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Improving Inclusive Communication: Pilot Results from a Simulation-Based Learning Opportunity to Practice Taking a Sexual Health History

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INNOVATION HIGHLIGHT

Improving Inclusive Communication: Pilot Results from a Simulation-Based Learning Opportunity to Practice Taking a Sexual Health History

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- Introduction:** Sexual and gender minority (lesbian, gay, bisexual, transgender, questioning; LGBTQ+) patients experience health care inequities. Simulation using standardized patients (SPs) is an effective tool for communication-based training. To promote equitable practice, we created an experiential learning opportunity for residents to practice inclusive communication and improve their comfort in caring for LGBTQ+ patients while maintaining the psychological safety of SPs.
- Methods:** Our interdisciplinary team explored relevant simulation curricula, conducted a focus group with LGBTQ+ SPs, created a didactic presentation, and designed and implemented a simulated case. Family medicine residents participated in the training and completed pre- and post-training surveys rating their confidence in sexual health communication and working with sexual and gender minority patients. We compared Likert scale ratings in pre- and post-training surveys using a Wilcoxon signed-rank test. SPs completed post-simulation surveys rating their psychological safety.
- Results:** Residents completed pre-training (n = 13) and post-training (n = 12) surveys. Confidence improved in every category, reaching significance for confidence in obtaining a sexual health history from LGBTQ+ patients. Four SPs completed post-simulation surveys. All SPs reported that the event had educational value and was a positive experience.
- Discussion:** This innovative simulation training with an equity focus improved learner confidence and maintained the psychological safety of SPs. We speculate that curricular design elements of interdisciplinary collaboration and co-creation with SPs with lived experience may have contributed to the success.
- Conclusions:** Through interdisciplinary collaboration and experiential learning, we created a valuable learning opportunity that allowed residents to improve their confidence in taking inclusive sexual health histories of LGBTQ+ patients.
- Keywords:** Transgender persons, sexual and gender minorities, patient simulation
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Although significant health care disparities affect sexual and gender minority patients (lesbian, gay, bisexual, transgender, questioning; LGBTQ+),¹ there is limited emphasis on this aspect of diversity in health professions training.^{2,3} In Maine, approximately 4.9% of the adult population and 30% of adolescents identify as

part of the LGBTQ+ community.^{4,5} This community reports many negative health care experiences and endures disproportionate mental health challenges. More than 40% of Maine LGBTQ+ youth in high school reported that they have seriously considered suicide in the past year.⁶ Transgender people also experience worse health outcomes and higher rates of cancer, cardiovascular disease, and other chronic diseases than cisgender people.⁷ The 2015 US Transgender Survey further highlights the mistreatment and health care disparities that

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confront this population. Among survey participants, 33% reported at least one negative health care experience in the past year, including verbal abuse, misgendering, inappropriate questions, refusal of care, or expectations to educate their providers.⁸ Also, participants underused health care resources, as 23% did not seek medical care when needed due to “fear of being mistreated as a transgender person.”⁸ Another national study reported that almost 50% of LGBT participants and almost 90% of transgender participants felt that there were not enough health care providers with sufficient training to provide them with appropriate care.⁹

Despite evidence for health care disparities and worse health outcomes among LGBTQ+ patients, and an acknowledged need for more training in this area, health care professionals receive minimal education on sexual and gender diversity.^{3,7} In a small study of primary care providers, 51% reported that they were “competent” in addressing the health care needs of the LGBTQ+ population, and only 29% felt that they had adequate training to provide high-quality care for LGBTQ+ patients.¹⁰ Many providers lack the experience needed to provide equitable care for LGBTQ+ patients, and they critically need more education about LGBTQ+ topics, specifically inclusive care.

Interventions can address these gaps in care. Bias-focused education enhances knowledge about LGBTQ+ health care topics, experiential learning allows trainees to become more comfortable working with LGBTQ+ patients, and intergroup contact creates more empathy and understanding.¹¹ Simulation-based training can “facilitate learning through immersion, reflection, feedback, and practice without the risk inherent to a similar real-life experience.”¹² Using simulation to improve communication-based competencies, such as affirmative care for transgender patients, allows learners to identify their intrinsic biases, acknowledge their inexperience, and practice clinical encounters in a safer environment that promotes patient-centered care.¹³ Therefore, the objective of this project was to create a simulation using standardized patients (SPs) to practice inclusive communication and clinical skills for LGBTQ+ patients, with the goal of improving the confidence of health professionals caring for this population.

