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Nursing Care for Transgender and Nonbinary Patients An Educational Model for Forensic Nurse Examiners

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An Educational Model for Forensic Nurse Examiners

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Abstract

One of the greatest barriers to healthcare faced by the transgender and nonbinary (TGNB) population is the lack of access to providers who are knowledgeable in providing safe, appropriate, and gender-affirming care. LGBT education for most nursing baccalaureate nursing programs contains only 2.12 hours of LGBT-related content in their curricula, with even less time specifically devoted to transgender health topics. One foundational intervention for addressing healthcare disparities among the TGNB population is to provide better and more inclusive education for nurses about gender-affirming care. The purpose of this quality improvement project was to design, implement, and evaluate an interactive educational intervention to educate forensic nurse examiners about TGNB health disparities and health needs. Pre- and post- implementation surveys were collected from participants (n= 16) to measure change in attitudes, knowledge, and skills. These survey results were coded into these three categories, each measured as an aggregate. While there was no overall statistical significance found among the attitude, knowledge, and skills categories, there were individual questions addressing specific areas of knowledge and skills (e.g., TGNB local resources, reproductive health, gender dysphoria, and gender-affirming care) that showed significant improvement.

Introduction

Transgender and nonbinary (TGNB)[1] people in the United States face historical and current health disparities. According to the National Sexual Violence Resource Center, 47% of the TGNB population reported at least one incidence of sexual assault in their lives and they are victimized four times more than the cisgender population (Langenderfer-Magruder et al., 2016). It is crucial that this population receive holistic and appropriate health care after an assault; however, one of the greatest barriers to care faced by the TGNB population is the lack of access to healthcare providers who are knowledgeable in providing gender-affirming care. Forensic nurse examiners provide healthcare to patients following sexual assault which includes a physical exam, addressing medical concerns related to the assault, lab testing, medication to prevent infection and/or pregnancy, injury documentation, collection of evidence, and referrals to community resources (Providence Intervention Center for Assault and Abuse, n.d.). Given the high rates of sexual assault among the TGNB population, it is particularly important that forensic nurse examiners are also able to provide appropriate care for the TGNB population as part of their trauma-informed scope of practice.

The International Association of Forensic Nurse examiners (IAFN) recommends a specialty training for forensic nurse examiners to be a 40-hour didactic training, followed an average of 40 hours of clinical training. The IAFN has a set of guidelines of what should be included in this training to be board-certified in this nursing specialty. Credentialing is determined by each state and completion of a training by a program that is board-certified is not required in all states. For example, Washington State's Sexual Assault Nurse Examiner (SANE) training program at Harborview is not accredited by the

[1] The terms, *transgender* and *nonbinary,* are used to describe a specific population. *Transgender* describes a person whose gender identity differs from their sex assigned at birth. This is a term of choice, that describes gender identities on the male/female binary and is also inclusive of gender identities that transcend the binary. *Nonbinary* is an umbrella term to specifically include gender identities that exist beyond the binary such as gender queer, agender, and gender nonconforming identities (Stryker, 2013; UCSF Gender Affirming Health Program, 2016).

IAFN and the curriculum varies whether the information is delivered in Seattle or in rural areas of Washington State (Yaw, 2020). The IAFN education guidelines for forensic nurse examiners states the importance of considering psychosocial issues and unique health care challenges associated with underserved sexual violence patient populations, such as GLBTQIA populations; however, specific gender-affirming care recommendations are not included (International Association of Forensic Nurses, 2018).

The U.S. Department of Justice Office on Violence Against Women (OVW) has a national training set of standards for sexual assault medical forensic examiners. This document of standards has one sentence that states that forensic examiners should be knowledgeable about high-risk populations that are vulnerable to sexual victimization, and includes the LGBT population here as a footnote, however, there is no information or standards of care specific to the LGBT population (U.S. Department of Justice Office on Violence Against Women, 2018).

