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The Case of Sean Smith: A Three-Part Interactive Module on Transgender Health for Second-Year Medical Students

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Abstract

Introduction: While great strides have been made in favor of the LGBT community overall, transgender individuals are still facing many legal challenges and suffer from more marked health issues and disparities compared to other members of the LGBT community. Our multimodal transgender curriculum was designed in accordance with the Kern model to address educational gaps in the area of transgender health. **Methods:** This three-part module consists of: (1) a didactic PowerPoint presentation reviewing unique health issues and disparities experienced by transgender patients, (2) a small-group session viewing and analyzing a pair of videos showcasing competent and poor communication between a provider and a transgender patient, and (3) a large-group patient panel featuring members of the transgender community. **Results:** One hundred and sixty-one students returned pre- and postworkshop surveys with 123 matched pairs. When comparing participants reported pre- and postworkshop confidence levels, the mean rating increased significantly for all three learning objectives. Based on a 5-point Likert scale (1 = *poor*, 5 = *excellent*), participants' mean ratings were highest for the patient panel at 4.5, compared to 3.9 for the large-group didactic lecture, and 3.8 for the small-group video session. **Discussion:** The use of this multimodal approach using a didactic session, video-based case discussion, and patient panel provided a strong foundation and primer for transgender health and resulted in an increase in learner confidence in module objectives regarding care for the transgender community.

Keywords

Transgender Health, Communication Skills, Cultural Competence, Diversity & Inclusion, Gender Identity, LGBTQ+

Educational Objectives

By the end of this activity, learners will be able to:

1. Describe the unique health issues and disparities experienced by transgender-identified individuals.
2. Describe medical transitioning and hormonal therapies for transgender-identified individuals.
3. Describe best practices for promoting culturally competent and affirming care for transgender-identified individuals.

Introduction

While great strides have been made in favor of the LGBT community overall, transgender individuals are still facing many legal challenges and suffer from more marked health issues and disparities compared to members of in the LGBT community.[1] Moreover, caring for intersectional identities, such as gender identity, gender expression, and sexual orientation, makes care for the transgender community particularly challenging considering the lack of prior formal training for medical providers on any of these singular dimensions. The 2011 Institute of Medicine Report on LGBT Health[2] was a driving factor in hastening the efforts of medical schools to better prepare trainees to address the needs and disparities of LGBT community members.

Among the multiple factors that contribute to the unique health issues and disparities experienced by LGBT community members, bias, prejudice, and stereotyping on the part of health care providers can contribute to differences in care.[3] Coverage of LGBT health care and provider training in the medical literature has grown rapidly in recent years. Despite being an important component of LGBT health, data regarding transgender-specific medical student training are scant. Most of the existing literature concludes that medical students rate themselves poorly in transgender health competence, likely

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due to inadequate curriculum time allotted to transgender-specific health care issues.[4-11] A recent review revealed that only about one-third (31%) of published studies on LGBT health care focused specifically on transgender issues.[4] Examinations of transgender-specific educational interventions by Vance et al. found significant difference in Likert scale-based self-perception and comfort levels of participants (medical students, residents, and advanced practice nurses) after completing a transgender-specific curriculum consisting of interactive online modules and an observational experience in a multidisciplinary pediatric gender clinic.[7] Another study demonstrated improvement in comfort levels of medical students using a validated transphobia scale after a 10-hour curriculum.[5] Similar improvement in medical students' self-reported comfort and willingness to care for transgender patients was found after transgender-specific curriculum was incorporated into a preclinical endocrinology didactic,[9] combined with direct clinical exposure to transgender patients,[12] or integrated with sexual history taking sessions built around transgender standardized patients.[13] These studies highlight the importance of early introduction of transgender-specific content in health care professional training.

A review of LGBT health-specific undergraduate medical curricula in *MedEdPORTAL* revealed 14 dedicated modules, with three specifically aimed at addressing transgender health,[14-16] at the time of submission of this module. The majority of the LGBT health curricula published in *MedEdPORTAL* briefly cover transgender health disparities but do not address transgender-specific health care needs or treatment options. Of the three transgender-specific curricula, each provided 1 hour or more of didactics primarily covering terminology, health care disparities, clinical skills, and culturally sensitive communication. These curricula primarily utilized PowerPoint and video cases or standardized patient (SP) encounters. The video case focuses mainly on taking a thorough sexual history and assessment of gender identity.[14] The SP encounters cover trans-identified patients who are presenting for a general physical.[15] Our own training module consists of a PowerPoint (covering terminology, health care disparities, screening guidelines, interviewing strategies, medical/surgical management, and local resources), a pronoun instructional video created by the Callen-Lorde Community Health Center, a small-group discussion centered around simulated patient-physician encounter videos contrasting poor and proficient communication skills, and a panel of transgender community members. Uniquely, our patient encounter videos describe proficient and poor medical interviewing of a transmale patient, who is using hormone therapy and presents with a medical complaint. While one other curriculum has used a general LGBT panel,[17] we found no others in our literature review that used a panel exclusively comprising members of the transgender community.