METHODS

Context

A multidisciplinary group formed in September 2021 to address requests for simulation-based communication training to improve diversity, equity, and inclusion. The group included stakeholders from the Gender Clinic (BB), Department of Family Medicine (VH), Simulation Center (LM, BR, CM, KH, BG), and a medical student representative (RK). This group sought input from self-identified LGBTQ+ members of our SP pool.¹⁴

The MaineHealth Institutional Review Board granted a letter of determination for this project.

Case Development

We identified relevant simulation curricula in the literature and used elements of these resources to draft a clinical scenario and SP training materials.^{13,15,16} Self-identified LGBTQ+ members of our SP pool participated in a focus group, and their perspectives informed case revision.¹⁴ Members of the SP focus group reviewed the case and training materials and then participated in an in-person SP training session. A pilot scenario then took place (January 11, 2023) with a fourth-year medical student in the role of learner. The student, SPs, and other group members offered feedback and proposed revisions to the case. Based on the feedback, the SP script was intentionally broadened to allow portrayal by any member of the LGBTQ+ community to ensure authenticity while also avoiding undue burden on a specific gender or sexual minority group.

(See Appendix 1 for scenario and SP training materials and Appendix 2 for the SP checklist for learner formative feedback.)

Educational Intervention

BB and VH created an 11-minute video didactic on taking an effective and inclusive sexual history based on the Centers for Disease Control and Prevention’s 5Ps approach.¹⁷ Family Medicine residents (PGY-1-3) reviewed this video immediately before participating in the simulation event (January 25, 2023, and February 21, 2023), which included our sexual health case as well as other simulated cases for their learning.

Faculty from the Gender Clinic, Department of Family Medicine, and Simulation Center were present to answer questions between the video review and simulation. Residents rotated in groups of 3 (1 interviewer, 2 observers) through several scenarios, including a case of taking a sexual health history. SPs provided feedback to the learner after completion. At the end of the session, the learner group debriefed with faculty, and the SPs debriefed with simulation staff.

Outcome Measurement

Learners completed anonymous, electronic pre- and post-training surveys developed by the research team. Group responses [Likert scale, scored from 1 (strongly disagree) to 5 (strongly agree)] were compared using Wilcoxon's signed-rank test. SPs completed anonymous post-event surveys that were adapted from Mayfield et al's published curriculum.¹⁵

RESULTS

Learners included 7 residents and 3 SPs who attended the first session, and 6 residents and 2 SPs who attended the second session (1 SP attended both sessions). Scores improved across all categories after the intervention (Table 1). The difference only reached significance for the question with the lowest pre-intervention score: confidence taking the sexual history of an LGBTQ+ patient. Responses from SP post-event surveys were largely positive, with all SPs reporting that the event had educational value (Table 2).

DISCUSSION

Through interdisciplinary collaboration and co-creation with SP stakeholders, we developed a constructive experiential learning opportunity for Family Medicine residents that addressed obtaining sexual health histories for LGBTQ+ patients as well as using appropriate terminology and creating a comfortable environment for LGBTQ+ patients. Participating residents reported that this experience furthered their confidence in taking sexual health histories in general and specifically improved their confidence in clinical communication with sexual and gender minorities. Limitations of this study include the small number of participating residents from a single specialty.

We dedicated great effort to creating a case that minimized harm and maximized psychological safety for SPs. Although this effort resulted in a longer curricular development process, we believe these enhanced efforts contributed to the effectiveness of simulation. Unique aspects of curricular development (versus a typical SP simulation) included broader collaboration among interdisciplinary faculty, co-creation of the curriculum by incorporating feedback from SPs with lived experience, and piloting the case with a learner (rather than the typical "dry run" that includes faculty talking through the case with an SP) with subsequent revision.

