ENHANCING HEALTH PROFESSIONALS' CULTURAL COMPETENCE OF GENDER AND SEXUAL MINORITY HEALTH

A Dissertation
Submitted to the Graduate Faculty
of the
North Dakota State University
of Agriculture and Applied Science

By

Megan Beth Thiel

In Partial Fulfillment of the Requirements
for the Degree of
DOCTOR OF NURSING PRACTICE

Major Program:
Nursing

March 2021

Fargo, North Dakota

North Dakota State University
Graduate School

Title

ENHANCING HEALTH PROFESSIONALS' CULTURAL COMPETENCE OF GENDER AND SEXUAL MINORITY HEALTH

By

Megan Beth Thiel

The Supervisory Committee certifies that this ***disquisition*** complies with North Dakota State University's regulations and meets the accepted standards for the degree of

DOCTOR OF NURSING PRACTICE

SUPERVISORY COMMITTEE:

Dr. Molly Secor-Turner
Chair

Dr. Allison Peltier

Dr. Mykell Barnacle

Dr. Christine McGeorge

Approved:

03/30/2021
Date

Dr. Carla Gross
Department Chair

ABSTRACT

The lesbian, gay, bisexual, and transgender (LGBT) community continues to experience worse health outcomes than their heterosexual counterparts. Inequities in health care include low health insurance rates, high rates of stress due to systemic discrimination and stigma, and a lack of cultural competency in the health care system. Gender and sexual minority (GSM) people are at higher risk of mental health disorders, sexually transmitted infections (STIs) and human immunodeficiency virus (HIV), substance use and abuse, cancer, suicide, and other disorders/diseases. A lack of cultural competency in health care systems perpetuates these health disparities and inequities in care that burden the LGBT community.

This project's purpose was to evaluate the effectiveness of an online educational intervention on enhancing health professionals' cultural competence of GSM health. This study used a one-group pre-, post-, and follow-up survey intervention, quasi-experimental design to evaluate the effectiveness of an educational intervention on improving health professionals' knowledge, clinical preparedness, and attitudinal awareness of GSM health. The study's setting was at a primary care center with clinics spread across three rural counties in North Dakota with a combined population of less than 14,000. This study used convenience sampling, and the recruitment of participants included a project presentation at the health care organization where the project would take place and an email invitation. Thirty-six participants completed the pre-survey, 11 of those 36 participants completed the educational intervention and post-survey, and six of those 11 participants completed the follow-up survey four-weeks after completing the educational intervention. The instrument used for the presurvey, post-survey, and follow-up survey was the Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCSS). A paired sample t-test was used to compare pre, post, and four-week follow-up

LGBT-DOCSS mean scores. The results indicated a statistically significant improvement in LGBT-DOCSS mean score on the post-survey ($p = 0.0011$) and four-week follow-up ($p = 0.01$) compared to the pre-survey. Additionally, the majority of participants reported that this educational intervention was valuable to their practice. This project revealed that an online educational intervention effectively enhanced health professionals' cultural competence of GSM health.

ACKNOWLEDGEMENTS

I would like to express my special appreciation and gratitude to my advisor and Chair, Dr. Molly Secor-Turner. I would like to thank you for supporting my passion for pursuing this study. Your guidance, expertise, and mentorship provided me with the foundation and tools to complete this project. I would also like to thank my committee members, Dr. Christine McGeorge, Dr. Allison Peltier, and Dr. Mykell Barnacle, for taking the time to serve as my committee members and providing me guidance throughout this dissertation journey.

A special thanks to all of those who played a role in my academic accomplishments. From my instructors to clinical preceptors, your investment in my education I will forever be grateful for.

I would like to extend my appreciation to Coal Country Community Health Center for allowing and supporting this project's implementation to take place. Chastity, thank you for ensuring the successful implementation of this project. A special thanks to those who participated in this project. Without you, this project would not exist.

I would like to thank my mother-in-law, Kim, for always being there to help with Crosby. A special thanks to my sister-in-law, Kelsey, who completed her Doctor of Nursing Practice degree when I was beginning mine. Your guidance and support are much appreciated.

I must acknowledge my treasured colleagues. I have been privileged to share the classroom with such loving hearts and strong minds. Brooke, this journey was better because you were in it. I cherish the bond that we have formed, and I will continue to look forward to the stories we tell, the memories we share, and the experiences we make.

I humbly extend my recognition to all those who helped me throughout this journey. The completion of this project could not have been possible without the assistance of so many people whose names may not be enumerated. Their contributions are sincerely appreciated.

DEDICATION

This work is dedicated to my partner, Cody. Your unrelenting support and encouragement throughout all my life endeavors means more to me than words could ever describe. I am beyond thankful that I get to share this thing called life with you by my side. This world is a better place because you are in it, and I certainly know I am a better person because of you. Thank you for always stepping up or stepping in throughout this journey, even when your own plate was heaping. And to my son, Crosby. You are my inspiration and my biggest joy. There is no limit to what you can accomplish in your lifetime. To my mom, your empathy, compassion, and acceptance for all people laid the foundation for who I am today.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER ONE. INTRODUCTION

Background and Significance

Individual, systemic, and environmental barriers exist among the lesbian, gay, bisexual, and transgender (LGBT) community that impede this vulnerable population from achieving true social and health equity. Discrimination in health care, the lack of health coverage for gender and sexual minorities (GSM), inadequate health professional competency and education, the lack of resources, and unwelcoming, heteronormative clinical spaces serve as barriers to care (Healthy People 2020 [Internet]; Institute of Medicine [IOM], 2011; The Joint Commission, 2011). These cultural, structural, and other barriers predispose the LGBT community to poorer health outcomes and perpetuate the health disparities among this at-risk population. National health initiatives have highlighted the need for increased health professionals' cultural competence to confront these health disparities and inequities (IOM, 2011; The Joint Commission, 2011; Healthy People 2020 [Internet]. Health professionals must acknowledge the health disparities among the LGBT community as an area of crucial concern and focus LGBT-specific education and cultural competence training on the attitudes, knowledge gaps, and lack of clinical skill that perpetuate these disparities.

To genuinely meet the needs of patients, families, and the communities served, the health care delivery system must instill effective communication, cultural competence, and patient- and family-centered care practices into the foundation of its activities in delivering care (The Joint Commission, 2011). Patient-centered care "encompasses qualities of compassion, empathy, and responsiveness to the needs, values, and expressed preferences of the individual patient" (IOM, 2011, p. 48). Patient-centered care combined with effective communication has been linked to increased patient satisfaction, better adherence to treatment recommendations, and improved

health outcomes among the LGBT community (The Joint Commission, 2011). Several diverse patient populations have experienced efforts to advance cultural competence, improve communication, and provide more equitable and patient-centered care in the health care delivery system. Despite these efforts and advancements made for diverse populations, the LGBT community has historically been overlooked (The Joint Commission, 2011).

Gender and sexual minorities and their families reside across the United States, living in every county in the United States (The Joint Commission, 2011). In 2020, the proportion of United States adults identifying as LGBT was 5.6% (Gallup, Inc, 2021). Throughout the years, the proportion of LGBT-identifying adults in the United States has increased from 3.5% in 2012 to 4.5% in 2017, and most recently to 5.6% in 2020 (Gallup, Inc, 2018, 2021). Gender and sexual minority individuals experience the same health concerns as the rest of the population, and they also confront a multitude of additional health risks and concerns. The LGBT community experiences a higher prevalence of certain physical and mental conditions, and experiences inequities in the care they receive due to insensitivity to their unique needs, lack of awareness, and stigma (IOM, 2011).

Gender and sexual minority patients face barriers to equitable care, such as refusal of care, delayed or substandard care, mistreatment, inequitable policies and practices, discrimination, less access to insurance and health care services, little to no inclusion in health outreach or education, and a lack of cultural competence in the health care system. Health disparities experienced by the GSM population include the following: lower overall health status; higher rates of smoking, alcohol, and substance abuse; higher rates of trauma; higher risk for mental health illnesses, such as anxiety, depression, and suicide; higher rates of sexually transmitted infections (STIs), including human immunodeficiency virus (HIV) infection; and

increased incidence of some cancers and poorer cancer outcomes (Eckstrand & Ehrenfeld, 2016; Hollenbach, Eckstrand, & Dreger, 2014; IOM, 2011; Smalley, Warren, & Barefoot, 2018). Gender and sexual minorities and their families are more likely to experience poverty, homelessness, obstacles to education, and family disruption than their cisgender heteronormative peers (Burwick et al., 2015). These social determinants of health directly affect a person's functioning, overall health, and health outcomes (Healthy People 2020 [Internet]).

Adverse health outcomes and health disparities among GSM individuals are well documented. Numerous studies show that a significant contributor to increased mental health problems and poorer overall health status among GSM individuals result from their experiences of a specific type of social stress not experienced by heterosexuals (Lee et al., 2017; Longares et al., 2016; Moody et al., 2018; Rendina et al., 2018; Salfas et al., 2019). These social stressors, known as minority stressors, arise from internal and external stressors that foster stigmatization within and around GSM individuals. Manifestations of societal stigma are at multiple levels, including the national and state policy level, the community level, and the interpersonal level. External or distal stressors are enacted stigma, exhibited through discrimination, harassment, and violence towards GSM individuals (Salfas et al., 2019). Internalized, or proximal, stressors involve GSM individuals internalizing these negative societal behaviors into their self-perception and values resulting in internalized homophobia, lack of sexual orientation or gender identity disclosure, and awareness and anxiety about prejudice. These internal and external stressors amass over time, leading to persistently high-stress levels that result in increased mental health problems and poorer health outcomes. These adverse outcomes reflect the culture that marginalizes this population and is not due to GSM individuals' deficit. This marginalization of minority groups is known as the Minority Stress Model (Meyer, 2003). Meyer developed the

Minority Stress Model to explain why minority individuals often suffer from greater physical and mental health disparities than their peers in the majority group (Meyer, 2003). To manage the stressors associated with being a member of a marginalized group, GSM people often engage in unhealthy coping behaviors to survive with the symptoms of minority stress.

