

Reducing Gender Binarism in Primary Care through Gender Diversity Education

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Table of Contents

Abstract	6
Significance (Economic, Policy, Health System).....	8
Local Issue	8
Diversity Considerations.....	9
Problem, Purpose	9
Problem Statement.....	9
Purpose.....	9
Review of Evidence.....	10
Inquiry	10
Literature Search Strategy.....	10
Evidence by Theme.....	11
Discussion	20
Theory.....	22
Methods.....	23
IRB Approval, Site Approval	23
Ethical Issues.....	23
Funding, Projected Cost Savings, Revenue.....	24
Setting & Participants	24
Intervention	24
Implementation	25
Facilitators and Barriers	26
Feasibility and Sustainability.....	26
Evidence Based Practice Framework.....	26
Organizational Change Process	27

Study Design.....	27
Outcomes	27
Validity	28
Measurement Instruments.....	28
Demographic Data Collection	29
Quality of Data	29
Analysis Plan	30
Results.....	30
Setting and Participants.....	30
Intervention Course.....	31
Outcome Data.....	32
Discussion	33
Successes	33
Strengths	33
Results Compared to Literature	34
Limitations.....	34
Internal Validity Effects	34
External Validity Effects	35
Sustainability.....	35
Efforts to Minimize Limitations	35
Interpretation.....	36
Expected and Actual Outcomes	36
Effectiveness and Revisions of Research.....	36
Expected and Actual Impact to Health System, Costs, and Policy	37
Conclusion	37

Practical Usefulness of Intervention	37
Further Study	38
Dissemination	38
Impact to Healthcare.....	38
References.....	39
Appendices.....	47
Definition of Terms	47
CINAHL Keyword Search.....	48
Adapted PRISMA Flow Diagram.....	49
Evidence Table	50
Evidence Grid.....	75
Evidence Diagram.....	77
Theory, Concept Diagram.....	78
Appendix H Approvals.....	79
Anticipated Replication Budget.....	82
EBP Flow Diagram	83
Gender Attitudes Scale (Transphobia Scale)	84
Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCSS)	85
Project Timeline.....	86
Logic Model	87
Permission for Measurement Tool Use	88
Data Collection Template	90
Statistical Analysis Table	92
Logical Flow of Outcomes	94

Results95

Executive Summary.....96

Abstract

Primary care providers rarely receive formal educational content on gender diversity. However, as gender diverse persons compose close to 1.5 million individuals in the United States population, primary care providers must thoroughly understand gender diverse populations and the systems that marginalize their care. The purpose of this quasi-experimental research was to determine if educational sessions on gender diversity increased knowledge and positively affected attitudes regarding gender diversity in staff members at a network of 4 federally qualified health care centers in Northern Vermont. Two educational sessions totaling 90 minutes occurred over four months consisting of didactic content, case study work, and a discussion panel with a gender diverse community member. Outcomes were measured pre, post, and one month post education through administration of the Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCCS) to gauge changes in knowledge and the Gender Attitudes Scale (Transphobia scale) to measure changes in attitude. Friedman analysis showed a statistically significant decrease in transphobia from implementation to one month after intervention completion, $\chi^2(2, n=20) = 6.92, p = .031$. While gains were noted across both total and subscale LGBT-DOCCS measures, they did not rise to the level of statistical significance, likely due to the underpowered sample size. This study may impact the provision of more equitable care for gender diverse individuals, foster gender diverse patient retention, and reduce costs associated with individuals who defer primary care.

Keywords: gender diverse, gender diversity, LGBT, gender non-conforming, non-binary, nonbinary, transgender, TGD, TGNB, primary care, education, training, cultural competence, cultural safety

Reducing Gender Binarism in Primary Care through Gender Diversity Education

Primary care providers (PCPs) from all educational settings lack adequate education concerning sexual orientation, sex, and gender identity (Carabez et al. 2015; Felsenstein, 2018; Manzer et al., 2018; Rossi & Lopez, 2017; Yingling et al., 2016). As educational systems that produce providers undertake slow and often inadequate reforms, the language and education surrounding sexual and gender diversity are not stagnant and require continual education (Biddell, 2017; Felsenstein, 2018; Rossi, & Lopez, 2017; Tengelin & Dahlborg-Lyckhage, 2017; Yingling et al., 2016). Additionally, providers who received little to no sexual or gender diversity education are not immune to interactions with Lesbian, Gay, Bisexual, and Transgender (LGBT) and Gender Diverse (GD) patients (Appendix A). Studies show that barriers to care, rather than pathological conditions, lead to poor health outcomes for this population (Reisner et al., 2014). Gender diverse persons comprise .4%-.6% of the U.S. population, a far higher prevalence than many pathologies, risk factors, or conditions given greater weight in traditional healthcare education (Kattari et al., 2019; Yingling, 2016).

Investigation of how nursing theory addresses the concepts of gender and culture shows many divergent approaches. Utilization and deconstruction of the theory of cultural safety provides a guiding framework for the education of PCPs. Cultural safety allows gender diversity education to separate from the traditional educational approach of the homogenous experience of a specific population and forms education through interrogation of provider attitude and power dynamic. While cultural safety is a fledgling theory, it provides the most progressive and equitable path forward, allowing GD patients to define what satisfactory healthcare is (Gibbs, 2005a). Exposing providers to the cultural safety framework will affect other aspects of care predisposed to implicit bias producing secondary positive effects within the primary care system.

This project provided continuity to existing literature, which highlighted deficiencies in PCP education and how it harms GD patients by implementing supplemental education in the

PCP practice setting. It guided health care clinic staff to interrogate their assumptions, biases, and power dynamics in their interactions with gender diverse individuals using the framework of cultural safety.

Significance (Economic, Policy, Health System)

Provider education about the binary nature of healthcare and those it marginalizes is needed in all geographical settings. Gender diversity is often uncaptured on demographic forms, inhibiting measurement of the true scope of the population (Carabez et al., 2015; Rossi & Lopez, 2017). Additionally, gender diverse individuals often report deferral or denial of care due to real and perceived discrimination, further excluding them from adequate data capture (Whitman & Han, 2016). Discrimination protections based on sex and gender vary widely by region and state, and even when policy and law are established, discrimination still precludes care (American Civil Liberties Union [ACLU], n.d.).

Local Issue

Issues that pervade national and global data capture are also obscured locally. Vermont Department of Health (VDH, 2017) statistics report LGBT demographics; however, inclusion criteria for this population are undefined, rendering it impossible to delineate the degree of GD inclusion or exclusion and how to separate these statistics from data on sexual diversity. The LGBT Demographic Data Interactive (LGBT DDI, 2019) estimates 5.2% of Vermont's adult population identify as LGBT, greater than the national average of 4.6%. The LGBT DDI aggregates U.S. Census and Gallup data, which frame questions within the gender binary.