The OVW national protocol for sexual assault medical forensic examiners discusses important aspects of gender-affirming care such as: providing inclusive intake forms and documents that ask about gender identities, referring to survivors by their preferred name and pronouns, protecting LGBT identities as confidential medical information, reflecting the patient's use of nonstandard labels for body parts, and understanding that transgender people have typically been subject to others' curiosity, prejudice, and violence, and may be reluctant to report the crime or consent to the exam for fear of being exposed to inappropriate questions or abuse. The protocol has information on other specific medical considerations for TGNB folks taking hormones or have had gender-affirming surgeries as well (U.S. Department of Justice Office on Violence Against Women, 2013). The information in this protocol is not included in the OVW training standards.

Nurses are the most numerous healthcare staff and often the first line of contact for patients. Forensic nurse examiners are trained to care for those who have experienced physical or sexual violence

and trauma, and they can help ensure the health and safety of their patients. Nurses can alter the course of a person's health outcomes, but there is a significant lack of education related to TGNB health to help nurses meet the needs of these patients (Sherman et al., 2021). Most nursing baccalaureate programs in the United States contain 2.12 hours of LGBT-related content in their curricula, with even less time specifically devoted to transgender health topics (Kattari et al., 2020). This gap in knowledge can be addressed by improving nursing school curricula that integrates knowledge about caring for this population in a way that reduces stigma, stereotyping, and bias. Interactive educational modules that address social justice, implicit biases, knowledge, and technical skills have been shown to be most effective (Maruca et al., 2018; McCave et al., 2019; McEwing, 2020; Morris et al., 2019; Zuzelo, 2014). Improving nursing education in the clinical setting that includes gender-affirming care practices is needed due to the curricula of nursing education programs that lack robust TGNB population health care to reduce health inequities in this patient population.

Purpose, Aims, Theoretical Framework

The purpose of this DNP project was to develop an interactive educational intervention about TGNB care for forensic nurse examiners in a way that provides detailed education about the health needs of the TGNB population and that addresses the stigma and health inequities faced by this population. This project also included an evaluation of the impact of the educational intervention on nursing attitudes, skills, and knowledge regarding TGNB care following sexual assault. The specific aims were to: 1) improve nursing attitudes, knowledge, and skills among forensic nurse examiners at Providence Intervention Center for Abuse and Assault (PICAA) which was measured by a pre- and post-intervention survey; 2) improve nursing knowledge and confidence to counsel patients regarding emergency contraception, including possible side effects that may exacerbate gender dysphoria; 3) systematically gather qualitative feedback about this pilot interactive educational intervention with the goal of improving it for future use.

The Donabedian process model was used and focuses on three categories: structure, process, and outcome. Each category is interdependent on the other and outlines the flow for a health quality improvement model (Moran et al., 2020; Santana et al., 2017). For this quality improvement project, the structure refers to the setting that is PICAA. The process is implementing an interactive educational intervention for forensic nurse examiners at PICAA. The outcome is to improve nursing attitudes, knowledge, and skills about TGNB health to ultimately improve healthcare experiences and health outcomes for the TGNB population.

Background/Literature Review

Health Disparities Among the TGNB Population

The TGNB population have unique health needs related to gender-affirming care, infection screening, family planning, medications, and surgical history (UCSF Gender-affirming Health Program, 2016). These are all important aspects of a person's wellbeing that a healthcare provider should be knowledgeable about to provide appropriate and safe care. Understanding health disparities faced by the TGNB community and the identities of this community helps to improve attitudes towards this patient population, resulting in unbiased and empowering care (Dubin et al., 2018). The TGNB community have a higher burden of mental health illness, including depression, anxiety, and suicidal ideation (Dubin et al., 2018). Transgender adults experience suicidal ideation 12 times higher than that of the U.S. population and suicide attempts are 18% higher. Transgender individuals experience higher rates of HIV and 22% of transgender women are living with HIV. Transgender women are also more likely to be targeted by physical violence (Glick et al., 2018). TGNB people with disabilities and TGNB people of color report even more heightened and frequent experiences of health care discrimination than their white and able-bodied TGNB counterparts (Kattari et al., 2020).

