to repeat comfort scores and possibly also videos were insufficient to permit significance testing, the total comfort level scores reflected more comfort in their second interviews. These moved from 74.65 ± 24.18 to 71.13 ± 24.14 (Cohen's $d = 0.15$) for interviewers and from 75.52 ± 23.52 to 70.17 ± 22.38 (Cohen's $d = 0.23$) for interviewees—small but consistent effect sizes, especially for interviewees.

Qualitative data

Qualitative data were derived from discussion boards and student feedback on the exercise and fell into 3 broad thematic areas: comfort in asking sexuality-related questions, awareness of how a patient might feel being asked sexuality-related questions, and insight that it was much more difficult to answer questions than to ask them. Examples of each theme follow.

Comments on increasing confidence and comfort

> The dyad interview enabled me to grow confidence to ask questions related to one's sexuality. It enlightened me about the fact that these type of questions are inevitable when working in the health care setting and hence I should rather not view these topics as ones that need to be discussed in a conservative manner but rather topics that should be normalized in our day and age. I feel like this interview practice provided me with an insight on how to approach these type of questions and gain confidence to ask these in a professional setting.

> The dyad interview gave me insight into how to be confident when asking questions that might otherwise be uncomfortable within a "normal" setting. Having this confidence also helps the interviewee (or patient) to be more relaxed and open.

> The interview allowed me to broaden my perspective on what topics I am sensitive to as well as which topics my interviewee was. Additionally, this interview allowed me to approach sexuality within the professional world in a controlled, safe manner.

> The interview gave me the opportunity to be exposed to a scenario that is generally very awkward and uncomfortable. It is great practice as this will be the first of many uncomfortable situations.

Awareness of patient perspective

> The insight I gained from using the comfort rating was the ability to see the perspective both from an interviewer and interviewee point of view. It showed me how one can experience a completely different level of comfortableness when answering and asking questions.

> The comfort rating system helped me to understand the importance of putting yourself as an interviewer in the interviewee's shoes when asking questions, as there are vast differences in some cases from the perspective of asking a question and answering that same question.

> The dyad interview made me confront topics that I have previously viewed as taboo and it showed me that they really are not uncomfortable questions when in the right context and trust has been established.

> It reminded me that the questions that are often uncomfortable to ask or answer can be the most important ones—a little discomfort is better than a lifetime of suffering in silence.

Comfort level of being interviewer vs interviewee

I felt comfortable asking these questions. However, it was more uncomfortable answering these questions.

> I saw that when taking on a certain role (interviewer/interviewee) there are different things that are uncomfortable.

> I realized that there was a huge difference between asking and answering these questions.

> During the comfort rating as the interviewer, because you aren't answering the questions, you don't really grasp how each question makes you feel. However, it is only when the roles are reversed, and it is your turn to respond that you comprehend the significance of the question. Being in both situations taught me how to see things from both sides.

Some critical comments from students were also noted.

> I feel that most of the questions had no influence on the health of a patient and therefore it doesn't influence my treatment at all. I feel that it was completely inappropriate to ask a patient's personal preferences as it does not in any way contribute to one's sexual history or health.

> I do however think that some of the questions in this interview were slightly too invasive—it is unlikely that we will be required to ask such probing questions around this subject in the workplace one day.

> I felt as uncomfortable with asking some of the questions as I did with answering them. I do not like the feeling of invading somebody's privacy and that is how I felt during the interview.

Discussion

These data, from a large sample of first-year medical students, indicate that comfort with sexually related questions and answers can be readily assessed by interviewer and interviewee in video dyads, where one student plays the interviewer and the other the interviewee, based on 2 of 5 provided profiles chosen by the interviewee. Table 1 outlines the sexual history questions: 2 baseline demographic questions without sexual content and 33 sexual history questions. It shows that, with a few exceptions (including the 2 baseline questions), the direction was always toward being more uncomfortable receiving sexual history questions (interviewee) than asking them (interviewer). This may relate to a role differential in questioning, with the interviewer having more "power" than the interviewee. Changing roles also serves to give the student insight into the position of the patient and the importance of how the questions may be posed. Summed scores across all questions confirm that there is significantly more discomfort in interviewees than interviewers.

Figures 1 and 2 illustrate that the summed comfort scores follow a roughly normal distribution, skewed toward more comfort with the interviewers. While comfort or mild discomfort was by far the most common response, a very small number of individuals indicated a high level of discomfort.

