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Featured Article

Transgender Simulation Scenario Pilot Project

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Abstract

Background: Transgender people often experience inequities, discrimination, and violence within health care environments by ill-informed health care professionals. Simulation has been beneficial in increasing students' knowledge about transgender health issues.

Methods: A transgender simulation scenario was piloted with pairs of students completing an anesthesia preoperative interview with a transgender patient who presents for an emergent surgery. Thirty (42%) of graduate nursing students enrolled in a Doctor of Nursing Practice nurse anesthesia program voluntarily participated in a transgender pilot simulation.

Results: Twenty-eight of 30 participants (93%) completed a presimulation and postsimulation survey with the majority (68%) reporting after the simulation that they had ongoing feelings of incompetence related to the health care needs of transgender patients.

Conclusion: Expanded didactic lessons and simulation experiences that include transgender content can increase comfort levels for both patient and provider as we strive to shift the paradigm toward health care equity for all.

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Transgender (trans) people have a gender identity that does not align with their sex assigned at birth (American Psychological Association, 2015). Some trans people pursue gender-affirming medical interventions (e.g. gender-affirming/cross-sex hormone therapy, hormone blockers [gonadotropin-releasing hormone agonists, anti-androgens, and so forth] surgeries, and other body modifications). The term transgender is part of the lesbian, gay, bisexual, and transgender (LGBT) acronym, an acronym that represents both sexual orientation (LGB) and gender identity (T). The trans population experiences health disparities, such as an increased risk of HIV infection, higher levels of psychological distress and substance abuse, and a higher suicide attempt rate than the US general public (Bockting, Miner, Swinburne Romine, Hamilton, & Coleman, 2013; James et al., 2016). Furthermore, trans people experience inequities, discrimination, violence, and systematic maltreatment within health care environments by ill-informed health care professionals (Cicero & Black, 2016; James et al., 2016).

One explanation for the maltreatment and barriers to health care may be attributed to the lack of inclusion of LGBT-

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specific curricula, particularly trans health topics, in nursing programs (Bosse, Nesteby, & Randall, 2015). Lim, Johnson, and Eliason (2015) reported that nearly 75% of faculty members (n = 1,231) teaching in US baccalaureate nursing programs did not include or provided limited instruction on LGBT health topics; when such topics were included, only an average of 2.12 hours were dedicated to LGBT health. Moreover, the number of hours specific to trans health topics were not disaggregated from the total reported hours (Lim et al., 2015). Barriers to integrating LGBT health topics reported by faculty members included limited guidance on how to integrate LGBT topics, inadequate knowledge on LGBT health, and some faculty members opposed or were uncomfortable teaching LGBT health (Lim, et al., 2015). Without adequate curricula content addressing LGBT health, nursing students and graduates may lack skills needed to respectively communicate with and provide equitable care to trans patients.

Key Points

- Gaps exist in nursing curricula to prepare graduates for transgender patient care.
- Simulation allows students to practice communication with transgender patients.
- Improved communication with diverse populations promotes an inclusive culture.

Along with other teaching modalities used in nursing schools, simulation-based exercises have been beneficial in increasing students' knowledge about LGBT health and care approaches (Díaz et al., 2017; Hickerson, Hawkins, & Hoyt-Brennan, 2018). Therefore, this article outlines the integration of a trans patient simulation piloted in an advanced practice nursing program at a school in the southeast US. The scenario aimed to pilot a clinical scenario with a trans patient, to increase awareness of trans health issues, to provide an opportunity to practice therapeutic communication, and to address psychosocial risk factors with patients who identify themselves as trans. In addition, the purpose of the simulation was to address the feasibility of delivering such a scenario, to determine next steps for integrating trans health content within nursing school's simulation-based exercises, and to assess nurse anesthesia students' comfort and confidence in delivering health care to trans patients.

Sample

Participants

The pilot simulation was offered on a voluntary basis to students in a 3-year Doctor of Nursing Practice nurse anesthesia program. Participants included first, second, and third year students. It was emphasized that the pilot simulation was not currently part of the core curriculum and that participation in the simulation would not affect the students' grade. Before this simulation activity, the nurse anesthesia program offered no formal training related to caring for trans patients. Owing to the varied levels of anesthesia simulation and clinical experience, participants completed the scenarios in pairs; first year students were paired with second or third year students. One student was designated as the Certified Registered Nurse Anesthetist (CRNA) and the other as the Student Registered Nurse Anesthetist (SRNA) or CRNA in training. Out of 72 students enrolled in the nurse anesthesia program, 30 (42%) voluntarily participated in the pilot simulation.