Although the didactic likely covered material that learners had previously engaged with to some extent, it allowed the residents to review specific material and highlighted key teaching points. In a focus group, one SP specifically emphasized the value of the didactic by encouraging the team to offer "as much pre-education as possible" before the simulation itself.¹⁴ For example, the didactic taught learners how to appropriately address a misgendering mistake, and this strategy was followed by a learner who misgendered the SP during the event. Then the SP reflected on this approach as a positive experience. This finding suggests that the simulation effectively improved psychological safety for all participants and enabled the learner to comfortably address their mistake, thus reducing further harm to the SP.

We successfully created a case and didactic to further the LGBTQ+ health care curriculum with a focus on psychological safety. However, this simulation can be improved and expanded to further reduce health care inequity. For example, the post-event survey revealed that residents remained most comfortable working with gay and lesbian patients and least comfortable with non-binary and transgender patients. Future efforts will include expanding training to other disciplines and professions and incorporating additional topics that address specific gaps in care for this population. Ultimately, we will create a guide to developing simulated cases that explore sensitive topics and highlight our process of including interprofessional and interdisciplinary collaboration, input from SPs, and co-creation with people who have lived experience during case development.

Table 1. Learner Responses to Pre- and Post-Surveys (N = 13)*

Item	Pre-survey (n = 13)		Post-survey (n = 12)		P value [†]
	Median [IQR]	Mean	Median [IQR]	Mean	
I feel confident in my ability to take a sexual health history with anyone	3.0 [3-4]	3.4	4.0 [3.2-4]	3.9	.10
I feel confident taking a sexual health history with those who are gay or lesbian	3.0 [3-4]	3.5	3.0 [3.2-4]	3.9	.17
I feel confident taking a sexual health history with those who are non-binary	3.0 [3-3.5]	3.2	4.0 [3-4]	3.8	.09
I feel confident taking a sexual health history with transgender patients	3.0 [2.5-3]	3.0	4.0 [3-4]	3.8	.03
I feel confident that I can use the correct terminology when discussing sexual health with members of the LGBTQ+ community	3.0 [2-4]	3.1	3.5 [3-4]	3.6	.20
Do you feel confident that you can provide a comfortable environment for a transgender patient when taking a sexual health history	3 [3-4]	3.4	4.0 [4-4]	4.0	.06

Abbreviations: IQR, interquartile range; LGBTQ, lesbian, gay, bisexual, transgender, questioning.

* Responses based on a Likert scale from 1 (strongly disagree) to 5 (strongly agree).

[†] Mann Whitney U test

Table 2. Standardized Patient Responses to Post-Event Surveys

Item	Standardized Patient 1	Standardized Patient 2	Standardized Patient 3	Standardized Patient 4
Do you think today's scenario was a worthwhile educational event for the learners?	Yes	Yes	Yes	Yes
Comment:	Absolutely.	The more that learners can encounter patients who don't fit the "norm", the better.	I wasn't able to hear a lot of the feedback because of the microphone situation, but from what I did hear, and from what [name] relayed, it seemed fruitful.	NA
For you as an SP, was this experience positive or negative	Positive	Positive	Positive	Positive
Why?	It was positive because...the learners did well and gained good positive direction. And I like helping facilitate that.	I appreciated the opportunity to bring awareness of trans health to the learners and see how they are interfacing with trans people.	All of the learners seemed thoughtful and well-intentioned, and I think it was a good thing that some common slip-ups happened so that there could be conversations about them.	Very positive
Were there any particular interactions with learners that stood out to you?	Yes	Yes	Yes	Yes

Abbreviations: LGBTQ, lesbian, gay, bisexual, transgender, questioning; NA, not applicable; SP, standardized patient.

Table 2. Standardized Patient Responses to Post-Event Surveys

Continued

Item	Standardized Patient 1	Standardized Patient 2	Standardized Patient 3	Standardized Patient 4
Please elaborate.	Nothing particularly stood out for me, but the experience as a whole was very positive. Each student was respectful, did not come across as judgemental tho [sic] there were a few learning experiences for them to do better.	I wish I could remember his name, but my last scenario of the day- the doctor was fantastic. Showed initiative in a potentially uncomfortable situation, was very knowledgeable and rolled with every answer.	It seemed like the learners were all trying to use non-judgmental language and open-ended questions, which I thought was great. There was a moment when one learner misgendered [name], but when [name] corrected the learner, they readily acknowledged it, apologized, and moved on, without dwelling on it or apologizing to the point where [name] then had to make the learner feel better (which is a very common experience for queer folks), so that was great to see! There was another moment where a different learner used some language that felt a little judgmental towards people with multiple partners, but I believe they discussed this in feedback.	The last learner was a shining example of what this case can be.
Would you recommend this event to another SP from the LGBTQ+ community?	Yes	Unsure	Yes	Yes

Abbreviations: LGBTQ, lesbian, gay, bisexual, transgender, questioning; NA, not applicable; SP, standardized patient.

