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Difficult conversations: Navigating intimate partner violence with standardized patients

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ABSTRACT

Background: One in three women in the US experience intimate partner violence (IPV) in their lifetime. There are minimal opportunities for medical students to learn about responding to IPV.
Methods: Students participated in a learning intervention about recognizing and addressing IPV, followed by a standardized patient session. Students filled out a seven-question survey before and after the session, which assessed comfort addressing IPV, discussing resources, and practicing trauma-informed care. Responses were compared using the Mann-Whitney *U* test.
Results: Sixteen medical students participated, response rate of 100%. The median score for comfort recognizing signs of IPV increased from 2 to 3 ($p < 0.01$); for asking patients about IPV, from 1 to 3.5 ($p < 0.01$); in knowledge of IPV resources, from 1 to 3 ($p < 0.01$); in preparedness to practice trauma informed care, from 2 to 3.5 (*ns*). Comfort addressing IPV improved from 1 to 3 ($p < 0.01$).
Conclusion: After the session, student preparedness and comfort addressing IPV increased. The learning intervention addressed information not in standard medical curricula. This module can be easily adapted to any medical school curricula.

Introduction

Intimate partner violence (IPV) is a public health issue that has numerous ramifications on a person's health, and is an issue that many surgeons will have to address during their career. The American Medical Association defines IPV as "a pattern of coercive behaviors that may include repeated battering and injury, psychological abuse, sexual assault, progressive social isolation, deprivation, and intimidation."[1] Around one in three women and one in seven men in the United States experience intimate partner violence (IPV) during their lifetime.[2] Intimate partner violence is understudied in the LGBTQIA+ community, and especially in transgender and gender nonconforming individuals. However, the limited data on these communities suggests that they experience equivalent or higher rates of IPV than heterosexual- and cisgender-identifying individuals, and that they experience higher barriers to accessing care.[3] Surgeons can often be one of the first responders to IPV and can be integral to connecting patients to resources. For instance, one study indicates that the prevalence of IPV among patients at two orthopedic clinics was about 32%.[4] Patients experiencing IPV who present to surgical clinics are also more likely to be experiencing severe physical violence, leading to the need for surgical intervention.[5] Nearly twenty percent of men presenting with penetrating trauma have a history of IPV.[6] Victims and perpetrators of IPV have a 10-times higher rate of injury-related hospitalization.[7] Further, surgical clinics may present an ideal opportunity for intervention, given the high prevalence and the ability of surgeons to follow up with their patients (as opposed to emergency medicine physicians).[5] Despite this, most surgeons hold several misconceptions about IPV, including that it is exceedingly rare in their own practices.[8] A majority of orthopedic surgeons (53%) reported that they lacked knowledge of resources for IPV patients.[8]

These patterns are similar for medical students and surgical trainees, a majority of whom (medical students: 84%, surgical residents: 60%) believe their education on IPV is inadequate.[9] Medical

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students struggle even more than surgical residents with barriers to addressing IPV, including lack of time, lack of knowledge of resources, and personal discomfort in addressing IPV. While nearly all medical students had little or no prior IPV training, 80% indicate a desire for increased IPV education.[9]

Prior studies on the clinical understanding of IPV among residents and medical students have determined that sufficient background knowledge on IPV and hands-on training on how to ask patients about IPV in a culturally competent and trauma-informed way impact a physician's interaction with survivors of IPV.[10] The United States Preventive Services Task Force currently recommends screening all women of reproductive age for IPV, and referring patients who screen positive to resources.[11] Despite this, few physicians feel comfortable addressing IPV with their patients, and many do not screen their patients for IPV.[11 12] This points to a need for IPV to be addressed consistently throughout medical education, to best equip physicians to respond to their patients' needs. Standardized patient sessions allow for the opportunity to evaluate student competency and increase their comfort with addressing IPV in a clinical setting.[13]

The purpose of this study is to assess whether there are gaps in current medical school curricula with regards to learning how to care for survivors of IPV, and to identify an intervention that will teach students the skills needed to care for patients impacted by IPV. We hypothesized that participation in a 2-hour learning experience that combines didactic and hands-on instruction can effectively teach students how to recognize, screen for, and respond to patients who are survivors of IPV. This is a proof of concept paper that demonstrates the ease with which IPV education can be integrated in existing medical school curricula.