Increase awareness and efforts to understand the unique health needs of the GSM community and the enduring discrimination and stigma experienced by this community needs addressing. Practices, resources, and strategies exist for health professionals and health organizations to improve the quality of care delivered to the LGBT community by building trust and making the health care environment more inclusive, safe, and LGBT-affirming. Efforts to advance effective communication, cultural competence, and patient-centered care for all patients will foster care delivery that is welcoming and inclusive to all diverse patients and families and will enable higher-quality services (The Joint Commission, 2011).

Defining Cultural Competence

One of the more universally accepted definitions of cultural competence in clinical practice is "a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enable the system, agency, or professionals to work effectively in cross-cultural situations" (Cross et al., 1989, p. 13). The foundation of cultural competence is demonstrated through practical means through the ability to provide effective services (Substance Abuse and Mental Health Services Administration, 2014). The Office of Minority Health (2000) built on Cross's definition of cultural competence adding,

> 'Culture refers to integrated patterns of human behavior that include the language, thoughts, communications, actions, customs, beliefs, values, and institutions of racial, ethnic, religious, or social groups. 'Competence' implies having the capacity to function

effectively as an individual and an organization within the context of the cultural beliefs, behaviors, and needs presented by consumers and their communities (p. 1).

Cultural competence core elements include cultural awareness, cultural knowledge, and cultural skill development (Substance Abuse and Mental Health Services Administration, 2014). To provide culturally sensitive care, individuals and organizations need to be aware of their attitudes, beliefs, biases, and assumptions of others. There is a need to invest in gaining cultural knowledge of the populations served and how it relates to care and treatment and then using this cultural knowledge to develop competence in clinical skills that ensure culturally appropriate and sensitive care.

Purpose Statement and Project Description

Health professionals and health care organizations must understand the unique health care needs and the health disparities and inequitable care that burden the GSM population. A conscious effort to enhance health professionals' LGBT cultural competence and eliminate these health disparities and inequities in care is well overdue. *Healthy People 2020*, the Joint Commission, and the IOM have highlighted the need for increased education and cultural competence among health professionals to address the inequities in care and the health disparities that the LGBT community faces in the health care delivery system (Healthy People 2020 [Internet]; IOM, 2011; The Joint Commission, 2011).

This project aimed to enhance health professionals' cultural competence in LGBT health to provide them with the necessary knowledge and clinical skills needed to care for GSM patients and address the attitudes and prejudicial biases that perpetuate the health disparities and inequities in care. An educational intervention was implemented in rural North Dakota to achieve this purpose in the primary care setting. The educational intervention consisted of an online

interactive module and a webinar provided by the National LGBTQIA+ Health Education Center: A Program of the Fenway Institute. The Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCSS), an interdisciplinary LGBT clinical self-assessment for health and mental health providers (Bidell, 2017), was administered before the educational intervention, immediately after the educational intervention, and four-weeks post-intervention.

Objectives

The clinical dissertation objectives were to:

1. To increase health care professionals' understanding of the unique health needs and health disparities of the LGBT community.
2. To increase health care professionals' level of clinical preparedness when caring for GSM patients.
3. To increase health care professionals' LGBT-affirming attitudes.
4. To improve health care professionals' competence in providing culturally competent GSM health care.
5. To assess health care professionals' satisfaction with GSM health online learning modules.

CHAPTER TWO. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Review of Literature

Chapter two provides a review of the literature to demonstrate the need for enhanced culturally competent care regarding GSM health, the inequities in our current health care delivery system, and the health disparities that burden the LGBT community. This literature review is divided into the following sections:

1. Inadequate GSM education for health professionals
2. Barriers to culturally sensitive and appropriate care for GSM patients
3. Health inequities and disparities related to GSM health

Chapter two ends with a description of the theoretical framework, The Process of Cultural Competence in the Delivery of Healthcare Services by Josepha Campinha-Bacote that was utilized to guide the development and implementation of the educational intervention to enhance health care professionals' cultural competence of GSM health (Campinha-Bacote, 2002).

A literature search was performed for all English-language studies on the lack of culturally competent care and knowledge among health care professionals on LGBT health and related health disparities in the LGBT community. Databases searched included the Cumulative Index of Nursing and Allied Health Literature (CINAHL), Cochrane Library, Health Source – Nursing/Academic Edition (EBSCO), PubMed, and Ovid – Lippincott Williams & Wilkins using the keywords "lesbian" or "gay" or "bisexual" or "transgender" or "gender and sexual minorities" or "LGBT" or "GSM" or "SGM" combined with the keyword "knowledge" or "cultural competence" or "education" or "culturally competent" or "health disparities" or "health inequities" combined with the keyword "health professionals" or "health care" Date delimitations were from 2014 to the present. The search yielded 510 studies. After applying the inclusion

criteria as outlined below, 305 studies were remaining. Additional studies were discovered from hand searching bibliographies of studies, where a few key reports and studies published before 2014 were found. A research librarian assisted in the literature review and recommended two books that North Dakota State University (NDSU) owned, were used in the literature review. Key reports from government agencies (i.e., The Joint Commission and IOM) and national LGBT organizations were also included in the review of the literature.

Literature review inclusion criteria were research studies or systematic reviews that examined health care professionals' lack of knowledge and cultural competence in GSM health and the health disparities among the GSM population. Studies were limited to those conducted in the United States, Canada, and Europe because of differences in health care delivery systems and political and societal views of GSM minorities throughout the world. Exclusion criteria were

- Studies that focused on one specific sexual orientation identity, such as women who have sex with women, without a broader connection to the GSM community
- Studies where the findings were not generalizable to a broader population, such as studies that pertained to one specific health profession, such as plastic surgeon
- Studies with a narrow focus on a specific health concern that was not addressed in other studies, such as oral health.

For the purposes of this project, GSM refers to individuals who identify with a gender identity other than that of cisgender (e.g., gender aligns with the sex assigned at birth), and for individuals that identify with a sexual orientation other than that of heterosexual (Smalley et al., 2018). According to Smalley et al. (2018), GSM is increasingly favored over LGBT as it is more inclusive by "inherently acknowledging all individuals of diverse sexual orientations and gender identities, including ones that have yet to reach common knowledge (e.g., use of 'T' can be seen

as disenfranchising by individuals who identify as genderqueer rather than transgender)" (p. 9). The term LGBT-affirming and LGBT community will still be used throughout this paper, as these phases are used widely in the literature. Preferences in terminology differ from generation to generation and person to person. The terminology and language that most GSM individuals identify with may not accurately describe their identities or how an individual member may identify. Just as gender expression and sexual orientation are fluid, terminology and language among the LGBT community are fluid, and broad definitions may not capture how individual members identify.

Additionally, while this dissertation strives to capture the health inequities and disparities, and the barriers to care of the LGBT community as a whole, it does not address the unique socio-political climate and health challenges compounded for minority subgroups within the LGBT community. These individuals and groups of minorities within the LGBT community who identify as double-minority, are intersecting marginalized groups who encounter stigma at multiple levels and may experience high family rejection rates due to racial/ethnic cultural norms, victimization, and microaggression associated with both heterosexism and racism (Eckstrand & Ehrenfeld, 2016; Kemp, 2018; Smalley et al., 2018). Additionally, double-minority status is associated with poorer health status and outcomes.

Table 1

Sexuality Terms and Definitions

Term	Definition
Biological sex (assigned male/female at birth)	(noun) – This refers to the sex that is assigned to a child at birth, most often based on the child's external anatomy.
Cisgender	(adj.) – A person whose gender identity and assigned sex at birth corresponds (i.e., a person who is not transgender).
Gender expression	(noun) – This term describes the ways (e.g., feminine, masculine, androgynous) in which a person communicates their gender to the world through their clothing, speech, behavior, etc. Gender expression is fluid and is separate from assigned sex at birth or gender identity.
Gender identity	(noun) – A person's inner sense of being a boy/man/male, girl/woman/female, another gender, or no gender.
Heteronormativity	(noun) – The assumption that everyone is heterosexual, or that heterosexuality is "normal." Also refers to societal pressure for everyone to look and act in a stereotypically heterosexual way. Heteronormativity can manifest as heterosexism, the biased belief that heterosexuality is superior to all other sexualities.
Intersectionality	(noun) – The idea that comprehensive identities are influenced and shaped by the interconnection of race, class, ethnicity, sexuality/sexual orientation, gender/gender identity, physical disability, national origin, religion, age, and other social or physical attributes.
Men who have sex with me/women who have sex with women (MSM/WSW)	(noun) - Categories to describe people who engage in same-sex sexual behavior, regardless of how they identify their sexual orientation.
Non-binary	(adjective) – Describes a person whose gender identity falls out of the traditional gender binary structure of girl/woman and boy/man.
Queer	(adjective) – An umbrella term describing people who think of their sexual orientation or gender identity as outside of societal norms.
Sexual orientation	noun) – How a person characterizes their emotional and sexual attraction to others

Note. *Adapted from "LGBTQIA+ Glossary of Terms for Health Care Teams,"* by the National LGBTQIA+ Health Education Center, 2020. Copyright 2020 by the National LGBTQIA+ Health Education Center.