The 2015 U.S. Transgender Survey performed by the National Center for Transgender Equality (NCTE) received 163 responses from Vermont residents. With regards to health data, over one quarter reported that if they chose to seek healthcare, they had at least one negative interaction with a provider (National Center for Transgender Equality [NCTE], 2017). Twelve percent of respondents reported they did not seek healthcare when required due to fear of

mistreatment and unaffordability of care (NCTE, 2017). Nine percent of respondents reported that a professional invalidated or attempted to change their identity (NCTE, 2017).

Diversity Considerations

Gender diverse individuals have been continually identified as marginalized and expected to assume the role of educator to their providers when seeking healthcare. This project aimed to explore and reduce this patient burden when they seek care; however, the student investigator understood that including a panel of gender diverse participants as a part of this research asked them to undertake the same burden. Due to this, the student investigator partnered with the Pride Center of Vermont who agreed that a gender diverse employee would participate during their paid work hours.

This project was implemented in a rural setting in a state with limited demographic diversity. It is understood that the lens of providers as well as gender diverse patient lived experience will be predominantly Caucasian and likely not focus on intersectional marginalization in the way a project would require in more diverse populations.

Problem, Purpose

Problem Statement

Healthcare education lacks adequate content regarding gender diversity. Providers who receive inadequate education are not immune to interactions with GD patients. Gender diverse individuals have poorer outcomes than their cisgendered peers partially because of barriers to care (Baldwin et al., 2018). Filling this educational gap will allow for more equitable care to this population.

Purpose

The purpose of this research was to determine if educational sessions on gender diversity increased knowledge and positively affected staff members understanding and attitudes of gender diversity at a network of four federally qualified health care centers (FQHCs) in Northern Vermont.

Review of Evidence

Inquiry

In rural Vermont primary care clinic employees, does education on gender diverse persons and the prevalence of binarism in healthcare improve attitudes and understanding of gender diversity?

Literature Search Strategy

Literature for this inquiry was obtained from database searches. Dubin et al. (2018) performed comprehensive medical database searches in PsycINFO, PubMed, LGBT Life, and Education Source through December 2017. The LGBT Life and Education Source were not available databases for the student investigator, so these searches were not queried for more recent additions. The MedEd Portal was re-queried to include keywords *queer* and *gender divers** as well as published literature from 2018 onward and resulted in 55 records. PubMed and PsycINFO were re-queried for additions since 2018, resulting in four PsycINFO additions. The CINAHL database was queried to add analogous publications from nursing, resulting in a return of 68 records (Appendix B). Keyword searches in notable LGBTQIA+ journals, search engines such as Google scholar, and textbook references were also used in the search.

Most of the literature was ascertained by following references downstream from within initial sources. The difficulty of obtaining high-level literature for this topic speaks to various issues: the wide variety of search terms that must be used to adequately encompass publications that result in many articles extraneous to the topic, the scant amount of relevant literature available, and the lack of publication on this topic outside of journals devoted to gender and sexuality issues. While many articles validated the need for this inquiry, the included literature focuses on evolving that need into educational information on gender diversity through the lens of cultural safety.

Required for inclusion were articles available in full text, written or translated into English, and from countries whose healthcare education follows a Western model. Broad search

terms required for adequate capture require numerous exclusion criteria to focus on the intended inquiry. Articles were excluded if rooted in transgender binarism, focused on sexual pathology regarding transgender individuals, or related to medical-based transition. Articles were excluded if they used the LGBT acronym only to interrogate sexuality. Articles were omitted if they focused on non-generalizable specialty care, LGBT clinicians, or the diversity of binary gender representation rather than patient gender identity. Six hundred and five articles from database searches were excluded based on these criteria through title and abstract identification, and after full-texts articles were accessed, 107 were further excluded (Appendix C).

Forty articles met these criteria and substantiated five main themes (Appendix D): three level III studies, six level IV studies, two level V studies, 21 level VI studies, and nine level VII studies. These publications encompass a representative cross-section of published literature, skewed toward theoretical and conceptual frameworks, qualitative research, and secondary data synthesis.

Evidence by Theme

Five predominant themes emerged (Appendices E & F): cisgenderism dominance, deficient provider education, lack of unified terminology, the insufficiency of the theory of cultural competence to address this issue, and the adverse health outcomes that arise from inadequate or biased care toward gender diverse individuals. The latter four themes are all affected by the pervasive framework of cisgenderism.

Cisgenderism Dominance

Healthcare and most of Western society since the advent of Christianity are built upon the presumption of a cisgendered experience (Thorne et al., 2019; van Heesewijk et al., 2022). Cisgenderism is defined within this inquiry as anything outside the binary of male or female gender considered non-normative (Ansara, 2015). Cisgenderism invalidates how individuals perceive their gender and bodies by pathologizing, misgendering, and applying objectified

biological language onto them (Ansara, 2015). Clinicians are educated in settings that inherently succumb to normativity and lack the capacity for the discord required to shift thinking, leading to inherent bias (Eliason, 2017; Meyer & Leonardi, 2017; Nicholas, 2018). Sherman et al. (2021) surveyed undergraduate nursing students before sexual and gender diversity (SGD) education and found that most students assumed patients and peers identified as cisgender upon introduction rather than approaching interactions with neutrality. Pervasive cisgenderism places transgender identities within a binary structure and erases nonbinary and third gender identities (Ansara, 2015; Thorne et al., 2019). The dichotomy of cisgenderism moves non-normative gender identity into an othered category, reduces to pathology, or is discarded as an unnecessary piece of healthcare, despite research showing the centrality of gender validation to health and wellbeing (Kellett & Fitton, 2016).

Provider Educational Deficiencies

Omission of Content. The basis of most research concerning provider attitudes and perceptions of gender diverse persons has a genesis in the lack of the most basic LGBT education during a healthcare provider's educational tenure (Ellaway et al., 2021; Felsenstein, 2018; Manzer et al., 2018; Kellett & Fitton, 2016; Rossi & Lopez, 2017; Weingartner et al., 2022; Yingling et al., 2016). The limited education primarily centers on sexual (LGB) rather than gender (T) identity, problematically leading to frequent conflation of the two (Carabez, 2015; Felsenstein, 2018; Rossi & Lopez, 2017; van Heesewijk et al., 2022; Yingling et al., 2016). Fiani and Han (2018) and Yingling (2017) identified most curricular guidelines regarding the inclusion of SGD education are framed as suggestions rather than requirements. The lack of inclusion of SGD topics by national certification bodies on examination leads administrators to deprioritize delivery of this content due to lacking time, standards, and faculty who vocalize comfort with the material (Paradiso & Lally, 2018).

Lack of SGD content inclusion has been identified in surveys of healthcare learner attitudes as a deficiency within healthcare education (Felsenstein, 2018; Minturn et al., 2021;

Rider et al., 2019). Administrators concur with the noted deficiencies and often rank delivery of this content as poor and subpar (Dubin et al., 2018; Rider et al., 2019). Research shows that where training is included within the healthcare curriculum that it is often only placed within specific pathophysiologic modules or, in the case of Underman et al. (2016), in a cohort of patient interactions deemed as potentially difficult or confrontational.