Stigma and Barriers to Healthcare

In 2015, the National Center for Transgender Equality conducted the largest national survey of transgender people in the U.S. and found that within the past year, 30% of respondents had experienced a negative encounter with a healthcare provider and almost 25% had avoided seeking medical care due to fear of being mistreated (James et al., 2016). Over 25% of the TGNB population does not have a primary care provider, which reduces access to preventative care and contributes to adverse health outcomes (Korpaisarn & Safer, 2018; Meyer et al., 2017). TGNB individuals who indicated that they had a primary care practitioner who was transgender inclusive were significantly less likely to have had suicidal ideations in the past year and were less likely to experience current depression than those who did not feel their providers were transgender inclusive (Kattari et al., 2020). *Transgender inclusive care* in that context meant that staff and providers were knowledgeable about trans-specific standards of physical and mental health care for patients at any life stage, used gender neutral language, and provided inclusive questions on intake forms. Also, the healthcare facility had gender neutral restrooms and health brochures and literature that was relevant to TGNB patients (Kattari et al., 2020).

Additional barriers to care include financial constraints, experiencing discrimination in healthcare settings, receiving biased care, being misgendered purposefully, and needing to teach healthcare providers about their health needs (James et al., 2016). These are examples of structural and interpersonal stigma. According to the Minority Stress Model, negative attitudes and prejudices from society cause frequent stressors and adverse mental health effects including substance abuse, suicidal ideation, and suicide attempts (Hendricks & Testa, 2012). Internalized transphobia is the directing of structural and interpersonal stigma inward, towards oneself. This can affect mental health outcomes and coping skills. Educating nurses about TGNB health is an important way to reduce structural and interpersonal stigma (Hatzenbuehler, 2016).

Nursing and TGNB Health Education

Nursing has been the most trusted profession in the United States over the last 18 years and represents the largest segment of the healthcare workforce (Sherman et al., 2021; University of Washington, 2020). In hospital settings, nurses spend the most time directly caring for patients, and they frequently take on the responsibility of advocating for their patients' health needs. Changes in protocols and attitudes often arise from within nursing teams, but studies show that nursing students' knowledge and competence towards transgender patients and topics surrounding gender-affirming care were much lower than compared with health knowledge of broader Lesbian, Gay, Bisexual (LGB) populations (Dubin et al., 2018). A survey of 1,010 students from various medical, dental, and nursing schools revealed that students did not feel prepared to take care of the LGBT patient population before taking an LGBT focused health training (Green et al., 2018). There is currently no standard method to educate future nurses about TGNB health, and studies show that providing a surface-level overview defining the TGNB population and their specific health concerns does not change nursing bias (Stroumsa et al., 2019).

A more effective way to dispel stereotypes and unlearn transphobia among nursing staff is to create an interactive educational intervention that includes simulations of standardized patients who are transgender and/or nonbinary and work through the scenarios as a group, followed by a discussion. This allows participants to practice asking pronouns, using names that may be different from patients' legal names, all while practicing trauma-informed and gender-affirming care.

Adverse childhood experiences and traumatic stress have been shown to increase a person's risk for adverse health outcomes later in life (Nelson et al., 2020); therefore, a trauma-informed care approach was developed to holistically care for patients. Trauma-informed care uses a lens of "what happened to you" versus "what is wrong with you," which protects patients from being blamed for their trauma and sequelae (Menschner & Maul, 2016). Core principles of providing trauma-informed care promoted by Substance Abuse and Mental Health Services Administration (SAMHSA) are promoting a

sense of safety, trustworthiness and transparency, peer support and community resources, collaboration among healthcare staff and mutuality, safety, empowerment, choice, and cultural sensitivity free of prejudice, bias, and stereotypes (Substance Abuse and Mental Health Services Administration, 2014). Trauma-informed care that encompasses gender-affirming care is important for the TGNB population that experience a disproportionate burden of trauma (Valentine & Shipherd, 2018).