Methods

The opportunity to participate in a supplementary education session and SP experience related to IPV was offered to all first and second year medical students at Washington University School of Medicine via email invitation. The first 16 respondents were enrolled in the IPV education session. The education session consisted of three parts: a didactic learning session, SP session and a debrief. In the didactic portion, a nurse who specializes in caring for IPV patients presented an interactive lecture to participants. This lecture included a definition of IPV, the potential signs of IPV in a clinical setting, strategies for addressing IPV as a healthcare provider, and local resources for patients experiencing IPV. For the SP session, students were randomly paired up and assigned to a room. Students were instructed to act as co-providers, taking turns asking the patient questions about her medical history and performing the physical exam. The standardized patient followed a script developed by Susan Glick, MD, in her paper "Domestic Violence Simulated Patient Case."[14] Following the 30-min session, the learners had the opportunity for 5 min of direct feedback from the SP. Finally, students participated in a 30 min debrief where they discussed their experiences, takeaways, questions, and concerns with a social worker and on-campus expert in IPV. This allowed students to both receive clarification on any questions they had regarding the material, as well as discuss the session's impact on them personally.

The effectiveness of the session was assessed by a pre-/post-survey shown in Table 1. The post-survey included the same questions as the pre-survey as well as two open-ended questions allowing students to give their feedback about the overall experience. This study was given exemption by the institutional review board.

Results of the Likert-scale items were analyzed using the median as a measure of central tendency and the Mann-Whitney *U* Test for significance. Barriers to addressing IPV (item 7) were reported using means and standard deviation. For the narrative feedback, the authors read through the de-identified responses and identified common themes among participants regarding their experience, the perceived strengths and weaknesses of the study, and desire for a similar session to be included in the medical school curriculum.

Results

Sixteen out of sixteen participants filled out both the pre- and post-session surveys, response rate 100%. Of these students, 15 were first year students and 1 was a second-year student. The results of our pre- and post-session surveys demonstrate that the learning experience was effective in increasing students' self-reported comfort and preparedness for discussing IPV with patients and treating patients who are experiencing IPV. Students improved from feeling somewhat uncomfortable recognizing signs of IPV before the session, with a median score of 2, to neutral after the session with a median score of 3 ($p < 0.01$). Comfort asking patients about IPV improved from not at all comfortable (1) to neutral/somewhat comfortable (3.5) ($p < 0.01$). Knowledge of IPV resources improved from not at all knowledgeable (1) to neutral (3) ($p < 0.01$). Students reported a non-significant improvement in preparedness to practice trauma informed care, from somewhat uncomfortable (2) to neutral/somewhat comfortable (3.5). Finally, student comfort addressing IPV improved from not at all comfortable (1) to neutral (3) ($p < 0.01$) (Fig. 1). In Question 7, students also reported on average fewer barriers to treating and counseling victims of IPV in the post-survey (2.4) as compared to the pre-survey (3.6) ($p < 0.01$). In both pre- and post-session surveys, all barriers were selected at least once, except 'Other', which was never selected. The most prevalent barriers in the pre-session survey were knowledge of IPV resources (selected by 14 of 16 students), lack of opportunities to practice discussing IPV with patients (selected by 15 of 16 students), and lack of clinical exposure (selected by 14 of 16 students). All barriers were less prevalent after the session. The largest percent decrease was seen in lack of opportunities to practice discussing IPV with patients (56% decrease). The smallest percentage decrease in prevalence was in lack of clinical exposure (14% decrease), perhaps due to the fact that SPs are not perceived the same as real patient exposure (see Fig. 2).