Introduction

Despite an increase in the acceptance of GSM persons and attainment of equality in many sectors, cultural competence of GSM among health professionals continues to fall short (Carabez et al., 2015; Eckstrand & Ehrenfeld, 2016; Felsenstein, 2018; Henry, 2017; The Joint Commission, 2011; Klein & Nakhai, 2016; Ricca, Wahlskog, & Bergren, 2018; Smalley et al., 2018; Strong & Folse, 2015; Yingling, Cotler, & Hughes, 2017). The IOM, The Joint Commission, and *Healthy People 2020* have all emphasized the need for increased GSM-specific education to be provided to health professionals (IOM, 2011; Joint Commission, 2011; Healthy People 2020 [internet]). Inclusion of GSM-specific education in undergraduate and graduate curriculum has been called for by the American Association of Medical Colleges (AAMC), the Gay and Lesbian Medical Association (GLMA), *Healthy People 2020*, as well as from students at both the undergraduate and graduate level, and practicing health professionals (American Association of Medical Colleges, 2014; Grosz et al., 2017; Healthy People 2020 [Internet]; Hollenbach et al., 2014; Strong & Folse, 2015; Talan et al., 2017).

Inadequate Education and Barriers to Care

Lack of GSM-specific education in the curriculum results in students and health care professionals feeling ill-prepared and uncomfortable with providing care to GSM patients and lacking the cultural competence necessary to provide appropriate, culturally sensitive care. On average, medical schools taught a median of only five hours of LGBT-related content (Obedin-Maliver et al., 2011). On average, in bachelor of nursing programs, a mere 2.12 hours were spent covering LGBT-specific material (Lim et al., 2015). This lack of education and training has led to more than half of providers agreeing that they do not have the skills needed to address issues related to sexual orientation with their patients (White et al., 2015). Medical and nursing students

also report not feeling prepared or comfortable to care for GSM patients (White et al., 2015; Carabez, Pellegrini, Mankovitz, Eliason, & Dariotis, 2015). According to White et al. (2015), two-thirds of students rated their schools' LGBT curriculum as 'fair,' 'poor,' or 'very poor'. A study where 268 nurses were interviewed, 79% stated that no GSM patient-centered care training was offered through their organizations (Carabez et al., 2015). One nurse responding, "never in all my years of nursing, 37 years in nursing, I have never been educated in that subject" (Carabez et al., 2015, p. 325). Areas of knowledge and clinical preparedness deficits on GSM-specific health among health profession students include not knowing where to look for information on GSM-specific health care, lack of understanding and awareness of GSM terminology, feeling uncomfortable and lacking the knowledge to inquire about sexual orientation and gender identity (SOGI), and an increase in difficulty in obtaining a health history, conducting physical assessments, and discussing sexual behaviors with GSM patients than with heterosexual patients (Parameshwaran et al., 2017).

Nurse practitioners' and nurse practitioner students' discomfort and lack of preparedness to care for GSM individuals stem from the inability to recognize GSM adults as having unique health needs; a misunderstanding of GSM terminology; and a lack of knowledge regarding GSM preventive care and needs (Brown et al., 2020; Qureshi et al., 2020). A study with nurse practitioners and nurse practitioner students found that participants expressed an overall need to know more about SOGI terminology, with one participant stating, "sexual orientation is like what you are born with, and then gender identity is how you identify yourself, or how you see yourself…sexual orientation is if you identify as female or male and then gender identity is – actually, I guess I really don't know" (Brown et al., 2020, p. 263). Another participant in this study reported, "I have no idea what cisgender is" (p. 263).

The AAMC has released clear curricular guidance for medical schools to support students' knowledge, attitudes, and skills and improve care for GSM people (American Association of Medical Colleges, 2014). The American Association of Colleges of Nursing (AACN) nor the National League for Nursing (NLN), the two nursing curricular bodies in the United States, have yet to develop parallel guidance and recommendations (Yingling et al., 2017). This lack of guidance from nursing curricular bodies is evident in nurses' knowledge, comfort, and attitude towards GSM patients and their health needs (Cornelius & Carrick, 2015; Greene et al., 2018; Strong & Folse, 2015). Most nursing research has inadequately addressed GSM-specific health needs, with only eight articles out of almost 5,000 total articles published between 2005 and 2009 in the top 10 nursing journals focused on GSM health (Strong & Folse, 2015). In addition to the lack of formal direction from nursing accrediting bodies, nurse educators report feeling ill-equipped to teach about GSM issues (Lim et al., 2015)

In a study conducted by Cornelius and Carrick (2015), a survey of nursing students' knowledge of and attitudes toward GSM health care concerns showed only two health care knowledge items were answered correctly by at least 70 percent of the participants on all education levels (Qureshi et al., 2020). Only 22% of graduate-level nurses reported that they were well informed about discrimination experienced by the LGBT community, and only 18% reported that they were well informed about screening tests recommended for GSM patients (Qureshi et al., 2020). Only 10% of respondents reported that they were well informed about hormone needs for transitioning.

Discomfort

Lack of education and knowledge on GSM persons can contribute to health professionals feeling uncomfortable when caring for GSM patients (Brown et al., 2020; Lim et al., 2015;

Qureshi et al., 2020; Sabin et al., 2015; White et al., 2015). This discomfort can adversely affect patient care and lead to poor health outcomes. More than half of the providers report that they feel uncomfortable caring for GSM patients (Sabin et al., 2015). Among nurse practitioners' this knowledge gap of GSM health caused nurse practitioners to experience uncertainty, fear, and experience awkward encounters with GSM patients (Paradiso & Lally, 2018). This discomfort can negatively influence health professionals' inquiry into sexual orientation, sexual history taking, harm reduction strategies, and influence the ability to provide appropriate, relevant health promotion counseling (Sabin et al., 2015). Gender and sexual minority patients have identified health professionals being comfortable with GSM patients as fundamental to having a trusting and open patient-provider relationship (Alpert, CichoskiKelly, & Fox, 2017). Gender and sexual minority patients lived experiences of provider discomfort have negatively impacted their care due to providers denying care, using the wrong pronouns and terminology, not respecting their gender identity, and avoiding physical contact with them (Alpert et al., 2017). Gender and sexual minority patients note that they want providers to be comfortable instead of merely seem comfortable. One GSM respondent reported, "it is more useful to teach the skills in how to build that comfort than it is to teach someone to demonstrate a comfort that they may not feel" (Alpert et al., 2017, p. 1378).

Disclosure

Health care professionals' lack of comprehensive and inclusive education on the LGBT community can be detrimental to patients disclosing their sexual orientation. Health care providers must first be aware of their patients' sexual orientation and sexual behaviors; otherwise, special health care needs, and education may be overlooked, such as disease prevention and appropriate health screening services. Disclosure of sexual orientation and gender

expression is vital to ensure effective communication and patient-centered health care delivery. “Effective patient-provider communication has been linked to an increase in patient satisfaction, better adherence to treatment recommendations, and improved health outcomes (The Joint Commission, 2011, p. 1). Over a third of GSM adults avoid disclosing their sexual orientation or gender identity to their health care provider (Rossman, Salamanca, & Macapagal, 2017; Smalley et al., 2018). Among bisexual women and lesbians, less than 10% had ever been asked by their provider about their sexual orientation (Klein & Nakhai, 2016). Using inclusive language, being perceived as accepting of the patient being GSM, directly asking a patients' sexual orientation and gender identity, and using welcoming body language are reported as facilitators for patient disclosure.

Heteronormative language, fear of discrimination and non-affirming care, fear of poor health care providers' response, and closed-off body language are reported barriers to patient disclosure (Brooks et al., 2018; Law, Mathai, Veinot, Webster, & Mylopoulos, 2015; Qureshi et al., 2020). Another reason cited for not disclosing one's sexual orientation was the belief that the provider assumed all along that he/she was heterosexual (Law et al., 2015). Improving health professionals' cultural competence can facilitate disclosure of sexual orientation and gender identity, which is essential for patient-centered care, guiding risk reduction and health promotion, and ensuring appropriate health screening and health services are offered to GSM patients.

In one study, self-disclosure increased by 63% following an educational intervention to increase health care providers' knowledge and attitudes of GSM health (Henry, 2017). Disclosure is essential in guiding risk reduction and health promotion by providing patient-centered care. Consequences of non-disclosure include: "assumptions of heterosexuality (therefore, potential

risks may be overlooked); the invisibility of self and sources of support such as a partner or other chosen family; irrelevant health care teaching; insensitive questioning; sexism; improper treatment; and misdiagnosis (Eckstrand & Ehrenfeld, 2016, p. 45). Non-disclosure has repercussions on patient's overall mental health, with poorer psychological well-being noted on one-year follow-ups where GSM patients did not disclose their sexual orientation (Utamsingh, Richman, Martin, Lattanner, & Chaikind, 2016).

Language and Terminology

Language can reveal knowledge, skills, and attitudes and acts as both an inhibitor and catalyst of communication and competence. Understanding and using the correct language and terminology is fundamental to fostering a clinical environment that is welcoming, considerate, and patient-centered (Eckstrand & Ehrenfeld, 2016). Understanding the differences between sexuality, biological sex, gender identity, and gender expression is imperative to providing culturally sensitive care at the most basic level.