At Rutgers New Jersey Medical School (NJMS), we have built a longitudinal LGBT curriculum for medical students that includes an introductory module in the first year, advanced modules in the second year, and clinical testing of LGBT skills in an OSCE setting during the third/clinical year. The collaboration of faculty leadership, extensive student involvement, and transgender community members consultation was essential in the design, implementation, and evaluation of this curriculum, which is consistent with our previous work in this area.[18] All curriculum development was completed in accordance with the six-step Kern model,[19] which was applied as follows:

1. Problem identification and general needs assessment: Team members conducted a literature search of medical education efforts on transgender health and analyzed how our advanced module could be best developed to fit into the broader LGBT curriculum at NJMS. Built into our first-year curriculum, the introductory module served as the basis for development of the advanced modules.
2. Targeted needs assessment: Data from the introductory module were used to develop and refine course content. In addition, a gap analysis was performed to identify areas requiring further exploration. Specific effort was placed on identifying topics in which basic science and clinical science objectives could be well illustrated in the setting of a systems-based course.
3. Goals and objectives: (1) To describe unique health issues and disparities experienced by transgender patients; (2) to describe medical transitioning and hormonal therapies; and (3) to continue to promote best practices for culturally competent and affirming care.
4. Educational strategies: The workshop features (1) a didactic PowerPoint presentation reviewing unique health issues and disparities experienced by transgender patients with a specific focus on teaching students office-based masculinizing and femininizing therapies, (2) a small-group session viewing and analyzing a pair of videos showcasing competent and poor communication between a provider and a transgender patient, and (3) the use of a large-group patient panel featuring members of the transgender community.
5. Implementation: The 2.5-hour workshop was administered during the genitourinary/endocrine organ system course for second-year medical students. Small-group facilitators included LGBT and allied students and faculty from NJMS.

6. Evaluation and feedback: Workshop participants were asked to complete a pre- and postworkshop evaluation form.

Methods

This workshop featured three educational sessions: (1) a didactic PowerPoint presentation reviewing unique health issues and disparities experienced by transgender patients with a specific focus on teaching students office-based masculinizing and femininizing therapies, (2) a small-group session viewing and analyzing a pair of videos showcasing competent and poor communication between a provider and a transgender patient, and (3) a large-group patient panel featuring members of the transgender community. Sessions one and three were done in a large-group format; however, session two was, and should be, implemented with smaller groups of 10-15 students (or smaller as staffing permits) to ensure safe and robust discussion.

This workshop was presented to second-year medical students within the genitourinary/endocrine course but is also appropriate for residents, faculty, and other health professional trainees (e.g., nursing). All students had been primed with an initial teaching module about LGBT health as first-year medical students. One facilitator implemented all three sessions, but this could be divided between two facilitators. The facilitator for the didactic session should be a clinical faculty member, or resident, with significant background and/or experience in the care of transgender patients. For the small-group session, we recruited a diverse set of small-group facilitators, including medical students, residents, and faculty with various sexual, gender identity, racial, and generational perspectives. The optimal timing for this workshop was 2.5 hours. The workshop may be shortened to 1.5 hours by having the facilitator review the cases in a large-group format rather than using them as a small-group learning experience; however, the authors do not recommend this approach due to feedback we have received from learners in previous implementations.

In preparation for the workshop the facilitator printed copies of the evaluation forms (Appendix A), the Genderbread Person (Appendix B), and the video worksheet for each participant. We suggest the Genderbread Person be printed as a small card and laminated. Additional materials needed to administer this workshop included pens, audiovisual equipment, a large-group room, and a small-group set-up with chairs and tables to support 10-15 participants per table.

The workshop began in the large-group room with learners completing the preworkshop survey (Appendix A) to assess their confidence in addressing each of the learning objectives and their experience with homophobic and transphobic comments on campus. The preworkshop survey also included a space for learners to pose questions to the facilitator. Next, the facilitator presented the 55-minute Best Practices in Transgender Health Care PowerPoint (Appendix C), which provided the core content for each learning objective (e.g., a description of medical transition and hormone therapy for transgender patients). Each learner received a copy of the Genderbread Person (Appendix B) and the presentation included an approximately 2-minute video created by Callen-Lorde Community Health Center titled *Pronouns Matter* (Appendix D) to provide testimonies of why it is important to consider a person's pronoun. The Facilitator Guide (Appendix E) includes detailed instructions on the content and the flow of the presentation.