Gender Diversity Content Presentation and Inclusion. Education concerning transgender individuals is largely based in binarism and focuses on medical pathology, mental, sexual, and reproductive health further framing transgender individuals as a problem requiring remedy rather than a valid body and identity (Bidell, 2017; Carabez et al., 2015; Manzer et al., 2018; Yingling et al., 2017). Sexual and gender diversity curriculum inclusion focuses primarily on sexual diversity, and there is rarely a breakout of time allocation when gender diversity is included (Berenson et al., 2020; Calzo et al., 2017; Dubin et al., 2018). Thompson et al. (2019) stated that as of 2017 that no transgender medical education included content specifically relating to needs of the non-binary patient. Educational inclusion beyond endocrine, genitourinary, reproductive, and mental health modules are often elective, further emphasizing SGD content is not essential to care and allows for self-omission by those who may hold the most harmful views (Dubin et al., 2018, Minturn et al., 2021). Piloted modules are often isolated and surveyed for efficacy immediately after completion, leaving the long-term efficacy of the education in question (Dubin et al., 2018; Leslie et al., 2017; Ruud et al., 2021). Elective modules often present SGD material within the same program and do not accurately screen for conflation before evaluation if the two concepts are presented or evaluated separately (Bidell, 2017; Bretherton et al., 2021; Dubin et al., 2018). Strousma et al. (2019) astutely discussed that due to these deficiencies with existing education, hours of content presented should not be correlated with the quality of content.

Discomfort, Morality, Belief. Strousma et al. (2019) discussed that the presence of transphobia in healthcare differs from that of society due to medicalization and pathologization.

Systemic healthcare transphobia coupled with provider transphobia are the strongest indicators of educational programming success or failure (Strousma et al., 2019). Statistically significant knowledge gains were mitigated when participants held transphobic beliefs (Strousma et al., 2019). Cisgenderism dominance shapes SGD as political and thus something which members of the healthcare system feel entitled to separation from due to moral belief or discomfort (Carabez et al., 2015; Manzer et al., 2018; Meyer & Leonardi, 2017; Paradiso & Lally, 2018; Rider et al., 2019; Sherman et al., 2021; Tengelin & Dahlborg-Lyckhage, 2016). Nicholas (2018) recognized that measured knowledge gains are often incorrectly correlated with attitude change or increases in provider sensitivity and cautions against drawing this conclusion. Discomfort, fear of getting it wrong, and educators who are less willing to include content are drivers of non-participation (Paradiso & Lally, 2018; Rider et al., 2019). Students have also reported that education on SGD felt overwhelming and resulted in them feeling less equipped to interface with patients who identified as such (Calzo et al., 2017).

Health Outcomes of Gender Diverse Individuals

Introduction sections for most studies include statistics regarding the negative health outcomes of gender diverse individuals. Sub-topics of relevance to this inquiry delve into the following: the pathologization of care and focus solely on negative outcomes, the relationship between social stigma, harm, and barriers and equitable care, how healthcare providers contribute to direct harm, and the burden placed on gender diverse individuals to advocate and teach their providers.

Focus on Negative, Pathology. While numerous studies discuss higher rates of depression, anxiety, abuse, and suicidality GD persons face, Baldwin et al. (2018) and Stanton et al. (2016) considered the negative focus on these aspects of the gender diverse experience and how it discounts affirmation of one's gender identity as a protective factor to their wellbeing. Even when the gender diverse experience is not being discussed as a pathology, it is often mentioned only as a risk factor for other health conditions (Kellett & Fitton, 2016). Within the

framework of cisgenderism dominance, providers often assume gender diverse individuals' identity only matters when they require reassignment or medication to mold their identity to the binary societal paradigm (Nicholas, 2018; Whitman & Han, 2016)

Social Harms and Barriers to Care. Barriers and harms caused by society deter, or prevent, GD individuals from care. Providers must be aware of these harms and barriers and be vocal advocates for change and advancement; otherwise, their educational gains will be inaccessible to patients (Meyer & Leonardi, 2017). Insurance systems perpetuate cisgender normativity by requiring pathological diagnosis for access to gender-affirming care.

Policy limitations may cause discordance between legal documentation and identity, criminalize care, and allow for overt and covert discrimination (Dubin et al., 2018). Stigma, bias, and discrimination claim responsibility for higher rates of substance use, non-suicidal self-harm, suicidality, human immunodeficiency virus (HIV) and sexually transmitted infections (STIs), and overall poor physical health (Baldwin et al., 2018; Fiani & Han, 2018). Bias, discrimination, and stigma do not cease outside the walls of healthcare provision and societally push SGD persons into disproportionately higher rates of poverty, incarceration, houselessness, underemployment, and under/uninsured status (Baldwin et al., 2018; Stanton, 2017). Reisner et al. (2014) demonstrated that when SGD individuals have equitable access to care that many health behaviors that can lead to chronic illness can be mitigated. However, systems of oppression, microaggression, and discrimination dissuade almost 30% of those who identify as gender diverse from obtaining medical care (Bidell, 2017).

Harms Perpetuated by Providers. Leslie et al. (2017) and Minturn et al. (2021) directly tied the lack of provider education on SGD to poor patient outcomes. Provider's attitudes have ranged from hesitant to outright refusal to provide even basic care to SGD individuals (Minturn et al., 2021; Sundus et al., 2021). When providers do interact with SGD patients, they have been reported to fail to acknowledge or address any aspects of one's gender or sexuality, intentionally or unintentionally misgender patients, provide inequitable care due to

bias, presume a universal experience of all GD patients, and refer care that does not require specialist management (Ansara, 2015; Baldwin et al., 2018; Kellett & Fitton, 2016; Tengelin & Dahlborg-Lyckhage, 2016). Whitman and Han (2016) noted that up to 6% of sexual assaults against GD individuals are perpetrated by healthcare providers or social service workers. Whitman and Han (2016) also discussed the discordance between providers' reported competency and awareness in interaction with GD individuals. Many clinicians who endorsed problematic items and beliefs upon survey stated they universally felt competent in assessment, and over half felt qualified to deliver specialized care suggesting high rates of blindness to bias (Whitman & Han, 2016).

Teaching and Advocacy Burden. Educator reluctance to teach SGD due to discomfort or lack of knowledge places the educational burden on SGD individuals and patients (Baldwin et al., 2018; Rider et al., 2019). With high conflation of sexual and gender diversity, sexually diverse individuals are often asked to present as subject matter experts on gender diversity (Meyer & Leonardi, 2017). Many providers have reported that if GD patients are unwilling to teach about or advocate for their needs, they do not warrant addressing (Meyer & Leonardi, 2017).

Lack of Unified Language/Terminology

The language used to describe SGD is not static (Thorne et al., 2019). The spectrum of terminology and definitions for terms relating to sex, sexuality, and gender encompasses definition, politics, and personal belief (Corwin, 2009; Ellaway et al., 2021; Fiani & Han, 2018; Rossi & Lopez, 2017; Thorne et al., 2019). Language ranges from colloquial to formal, can include or omit hyphenation, and is not discarded as it evolves, resulting in profuse terminology which must be included within search parameters to adequately capture the scope of experience and research in literature (Corwin, 2009; Rossi & Lopez, 2017; Thorne et al., 2019). Within this vastness, three sub-themes arise: the conflation of sex and gender, cisgendered norms valuing

binary language leading to gender erasure and lack of data capture, and the imposition of definition on individuals rather than allowing individuals to define themselves.