~~S~~ufficient consideration of terminology and language is essential in providing culturally sensitive care. “Language provides insight into and simultaneously helps to define identities, even as they may change given various contexts such as location, situation, audience, and time period” (Rossi & Lopez, 2017, p. 1335). Barriers to quality care can be created through improper terminology through not providing space for GSM individuals to define themselves, which perpetuates systemic discrimination, and erroneous assumptions made by health professionals. According to Rossi and Lopez (2017), “professionals may confuse behavior with identity and label a man who has sex with men as gay, though the individual may not identify as such. Additionally, a provider who conflates sexual orientation with gender identity can incite

defensiveness and discomfort" (p.1332). Improper terminology can create barriers to quality care.

Health professionals' communication style is the primary predictor of sexual orientation disclosure, even more so than one's level of 'outness' (Utamsingh et al., 2016). Several communication strategies can help improve patient/provider communication and create a more welcoming clinical environment. For example, using phrases such as "sexual identity" rather than "sexual orientation" is more inclusive. It is reflective that all people have a sexual identity and applies to both sexual minority and sexual majority populations (Rossi & Lopez, 2017). Heteronormative language, such as inquiring into marriage or inquiring about a patient's "mother and father," is disaffirming language and should be avoided. Additionally, all staff should utilize preferred pronouns and document a patient's preferred pronoun in the medical record (Eckstrand & Ehrenfeld, 2016; Smalley et al., 2018).

The use of inclusive language should extend to materials for patients and other supporting documents. Providing GSM patients opportunities to complete forms with answers that accurately reflect how they identify may lead to more accurate and open disclosure (Rossi & Lopez, 2017). Explicitly stating on a practice's websites that providers welcome GSM patients, having imagery and signage indicating the celebration of LGBT communities, and images that affirm and support the GSM patient are examples of GSM inclusive and supportive environments (Eckstrand & Ehrenfeld, 2016; Smalley et al., 2016).

Implicit Attitudes

According to Sabin, Riskind, and Nosek (2015), cultural competence is inadequate in serving GSM patients among health care professionals, despite positive explicit attitudes towards the GSM population. Enhanced knowledge and cultural competence can positively impact health

professions' explicit and implicit biases and attitudes towards GSM persons (Sabin et al., 2015). According to Georgetown University – National Center for Cultural Competence, (n.d), in explicit or conscious bias, "the person is very clear about his or her feelings and attitudes, and related behaviors are conducted with intent" (p. 1). Explicit attitudes are self-reported, conscious awareness. Implicit attitudes exist outside conscious awareness and can predict a range of behaviors, such as discrimination (Eckstrand & Ehrenfeld, 2016; Sabin et al., 2015). Implicit bias can affect a person's affect or behavior without full awareness from that person. Implicit bias can "interfere with clinical assessment, decision-making, and provider-patient relationships such that the health goals that the provider and patient are seeking are compromised" (Georgetown University - National Center for Cultural Competence, n.d., p. 1). Almost half of heterosexual medical students expressed some explicit bias, but more concerning, over 80% of medical students exhibited at least some implicit bias against sexual minority individuals (Burke et al., 2015).

Studies conducted by Sabin et al. and Burke et al. (2015), measured implicit attitudes using the Sexuality implicit-association test (IAT) from Project Implicit, a validated measure of automatic, unconscious attitudes. There are seven results possible for an individual taking the Sexuality IAT, 1) I strongly prefer straight people to gay people, 2) I moderately prefer straight people to gay people, 3) I slightly prefer straight people to gay people, 4) I prefer straight people and gay people equally, 5) I slightly prefer gay people to straight people, 6) I moderately prefer gay people to straight people, and 7) I strongly prefer gay people to straight people (Project Implicit, 2011). Sabin et al. found that moderate to strong implicit preferences for straight people over lesbian or, in particular, gay men, are widespread among heterosexual providers. Nurses held the strongest implicit preference for heterosexual people. Implicit preferences can predict

patient-provider communication quality, treatment recommendations, and contribute to health disparities. Education has been demonstrated to be highly effective in increasing knowledge about GSM persons and moderately effective in reducing negative attitudes toward sexual minorities (Sabin et al., 2015).

Heteronormativity

Assumptions and heteronormative beliefs, attitudes, and legislation can negatively influence GSM health and health outcomes. Heteronormativity is the assumption that everything is usually and naturally heterosexual (Utamsingh et al., 2016). Examples of heteronormativity include assuming one's partner is always of the opposite sex, asserting that sexual orientation and gender expression that varies from heterosexuality is immoral, disregarding the spectrum of sexual orientation, assuming all patients are heterosexual and identify with their birth gender, and exclusive recognition of heterosexuality and constant depictions of heterosexual acts in public and media (Alpert et al., 2017; Bidell & Stepleman, 2017; Eckstrand & Ehrenfeld, 2016; Smalley et al., 2018; Utamsingh et al., 2016).

Almost exclusively, all content and case study presentations used in health professional's education reinforce heteronormativity (Murphy, 2016; Robertson, 2016). Lack of GSM content and the assumption of heteronormativity demonstrates the belief that sexual orientation and gender identity is irrelevant to the delivery of quality care (Robertson, 2016). If the curriculum contained transgender health, this was perhaps the one time that transgender persons would be included in the discussion or panel. This limited appearance of transgender person to transgender-specific panels and excluding them in panels dedicated to general aspects of life "creates a dual dynamic of hypervisibility and invisibility, reinforcing heteronormativity by

implying that those who disrupt normative arrangements of sex-gender-sexuality cannot be integrated into the realm of normal life experience" (Murphy, 2016, p. 276).

Heteronormative assumptions by health professionals can be conveyed by implying same-sex intercourse as being deviant and lack of acknowledging the various forms of sexual play and intercourse (Utamsingh et al., 2016). Gender and sexual minority patients report heteronormative attitudes can be revealed by their providers' behavior, such as avoiding eye contact, turning their backs to the patient when the patient and the patient's partner are in the room, and lack of physical contact (Alpert et al., 2017; Utamsingh et al., 2016). Institutionally, heteronormativity can be expressed through curriculum choices, policies, and regulations (Dean, Victor, & Guidry-Grimes, 2016). Heteronormative beliefs and attitudes partly stem from inadequate education about the LGBT community (Smalley et al., 2018; Utamsingh et al., 2016). As described by one nurse, "I believe it is assumed that the patients will be heterosexual…nurses, in general, are not prepared enough to work with LGBT patients (Carabez et al., 2015, p. 327)." Education provides the foundation for health professionals to self-reflect on their own beliefs and attitudes, which is crucial to reducing heteronormativity (King, 2015). Heteronormative beliefs and attitudes can lead to GSM patients feeling invisible, fear of mistreatment and judgment, and a lack of trust and confidence (Bidell & Stepleman, 2017; Dean et al., 2016; Utamsingh et al., 2016). Heteronormativity can cause closed-off communication, inappropriate diagnostic testing, miscommunication about etiologies, insufficient treatment goals, discounting of patient's perspective, late detection and delayed treatment, and poor health care experiences overall. The most considerable health risk due to heteronormativity for GSM individuals is the avoidance of health care in the first place (Utamsingh et al., 2016).

Heteronormativity is fostered in the idea that health professionals treat everyone the same, regardless of sexual orientation, gender, ethnicity, or race, and the notion that health care professionals treat everyone as an individual. Therefore, the need for inclusive education on vulnerable populations is not necessary (Beagan et al., 2015). Gender and sexual identity do matter in health care and the delivery of health services. Knowing and understanding the whole person is essential for holistic care. In a study by Beagan et al. (2015), one physician participant responded, "for a long term therapeutic relationship, if they feel they need to hide a significant portion of their life, it's unlikely that they're going to feel comfortable with disclosing all the important things and having all of that factoring into, my ability to provide them the best clinical advice" (p. e18).

Gender and sexual identity matter because of homophobia and transphobia. Gender and sexual minority patients' lived experiences of homophobia and transphobia might affect patients' lives and health. Specific health care concerns that exist among GSM individuals, such as avoidance of health care, denial of same-sex relationships in medical decision-making, and potential intolerance among health professionals, are partly due to the assumption of heteronormativity in health care (Beagan et al., 2015). Gender and sexual identity are essential to provide health care services unique to GSM patients' health needs, encourage effective provider-patient communication and patient-centered care, and recognize and appreciate the struggles and lived experiences of stigma and discrimination in their day-to-day lives and the health care delivery system (Beagan et al., 2015; Carabez, Pellegrini, Mankovitz, Eliason, Ciano, et al., 2015; Robertson, 2017).

Victimization, Discrimination, and Stigma

Victimization and discrimination, compounded by stigma experienced by GSM patients, are well-documented (Bidell & Stepleman, 2017; Cahill et al., 2014; Dorsen & Van Devanter, 2016; Eckstrand & Ehrenfeld, 2016; Lim, Brown, & Justin Kim, 2014; Mansh, Garcia, & Lunn, 2015; Smalley et al., 2018; Whitehead, Shaver, & Stephenson, 2016). A survey by Lambda Legal (2010) found that 8% of sexual minority and 27% of transgender individuals have been refused needed health care, and almost 11% of sexual minority and 21% of transgender people reported health professionals using harsh or abusive language toward them. A study by Alpert, CichoskiKelly, and Fox (2017) described self-reported experiences of unprofessional conduct and discrimination towards GSM patients. A lesbian with multiple sclerosis described an instance, "he never sent me for any scans. He never did any tests. He just came in, looked at the front page of my paperwork [where I'd written 'lesbian' and] called me a 'fucking dyke' to my face" (Alpert et al., 2017, p. 1376).