Gender-affirming care protects gender diverse patients. Core elements of gender-affirming care include using gender-affirming language, providing forms that reflect LGBTQIA identities and relationships, consistency in patient's chosen pronoun and name use, protecting confidentiality and only discussing a patient's gender identity with those who need to know for providing appropriate care, and asking questions only relevant to the reason the patient is seeking healthcare. Gender-affirming care also includes being knowledgeable about hormones and side effects, gender dysphoria, fertility goals, or referrals to surgery.

Continuing education courses for nurses that include facilitated case-studies, problem-based learning, experiential learning, and standardized patient simulations have been shown to increase knowledge and skills essential for caring for TGNB patients in nursing participants (Maruca et al., 2018 & McCave et al., 2019). Passive learning from online modules that fails to address dismantling stigma and health inequities does not increase provider competence in caring for TGNB patients. In contrast, active learning and participation allow participants to practice using affirming language, receive feedback from peers and facilitators, and to consider the social, financial, and emotional challenges faced by transgender individuals that impacts health promotion in real time (McEwing, 2020; Morris et al., 2019; Zuzelo, 2014).

Improving Nursing Education Curriculum and Systems

The integration of important aspects of gender-affirming care should be appropriately placed into curricular content that traditionally focuses on cisgender people, including topics such as pediatrics, primary care, medical-surgical nursing, obstetrics, and gerontology (Dubin et al., 2018; Glick et al., 2018; Green et al., 2018). Educators have the responsibility to intentionally revise nursing curricula using evidence-based methods to prepare nurses for patients of all backgrounds in a way that is respectful, empowering, and patient-centered. Until nursing degree programs incorporate TGNB health into their curricula, this quality improvement project is the best way to bridge the knowledge gap about providing gender-affirming care for nurses in clinical practice.

Methods

Institutional Review Board

The Seattle University International Review Board determined that this project was to be exempt, as it did not meet the definition of human subjects research.

Intervention Design

This project was designed to measure change in forensic nurse examiners' attitudes, knowledge, and skills before and after participating in an educational intervention about healthcare for TGNB patients. The University of California San Francisco Transgender Center for Excellence and the World Professional Association for Transgender Health (WPATH) have published evidence-based standards of care documents for primary care and gender-affirming care for the TGNG population, which were used as guiding resources for designing this intervention (UCSF Gender-affirming Health Program, 2016 & World Professional Association for Transgender Health, 2012). This interactive educational intervention was created for forensic nurse examiners and other staff at PICAA. The intervention was delivered via PowerPoint presentation and followed by interactive case studies about caring for the transgender and nonbinary patients who may present to PICAA for healthcare services. The intervention lasted approximately 45 minutes long with a brief question-and-answer segment at the conclusion.

The educational intervention covered key terms, information about the high prevalence of sexual assault and health disparities, stigma and medical gate keeping among medical professionals, core elements of gender-affirming medical care in the context of care after a sexual assault, referrals to local resources and safety planning, and a case study. Two participants asked questions at the end of the presentation, centered around new information they had learned regarding the effectiveness of HIV preventative medications among patients who take estrogen.

The pre- and post -intervention surveys consisted of 21 identical questions. The post - intervention survey had two additional, open-ended questions about the intervention itself. The questions were categorized among three measured areas, attitudes, knowledge, and skills. Participants answered using a five-point Likert scale ranging from strongly disagree to strongly agree. See Table 1 for the full list of survey questions.