Table 2. Standardized Patient Responses to Post-Event Surveys

Continued

Item	Standardized Patient 1	Standardized Patient 2	Standardized Patient 3	Standardized Patient 4
Why?	<p>I absolutely would. I think it's an important thing that needs to be addressed to help the community. There are so many times when people in the LGBT community just don't seek medical help because they've had such bad experiences and the only way to get past that is to have people in the medical field willing to change. Having docs and med students participate in experiences like this encounter is a great step in that direction</p>	<p>It was taxing, honestly. I would absolutely do it again, but not knowing someone else's temperament if I *did* suggest it, there would be caveats.</p>	<p>I think it depends on how triggering it might be for the individual SP, but I think there are a lot of folks, like myself, who would find more benefit than harm in doing the scenario. Also, I think the supportive environment created by the Sim Center in general and specifically around this event is just stellar. I can't think of a safer place to do this. Having the ability to talk to another SP before going in to give feedback seems to be extremely valuable and an additional layer of support for the acting SP.</p>	<p>As much as a safety net that can be created was implemented in this case.</p>
<p>What else could the Simulation Team do to better prepare SPs or learners for this event?</p>	<p>I don't really know. I think the sim team does a great job preparing us for the event, and especially giving support before, during, and after. The after care for highly mentally stressed cases is A++</p>	<p>I think you're all doing a fantastic job.</p>	<p>I don't know how in-depth a didactic the learners get about the queer community, but I think the more the better, especially around microaggressions and other details that may seem small to someone outside the community (like saying "what are your pronouns" instead of "what are your preferred pronouns" and learning how to phrase questions about body parts, partners, practices, etc.). I felt very prepared as an SP.</p>	<p>Can't think of anything</p>

Abbreviations: LGBTQ, lesbian, gay, bisexual, transgender, questioning; NA, not applicable; SP, standardized patient.

Table 2. Standardized Patient Responses to Post-Event Surveys

Continued

Item	Standardized Patient 1	Standardized Patient 2	Standardized Patient 3	Standardized Patient 4
Do you have any additional suggestions or thoughts to share about today's event?	I don't think so. I think if I said more it would just be reiterating my points stated above.	My one and only thought is that I wish this hadn't been a "sexual health" case where trans folks are concerned. Transgender identity already gets conflated with sexuality quite a lot, and my concern is that this would cement it in the minds of medical professionals. Being transgender doesn't have anything to do with what sexuality a person presents, but it is accurate that trans people need sexual health care as much as anyone else. It's a small criticism, definitely not one meant to detract from the very important work you're doing, but I felt like it needed to be said. Thank you all again for the opportunity!	I just really appreciate that the Sim Center takes this seriously and is trying to integrate this level of diversity throughout the curriculum. It's clearly not just checking a box, and that means a lot. I'm really excited about the education these learners are getting! Thank you	All the training that went into this case was absolutely needed and makes it feel safe.

Abbreviations: LGBTQ, lesbian, gay, bisexual, transgender, questioning; NA, not applicable; SP, standardized patient.

CONCLUSIONS

Through interdisciplinary collaboration, co-creation with SPs with lived experience, and a case-development process designed to optimize psychological safety, we created an experiential learning opportunity for health professionals. After the simulation, learners reported greater confidence in their ability to take an inclusive sexual history and an improved ability to use appropriate language and create a comfortable environment for LGBTQ+ patients. SPs who participated reported that the simulation was a positive experience with strong educational value and identified peer support as a key factor in promoting their psychological safety.