In the narrative feedback, participants were asked what the most and least helpful aspects of the session were, as well as how the experience could be improved upon in the future. Students had something positive to say about almost every aspect of the session, but the direct practice with the standardized patient and the discussion about community resources emerged as the most helpful aspects for the majority of students. When asked what parts were the least helpful, students mostly indicated that they wanted a more focused presentation, with emphasis on how to handle specific scenarios, a script for how to handle certain aspects of the conversation, and the inclusion of case studies or quotes from actual encounters with patients experiencing IPV. Critiques of the actual standardized patient encounter included wanting more time with the patient and feeling that the session could not accurately capture the difficulty and nuance of real encounters with patients, because the students knew to be looking out for signs of IPV from the beginning. Many of the students' suggestions mirrored these critiques. Several students also expressed their desire to have more of these sessions throughout the preclinical years as a component of our school's Practice of Medicine course, which teaches students about the clinical aspects of medicine.

Table 1
Pre/post-session survey questions.

Question	Answer Choices
1. Year in school	Open-ended
2. As of right now, how comfortable do you feel recognizing signs of intimate partner violence in a medical context?	1) Not at all comfortable 2) Somewhat uncomfortable 3) Neutral 4) Somewhat comfortable 5) Very comfortable
3. As of right now, how comfortable do you feel asking a patient about intimate partner violence?	1) Not at all comfortable 2) Somewhat uncomfortable 3) Neutral 4) Somewhat comfortable 5) Very comfortable
4. As of right now, how comfortable are you discussing resources for patients experiencing intimate partner violence (both within the hospital and in the St. Louis community)?	1) Not at all comfortable 2) Somewhat uncomfortable 3) Neutral 4) Somewhat comfortable 5) Very comfortable
5. As of right now, how prepared do you feel to practice trauma informed care?	1) Not at all prepared 2) Somewhat unprepared 3) Neutral 4) Somewhat prepared 5) Very prepared
6. As of right now, how prepared do you feel to address intimate partner violence with patients?	1) Not at all prepared 2) Somewhat unprepared 3) Neutral 4) Somewhat prepared 5) Very prepared
7. What are the barriers (if any) you perceive to personally being comfortable treating and counseling victims of intimate partner violence? (You may select more than one response.)	a) Knowledge of IPV resources b) Lack of opportunities for learning about IPV c) Lack of opportunities to practice discussing IPV with patients d) Safe platforms for discussions e) Lack of clinical exposure f) Other
8. What aspects of the SP session were the **most helpful** in preparing you to address intimate partner violence with future patients?[a]	Open-ended
9. What aspects of the SP session were the **least helpful** in preparing you to address intimate partner violence with future patients?[a]	Open-ended

[a] = Only included in post-survey.