	Table 1. Pre- and Post -Intervention Survey Questions
Attitudes	I feel comfortable sharing my pronouns when introducing myself to patients.
	I ask patients their pronouns at every visit.
	The transgender and nonbinary (TGNB) population have the same social determinants of health compared to the cisgender population.
	You can infer a patient's sexuality based on their gender.
	Gender exists on a spectrum.
	Gender expression is indicative of a person's pronouns.
	I know to refer to clients by their chosen names and pronoun(s), even when speaking to coworkers about them or when documenting in their charts.
	I understand that a transgender client may fear assault or belittlement by a healthcare professional's response to their gender identity or expression.
	I believe that incorrect pronouns can trigger gender dysphoria and mistrust.
Knowledge	My nursing curriculum included topics specific to transgender and nonbinary (TGNB) health and gender-affirming care.
	I have a basic understanding of hormone replacement therapy and gender-affirming surgeries.
	I understand the HIV risks specific to the TGNB population.
	I am aware that a trans man/transmasculine client who has ovaries and a uterus can become pregnant when using testosterone and/or not menstruating.
	I am aware that a trans client may be at heightened risk of sexual assault revictimization either by intimate partners or others.
Skills	I am aware that a trans client may lack or have decreased social supports (eg, family, friends, trusted service providers).
	I feel confident in educating TGNB patients who are taking hormones about emergency contraception.

	I understand how an emergency contraception prescription could trigger gender dysphoria.
	What are your preferred pronouns? is an appropriate question to ask all patients.
	I feel confident in understanding the components of gender-affirming care.
	I am aware that some trans clients may use non-standard labels for certain body parts.
	I am aware of available trans-positive resources and service providers in the community for TGNB clients requiring external support.

Setting, Participants, and Recruitment

This educational intervention took place in an online Microsoft Teams meetings with the Providence Intervention Center for Assault and Abuse (PICAA) staff. PICAA is a 24-hour emergency medical, counseling, and advocacy service for survivors of violence in Snohomish County composed of about 30 staff members. The interactive educational intervention was presented remotely because of COVID-19 restrictions. This educational intervention was created and delivered to forensic nurse examiners and other staff at PICAA who chose to participate (Table 2). Participation in this educational intervention was optional for staff at PICAA. The intervention was promoted to staff via email. I also joined two staff meetings to encourage participation in the intervention and to answer questions from staff. Participants were asked to fill out pre- and post- intervention surveys before and after the educational intervention took place. There were 16 participants (53% of staff) who filled out the pre - intervention survey, seven of which were forensic nurse examiners. The post-intervention survey had 13 responses (43% of staff), eight of which were forensic nurse examiners. A statistical analysis was conducted to compare the means of the survey responses collected from participants before and after the educational intervention.

Table 2. Participants by Title

Map of Survey Respondents	**Pre- intervention**	**Post- intervention**
Forensic nurse examiners	7	8
Medical assistant	2	1
Psychotherapist	1	1
Advocate	4	1
Administrator	1	1
Other position unspecified	1	1
Total	16	13

Data Collection

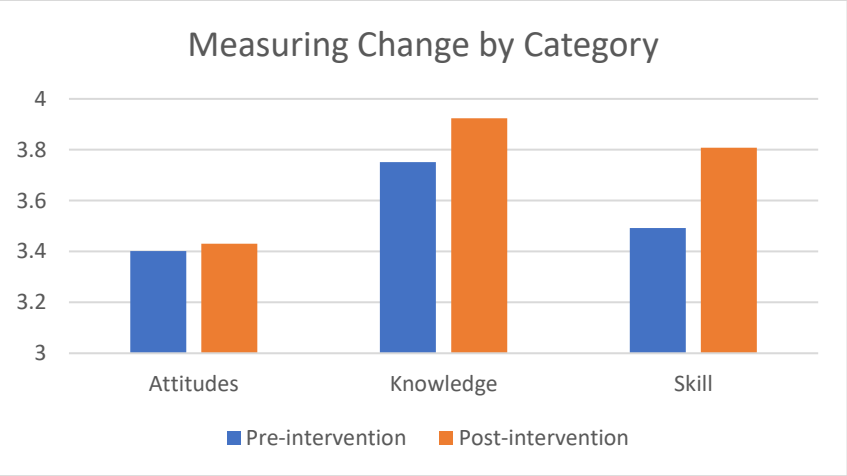
Pre- and post- intervention surveys were written to be answered on a Likert scale, ranging from strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree. Surveys were distributed via email to participants to be completed within two weeks before and after the educational intervention. Quantitative data extracted from pre- and post- intervention survey responses was translated into a numerical value and categorized by attitude, knowledge, and skills. T-tests were performed using Microsoft Excel to explore the statistical impact of the educational intervention on the participants as measured by a change in participant attitudes, knowledge, and skills.