Methods

Simulation Development

The pilot simulation was based on a previous patient encounter by the lead author. After creation, the pilot scenario was reviewed by a second CRNA for anesthesia content and a trans health content expert. In addition to the simulation, trans health resources were identified and later distributed to simulation participants. The pilot simulation was designated as exempt by the institutional review board.

Simulation Scenario

Four group sessions with six students in one session and eight students in three sessions were completed in a designated anesthesia preoperative holding area (APHA) of the simulation center, which included fully functional operating rooms, anesthesia equipment, and high-fidelity manikins. Students were informed during the prebrief that they would approach the interview in pairs, and each student was instructed to conduct half of the anesthesia preoperative interview. After the pre-brief, the emergency department notified the CRNA that the patient was en route to the APHA with a surgical emergency.

Patient Profile

A 21-year-old patient assigned male at birth presented to the emergency department with acute onset of nausea, vomiting, and groin pain at rest and was diagnosed with a right testicular torsion, a surgical emergency. The patient had a history of tobacco use, social alcohol consumption, a previous surgical procedure without surgical or anesthetic complications, no allergies, and no further health history. The patient's current home medications included 2 mg of estradiol by mouth once daily, 100 mg of micronized progesterone by mouth once daily, and 50 mg of spironolactone by mouth twice daily; gender-affirming medications often used to feminize one's body. The role of a patient was played by an SRNA who was provided with scripted lines that were used for each simulation session.

Table 1 Student Perceptions on Transgender Health Issues

	Yes		No	
	Presimulation, *n* (%)	Postsimulation, *n* (%)	Presimulation, *n* (%)	Postsimulation, *n* (%)
Competent; adequate knowledge to address trans health care needs	7 (25)	9 (32)	21 (75)	19 (68)
Received information and instruction to meet health care needs of trans community	3 (11)	9 (32)	25 (89)	19 (68)
My personal views affect care of trans community	5 (18)	6 (21)	23 (82)	22 (79)
Interested in gaining more knowledge to care for the trans population	25 (89)	25 (89)	3 (11)	3 (11)
Would refuse to provide care to trans patient if the option was available without recourse	0 (0)	0 (0)	28 (100)	28 (100)
Equipped with resources to provide competent care to trans individuals	6 (21)	11 (39)	22 (79)	17 (61)

Adapted from Mitchell et al., 2016.

Simulation Implementation

Upon arrival to the APHA, the CRNA and SRNA introduced themselves and asked the patient to verify personal identification by stating name and date of birth. The patient's reply was then compared to the information on the patient's identification wristband. The patient further stated, ''I go by Michelle'' and requested that the wristband be changed.

Simulation participants began the anesthesia preoperative interview and assessed standard anesthesia-related questions including home medications, allergies, when the patient last ate and drank, past medical and surgical histories, and a systems review (cardiac, respiratory, neurological, endocrine, gastrointestinal, genitourinary, musculoskeletal, and so forth). After the CRNA and SRNA interviewed the patient, the patient asked if the planned anesthetic would interfere with the gender-affirming medications. Furthermore, the patient requested the surgeon to remove both the testicles, not just the effected one, to avoid future gender-affirming surgeries (i.e., orchiectomy).

Simulation Debriefing

The simulation objectives guided the 20-minute debriefing. Simulation participants were asked what happened, how they felt about the experience, and how they felt the simulation experience went (5 minutes). Then, actual events were recounted by the group to spur participant reflection on their thought processes and performance (10 minutes). The debrief ended with a summary of positive performance and performance gaps (5 minutes) and a brief presentation of trans information and health disparities.

Results

Twenty-eight of 30 participants (93%) completed a presimulation and postsimulation survey (Table), which consisted of six yes/no questions that assessed their perceived comfort and competence providing care to trans patients. The survey was adopted from the LGBT Health Issues Questionnaire (Mitchell, Lee, Green, & Sykes, 2016) with an opportunity for students to comment on their experiences. Six (21%) students before the simulation compared with 11 (39%) students after the simulation reported that they were equipped with resources needed to provide competent care to trans patients. Despite these results, after the simulation, a large majority of students had ongoing feelings of incompetence related to the health care needs of trans patients.