Conflation of Sex and Gender. While the LGBT acronym has been beneficial for inclusion into colloquial discourse, without further discussion often leads to a conflation of the concepts of sex, sexuality (LGB), and gender (T), which leads many clinicians to presume a homogenous experience (Ansara, 2015; Carabez et al., 2015; Gallego & Knudsen, 2015; Thorne et al., 2019). Using less expansive acronyms additionally highlights transgender as the only gender diverse identity perpetuating its binarity to mean the opposite of cisgendered, further cementing provider assumption that the individuals require or desire medical intervention for validation (Baldwin et al., 2018; Saewyc, 2017; Whitman & Han, 2016). Transgender is often used in the literature to describe identities both within and outside of the binary system despite many GD individuals stating this does not accurately reflect their identity (Ansara, 2015; Fiani & Han, 2018; Kellett & Fitton, 2016; Nicholas, 2018). Studies that investigate and evaluate educational interventions involving both sexual and gender diversity do not often measure if the taker is conflating the two terms, evaluating SGD as a singular topic, or centering evaluation entirely around sex and sexuality (Bidell, 2017; Stanton et al., 2016).

Gender Erasure and Systems Deficiencies. Pervasive medical and societal cisgenderism is rooted in everything from the delivery of care to the creation of our recordkeeping systems (Manzer et al., 2018). Resultant in this constrictive language is a failure to evolve to adapt to new language and the erasure of historical third gender identities (Fiani & Han, 2018; Thorne et al., 2019). The lack of data capture limits research and funding and perpetuates the denial of gender diverse individuals within a practice (Baldwin et al., 2018). Gender diverse individuals also find their experiences around family and social structure and support marginalized and erased when clinicians believe that accepting language ends with pronoun usage (Manzer et al., 2018).

Language is Imposed Upon, Rather than Asked for. Rossi and Lopez (2017) expanded upon the theme of erasure by noting that the healthcare system does not often solicit feedback from GD individuals about language that works for them but rather provides limited options that many do not feel represent their identity. Insufficient options may include outdated, triggering, or othering language and identity erasure when forms only include binary options and the literal word other (Rossi & Lopez, 2017). The imposed language implicates power flows from provider to patient and subconsciously communicates to patients that if their identities are not ones listed, they are invalid (Rossi & Lopez, 2017).

Insufficiency of Cultural Competence

The literature agrees that ongoing and additional healthcare provider education surrounding binarism and gender diversity is needed, and the framework of cultural competence is inadequate for achieving beneficial care (Bidell, 2017; Nicholas, 2018; Rossi & Lopez, 2017; Tengelin & Dahlborg-Lyckhage, 2017; Whitman & Han, 2016; Yingling et al., 2016). Of the studies included in this evidence synthesis, 22 of them raise the ineffectiveness of content delivery using the theory of cultural competence in some form. Cultural competence lacks dynamism to keep pace with language evolution, implies an end to achievement, and fails to account for both social and structural influences acting upon cultures. It does not account for biases held by learners, and it perpetuates dominant and minority power structures (Rossi & Lopez, 2017).

Insinuates Terminality. The framework of cultural competence presumes that only a static knowledge set is required to understand a minority group (Bidell, 2017; Rossi & Lopez, 2017). Competence fails to capture the evolving needs of SGD individuals as language, social acceptance, culture, and political climate evolve (Bidell, 2017). Using competence as a guiding framework has resulted in education that is presented and evaluated in a singular instance rather than as an introduction to lifelong learning (Calzo et al., 2017; Dubin et al., 2018; Underman et al., 2016; Yingling et al., 2017)

Omits Structural Influences. Nine studies reflect upon the necessity of examining social and structural influences within our society that harm GD people. Baldwin et al. (2018), Meyer and Leonardi (2017), and Tengelin and Dahlborg-Lyckhage (2016) stated it is insufficient to interrogate the self to improve if normative aspects of society that subordinate gender diverse individuals are still intact and not understood and challenged by the learner. MacKinnon et al. (2021) and Meyer and Leonardi (2017) specifically identify cisnormativity and heteropatriarchy as norms to be challenged. The necessity of examining institutional, social, and legal bias and prejudice is raised by Baldwin et al. (2018), Dubin et al. (2018), Kellett and Fitton (2016), and Rossi and Lopez (2017). Stanton et al. (2016) discussed the pathologization inherent with the othering of GD individuals, which leads learners to discount the benefits of community connectedness. Yingling et al. (2017) noted that even if cultural competence were an effective content delivery mode, many curricular bodies blend culture and ethnicity, which omit SGD individuals from these units.

Does not Interrogate Self. Cultural competence removes agency and autonomy from the SGD individual and places them into a pre-determined box full of characteristics that may or may not define their valid identity (Nicholas, 2018). Interrogating the effect of dominant systems of heteropatriarchy and cisnormativity is essential. However, providers must also work to reflect on the effects of the dominant norms on personal belief and bias (Sundus et al., 2021). In a pre-survey for their educational curriculum implementation, Minturn et al. (2021) found that 80% of their study population held harmful internal bias toward SGD individuals. Pre/Post evaluation by Strousma et al. (2019) revealed that many participants did not believe learning about or providing care to SGD individuals was part of the responsibility of conventional medicine. Providers often confuse culturally competent care with a positive therapeutic relationship (Manzer et al., 2018). As evidenced by Whitman and Han (2016), many providers often vastly overestimate their capability to provide sensitive and beneficial care to SGD individuals. Providers must be made aware of these personal biases that harm patients;

otherwise, checking boxes to define a SGD patient will remain insufficient to mitigate negative outcomes (Whitman & Han, 2016). Rossi and Lopez (2017) stated that for beneficial outcomes for SGD patients, providers must shift their mindsets from the concept of *working on* to the concept of *working with* to ensure capture of one's identity and needs.

Perpetuates Othering. Cultural competence discounts unique lived experiences for the homogeneous synthesis of a minoritized group (Baldwin et al., 2018; MacKinnon et al., 2021). Content delivery becomes authoritative rather than collaborative when it excludes the minority group being presented (Baldwin et al., 2018; Kellett & Fitton, 2016; Paradiso & Lally, 2018; Tengelin & Dahlborg-Lyckhage, 2016). If SGD individuals do not fit neatly into the already othered paradigm shaped by the dominant group, their unique identities are often rendered radical and discounted (MacKinnon et al., 2021). Competence encourages singular othering, presuming minority groups do not intersect and that multiply minoritized individuals do not have unique needs. Cultural competence disserves learners by shifting them away from critical thinking into a flowsheet and check-box mindset (Sundus et al., 2021; Tengelin & Dahlborg-Lyckhage, 2016). This approach makes it more difficult for providers to reconcile the diversity of needs of SGD individuals and deemphasizes SGD individual autonomy and the collaborative nature of the provider/patient relationship (Sundus et al., 2021; Tengelin & Dahlborg-Lyckhage, 2016). Nicholas (2018) notes that the quest for competence as a means for prejudice reduction leaves harmful norms intact. Stanton et al. (2016) discuss how competence tends to focus on harms and othering factors while neglecting protective aspects of minority groups that reinforce resilience and support thriving.