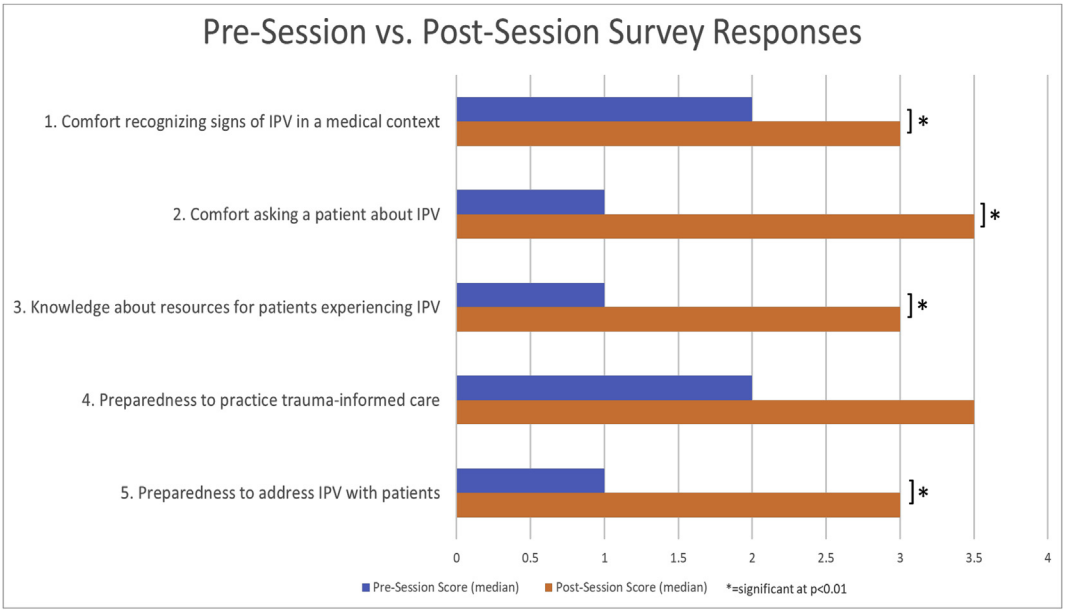

Fig. 1. Following the intervention, students' median comfort on all metrics assessed increased as compared with the pre-survey. Apart from item 4 ("Preparedness to practice trauma informed care"), all items reached significance at the $p < 0.01$ level using the Mann-Whitney *U* Test.
*Intended for color on web, black/white in print. (For interpretation of the references to color in this figure legend, the reader is referred to the Web version of this article.)

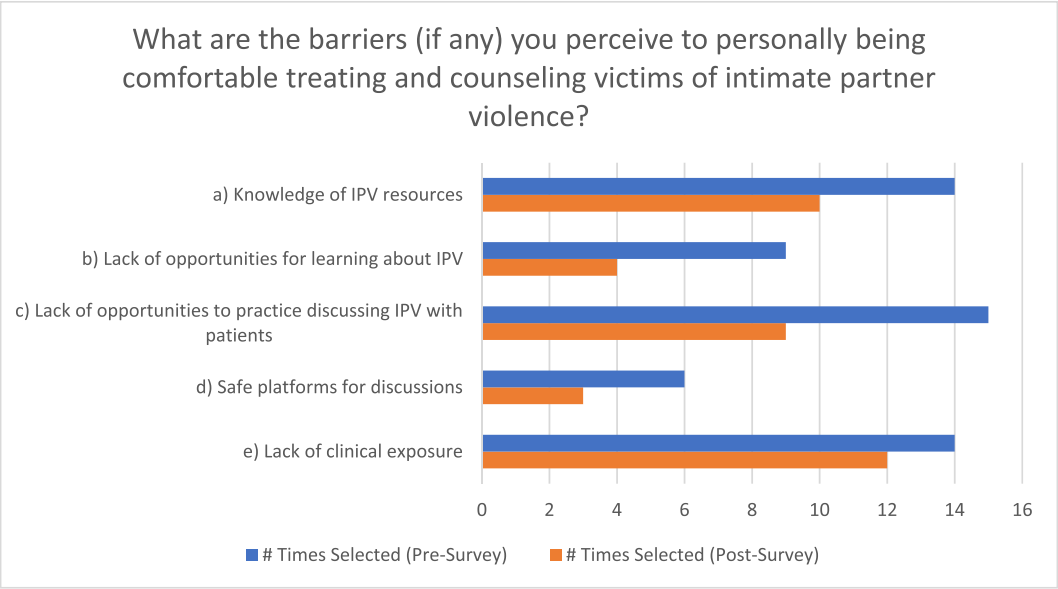

Fig. 2. Number of students who selected each barrier in Question 7, for the pre-survey (top) and post-survey (bottom). The three most oft-cited barriers were knowledge of IPV resources, lack of opportunities to practice discussing IPV with patients, and lack of clinical exposure.
*Intended for color on web, black/white in print. (For interpretation of the references to color in this figure legend, the reader is referred to the Web version of this article.)

Discussion

Our study shows that a learning session which combines didactic education and hands-on learning is effective at increasing student preparedness and comfort addressing IPV with their patients. Our learning intervention, which included an introductory lecture, a standardized patient experience, and a follow-up debrief session, gave students the opportunity to learn valuable information about approaching the sensitive topic of IPV, and allowed them to practice these skills in a low-risk environment. Students felt more prepared to address and counsel patients about IPV after the intervention and reported having fewer barriers in discussing this topic with patients. Through qualitative feedback, students noted that this was a valuable learning experience, and they overwhelmingly advocated for more and broader exposure to the topic of IPV in the preclinical curriculum.