Jaffee, Shires, and Stroumsa (2016) found that 29.9% of individuals who identify as transgender postponed or did not seek needed health care due to discrimination. Additionally, when transgender patients reported having to teach their provider about transgender people they were four times more likely to delay care (Jaffee et al., 2016). Prior experiences of discrimination and fear of discrimination prevent GSM patients from accessing health care and disclosing sexual orientation (Lee & Kanji, 2017). The consequences of homophobia, biphobia, transphobia, and heterosexism become internalized by GSM persons and can result in internalized homophobia or self-stigmatization (Eckstrand & Ehrenfeld, 2016). "Self-stigmatization incorporates society's negative views into the self-concept and results in negative feelings about one's own non-heterosexual identity" (Eckstrand & Ehrenfeld, 2016, p. 40).

Discriminatory behavior can negatively impact mental and physical health outcomes (Zeeman et al., 2019). Awareness of these barriers through education and research that focuses on them has provided the opportunities for health professionals, researchers, policymakers, and institutions to make the appropriate changes to health policy, the delivery of health care, and for health professionals to be aware of their implicit biases towards GSM persons while making a conscious effort to eliminate these biases and attitudes (Smalley et al., 2018)

Discriminatory Health Care Culture and Policy

Heteronormative culture has been and continues to be reflected in health care policy and legislation. Homosexuality was considered a diagnosable illness in the United States until the late 1970s (Bidell & Stepleman, 2017; Eckstrand & Ehrenfeld, 2016; Smalley et al., 2018). Following the declassification of homosexuality as a mental disorder, the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* added a new diagnosis, sexual orientation disturbance, to the *DSM-II* (American Psychiatric Association, 1968*)*. Sexual orientation disturbance "regarded homosexuality as an illness if an individual with same-sex attractions found them distressing and wanted to change…the new diagnosis legitimized the practice of sexual conversion therapies" (Drescher, 2015, p. 571).

In the *DSM-III*, sexual orientation disorder was renamed ego-dystonic homosexuality (American Psychiatric Association, 1980). With the release of the *DSM-III-R*, there was an acknowledgment that feelings of distress about an aspect of self-identity were not indicative of having a mental disorder (Bidell & Stepleman, 2017). The publication of the *DSM-5* in 2013 eliminated the word disorder and renamed the disorder as gender dysphoria (American Psychiatric Association, 2013). The continued inclusion of gender dysphoria in the *DSM* continues to reiterate the belief that sexual and gender minorities have a mental disorder (Bidell

& Stepleman, 2017). The World Health Organization's current edition of the *International Statistical Classification for Diseases and Related Health Problems* (10th ed.; ICD-10) includes diagnostic categories for both sexual orientation and gender identity minorities (World Health Organization, 1992).

Legislation and Health Insurance

Health professionals' right to refuse care to GSM patients remains the law in more than half the United States (Smalley et al., 2018). Gender and sexual minority persons' persistent discrimination experiences in the health care delivery system can be detrimental and can further be exacerbated by negative encounters with health professionals.

Health coverage for GSM individuals continues to serve as a barrier to care. Progress has been made with the passing of the Affordable Care Act, which expanded health care access for millions of Americans, including the LGBT community (Skopec & Long, 2015; Smalley et al., 2018). Despite this progress, 19 states have not expanded Medicaid coverage to reach those that fall through the "insurance gap." "Expansion of the Medicaid program (i.e., the inclusion of poverty in adult eligibility for Medicaid benefits) is significant because GSM adults experience rates of poverty as high or higher than cisgender heterosexual adults" (Smalley et al., 2018, p. 18). The Affordable Care Act eliminated denial of care for pre-existing conditions. Nevertheless, medical care coverage for transgender-related diagnoses is inconsistent leaving trangender people directly responsible for a substantial portion of their medical bills (Eckstrand & Ehrenfeld, 2016).

Culturally Competent Health Professionals

The significant lack of GSM-competent providers to provide health care to GSM patients continues to be a barrier to equitable health care access (Eckstrand & Ehrenfeld, 2016; Khalili,

Leung, & Diamant, 2015; Mayer et al., 2008; Smalley et al., 2018; Healthy People 2020 [Internet]; IOM, 2011; The Joint Commission, 2011). Only 16% of health institutions report having comprehensive GSM-competency training, 32% having some training available, and the remaining 52% have had no GSM training (Khalili et al., 2015). Moreover, fewer than nine percent of health institutions report having a procedure to identify GSM-competent providers affiliated with their institution. Few health institutions report utilizing the GLMA provider directory as a resource for assisting GSM patients in finding a GSM-competent provider (Khalili et al., 2015). Gender and sexual minority competent providers should be easily identifiable. "Outness" of providing GSM-competent care largely places GSM patients at ease (Smalley et al., 2018). The Healthcare Equality Index (HEI) is an avenue for GSM patients to find LGBT-affirming health services (Snowdon, 2016). The Human Rights Campaign Foundation created the HEI as a way for health facilities to assert that they "comply with the Joint Commission and Centers for Medicare and Medicaid Services (CMS) requirements for GSM equity, are committed to GSM patient-centered care, and extend nondiscrimination protection to their GSM employees" (Snowdon, 2016, p. 4). In 2016, there were 496 health care facilities designated leaders in health care equity.

Health Inequities and Disparities

Inadequate education and barriers to care have played a synergistic role in the health inequities and disparities among the LGBT community. The IOM and *Healthy People 2020* initiative have highlighted the unique health needs and health disparities that affect GSM members; and a call to action to address these inequities has been made (IOM, 2011; Healthy People 2020 [Internet]). These health disparities and inequities in care stem from social and political discrimination, structural and legal policies/legislation, and a lack of knowledgeable and

culturally competent health care professionals and environments (Ard & Makadon, 2012; Byne, 2015; Eckstrand & Ehrenfeld, 2016; Matza, Sloan, & Kauth, 2015; Sekoni, Gale, Manga-Atangana, Bhadhuri, & Jolly, 2017; Skehan & Muller, 2016; Smalley et al., 2018).

Specific GSM Related Risk Behaviors

Sex risk-related behaviors. Gender and sexual minorities, particularly men who have sex with men (MSM) and transgender women, may be at elevated risk to engage in risky sexual behaviors (Macapagal et al., 2018; Smalley et al., 2018). Anal intercourse is understood to pose the highest risk of HIV infection, specifically for receptive partners (Eckstrand & Ehrenfeld, 2016). Halkitis, Wolitski, and Millett (2013) noted, "one of the key reasons for high vulnerability to HIV among MSM compared to heterosexuals, even if the number of partners and frequency of sexual activity were the same, is simply because anal sex carries 18 times greater chance of HIV infection than vaginal sex" (p. 263). Sexual behaviors of MSM compared to heterosexual men may include an increased number of lifetime sex partners, more sex partners in the past year, a longer lifetime period of acquiring new sex partners, younger sexual debut, and more likely to have concurrent sex partners (Halkitis et al., 2013; Smalley et al., 2018). The complex interplay of gender, sexuality, biological vulnerabilities, and social and structural determinates account for high rates of HIV infection among transgender persons (Smalley et al., 2018).

The introduction to online social applications, or "hookup apps" has emerged as a risk factor for unsafe sexual behaviors among heterosexuals and the LGBT community (Choi et al., 2016; Macapagal et al., 2018; Shapiro et al., 2017). Online social networks provide a convenient and discrete way for GSM persons to connect to other members of their community and meet sexual needs and desires while overcoming common obstacles to meeting same-sex partners (Macapagal et al., 2018; Smalley et al., 2018). Sexual networks among MSM and transgender

women may be influenced by concurrent risk within sexual networks, including injection drug use, serosorting, age, and group sexual encounters that can result in higher risks associated with sexual encounters (Smalley et al., 2018). Sexual networks may be determined by demographic factors or form due to shared interests or patterns of sexual behavior (Smalley et al., 2018). Some GSM persons have needed to construct safeguarded spaces to interact with similar individuals due to discrimination directed against them (Chatterjee, 2014). These protected spaces have emerged as physical venues used by some GSM individuals to engage in sexual activity (Smalley et al., 2018). Engaging in sex with multiple people simultaneously or in quick succession, having condomless anal intercourse, and the use of drugs, both through injection and other methods, are some of the high-risk sexual behaviors that may occur with the use of online social network applications or within these physical venues (Smalley et al., 2018).

Tobacco, alcohol, and other substance use. Sexual minority adults appear to have the highest smoking rate (Lim et al., 2014; Smalley et al., 2018). The prevalence of smoking is reportedly 27% to 71% higher among gay and bisexual men, and 70% to 350% higher among lesbians and bisexual women, than it is in the general population (Lim et al., 2014). Rates of heavy drinking were consistent across populations; GSM individuals faced higher rates of alcohol and substance abuse and dependency due to psychosocial vulnerability and stigma attached to their sexual orientation or gender identity (Lim et al., 2014; Smalley et al., 2018). Sexual and gender minority persons, compared to their heterosexual counterparts, are significantly more likely to report current illicit drug use, with prevalence rates for lesbians: 9.7%; gay men: 23.5%; bisexual men: 19.9%; bisexual women: 39.4%; and gender minority individuals: 19.0%-39.6% (Smalley et al., 2018). Polysubstance use is alarmingly high for GSM

groups. For GSM youth, the prevalence of substance use is a staggering 190% higher than for cisgender heterosexual youth (Smalley et al., 2018).