Participants reported that the simulation was helpful, effective, and increased their ease of caring for trans patients. This aligns with anecdotal evidence from our study with one student commenting, ''This simulation was extremely valuable for future practice'' and ''I did not realize how uncomfortable I might be in this type of scenario … I think more education will help with the uncomfortable feelings and allow us to be more competent providers.''

Another student noted, ''This simulated patient interaction really caught me off-guard. I felt awkward and like I was already starting out my first critical interactions with a patient on a bad foot; one that might lead them to mistrust me or consider me incompetent. I did not know what was considered ''politically correct'' to ask in terms of questions regarding their transition and felt like I did not want to ask anything at all because I was worried I would offend the patient. This just goes to show (once again) that simulation is one of the best teaching tools; clearly [student

playing the role of the trans-female] is not a trans-female, yet I still felt the gamut of emotions as if the scenario being simulated was actually happening.''

Students appeared humbled by the awkwardness they felt in the situation. Simulation and debrief sessions were devoid of any negative comments about or actions toward the patient. All remarks, verbal and written, indicated a desire for further trans content and simulation training during their remaining time in the program. Most students did not know how to address the patient's requests to have the name on her armband changed and to have both testes removed during the emergency surgery. Students voiced their confusion if it was ethically appropriate to remove both the testes. Many students advised that they would inform the treatment team that Michelle is the correct name to use, despite a different name being listed on her wristband. Students added that they were unfamiliar with the correct process of securing a name change in the electronic health record, yet they stated that they would investigate hospital name-change policies after completion of the emergent surgery and inform her post-operatively of how they will address the patient's request pertaining to the name in her electronic health record. Furthermore, a majority of the student participants were unsure of the correct response and stated that they would find out and let the patient know.

Discussion

This pilot introduced a newly created preoperative simulation scenario that aimed to increase awareness of trans health issues, provide an opportunity to practice therapeutic communication, and address psychosocial risk factors with patients who identify themselves as trans. The purpose of the simulation was to address the feasibility of delivering such a scenario, to determine next steps for integrating trans health content within nursing school's simulation-based exercises, and to assess nurse anesthesia students' comfort and confidence in delivering health care to trans patients. The piloted trans patient simulation was well received and improved nurse anesthesia students' knowledge base in delivering health care to trans patients; however, knowledge gaps remain. Participants gained insight into the life of a patient which may differ from theirs, and they have an initial understanding of trans health care challenges; many participants exemplified cultural humility in which self-awareness of the student's discomfort with the situation is expressed, as well as a desire to know more and improve care.

Limitations of this pilot scenario were associated with the types of students who participated, assessment of student learning, and the current knowledge base of the faculty members delivering the simulation. First, the student participants were volunteers, indicating that they may have been more accepting of the trans patient. The degree of implied acceptance may have positively impacted the level of student participation. Further evaluation is needed as the scenario is improved and delivered to a more diverse group of students. As the scenario and debrief lessons are refined and eventually implemented throughout the curriculum, the greater need is to reach all types of learners, from those already knowledgeable on delivering gender-affirming health care to persons unfamiliar and uncomfortable caring for trans people. Second, the pre-post survey used to evaluate the student's knowledge base and comfort providing health care to trans patients was assessed using yes/no questions. This approach can be improved by using a Likert-type scale to better evaluate the effectiveness of the simulation and to identify specific trans health areas for improvement. Finally, during the debriefing, simulation faculty members had limited familiarity with trans health and were unable to fully respond to some students' questions. Future simulations can be strengthened by having a content expert attend the simulations and debriefings and by having a transgender-identified person speak of their lived experiences. Such presence would have been helpful as the content expert could have provided answers to questions to which faculty was less familiar. Future trans health simulation sessions may also benefit from more thorough faculty preparation and assessment of preparation for providing instruction on the diverse trans population and their unique health care needs. Moreover, simulated learning environments that incorporate manikins, task trainers, and equipment that realistically represent the variety of patients encountered within health care environments may better prepare nurses to provide gender-affirming care for trans people.

In summary, ongoing trans education is planned as student surveys, and anecdotal evidence indicated that the simulation identified knowledge gaps pertaining to trans people and trans health care, which should be integrated into the curriculum.

Conclusion

Educators must equip students to provide health care to trans patients. Expanded didactic lessons and simulation experiences that include trans content can increase comfort levels for both patient and provider as we strive to shift the paradigm toward health care equity for all. Incorporating trans health topics across nursing curricula will help prepare future nurses in meeting the needs of the trans population.

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