The highest median level reported on the survey was "somewhat comfortable," which points towards a need for additional IPV-related teaching sessions. We believe that the existing session could be made more effective by allowing students to interact with the standardized patients individually. Furthermore, longitudinal teaching sessions are likely necessary in order to further increase medical students' comfort with this topic. Incorporating IPV into the pre-clinical curriculum and allowing students multiple opportunities to interact with standardized patients is necessary to increase students' level of comfort with this issue. These sessions will continue to be offered annually to all medical students, which will allow students to hone their skills over time. Future sessions will follow the same format as the original session, with a teaching module, 20-minute SP session, and a debrief. Future sessions will also address the relationship between IPV and gun violence, as knowledge of this subject is critical to fully understand and address a patient's situation and needs. Future sessions will involve scenarios with IPV in different settings, such as the emergency room or inpatient visits, to enhance understanding and comfort with addressing IPV in varying clinical settings.

Existing literature on medical student and resident IPV education reinforces the key findings from our study. Surveying medical providers has identified inadequate knowledge and training as significant barriers for addressing IPV with patients. Only 9% of medical students feel prepared to counsel patients about IPV, and only 40% of residents report prior IPV training.[11] Our surveys identified the lack of opportunity to practice discussing IPV and inadequate knowledge on the topic as key barriers for medical students screening patients for IPV. This emphasizes the need for a learning intervention during the medical school years.

Prior research has established the importance of teaching medical students about IPV, as self-reported competence is an important predictor of likelihood of screening for IPV.[15] Participation in IPV training opportunities is associated with higher knowledge on IPV, with experiential IPV training associated with higher levels of awareness of IPV.[16] A study conducted by Edwardsen et al. showed that an IPV-focused intervention (a teaching module with guided discussion and practice interviewing) was significantly associated with eliciting a history of IPV and responding with empathetic statements versus students in the control group.[17] Students in our study were significantly more comfortable recognizing signs of IPV in medical contexts after our intervention.

Studies have established the need for hands-on IPV training in medical school, with 93% of students reporting that IPV training with an SP encounter would make it easier to screen patients.[18] Our intervention effectively incorporated an SP encounter within the IPV learning module. After our learning intervention, there was a significant increase in self-reported preparedness and comfort in addressing IPV with patients, as well as increased knowledge about IPV resources. Fewer students reported knowledge about IPV as a barrier to screening patients after our learning intervention.

Limitations of our study include the small sample size and the fact that it took place at a single institution. There was a potential bias in selection of participants, as students who feel unequipped to address IPV with patients are more likely to sign up, and they may not be representative of the overall student body. This could potentially skew data regarding their initial knowledge of IPV. We also only assessed comfort addressing IPV and did not include any items assessing competency or knowledge of the subject.

We believe that this program can and should be implemented at all medical schools, so every future physician has the skills necessary to address IPV with patients. There may be barriers to

implementation at other medical institutions, such as lack of local experts who are able to teach students about IPV and difficulty finding standardized patients who are comfortable with this topic. Other institutions may not have faculty with the knowledge base needed to run these sessions. However, local experts could be found by reaching out to local organizations working to combat IPV, local emergency shelters, and social workers employed by the hospital. We believe that most medical schools have the resources (either within their own institution or in the community) to implement this program.

Conclusion

Despite these limitations, we believe the intervention described above is generalizable to medical schools and residency programs across the country. IPV is a serious medical and social issue with high prevalence in clinics for almost every specialty. Surgeons are well-suited to address IPV with their patients, however, most do not routinely screen for it. Many physicians do not feel comfortable addressing this issue with their patients. Medical education currently fails to adequately educate trainees on IPV and trauma-informed care. Considering the ubiquity of this serious issue, training in how to handle IPV should start in medical school and continue throughout medical training. The intervention demonstrated in this study is effective in teaching medical students to recognize and address IPV, and can be easily integrated into medical school curricula across the country. In doing so, we can take the first step towards increasing the number of physicians who screen their patients for IPV, thereby providing more patients with crucial resources and a safe place to discuss their experiences and options. Future directions in our research include investigating the long-term competency outcomes of study participants during their clinical years, as compared with their non-participant classmates.

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Declaration of competing interest

The authors whose names are listed immediately below certify that they have NO affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.

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