Diet. Gender and sexual minority individuals are at higher risk of eating disorders, including anorexia, binge eating and purging, and excessive laxative use compared to non-GSM individuals (Smalley et al., 2018). In comparison to their cisgender heterosexual counterparts, sexual minority men are at the greatest risk of eating disorders, body dissatisfaction, and decreased body image among sexual minority subgroups. This increased risk for disordered eating among sexual minority men appears to be related to the greater emphasis on physical appearance within the gay community (Eckstrand & Ehrenfeld, 2016; Smalley et al., 2018). "Approximately 10-25% of people with eating disorders are men, with 10-42% identifying as gay or bisexual, above the rate of homosexuality and bisexuality within the male population (3.6%)" (Eckstrand & Ehrenfeld, 2016, p. 209). Transgender women are at a higher risk of disordered eating, body dissatisfaction, body-related distress, and poor body image (Eckstrand & Ehrenfeld, 2016). Experiences of minority stress, stigmatization, internalized homophobia, and harmful events may put GSM individuals at higher risk for body image concern (Smalley et al., 2018).

Sexual minority women and gender minority individuals are more likely than their heterosexual counterparts to be overweight or obese (Ard & Makadon, 2012.; Smalley et al., 2018; Fredriksen-Goldsen et al., 2014; VanKim et al., 2016). The risk for obesity appears elevated across the lifespan of sexual minority women, both as adolescents and older adults (Eckstrand & Ehrenfeld, 2016; Mereish, 2014; Smalley et al., 2018). Transgender men have the highest prevalence of obesity compared to sexual minorities and transgender women (Warren, Smalley, & Barefoot, 2016). Many factors that are synergistic of each other are correlated to a

higher prevalence of overweight and obese sexual minority women and transgender individuals, including demographic factors, behavioral factors, social and relationship factors, psychological factors, and biological factors (Smalley et al., 2018).

Physical activity. According to Calzo, Roberts, Corliss, Blood, Kroshus, and Austin (2014) and Gorczynski and Brittain (2016) GSM persons report fewer physical activity hours than their cisgender heterosexual counterparts. Only 42% of GSM report participating in physical activity needed for good health, compared to 59% from the cisgender heterosexual population (National LGB&T Partnership, 2016). Sixty-four percent of gender minorities do not reach the physical activity recommendations required for good health (National LGB&T Partnership, 2016). Physical activity reduces the risk of cardiovascular disease, type II diabetes, certain kinds of cancers, strengthens bones and muscles, and promotes mental well-being (Center for Disease Control and Prevention [CDC], 2015). Exclusionary and discriminatory practices, homophobia, biphobia, transphobia, threats of violence, and psychological challenges are identified as personal and social barriers preventing GSM people from being physically active (Gorczynski & Brittain, 2016). More research is needed regarding physical activity and GSM persons.

Engagement with health care. Not accessing health care services may not seem to count as a risk behavior, but failure to do so can lead to poor health (Smalley et al., 2018). Limited access to health care, poor health, and an individual's socioeconomic status are connected with risk behavior. Due to limited access to health care, GSM members often experience an increased risk of certain cancers, STIs, unhealthy weight, and other issues (Smalley et al., 2018). It is essential to acknowledge that "non-affirming care, and the resulting avoidance of care, is more significant than actual physical access to health care…increased access points are only as

meaningful as the impact of cultural sensitivity and training of the workforce…" (Smalley et al, 2018, p. 33).

Conditions, Outcomes, Illnesses, and Diseases

Cancer. Gender and sexual minorities are at higher risk for multiple types of cancers, including anal, penile, and oropharyngeal compared to the cisgender population (Blondeel et al., 2016; Bristowe et al., 2018; Butler et al., 2016; Curmi, Peters, & Salamonson, 2014; Eckstrand & Ehrenfeld, 2016; Smalley et al., 2018). Sexual minority men are disproportionately affected by human papillomavirus (HPV) infections. Men who have sex with men have an increased risk for HPV- related cancers, such as cancer of the anus, penis, and oropharynx (Sadlier et al., 2014). A study on anal HPV prevalence and incidence in youth MSM, found that 69.6% of participants in the study had any HPV infection detected over a one year follow-up period, with the incidence rate for any new HPV infection among men with no HPV detected in their first swab, being 38.5% per 1,000 person-months (Glick et al., 2014). Furthermore, HPV-16 and/or -18, the two strains that cause the majority of anal cancers, were detected in more than one-third of study participants at least once, and nearly 20% of all participants in the study had evidence of persistent infection with one of these two strains (Glick et al., 2014). In HIV-positive MSM, anal HPV infection were found to be 86% (van Rijn et al., 2014). Given the high prevalence of HPV among MSM, immunization with the HPV vaccine is imperative.

Multifactorial barriers to health care for the LGBT community creates challenges to achieving cancer health equity for the GSM population. For transgender individuals, finding a health professional competent in their unique health needs and a sense of "gender dissonance" regarding cervical, prostate, or breast cancer screening may lead to avoidance of preventative care and cancer screening (Johnson, Nemeth, Mueller, Eliason, & Stuart, 2016). "Barriers to care

are greater than just an individual's gender minority status; that status may directly impact engagement with care (Smalley et al., 2018, p. 64). Published research on cancer among gender minorities is scarce, and future research should be dedicated to this area (Smalley et al., 2018).

Anal cancer. High-risk types of HPV, which is the primary risk factor for the development of anal cancer, are most prevalent in populations that have receptive anal intercourse, such as MSM (D′Souza et al., 2016). The number of receptive partners increased the risk of anal HPV by 2.9 times, and the frequency of receptive intercourse increased the risk of anal HPV infection by 2.6 times (Hernandez et al., 2014). The number of partners in which the individual was the insertive partner was not associated with incident HPV infection.

Additional risk factors for anal carcinoma in MSM include the coexistence of other STIs, a history of chronic local inflammation in the rectum, HIV, and immunosuppression. Calzo et al., 2014; Eckstrand & Ehrenfeld, 2016; Nadarzynski, Smith, Richardson, Jones, & Llewellyn, 2014; Smalley et al., 2018). Compared to the general U.S. population, anal cancer risk is 32 times higher in HIV-uninfected MSM and 52 times higher in HIV-infected MSM (D′Souza et al., 2016). The best preventative measure against anal carcinoma is the HPV vaccine. Due to the high rate of anal and oropharyngeal cancer among sexual minority men, they are an essential target group for HPV vaccination (Oliver et al., 2018). Early detection approaches to identifying anal dysplasia include anal Pap smears and high-resolution anoscopy (Hicks et al., 2015).

Breast cancer. Studies on the incidence and prevalence of breast cancer in cisgender heterosexual females compared to sexual minority women have proven inconclusive (Williams et al., 2020). There is evidence for differences in the utilization of breast care for sexual minority women compared to cisgender heterosexual women (Williams et al., 2020). The IOM (2011) suggests a higher risk of breast cancer in sexual minority women because of the higher

prevalence of risk factors, such as nulliparity, alcohol use, and obesity. Further research is needed on whether this higher prevalence of risk factors equates to higher disease rates for sexual minority women (Smalley et al., 2018). Little is known about gender minorities' participation or need to participate in mammography screening. Further research is needed to examine the cancer-specific risks that gender minorities face (Smalley et al., 2018).

HIV and Other STIs

Gender and sexual minority communities continue to be disproportionately affected by HIV, AIDS and other STIs (Blondeel et al., 2016; CDC, 2019; Clark, Babu, Wiewel, Opoku, & Crepaz, 2017; Eckstrand & Ehrenfeld, 2016; Smalley et al., 2018). Sexual minority men and transgender women are the GSM groups most vulnerable to HIV and other STIs (Smalley et al., 2018). In 2017, 38,739 people received an HIV diagnosis in the United States (CDC, 2019). In the United States, MSM accounted for 66% (25,748) of all HIV diagnoses and 82% of males' diagnoses. From 2012 to 2016, HIV diagnoses among sexual minority men remained stable, but trends varied by race/ethnicity. White sexual minority men saw a decrease of 14% of HIV diagnoses, African Americans remained stable, and Hispanics and Latinos increased by 12% (CDC, 2019). Human immunodeficiency virus prevalence among transgender women is 21.7%, 34 times higher than that among cisgender adults (of reproductive age) (Clark et al., 2017). Over three-quarters of transgender individuals newly diagnosed with HIV between 2009-2014 were transgender women (Clark et al., 2017). The CDC (2016) reported that during 2013, transgender individuals had the highest percentage of newly diagnosed HIV. Multifaceted relationships of gender, sexuality, biological vulnerabilities, and social and structural determinants account for the high rates of HIV infection among transgender individuals (Reisner, White, Mayer, & Mimiaga, 2014).

In the United States, the prevalence of HIV among transgender women is 14.1%, 3.2% for transgender men, and 9.2% for transgender people overall (Becasen et al., 2019). By contrast, the estimated HIV prevalence in the United States for adults overall is less than 0.5% CDC, 2019). The prevalence of HIV among transgender women of color was 44.2% among African American transgender women, 25.8% among Hispanic/Latina transgender women, and 6.7% among white transgender women (Becasen et al., 2019). A risk factor for acquiring HIV in transgender women is living in an urban area compared to a rural area, which may be attributed to the fact that HIV prevalence in urban areas is high (Chhim et al., 2017). Transgender women 25 years of age or older have a significantly higher prevalence of HIV than that of their younger counterparts due to greater length of exposure risk and an increasing number of sexual partners, increasing the cumulative probability of HIV acquisition (Chhim et al., 2017).