Discussion

Evidence Alignment and Strength

In the available literature concerning GD in healthcare education, 31 of 40 studies identified systemic deficiencies that require improvement. The themes and sub-themes that arose from the available literature reinforced the inadequacy of the current system and called for

change, as well as remediation for providers who have graduated without any or inadequate knowledge about the care of GD patients. All identified articles are level three evidence or lower, with three-quarters of identified articles classified in levels six and seven. Three level three studies, six level four studies, and two level five studies were identified in the search. The plethora of lower-level evidence for this project aligns with its nascency. Evidence discussed the significant barriers to challenging dominant norms. The underrepresentation of this population in the data obscures the significance of this issue which contributes to limited funding and resources to build more robust evidence. Additionally, literature identified significant barriers to challenging the cisgendered norms of Western healthcare.

Limitations

The identified vastness of terminology used to encompass the GD population raises the possibility that some vital research was omitted. Less than five percent of identified research through PubMed, PsycINFO, CINAHL and MedEd Portal query met the inclusion criteria for this synthesis, with a quarter of accessed articles excluded for commentary or perspective writing. The focus on discussing the need for GD education over implementing education comes across largely as performative allyship. One included study was not themed as it provided abstract and educational objectives with course curriculum materials but excluded discussion of population, implementation, or limitations (Grubb et al., 2013). Some research that was focused through a more predominantly sex and sexuality-centered lens was included due to nominal inclusion of gender diversity even if evaluations did not adequately measure or separate the two.

Gaps

Biddell (2017) discussed that much of the literature agrees on what constitutes incompetence but does little to advance how to shape competent, inclusive, and respectful care. It becomes clear through evidence synthesis and analysis that while many studies identify the need for training concerning GD care, few address strategies (Sundus et al., 2021). While research concludes that gender diverse persons should be brought in to consult upon and deliver

content, this inclusion is not always conducted. Studies do not appear to build on previous evidence that has brought forth the need to evaluate content delivery multiple times after implementation to gauge the sustainability of returns and integration into practice. Other identified gaps include the insufficiency of using cultural competency to structure education and dismantling cisgendered norms that lead to bias in the provider mindset. The merger of performative allyship and cultural competence developed in systemic isolation only furthers the notion of the GD population requiring little more than a reminder to use pronouns and occasionally discussing their identity as a risk factor for comorbid conditions. Baldwin et al. (2018) and Manzer (2018) noted that linguistic education is more complex than pronoun usage.

Theory

Cultural safety aims to transfer the power of the definition of a successful patient/provider interaction from the provider to the patient by interrogating culture internally instead of externally (Gerlach, 2012; National Aboriginal Health Organization [NAHO], 2006). Cultural safety asks nurses to deliver care that respects all aspects of a person rather than deliver care irrespective of a patient's culture (NAHO, 2006).

The driving concept of cultural safety that makes it unique to cultural competence is the notion of power (Curtis et al., 2019). While cultural competence and cultural safety share many common threads, cultural safety centers health professional reflection on interpersonal power differences and how the power transfer can facilitate optimal care (Curtis et al., 2019). Having healthcare providers interrogate the systems within which they operate through a lens of historical repression, domination, and systemic colonialism, shifts perspective to expanding the dominant culture to include historically *othered* populations rather than the perspective of cultural competence, which has typically been limited to simply understanding the *other* (Curtis et al., 2019).

Concept Alignment

Cultural safety aims to use its lens to improve health care and outcomes for marginalized populations through interrogation of the attitudes and power of those providing care (Gerlach, 2012). It centers on understanding power inequities, often hiding within implicit bias (Curtis et al., 2019). Learning and knowledge acquisition are large components of cultural safety; however, unlike cultural competence, this acquisition focuses on the provider rather than the patient (Curtis et al., 2019). The theory of cultural safety guided this research as it contains the greatest alignment with the inquiry concepts (Appendix G).

The NAHO (2006) describes that care dictated as *unsafe* results in patients being dissuaded from seeking care, whether directly or indirectly. Bidell (2017) identified that systems of oppression, microaggression, and discrimination dissuade almost 30% of those who identify as gender diverse from obtaining medical care. Authors of existing research suggest that the GD population has traditionally been ill-served using the approach of cultural competence and the myriad of theories composed by dominant cultures (Biddell, 2017; NAHO, 2006; Nicholas, 2018; Tengelin & Dahlborg-Lyckhage, 2017; Yingling et al., 2016).

Methods

IRB Approval, Site Approval

The University of Missouri Kansas City (UMKC) Institutional Review granted approval for this research on August 19 2022 (Appendix H). UMKC DNP Faculty approval was granted June 27 2022 and site approval was granted the following week after a meeting of the board of advisors (Appendix H).

Ethical Issues

Participant demographic information and surveys were deidentified through the Research Electronic Data Capture (REDCap) program. No personally identifiable information was obtained. Educational sessions were closed to the public and not recorded to ensure a space where providers felt comfortable engaging in open discussion. The question-and-answer portion of the second session was anonymous to protect participant identity. The research site identified

for the implementation of this project served as a clinical location for the student investigator, resulting in working relationships with employees within the practice. This may have led to a level of colloquial conversation and comfort that would not be replicable if this curriculum had been implemented by a facilitator unfamiliar with their audience.

Funding, Projected Cost Savings, Revenue

No external funding was utilized for this project. Project replication would require two hours for each running of session one, and two hours for session two, as well as time for outreach and coordination of scheduling for practice and panelists. Limited funding may be required for compensation and reimbursement of travel expenses for panel members (Appendix I). Project site owns all technological and facility resources required to facilitate educational sessions, and staff salary time is built-in to pre-scheduled staff meetings. Revenue could be anticipated as a secondary outcome of this project because of a lower attrition rate for GD individuals as well as attraction of GD patients who seek skilled providers.

Setting & Participants

This research utilized a convenience sample. Convenience sampling involved the sites and employees of FQHC network. Participants were in roles involving patient care, including physicians, nurse practitioners, social workers, registered nurses, licensed practical nurses, medical assistants, dental hygienists, and reception and administrative staff.

Intervention

This intervention consisted of two educational discussions over four months. The first session was delivered by telepresence during a previously scheduled staff meeting and conducted by the student investigator. Session one consisted of a Gender:101 presentation and interactive work around recognizing and correcting binaristic language within healthcare. The second session was conducted in-person during a previously scheduled all-staff meeting consisting of a facilitated discussion between the student investigator and a gender diverse community member followed by an anonymous question and answer session.