The learners then moved to small-group spaces to begin the 40-minute, facilitated, small-group activity. The activity began with learners watching the 2.5-minute Patient-Provider Poor Communication video (Appendix F), which depicted a provider taking an initial history from Sean Smith, a trans man with a chief complaint of a worsening extremity skin infection from self-administered hormone therapy. After watching this video, learners were asked to utilize the Video Reflection Worksheet (Appendix G) to note what was done poorly and what was done well by the provider in communicating with the patient, while also stratifying their responses by identifying what was done poorly and what was done well for all patients, as well as for transgender patients. Learners were also asked to reflect specifically on how the four dimensions of sexuality were addressed by the provider in communicating with the patient. Then the small-group facilitator led a discussion on student responses, using sample responses from the Facilitator Guide (Appendix E) to elicit additional understanding before showing the 4.25-minute Patient-Provider Competent Communication video (Appendix H). This video depicted the same patient and scenario as the prior video but showcased culturally competent practices in taking an initial history from the patient. After watching this video, learners were asked to utilize the same worksheet to note what was done poorly and what was done well by the provider. The small-group facilitator again conducted a debrief on student reflections and then all learners returned to the large-group room.

The final session was a 35-minute patient panel. Leading up to the session, the patient panelists were recruited through known author contacts as well as through local LGBTQ organizations and included employees and family members from the local affiliated teaching hospital. Questions were developed by the

authors and mirrored similar patient interviews conducted throughout the preclinical phase of the curriculum asking transgender individuals about their experiences as members of the transgender community, their interactions with the health care environment, and their beliefs regarding best practices for medical professionals toward members of their community. Predetermined questions were provided to panelists in advance to allow them time to prepare; however, students were also afforded the opportunity to ask questions during the live session. Panelists were aware of and specifically consented to the student question phase.

Following the panel, learners completed the postworkshop survey (Appendix A), which again assessed each learner's confidence in addressing the three learning objectives and thus allowed for a comparison of confidence between pre- and postworkshop. Pre- and postworkshop responses were compared using paired sample *t* tests. The postworkshop also included questions further assessing satisfaction levels with the module, including rating the three segments of the module and providing narrative comments on the strengths of the module as well as suggestions for improvement.

Results

Since 2016, this workshop has been implemented as a mandatory session for second-year medical students during the fall semester. During that time, the class size has been approximately 178 students. During the third implementation of this module (2018-2019 academic year), 161 students returned partial or completed pre- and postworkshop surveys, from which we were able to match 123 pairs. Our quantitative analysis utilized only these 123 survey pairs (69% response rate), while subjective comments were drawn from all 161 entries.

Perceived Campus Climate (Transphobic Remarks)

As part of the preworkshop survey, students were asked whether they had heard transphobic comments on school premises or at school-sponsored events since the beginning of the academic year (approximately 3 months). Of the 154 submitted preworkshop surveys, six respondents indicated hearing at least one transphobic comment. When asked to describe the comments, responses ranged from "refer[ing] to a possibly transgender patient as a 'tranny' ...in the clinic" to describing "transgender as a mental illness." Another student added, "when talking with men ...about STIs, one of the inmates made fun of a transgender [person] while we talked about HPV risks," in reference to their experience at an educational outreach event at a local jail.

Self-Perceived Confidence in Addressing Learning Objectives

When comparing participants reported pre- and postworkshop confidence levels, the mean rating increased significantly for all three learning objectives. Using a 5-point Likert scale (0 = *no confidence*, 4 = *complete confidence*), participants' mean confidence rating for the first objective (describe the unique health issues and disparities experienced by transgender-identified individuals) increased from 1.6 to 2.8 ($p < 0.001$) from pre- to postworkshop. Participants' mean rating for the second objective (describe medical transitioning and hormonal therapies for transgender-identified individuals) increased from 1.1 to 2.5 ($p < 0.001$) from pre- to postworkshop. Lastly, for the third objective (describe best practices for promoting culturally competent and affirming care for transgender-identified individuals), participants' mean rating increased from 1.5 to 2.9 ($p < 0.001$) from pre- to postworkshop.