Additionally, transgender women who disclosed their female gender identity were associated with a higher prevalence of HIV (Chhim et al., 2017). More overt feminine expression was associated with higher numbers of both commercial and non-commercial male sexual partners compared to those who did not make their female status visible all the time. Disclosing female gender identity could lead to stigmatization and discrimination in finding jobs, thus leading to engaging in sex work for income. “Sex work provides both desired gender affirmation and economic stability, often with greater financial rewards for sex without a condom…making them more prone to HIV infection” (Chhim et al., 2017, p. 4).

Globally, MSM are 27 times more at risk of HIV acquisition than the general population due to biological, behavioral, legal, social, and cultural factors (Avert, 2019). The high prevalence rate of HIV among MSM means that these group members have an increased chance of being exposed to HIV. Unprotected anal intercourse carries a higher risk of HIV acquisition

and transmission than vaginal intercourse. The anus is more susceptible to trauma, creating an entry point for HIV into the bloodstream. Men who have sex with men have high STI rates, making them more susceptible to HIV infections. With these heightened biological risk factors, the frequency of HIV and STI testing and sexual health visits remain relatively low among MSM. Behavioral factors contribute to the high prevalence of HIV among MSM. In 2018, UNAIDS reported that in 33 of the 87 countries that reported data to UNAIDS, less than 60% of MSM reported using a condom the last time they had anal intercourse, just 15 countries reported 80% or greater condom use at last anal intercourse among this population (UNAIDS, 2018).

Awareness of HIV status varies dramatically across the globe. Several European and North American cities are approaching or have exceeded one of UNAIDs' Fast Track targets for 2020, which is 90% of people living with HIV know their status; of whom 90% are on treatment; of whom 90% are virally suppressed (90-90-90; Avert, 2019; UNAIDS, 2014). In other countries, particularly those in Africa and India, awareness of HIV status ranges from less to 10% to 30% (Avert, 2019). Lack of awareness of HIV status propagates the transmission and acquisition of HIV as protective measures to prevent the transmission of HIV are not utilized. High-risk sexual behavior by some GSM members further increases the risk of HIV transmission and acquisition by others.

With the emergence of HIV preexposure prophylaxis (PrEP), improved prevention of HIV is promising. PrEP is a medication that individuals at risk for HIV can take to prevent getting HIV from sex or injection drug use (CDC, 2020). When taken as prescribed, PrEP reduces the risk of getting HIV from sex by about 99%. Discouragingly, over one million Americans are candidates for PrEP, yet only 18% of those at the greatest risk of acquiring HIV have accessed PrEP (Harris et al., 2019). Estimates from the CDC indicate that if only 40% of

eligible sexual minority men were to utilized PrEP, there would be a 33% reduction in HIV cases over the next ten years (CDC, 2014b; Jenness et al., 2016; Smalley et al., 2018). Implementing preexposure chemoprophylaxis prevention screening tools into health care settings and health professionals' education on PrEP and are much needed.

Gender and sexual minorities are at risk for several STIs (Blondeel et al., 2016; Eckstrand & Ehrenfeld, 2016; Nadarzynski et al., 2014; Smalley et al., 2018). Sexually transmitted infections increase the risk of acquiring and transmitting HIV infection (Smalley et al., 2018). Primary and secondary syphilis disproportionately affects sexual minority men. In 2013, 91% of syphilis cases were among men (Patton, Su, & Weinstock, 2014). Syphilis is a risk factor for acquiring HIV, and coinfection of HIV and syphilis increases the risk of neurosyphilis and its complication (Smalley et al., 2018). Chlamydia and/or gonorrhea infection in MSM may occur in urogenital sites, oropharynx, and the rectum (Eckstrand & Ehrenfeld, 2016; Patton, Kidd, et al., 2014; Smalley et al., 2018). Rectal gonorrhea and chlamydia, particularly when recurrent, have been associated with an increased risk of HIV seroconversion in sexual minority men (Smalley et al., 2018). Numerous viral STIs affect sexual minority men, including hepatitis A and B, HPV, and various herpes infections (Eckstrand & Ehrenfeld, 2016; Smalley et al., 2018). Ensuring that diligent vaccinations, including the hepatitis A vaccine, hepatitis B vaccine, and the HPV series are provided to GSM individuals is necessary. Routine STI and HIV screening, particularly among sexual minority men who partake in high-risk sexual behavior, with testing extending beyond urogenital sites are essential to promoting quality health and good outcomes.

The risk of STIs and HIV among women who have women who have sex with women (WSW) has been perceived as low both by health professionals and WSW themselves (Smalley et al., 2018). This perception stems from two erroneous beliefs, (a) lesbian-identified women

only engage in same-sex intercourse and (b) it should be acknowledged that male sexual partners increase the risk of HIV and STIs, but it is still possible to transmit HIV and STIs between females (CDC, 2014a; Takemoto, 2019). Between 70%-80% of lesbian-identified women have had at least one male sexual partner (Barefoot, Warren, & Smalley, 2017), and HIV/STIs can be transmitted between female sexual partners (CDC, 2014a). Sexual minority women report higher rates of engaging in risky sexual behaviors, including unprotected sexual activity with male and female partners, history of multiple sexual partners, and forced sexual intercourse (Smalley et al., 2018).

Sexually transmitted infections that easily can be transmitted through female-to-female sexual contact include bacterial vaginosis, chlamydia, genital herpes, HPV, and trichomoniasis. Although rare, female-to-female sexual transmission of HIV, gonorrhea, syphilis, and hepatitis are possible (Smalley et al., 2018). Transmission of HIV/STIs through heterosexual intercourse, which is common even among lesbians, and sharing injection drug needles are additional ways that sexual minority women can acquire HIV/STIs. Several STIs have been found to more common among WSW than those who are exclusively heterosexual, including bacterial vaginosis and herpes simplex type 2 infection (Reiter & McRee, 2017; Smalley et al., 2018).

Most of the research on transgender men focuses specifically on those who have sex with men (Reisner, Poteat, et al., 2016; Smalley et al., 2018). The majority of transgender men identify their sexual orientation as non-heterosexual (Reisner, Poteat, et al., 2016; Reisner et al., 2014). Transgender men are increasingly vulnerable to HIV and STIs (Smalley et al., 2018). This increase in vulnerability is related to risky sexual behavior, including being less likely to use protection during their last sexual encounter and being more likely to have recently engaged in one or more high-risk sexual activities.

Mental Health

Examining vulnerable individuals or communities' mental health cannot be done without understanding the environmental and socio-cultural circumstances and lived experiences within these individuals and communities. Stigma, discrimination, hate violence and crime, internalized and external homophobia, lack of acceptance and visibility, the inadequacy of knowledgeable and culturally competent health professionals and spaces, and harmful policies and legislation all play a syndemic role in GSM persons overall mental health (Ard & Makadon, 2012; Eckstrand & Ehrenfeld, 2016; Jennings, Barcelos, McWilliams, & Malecki, 2019; Skehan & Muller, 2016; Smalley et al., 2018; Zeeman et al., 2019). Using the Minority Stress Theory (Meyer, 2003) as the foundation for exploring and understanding mental health disparities in GSM individuals and communities is warranted (Smalley et al., 2018; Zeeman et al., 2019). The Minority Stress Theory can be described as a relationship between minority and majority values, which results in conflict with the social and cultural environment experienced by minority group members (Meyer, 1995). The Minority Stress Theory suggests that GSM health disparities can be explained in large part by repeated "stressors induced by a hostile, homophobic culture, which often results in a lifetime of harassment, maltreatment, discrimination, and victimization and may ultimately impact access to care" (Dentato, 2012, p. 1). Stressors from the environmental and cultural context in which vulnerable individuals and communities live and the lived experiences of discrimination and stigma among LGBT communities requires individuals to adapt while causing a significant amount of distress. Consequently, this affects one's overall physical and mental well-being and health (Ard & Makadon, 2012; Eckstrand & Ehrenfeld, 2016; Meyer, 2003; Smalley et al., 2018; Zeeman et al., 2019).

Mood disorders. A disproportionately high rate of mood disorders, especially major depression, is demonstrated in GSM individuals (Blondeel et al., 2016; Eckstrand & Ehrenfeld, 2016; Reisner, Poteat, et al., 2016; Smalley et al., 2018; Zeeman et al., 2019). Compared to their cisgender, heterosexual peers, sexual minority men and women are three times more likely to experience depression (Eckstrand & Ehrenfeld, 2016). Bisexual men and women have the highest rates of mood disorders among sexual minority subgroups, likely due to "double discrimination" and biphobia from not only the heterosexual population but also from the sexual minority population, microaggression, financial difficulties, and significantly more adverse life events than sexual minorities (Bostwick & Hequembourg, 2014; Eckstrand & Ehrenfeld, 2016; Flanders, Dobinson, & Logie, 2015; Nam, Jun, Fedina, Shah, & DeVylder, 2019). Gender minorities have more severe depressive symptoms than sexual minorities or their cisgender heterosexual counterparts. Among gender minorities, the prevalence of depressive symptoms meeting clinical cutoffs was 52%, compared to 27% for cisgender females and 25% for cisgender males (Reisner, Katz-Wise, Gordon, Corliss, & Austin, 2016). Anxiety disorders prevalence rates among GSM individuals are higher than those of cisgender heterosexuals (Cohen, Blasey, Barr Taylor, Weiss, & Newman, 2016; Ngamake, Walch, & Raveepatarakul, 2016). Gender and sexual minorities have 1.5 times the risk of developing an anxiety than cisgender heterosexuals (Smalley et al., 2018). Gender and sexual minorities have a significantly increased risk of experiencing a manic episode or being diagnosed with bipolar affective disorder (Eckstrand & Ehrenfeld, 2016).