Implementation

Site management notified all eligible members of their clinics of the training occurring during previously scheduled meetings via email. Participation in the project presumed informed consent (Appendix J). Two weeks prior to the first session, an initial survey was emailed from UMKC REDCap to potential participants. This survey collected participant demographic data as well as initial completion of the modified gender attitudes scale (Appendix K) and LGBT-DOCSS (Appendix L) surveys. Reminders for survey completion were sent to all who had yet to participate on a weekly basis until all sites had completed session one training.

The first session began with a five-minute facilitator introduction and the introduction of goals for both sessions and ground rules for a safe environment. Session lecture content was presented by the student investigator over fifteen minutes and covered the definitions and differentiation of sex and gender and the binary model of SGD within healthcare and education. The remaining ten minutes consisted of interactive work surrounding language and phrasing to reduce binaristic language usage in practice.

The second session was a discussion between the student investigator and a gender diverse staff member of the Pride Center of Vermont. The first five minutes addressed the introduction, goals, and ground rules and was led by the student investigator. This was followed by a 30-minute facilitated discussion between the student investigator and the gender diverse community member about their experiences as a gender diverse individual and how that has impacted their health care. During this time a box was passed around the room for the submission of anonymous questions from the audience. The remaining 25-minutes were spent discussing audience submitted questions. The survey tools (LGBT-DOCCS and Transphobia scales) were re-sent two hours after completion of this session, with two reminders for completion sent over the following week.

Final evaluations were sent 28 days after the completion of the second session to all participants who completed both sessions. Reminders to complete evaluations were sent twice

over seven days. Thirty-six days after the completion of session two, follow-up evaluations were closed, and data analysis commenced (see Appendix M).

Facilitators and Barriers

Facilitators of the research consisted of the project advisor, a nurse practitioner within the organization with a previously identified interest in the research topic, as well as the chief executive (CEO) and medical officers (CMO) of the provider organization. The Pride Center of Vermont assisted in compensated panel member participation representative of the gender diverse community. Cost was not a barrier within this project due to the supportive community infrastructure. Replication depends on leveraging existing relationships or funding to compensate gender diverse panelists for their transportation and time lent to participation. The primary barriers anticipated were underlying attitudes towards and exposure to gender diverse individuals as well as staff availability to attend programming and complete multiple evaluations.

Feasibility and Sustainability

This project has high feasibility as well as sustainability. Since the nascent discussion of the project with the CMO of the practice group, multiple staff members have approached them with requests for training regarding gender diversity. Clinicians are beginning to encounter more gender diverse patients and are self-identifying gaps within their training, likely resulting in increased enthusiasm for this offering. This topic has been strongly identified as a need within the literature, but there was limited guidance as to how to approach implementation. This project filled the gap while meeting unique practice needs and scheduling rather than attempting to implement a solution designed for a larger and more urban setting.

Evidence Based Practice Framework

This project was conducted within the framework of the Johns Hopkins Nursing Evidence-based Practice Model (JHNEBP). Both this model and this inquiry began with curiosity about standards around a problem (Dang et al., 2021). The JHNEBP is a continual and

dynamic process open to refinement and flexibility which meshes well with a project that is rooted in the necessity of systemic change rather than competence completion (Dang et al., 2021).

Organizational Change Process

Kotter and Cohen's Model of Change was utilized as the guiding change model for this project. This change model leverages emotions as the key to gaining organizational change buy-in to drive the process (Melnik & Fineout-Overholt, 2019, p. 48). The project touched on many of Kotter and Cohen's outlined steps during the education session process, outlining the urgency of the problem, why it needs to change, why it is worthwhile, and explaining that participation in this program is only the first of many short-term gains attendees can undertake for the gender diverse community. Periodic revisitation of this curriculum for all employees, not just new hires, allows for ongoing and more profound topic exploration and engage new employees, ensuring the change becomes embedded and not temporary.

Study Design

This project was quasi-experimental, consisting of assessment pre-intervention, post-intervention, and one month after completion. Analysis consisted of two assessment tools, the Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCSS) and the modified gender attitudes/transphobia scale, as well as the collection and integration of demographic data (Biddell, 2017; Strousma et al., 2019). The pre- and post-intervention design allowed the gathering of baseline participant knowledge about the subject and any demographic data which may influence underlying beliefs or receptiveness to presented information. Subsequent one-month post-testing filled an identified gap in the research related to longevity of acquired gains.

Outcomes

The primary outcome was a significant increase in staff knowledge and attitude with regard to gender diverse persons as measured through a modified gender attitudes scale and

LGBT-DOCSS surveys at the end of the educational sessions and for at least one month after the sessions (Bidell, 2017). The desired secondary outcome was grassroots interest in a practice audit to investigate current practices through the lens of gender diversity to identify change opportunities (see Appendix N).

Validity

Validity, both internal and external, was anticipated to be relatively strong. Internal validity was strengthened by accounting for pre-existing exposure to gender diverse individuals or other factors which may lend a participant to a stronger baseline of knowledge. Uncontrolled discussion of course material was considered an outcome of the primary intervention that would not otherwise occur if the educational program had not been initiated. Attrition may have occurred due to outside time commitment or schedule availability, which could complicate the measurement of the impact of individual attitude change but would contribute to an increased knowledge base and exposure within the practice. Both identified measurement tools have been shown to be reliable measures of the outcomes.

External validity was promoted through a transferrable and adaptable intervention to other similar geographic and socioeconomic locations. The utilization of GD individuals who reside close to the location of intervention who are willing to provide their expertise will shape future courses to specific locations and attitude and attenuation with local dynamics. Structure and evaluation tools will be transferrable, allowing for dynamic and local content. Due to the expected small sample size, the results cannot be generalized to the target population. Results may be limited in their generalizability due to decreased religiosity and political leanings of the region compared to other regions of the United States.

Measurement Instruments

Gender Attitudes Scale (Transphobia Scale)

The gender attitudes scale (Appendix K) was adapted by Strousma et al. (2019) from a previously validated transphobia scale developed by Nagoshi et al. (2008). Strousma et al.

(2019) removed the first question regarding flirtation but left the remaining eight items from Nagoshi et al. (2008) intact; the reason for this adaptation was not discussed. The Nagoshi et al. (2008) transphobia scale was found to have a Cronbach's alpha of .82 with a test-retest stability of .88. This information is important to obtain as Strousma et al. (2019) found that transphobia was a far more potent predictor of competent patient care than education. This assessment is predicted to take less than five minutes to complete and was administered prior to training and in a one-month follow-up assessment. Request for permission to utilize this tool was requested from Dr. Nagoshi on 12 April 2022 and granted on 15 April 2022 (Appendix O).

Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCSS)

This scale was created by Markus Bidell in 2017 to fill an assessment gap regarding sexual and gender-based assessments, excluding gender diverse assessment measures. This assessment scale underwent both exploratory and confirmatory factor analyses as well as reliability estimates (Cronbach's alpha = .86), test-retest reliability ($r = 0.87$), construct validity, and convergent and discriminant validity with existing LGBT assessment tools (Biddell, 2017). The assessment consists of participants rating agreement with a statement, for 18 questions, on a seven-point Likert scale. Ten minutes were allotted for this survey. Permission to utilize this tool was requested via email on 12 April 2022 and was granted on 14 April 2022 (Appendix O).