Comfort questions must be tailored to place and culture, and the ones used here were based on case profiles provided by a local community-based organization. What may be acceptable in an industrialized liberal Western nation, for example, may be unacceptable in other countries or even different cultures within a nation. We emphasize that each training program (medical, physician assistant, or nurse practitioner) needs to evaluate and tailor questions to the year of study or specialization, local cultural and political context, and norms. As is evident in trauma-informed care, there are significant levels of sexual assault in general populations.[8] Health care students will likely reflect levels in the general population. It is possible that questions or answers from the provided profiles may be triggering. For this reason, we need to incorporate trauma-based education in this process.[9] Interviewer and interviewee must be able to avoid ("pass") questions that they do not wish to ask or answer. Students had an option to pause at any point in the interview and resume later. It may also be advisable to start with the questions that promote the least anxiety and move toward those that are judged the most uncomfortable. An option might be to "tailor" the question order to individuals, letting the interviewer and interviewee choose the order in terms of their perceived levels of comfort. Placing these choices in the hands of interviewer and interviewee would allow for removal of any potentially triggering questions or answers.

While there were no differences in comfort between males and females for interviewers, for interviewees, males were significantly more comfortable than females. It is also apparent that there are gender-based differences in comfort in dyads as well as individually, with women experiencing more discomfort than men. It is interesting that the nature of the dyads (all women, mixed sex, or all men) reflected higher female discomfort as well, with dyads composed of all women showing significantly more discomfort (Figure 3). This may be due to social and cultural norms.

Factor analysis revealed 2 underlying dimensions in the 35 questions: more comfortable and more uncomfortable. Questions in the "more uncomfortable" category solicit personal sexual activity. Nearly all have the word *genitalia* in the question or imply the involvement of genitalia and so are explicit in bodily terms. They occur in combination with pleasure, enjoyment, preferences, or desire. There is no indication of any other scale clusters or themes that emerge other than degree of comfort/discomfort.

Personal comments on the exercise by way of student feedback indicated 3 major themes: an increasing confidence in using sexually related language and terminology; an increasing comfort from the exercise, which was a major goal; and being able to appreciate the patient's perspective by being in the position of interviewer. Finally, many reported that it was much easier being the interviewer than the interviewee.

The comments on increasing confidence were supported by having the opportunity to look at a small subset where students took the opportunity to do a second comfort rating, including, if desired, a second interview. While this subset was too small for statistical comparison and probability, it was apparent that there was a small and consistent effect size between first and second comfort ratings.

The sparse literature on teaching sexual history exploration to medical students[10,11] has identified discomfort in using sexual language as a major barrier. These data measure the construct of comfort/discomfort with specific sexuality-related questions and provide evidence for a scale of content and language associated with different levels of comfort. This enables other researchers and practitioners to develop exercises that cover low to higher discomfort levels so that they can be graded and offered in a least-challenging gradation from less to more uncomfortable. It specifically offers opportunity for culture-sensitive and site-appropriate tailoring of language and items for other countries to create locally culture- and language-sensitive exercises.

Limitations

These data are limited by being based only on the gender composition of the dyads and whether the comfort score was from a first or repeated interview. Data were not linkable to students beyond whether the exercise had been done or not. While almost the entire medical school cohort completed this exercise, nearly 10% of the sample still did not enter comfort scores, and we have no way of estimating if this was related to any bias. The students were medical students at a South African university, where intake to the medical course occurs immediately after completing high school and the average class age is 18 years. We believe that this could lead to higher levels of discomfort with sexuality-related questions than in the North American system, where students are admitted after completing an undergraduate degree and are likely to be 4 to 5 years older. The relatively novel nature of the exercise to the students may have obscured the variations in question themes, and students noted only the affect of discomfort rather than the finer detail of question content. Finally, we used examples provided by our community partners as a nonclinical sample, but it is equally possible to derive questions and answers from clinical contexts.

Conclusions

Comfort levels in asking sexuality-related questions based on provided examples can be assessed; they are also an easy and effective way of evaluating progress in the skill of asking sensitive sexuality-related questions that are associated

with the possible discomfort of the health care provider and patient. This is particularly important given that comfort and confidence in exploring sexual histories are based on affective and emotional issues as well as knowledge. This can be an emotive area socially and culturally; therefore, it is important to build in trauma-informed educational safeguards for the interviewer and interviewee, such as the choice to not ask or answer a specific question. It is also crucial to tailor questions based on age, stage in medical education, and context of medical and other health care students and to not assume that a single set of questions and answers is appropriate for different contexts or individuals. The concept of "comfort" in taking sexual histories is dimensionally conceptualized on a 5-point Likert scale, and questions can be presented in a format that builds from more comfortable to more uncomfortable, as chosen by each student. In this sample, females are likely, especially as the interviewee, to be more uncomfortable than males, as individuals and in dyads. Student voices, as contained in feedback comments, reinforced quantitative data and reflected wide student appreciation and insight of the values of this exercise.

Funding

None declared.

Conflicts of interest: None declared.

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