Results

Measuring differences by category

Survey results are included below categorized by coded questions that were designed to gather information on attitudes, knowledge, and skills related to healthcare for the TGNB population (Figure 1).

Figure 1: Overall Change in Scores from Pre-and Post- Survey by Category



Assumptions

When considering the data, we assume the comparison distribution will be a distribution of mean differences. We also assume that our population is likely to have higher overall scores in terms of positive attitude and increased knowledge and skill than the average medical professional, as these

participants self-selected into the intervention, suggesting an interest in the subject matter or self-awareness of a knowledge gap.

Attitudes

There were nine questions to assess participants' changes in attitudes related to TGNB patient care. There was no significant difference between pre- and post- intervention scores coded to "Attitudes" as an aggregate; $t(8) = -.348$, $p= 0.737$. There were no significant differences in pre- and post- survey responses for individual questions within this category. We know from our literature review that increasing quality of education and knowledge of TGNB health for nurses is complicated by preexisting personal bias against this population. Education alone does not always address systematic stigma or change attitudes or transphobia. This may suggest that attitudes, which are developed over time and more deeply ingrained, may be harder to move through a single online interactive educational intervention. Since participation in this intervention was optional and not a random sample, the participants could have had positive attitudes toward the TGNB population before the intervention as they were curious about learning how to best care for this patient population.

Knowledge

The knowledge section consisted of six questions. While there was no significant difference between pre- and post- intervention scores for the knowledge section as a whole $t(5) = -.857$, $p=0.431$. One question showed a sizable 25% increase up the Likert scale for the question "I am aware that a trans man/transmasculine client who has ovaries and a uterus can become pregnant when using testosterone and/or not menstruating." This may illuminate a gap in knowledge and show where more interventions would be beneficial. For example, a strong understanding of reproductive health and family planning as it relates to TGNB patients who are taking hormones would be important for nurses to know in OBGYN and primary care settings.

Skills

The skills section consisted of six questions. There was no significant difference between pre- and post- intervention scores; t(5) = -1.892, p=0.117116. However, there was a 38 percent increase for awareness of available trans-positive resources and service providers in the community for TGNB clients requiring external support. This suggests many respondents may not have known about specific local resources for their TGNB patients until this intervention was helpful in providing a list of places providers could investigate for their patients. There was also a 13 percent increase for understanding how an emergency contraception prescription could trigger gender dysphoria, and a 12 percent increase for providers feeling confident in understanding the components of gender-affirming care.

Participant Feedback

Participants ranked high levels of overall satisfaction with the intervention. When asked in the post- survey "how did learning about transgender and nonbinary care feel in a virtual environment?" Six respondents said it was either fine or preferred in the online format, but four respondents said they preferred it to be in person instead of a virtual setting. Some respondents commented on the limited time to cover this topic, "I wish we had more time! I was processing the information and was not fast enough to formulate questions" and "short amount of time to cover a very large topic."

Discussion

While this quality improvement project showed no overall statistical significance in change in attitudes, knowledge, and skills between pre- and post- intervention surveys by aggregate, there were still individual questions where the data showed an increase in specific areas of knowledge and skills related to TGNB local resources, reproductive health, gender dysphoria, and overall components of gender-affirming care. These areas of improvement may signal existing gaps in education and knowledge and expose where concentrated follow up educational interventions across these subjects could be most beneficial. In particular, participants were eager for more information on local resources and organizations that they can connect their patients to when in need. Healthcare does not stop when

the patient leaves the facility, so it is encouraging to see so many providers feeling like they learned something in terms of resources and are eager to learn more.