Demographic Data Collection

The student investigator collected demographic data from all participants during the initial assessment prior to commencement of the first educational session consisting of job title/licensure information and previous exposure to GD content. Previous educational exposure to GD content was collected, with participants indicating approximately how much training they have previously experienced in 30-minute increments and if that training was encountered in the educational or continuing education setting.

Quality of Data

Data were collected through established validated measurement tools administered through REDCap (Appendix P). Each participant was given a unique URL unknown to the investigator that allowed linkage between assessment tools and anonymity of participants. Anonymizing data aimed to reduce response bias. *A priori* power analysis for repeated measures, non-parametric, within factors ANOVA with an alpha of 5%, 80% power, and a partial η^2 of .06 (medium effect) resulted in a requirement of 90 participants (Faul et al., 2009). Collection of data one month after intervention fills gaps identified in literature regarding examining the diminishing effect of the intervention over time.

Analysis Plan

The addition of the one-month post-test required the use of a Friedman analysis (Appendix Q). Jamovi was used to perform statistical analysis (see Appendix R for statistical analysis table template; The jamovi project, 2022).

Statistical significance was defined as $p < .05$. It was anticipated that gains would weaken as time from the final educational session lengthens as this project challenges the dominant norms of both healthcare and society (Tengelin & Dahlborg-Lyckhage, 2017).

Results

Setting and Participants

Initial demographic information and surveys were sent to 72 eligible staff members on September 27. Session one took place through a telepresence session on October 12, 25, and November 2, 2022, corresponding with individual practice location staff meetings. One practice location did not hold formalized staff meetings as the employees all co-work at other locations. Session two occurred January 10, 2023 during a quarterly all-site, all-staff meeting with greater than 90 participants in attendance as non-patient administrative staff were also present.

The twenty participants who completed all three surveys were demographically comprised of three administrative staff, one behavioral health/social worker, two physicians,

two medical assistants, three registered nurses (RN) or licensed practical nurses (LPN), and eight nurse practitioners (inclusive of primary mental health NPs).

Nine participants reported receiving prior education on this topic, though seven were strictly through continuing education. Two participants who reported this topic was covered during their initial education reported an hour or less of content time. Continuing education averaged 6.8 hours with a mean of 4 hours.

Intervention Course

Forty-five staff members returned completed demographic information, and 41 completed pre-session survey responses. At the conclusion of session two, all 45 prior respondents were requested to repeat the two surveys, with 28 completing the immediate post surveys. Twenty-eight days after session two, on February 7, 2023, a third request was sent for the completion of surveys, leading to 24 responses. This resulted in a dataset of 20 participants who completed the two surveys at all three time periods, indicating an attrition rate of 51% from initial survey completion.

There were two major components to the intervention, and no major deviations were experienced from the original conceptual vision. Session one consisted of a five-minute introduction with ground rules and goals, followed by 10 minutes of lecture content presented by the student investigator, which covered the definitions of binary, sex, gender, gender expression, and gender identity, as well as the impacts of knowledge of these terms. The subsequent ten minutes included interactive exercises focusing on the presumption of a binary experience. The last five minutes were spent discussing the next steps of the educational program.

Session two began with a five-minute introduction, goals and reminder of ground rules, and distribution of blank paper and a writing instrument to every participant. Thirty minutes then entailed a moderated discussion with a gender diverse panelist as a box was circulated to collect questions. Following the panel presentation, the student investigator read the

anonymous questions to the panelist during a twenty minute interactive dialogue. Five minutes at the end focused on thanking participants for their time and informing them that they could expect to receive follow-up surveys within the hour, followed by the last set of surveys 28 days later.

Outcome Data

Gender Attitudes Scale (Transphobia Scale)

The mean score of the transphobia scale was calculated for each response, consistent with analysis performed by Strousma et al. (2019). A statistically significant reduction in transphobia over time was found $\chi^2(2, n=20) = 6.92, p = .031$ (Appendix S, figure 1). Post-hoc pairwise Durbin-Conover testing revealed that assessment prior to session one and one month after completion of session two yielded the most significant impact in transphobia reduction.

Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCCS)

Friedman analysis for mean total and subscale LGBT-DOCCS scores did not display statistical significance. The total mean LGBT-DOCCS score came closest to displaying significance $\chi^2(2, n=20) = 5.22, p = .074$, inferring that while participants did not significantly increase understanding with regards to the clinical practice ($\chi^2(2, n=20) = 4.32, p = .114$), attitudes ($\chi^2(2, n=20) = 2.92, p = .232$), or knowledge ($\chi^2(2, n=20) = 3.97, p = .137$) subscales, when these small subscale improvements were grouped together, it displayed overall knowledge gain. Despite not reaching statistical significance, both subscale and total data displayed increased knowledge from pre-intervention to one-month post-intervention time (Appendix S, Figure 2).

Missing Data

Several participants completed two of three data collection points, but these were excluded from Friedman analysis. Despite strong session engagement, survey response rate declined steeply between collection points. The availability of technology to complete assessment during session time may result in more robust data.

Discussion

Successes

Despite an underpowered data set, gains were noted from pre-intervention to one month after intervention completion across all measured data points. The intervention showed that exposure to the curriculum on gender diversity and healthcare binarism significantly decreased transphobia. Strousma et al. (2019) noted that transphobia can mitigate statistically significant knowledge gains; thus, decreasing transphobia is a pivotal first step to organizational change. Secondary gains were that organization executives were so energized by the initial program that they have been discussing how to incorporate gender diversity into continuing education and beginning to discuss conducting a practice audit to ensure documentation does not negate gains in knowledge.

Strengths

Many strengths supported and bolstered the implementation of this research. Providers within this organization began requesting training on this topic around the same time the student investigator had reached out to management seeking an implementation location. The high degree of initial buy-in from senior leadership and staff contributed to the excitement. Participants of this initiative did not need to deviate from their scheduled workday for attendance because the intervention occurred during regularly scheduled mandatory training periods that included compensation. Therefore, extra travel, the use of time-off, or funds allocated for continuing education were not necessary. The student researcher being local to the area of

implementation allowed for tailoring of session one to reflect examples of binarism throughout the local community. The gender diverse panelist, who participated in session two, functions as the health and wellness director of the state Pride Center and thus also brought deep knowledge of resources and community to the presentations. This panelist also frequently conducts educational initiatives and is knowledgeable regarding how to present content in a manner that engages audiences. The training was also designed so that it did not require a high degree of resources, technology, or funding to deliver content.

Results Compared to Literature

No published studies focused on quantitative investigation of gender diversity education in primary care. This study was designed to fill gaps identified by existing literature that generally focused on qualitative research, which looked at attitudes of healthcare providers towards gender diverse individuals, experiences of gender diverse individuals or interventions conducted during pre-licensure education. The closest approximation of existing research was a quality improvement project completed by Felenstein (2018), which was comprised of ten primary care clinic employees and focused on sexual rather than gender identity.