Overall Workshop Evaluation

Based on a 5-point Likert scale (1 = *poor*, 5 = *excellent*), participants' mean ratings were highest for the patient panel at 4.5, compared to 3.9 for the large-group didactic lecture, and 3.8 for the small-group video session. Similarly, more students provided a *very good* or *excellent* rating for the patient panel (90%) than for the didactic session (76%) and the small-group video session (74%). There were 58 participants who commented specifically on the transgender patient panel in response to the question, "please comment on the strengths of today's sessions/activities." Respondents noted that the panel "gives insight into patients' needs and expectations of care" and "was very informative and important in providing us with the perspective of the patient. It was an honest look into their lives and journey."

Discussion

In this multimodal workshop on transgender health, consisting of PowerPoint slides, video-based cases, and an interactive panel with members of the transgender community, participants reacted favorably to both the specific content and instructional methodologies. Following this module, participant mean confidence in addressing the learning objectives increased significantly indicating a greater comprehension of the unique health issues, medical transitioning therapies, and best practices when caring for transgender-identified individuals.

The participation of LGBTQ-identified medical students substantially improved the development and delivery of this program. While there are markedly few transgender-identified students in our medical education population, those who were previously involved in LGBTQ education efforts possessed

significant background in this area, which facilitated successful small-group sessions. All students involved were able to continue to build their niche for leadership and scholarship opportunities, which the authors have anecdotally observed to improve job satisfaction and burnout prevention.

After having been primed with an initial teaching module about LGBTQ health as first-year medical students, second-year medical students completed this module, which was nested within the genitourinary/endocrine course. The module furthered learners' knowledge base of the medical and social issues affecting the care of transgender patients. We also believe that this stepwise approach allows students to revisit core content, refresh on previously gained knowledge, and integrate new LGBTQ patient care concepts. For medical schools using nontraditional formats in the preclinical years, we suggest incorporating this content concurrently with the endocrine physiology and OB/GYN content. A helpful lesson learned was that briefly revisiting core content regarding care for LGBTQ patients covered earlier in the curriculum was necessary and allowed students to reorient themselves to receive this more advanced content; the use of the Genderbread person in both modules specifically provided that reinforcement.

The video cases and discussion continue to function as a highly rated exercise in teaching physician trainees how best to communicate with members of the transgender community. Students have given consistent feedback that small-group instruction for these video-based encounters is invaluable and large-group instruction would be less effective. A significant lesson learned helped improve the content of the videos, after many learners found our previously published videos about women who have sex with women[18] to have an exaggerated poor provider-patient encounter. The communication errors in these transgender videos were more subtle between the provider and patient.

The patient panel was the highest rated portion of the module. Student reflections regarding how the personal nature of the panel augmented the educational experience highlight the unique value added by the panel. While transgender visibility has increased over the past several years in the media, students may not have had the opportunity to hear from members of the transgender community directly, which we believe will positively impact their ability to communicate with and care for this underserved population in the future.

Limitations

While we were pleased with a 69% response rate, we would have ideally liked to have captured paired surveys for all participants. Our evaluation metric focused on the perception of knowledge acquisition and comprehension and should not be assumed to include behavior change, which is an important area for future study. Furthermore, the material covered in this module focused exclusively on gender expression and identity as they apply to members of the transgender community and did not include content related to differences in sexual differentiation (which are covered elsewhere in the NJMS curriculum) or newer terminology such as gender nonconforming.

We acknowledge that recruitment of transgender community members for the patient panel may prove challenging in certain geographic areas. We believe that direct student interaction with members of the community is invaluable and therefore would suggest that if a live panel cannot be convened, facilitators should attempt to set up a live video conference that allows for bidirectional communication. Facilitators can reach out to local and/or national LGBT organizations for assistance in recruiting patients for such online conferences.

In conclusion, transgender health education continues to be an area for improvement in medical programs across the country. This multimodal approach using didactic sessions, video-based small-group case discussions, and patient panels provides a strong foundation and primer for transgender health from which students can continue to grow throughout their careers. These materials were well received by participants and were correlated with a significant increase in confidence in the module objectives regarding care for the transgender community.

Appendices

A. Pre- and Postworkshop Survey.docx

B. Genderbread Person.pdf

C. Best Practices in Transgender Health Care.pptx

D. Pronouns Matter.mp4

E. Facilitator Guide.docx

F. Patient-Provider Poor Communication.mp4

G. Video Reflection Worksheet.docx

H. Patient-Provider Competent Communication.mp4

All appendices are peer reviewed as integral parts of the Original Publication.

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Informed Consent
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Ethical Approval
Rutgers University Institutional Review Board approved this study.

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