The participants were already interested in learning about transgender and nonbinary health, so there wasn't much room for change in attitudes, but it would be interesting to see how attitudes may change over time after the providers have hands on experience putting some of this information to use. Similarly, attitudes may be more likely to change based on personal experiences and not a remote intervention, so it is not entirely surprising that we did not see big changes here. However, experiential and simulation intervention that is trans-inclusive has been shown to improve attitudes and competent care towards this population (Stroumsa et al., 2019) and may be worth considering for future educational interventions.

Limitations

The primary limitation of the project was a small sample size and only one intervention at one time point. There were less than 20 participants across both surveys and for the intervention itself. To collect more data, we would have needed to conduct more interventions, or to have repeated the same intervention in different settings. These alternatives were outside the scope of this research project and represent possible areas for future research.

A second limitation is that there was some attrition between the pre- and post- intervention surveys. While all efforts were taken to ensure an identical pre- and post-survey population there were inevitably a few staff members who were only part of one survey and not the other, and similarly some who responded to the pre-survey but did not complete the intervention.

A third limitation is in the format of the intervention. Because of the ongoing COVID-19 pandemic, this intervention was presented remotely over Microsoft Teams meetings, and so it was not possible to do more interactive case studies or multiple presentations that may have resulted in more measurable change in attitudes, knowledge, and skills.

Finally, while this project and survey measured post- intervention competencies for nurses, such as knowledge gain and changes in attitudes, it did not capture patient outcomes that include physiologic outcomes, patients' perception of care, satisfaction, and trust, which is the purpose for these interventions. Pre- and post-intervention surveys can assess skills focused on affirmative practice for providers, but more studies and direct surveys of the patient population are needed to assess the impact of these interventions have on this population over time.

Nursing implications and recommendations

This project has demonstrated there is not enough education about TGNB patients and unique healthcare needs given to students during nursing school. The average amount of time given (approximately two hours) during school is simply not enough to capture the intricacies and potential complications when caring for the TGNB population.

Eventually, a longitudinal incorporation of TGNB health topics into standard nursing curricula will be preferable to separate, optional continuing education opportunities. Something as simple as changes in the language used in lectures to be more inclusive can encourage nursing students to learn how to care for patients outside of gender binary restrictions. The integration of important aspects of transgender health should be placed into curricular content that traditionally focuses on cisgender people, including topics such as pediatrics, primary care, medical-surgical nursing, obstetrics, and gerontology (Dubin et al., 2018; Glick et al., 2018; Green et al., 2018). In the absence of adequate prior education, it is increasingly important to provide interactive educational interventions at places of employment or workshops to fill this knowledge gap.

Based on our qualitative feedback from participants who remarked upon the importance of this intervention and desire to learn more, it is important to establish a culture of inclusivity and open dialogue around providing gender-affirming care, which includes primary care and preventative care, hormone prescriptions, surgery, electrolysis, and affirming patients as whole persons. This means

honoring names, pronouns, decreasing barriers that make accessing health care difficult, meeting patients where they are when they present for care, and helping them to achieve their health goals in a collaborative and empowering way. In practice, nurses can normalize the sharing of pronouns when introducing themselves to their patients, request opportunities for local organizations to come present to staff and educate them about the services they provide to this population, bring in additional experts for interactive case studies.

Conclusion

The TGNB population suffers from many unique healthcare inequities and access disparities, as well as experiencing higher incidences of sexual assault, mental health issues, and negative interactions with healthcare providers. In order to provide holistic, gender-affirming care providers must be educated about the unique needs of this population, but the amount of time dedicated for TGNB-specific and TGNB- inclusive healthcare in nursing education is simply not enough to meet the needs of this population. Medical practices and clinics have an opportunity to fill this gap by bringing in additional training opportunities and working to create a culture of inclusivity and learning at their site. In particular, providing information about the interactions between medications used specifically for gender-affirming care and family planning as well as information about local organizations and resources seem to have the most likelihood to increase overall provider knowledge and skills based on the results of this study showing the greatest movement for these pieces of information. Nursing attitudes are likely to need more immersion and context with TGNB patients to overcome pre-existing biases and stigmas that can be hard to sway with one training.

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