Limitations

Internal Validity Effects

Threats to internal validity included the lack of a control arm and the utilization of convenience sampling. Data collection was complicated as session one occurred over the course of a month and was sent to all participants two weeks before the first session. Data were not identified by which session one participated in due to an expected small sample, so it may have been possible for participants to complete pre-work data after participation in session one. This likely had the impact of falsely skewing their initial responses towards less transphobia and higher LGBT-DOCCS scores.

External Validity Effects

External validity may have been hindered by the delivery of session one by telepresence. Conduction through a virtual medium made it unclear how much interaction was or was not occurring, if attention was being paid to content presentation, or if a participant logged in and walked away or was engaged in other work. Additionally, while attendance of staff meetings was mandatory, participants were excluded if they had time off, concurrent meetings, or had a patient unable to be re-scheduled during this time. Due to the communication of meeting content prior to the session, participants may have self-selected out of participation due to discomfort or perceived disagreement with the educational topic. Lastly, session one was conducted three times, and while a PowerPoint presentation was followed, verbal presentation varied between the sessions. Data collection did not account for which session participants attended.

Sustainability

The sustainability of this project is possible due to enthusiasm from upper management but threatened due to funding limitations for continued development. Current FQHC grant funding is largely focused on facility funding, and as pandemic funding winds down, discretionary funding in rural health settings is limited. Without previous research to draw upon, it is unknown how gains will diminish over time without a continued commitment to further education. However, it could be implied to staff that without continued momentum that management does not feel this topic is a priority for continued evolution and accountability.

Efforts to Minimize Limitations

This project was designed to minimize limitations to participation. Participants were not required to adjust their schedule to attend sessions, and participation in sessions was expected by management. Data collection was limited to ease simplicity and keep collection times less than

ten minutes. Data were collected electronically, allowing ease of access across multiple practice locations and accommodating tele-work employees.

Interpretation

Expected and Actual Outcomes

This research showed that education to primary care clinic staff members was effective in reducing transphobia. While not statistically significant, improvements occurred in attitudes, knowledge, and clinical preparedness of those who attended, and these effects were sustained one month after completion of education. The small sample size makes generalizability difficult, and it is anticipated that a larger sample would show significant results. However, the geographic location where the research was conducted precluded the availability of a sample large enough to reach power. The duration of the intervention was spread significantly from the planned length due to re-scheduling and cancellation of staff meetings for other tasks as directed by senior management. Thus, the initial timeline of six weeks, which would have conducted all portions of session one within two weeks and session two one month after the completion of session one, evolved to twelve from the first offering of session one to the completion of session two. An unexpected benefit of this delay was that session two was conducted in person, which was different from the plan at the originally scheduled date.

Effectiveness and Revisions of Research

Future iterations of this research would likely benefit from the administration of survey tools built into course time at the beginning of session one and the completion of session two. There was a discrepancy, while not documented, between educational session attendance and the number of survey responses, suggesting that people forgot, could not find time, or did not feel it was a priority to complete survey responses. The duration of programming should be carefully considered to balance knowledge gains with the need to refresh previously learned material.

This intervention was well received within the administered health network. The presumption of a binary experience portion of session one can be easily adapted to the local community. It would be easily replicable in a similar resource-limited, rural setting and incorporated into more urban settings. The research was intentionally designed to be applicable in primary care and specialty clinics and would likely work well within inpatient care team settings. This student investigator feels that while the sample size for further research should be optimized, session capacity should continue to be limited to maintain a feeling of engagement, intimacy, and vulnerability.

Expected and Actual Impact to Health System, Costs, and Policy

With implementation, this research has shown the possibility of decreasing transphobic attitudes in healthcare center staff members and increasing their clinical preparedness, knowledge, and attitudes. This is a relatively low-cost and low-resource utilization way to retain and attract gender diverse patients into health care organizations. As states increasingly limit gender affirming care and conflate sex and gender, other governments are advertising their locations as havens for gender diverse individuals without first affirming that care within their states is sensitive to the needs of gender diverse individuals. As these political issues continue, it is anticipated that activists will raise the need, and governments in these states will look for low-cost ways to meet the new demand placed upon their healthcare systems quickly.

Conclusion

Practical Usefulness of Intervention

This initiative is widely transferrable and adaptable to address the lack of sexual and gender diversity education in various healthcare settings. The inquisitive and norm-critical process learned through this initiative can be expanded to other areas where social determinants of health are shown to impact patient outcomes, such as race, socio-economic, and mental health. The unique lens of this study addressing gender diversity not as a competence to be learned but a system we live within, which requires personal introspection and interrogation,

should ensure that any expansion of knowledge is obtained through a behavior change rather than simply a box to be checked.

Further Study

Using key takeaways to shape future education, it becomes evident that measuring immediate knowledge acquisition does not designate long-term success. While there is no agreed-upon ideal programming duration, it is a false equivalence to presume longer programs will result in a superior outcome. Further study will investigate ideal programming duration and content.

Dissemination

Results from this research will be submitted for publication. Results were discussed during a poster session at the Eastern Nursing Research Society (ENRS) conference in Philadelphia, PA, on April 23, 2023.

Impact to Healthcare

This educational initiative fills gaps of deficient provider education regarding gender diversity while healthcare educational reform progresses. While literature maintains that systemic change of interdisciplinary healthcare education curricula away from cisnormativity is needed to result in equitable care for the GD patient population, many providers completed their education before these reforms arose. Remedial training must be provided so GD patients feel safe seeking primary care.

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Appendices
Appendix A
Definition of Terms

Cisgenderism: Ideology that invalidates people's own understanding of their genders and bodies and treats individuals outside cis- and trans- terminology non-normative. Stems from cis- and trans- terminology for contrasting atomic spatial positions in organic chemistry (Ansara, 2015, p. 14). Often functions at systemic and structural levels (Ansara, 2015, p. 15).

Gender Diverse: Someone who experiences either a combination, or lack of, solely male or female identities. Used due to positive connotation and as umbrella term where people are still free to define their unique experience (Thorne et al., 2019, p. 13-14).

Heteropatriarchy: A colonial construct defining binary gender roles narrowly with emphasis on masculine dominance and feminine subordination which frames heterosexuality as normative (Anti-Violence Project, n.d.)

Transphobia: Individual hostility and negative attitudes towards non-cisgendered individuals (Ansara, 2015, p. 15).

Appendix B
CINAHL Keyword Search

("primary care providers" OR "clinicians" OR "primary care practitioners" OR "healthcare workers" OR "nurse" OR "nurse practitioner" OR "advanced practice nurse" OR "advanced practice nursing" OR "nurse educator")

AND

("education" OR "attitude" OR "continuing education" OR "curriculum" OR "teaching")

AND

("gender diverse" OR "gender diversity" OR "transgender" OR "gender nonconforming" OR "gender non-conforming" OR "gender non conforming" OR "non binary" OR "non-binary" OR "gender queer" OR "genderqueer" OR "queer" OR "gender-variant" OR "gender variant" OR "genderfluid" OR "gender fluid" OR "genderfluidity" OR "gender minority")