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Conflict of interest: None

REFERENCES

1. Hswen Y, Sewalk KC, Alsentzer E, Tuli G, Brownstein JS, Hawkins JB. Investigating inequities in hospital care among lesbian, gay, bisexual, and transgender (LGBT) individuals using social media. *Soc Sci Med*. 2018;215:92-97. doi:10.1016/j.socscimed.2018.08.031
2. DeVita T, Bishop C, Plankey M. Queering medical education: systematically assessing LGBTQI health competency and implementing reform. *Med Educ Online*. 2018;23(1):1510703. doi:10.1080/10872981.2018.1510703
3. Pregnall AM, Churchwell AL, Ehrenfeld JM. A call for LGBTQ content in graduate medical education program requirements. *Acad Med*. 2021;96(6):828-835. doi:10.1097/ACM.0000000000003581
4. LGBT demographic data interactive. The Williams Institute, UCLA School of Law. Accessed February 20, 2023. <https://williamsinstitute.law.ucla.edu/visualization/lgbt-stats/?topic=LGBT#about-the-data>
5. Building the welcoming and affirming communities urgently needed for Maine's LGBTQ+ youth. Out Maine. Accessed February 20, 2023. <https://outmaine.org/about/#:~:text=Approximately%2030%25%20of%20Maine%20teens,economic%2C%20racial%20and%20other%20oppressions>
6. Maine Integrated Youth Health Survey. Maine Department of Health and Human Services, Maine Department of Education. Accessed February 20, 2023. https://www.maine.gov/miyhs/sites/default/files/2021_Reports/Detailed_Reports/HS/MIYHS2021_Detailed_Reports_HS_State/Maine%20High%20School%20Detailed%20Tables.pdf
7. van Heesewijk J, Kent A, van de Grift TC, Harleman A, Muntinga M. Transgender health content in medical education: a theory-guided systematic review of current training practices and implementation barriers & facilitators. *Adv Health Sci Edu Theory Pract*. 2022;27(3):817-846. doi:10.1007/s10459-022-10112-y
8. James SE, Herman JL, Rankin S, Keisling M, Mottet L, Anafi M. *The Report of the 2015 U.S. Transgender Survey*. National Center for Transgender Equality; 2016.
9. When Health Care Isn't Caring: Lambda Legal's Survey of Discrimination Against LGBT People and People with HIV. Lambda Legal; 2010. Accessed March 7, 2023. www.lambdalegal.org/health-care-report
10. Rowe D, Ng YC, O'Keefe L, Crawford D. Providers' attitudes and knowledge of lesbian, gay, bisexual, and transgender health. *Fed Pract*. 2017;34(11):28-34. Accessed March 7, 2023. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6370394/>
11. Morris M, Cooper RL, Ramesh A, et al. Training to reduce LGBTQ-related bias among medical, nursing, and dental students and providers: a systematic review. *BMC Med Educ*. 2019;19(1):325. doi:10.1186/s12909-019-1727-3
12. Datta R, Upadhyay K, Jaideep C. Simulation and its role in medical education. *Med J Armed Forces India*. 2012;68(2):167-172. doi:10.1016/S0377-1237(12)60040-9
13. McCave EL, Aptaker D, Hartmann KD, Zucconi R. Promoting affirmative transgender health care practice within hospitals: an ipe standardized patient simulation for graduate health care learners. *MedEdPORTAL*. 2019;15:10861. doi:10.15766/mep_2374-8265.10861
14. Brown B, Kupferman R, Rocheleau B, et al. Optimizing psychological safety: using a focus group to acquire perspectives from standardized patients who identify as LGBTQ+. *JMMC*. 2023;5(2):10. doi: 10.46804/2641-2225.1158
15. Mayfield JJ, Ball EM, Tillery KA, et al. Beyond men, women, or both: a comprehensive, LGBTQ-inclusive, implicit-bias-aware, standardized-patient-based sexual history taking curriculum. *MedEdPORTAL*. 2017;13:10634. doi:10.15766/mep_2374-8265.10634
16. Weingartner L, Noonan EJ, Bohnert C, Potter J, Shaw MA, Holthouser A. Gender-Affirming Care With Transgender and Genderqueer Patients: A standardized patient case. *MedEdPORTAL*. 2022;18:11249. doi:10.15766/mep_2374-8265.11249
17. A guide to taking a sexual history. Centers for Disease Control and Prevention. Updated January 14, 2022. Accessed April 5, 2023. <https://www.cdc.gov/std/treatment/sexualhistory.htm>