Trauma and violence. Gender and sexual minority individuals are twice as likely to meet the criteria for posttraumatic stress disorder (PTSD) when compared to cisgender heterosexuals (Roberts, Austin, Corliss, Vandermorris, & Koenen, 2010; Smith, Armelie, Boarts,

Brazil, & Delahanty, 2016; Stenersen et al., 2019). This disparity in rates of PTSD among GSM individuals can be almost wholly accounted for by the increased rates of interpersonal violence and childhood abuse or neglect experienced by GSM individuals (Eckstrand & Ehrenfeld, 2016; Smalley et al., 2018). Gender and sexual minorities may not be diagnosed with PTSD but experience an increased risk of exposure to traumatic events and victimization, including childhood abuse, bullying, and sexual abuse (Smalley et al., 2018). Gender and sexual minorities experience of victimization have been correlated with the development of depression, anxiety, suicidality, disordered eating, substance use, and high-risk sexual behaviors (Smalley et al., 2018). This trauma in GSM individuals is not limited to one specific traumatic experience or overt heterosexism but is experienced through microaggressions (Smalley et al., 2018).

Gender and sexual minorities seem to be at increased risk of experiencing intimate partner violence (IPV) than cisgender heterosexuals (The Williams Institute, 2015). Bisexual individuals are the most likely to have experienced IPV among sexual minority subgroups and the general population, with a prevalence of lifetime IPV at 37.3% among bisexual men and 56.9% among bisexual women (The Williams Institute, 2015). Male perpetrators account for 89.5% of IPV and intimate partner sexual abuse (IPSA) among bisexual women. Compared with cisgender individuals, transgender individuals were 1.7 times more likely to experience any IPV, 2.2 times more likely to experience physical IPV, 2.5 times more likely to experience IPSA (Peitzmeir et al., 2019). Intimate partner violence can result in physical pain and suffering. Indirect effects of IPV on health include depression, PTSD, substance use, and dissociation (Smalley et al., 2018).

Gender and sexual minorities experience high rates of hate-motivated violence. In 2019 in the United States, 16.7% of all single-bias hate crime incidents were targeted because of bias

against sexual orientation, and 2.7% were victims of gender-identity bias (Federal Bureau of Investigation, 2020). Sexual orientation ranks as the third-highest motivator for hate crime incidents. These statistics represent only a fraction of such violence due to the reporting of hate crimes to the Federal Bureau of Investigation not being mandatory, with the number of law enforcement agencies reporting hate crime data decreasing by 451 from 2018 to 2019 (Ronan, 2020). In November 2020, the Human Rights Campaign released their annual report on fatal violence against transgender and gender non-conforming people, which revealed at least 37 transgender and gender non-conforming people had been killed in the United States since the beginning of 2020 (Human Rights Campaign, 2020). In 2015, 67% of GSM homicide victims were transgender women, with 54% of those victims being transgender women of color (Humans Right Campaign, 2015; Smalley et al., 2018). In the United States, 13 states do not have existing hate crime laws that cover sexual orientation and gender identity (Movement Advancement Project, 2020).

Suicide. Gender and sexual minorities have consistently been found to be at an increased risk of engaging in deliberate self-harm, suicidal behavior, and death by suicide (Herman et al., 2014; Yildiz, 2018). In a meta-analysis of studies of suicide attempts directly comparing sexual minority adults to cisgender heterosexuals' counterparts, the lifetime prevalence rate was 11% among sexual minority individuals and 4% among cisgender heterosexuals (Hottes, Bogaert, Rhodes, Brennan, & Gesink, 2016). The lifetime prevalence of suicide attempts in transgender individuals ranges from 18% to 45% (Herman, Haas, & Rodgers, 2014; Smalley et al., 2018).

Suicide risk is believed to be the highest during teen and young adult years. More than 4.5 times as many sexual minority-identified high school students reported attempting suicide in the past 12 months compared to non-LGB students, with 29.4% vs. 6.4%, respectively (Kann et

al., 2016). Close to 43% of sexual minority youth have seriously considered suicide. Bisexual youth or youth questioning their sexual orientation and gender identity were even more likely to experience depression or suicidality than their lesbian or gay-identified peers (Kann et al., 2016). It should be noted that arriving at accurate approximations of suicide by GSM individuals relative to their cisgender counterparts can be challenging, as sexual orientation and gender identity are not listed on death certificates (Smalley et al., 2018). "Compounding this problem, psychological autopsy studies may be biased toward underreporting of GSM status insofar as some informants were unaware or nonaccepting of the decedent's sexual orientation and gender identity. Consequently, estimates of risk have often been achieved indirectly" (Smalley et al., 2018, p. 182).

Family rejection. Positive parental and familial relationships and family support offer a protective factor against significant health risk behaviors. Nurturing and supportive family connections are imperative for youth well-being. Due to their identities, many GSM youth may lack these positive parental and familial relationships and may even experience family rejection. Gender and sexual minority youth who experience parental rejection are dramatically more likely to report suicidal ideation, to attempt suicide, to score in the clinical range for depression and anxiety, experience homelessness, use illicit substances, engage in high-risk sexual behavior, and are at greater risk for adverse health outcomes (Eckstrand & Ehrenfeld, 2016; Katz-Wise et al., 2016).

Sexual minority youth that reported family rejection were 8.4 times likely to have attempted suicide, 5.9 times more likely to experience a high level of depression, and 3.4 times more likely to use illicit substances than those who reported little or no family rejection (Hafeez et al., 2017). Among sexual minority youth, one-third of youth experience parental acceptance,

another third experience parental rejection, and the remaining third do not disclose their sexual orientation even by their late teenage years (Hafeez et al., 2017; Katz-Wise et al., 2016). Parental acceptance is associated with a greater likelihood of affirming identity than struggling with one's identity (Katz-Wise et al., 2017). Parental disclosure of one's sexual orientation or gender identity was associated with less internalized homophobia than youth whose parents did not know about their sexual orientation or gender identity. These health disparities among GSM youth are likely due to the stress associated with society's and parental relationships' stigmatization of homosexuality (Katz-Wise et al., 2016). This "minority" stress is experienced by GSM individuals as victimization, which is subsequently internalized, resulting in GSM individuals victimizing themselves through possessing negative attitudes towards their sexual orientation and gender identity.

Theoretical Framework

The theoretical framework used in this dissertation/project is the Process of Cultural Competence in the Delivery of Healthcare Services by Dr. Josepha Campinha-Bacote. Campinha-Bacote developed the model in 1998 and further revised the model in 2002 (Campinha-Bacote, 2002). The constructs of this model build off Leininger's (1987) works in transcultural nursing and Pedersen's (1988) in the area of multicultural development. The Process of Cultural Competence in the Delivery of Healthcare Services model considers cultural competence as an evolving process in which the health care professional continuously aims to effectively to work within the patient's context (Campinha-Bacote, 2002). The Process of Cultural Competence in the Delivery of Healthcare Services model requires health care professionals "to see themselves as becoming culturally competent rather than already being culturally competent"…this ongoing process "involves the integration of cultural awareness,

cultural knowledge, cultural skill, cultural encounters, and cultural desire" (Campinha-Bacote, 2002, p. 181). These five components are interconnected and require an individual or group address and are skilled in each component (Campinha-Bacote & Munoz, 2001).

Campinha-Bacote's cultural competence model is a model for health professionals in all areas of practice, from clinical to policy development and education. More specifically, the model has been recommended for health professions education as a framework for policy development and a framework for health care organizations to provide culturally relevant services (Campinha-Bacote, 1999). This process of cultural competence is fostered through the integration and achievement of each element of The Process of Cultural Competence in the Delivery of Healthcare Services – cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire. The educational intervention of this project will support and reinforce each of these elements to promote cultural competence. Working towards cultural competence of GSM health, health professionals' may have the ability to more effectively meet GSM patient's health needs within their cultural context.

Table 2

Process of Cultural Competence in the Delivery of Healthcare Services Components and Definitions (Campinha-Bacote, 2002) and Correlation to Project

Component	Definition	Correlation to Project
Cultural Awareness	• Foundation of cultural competence. • Self-examination and in-depth exploration of one's own cultural and professional background. • Recognition of one's biases, prejudices, and assumptions about individuals who are different from him/her.	• Through willing participating in this quality improvement project. • Online learning module discussed stigma and discrimination the LGBT community faces in the health care delivery system. • Webinar discussed the relationship between stigma and LGBT health disparities. • LGBT-DOCSS Questions: 3, 5, 7, 9, 12, 17, 18. • Project Evaluation Question: 2, 6
Cultural Knowledge	• The act of seeking and obtaining sound knowledge about diverse cultural and ethnic groups. • Incorporates understanding health-related beliefs and cultural values, disease incidence and prevalence, and treatment efficacy. • Viewing the individual as a unique blend of diversity found within each culture, with unique life experiences, and the process of acculturation to other cultures.	• Online learning module described health disparities faced by LGBT people and explained the importance of effective communication to provide affirming care for LGBT patients. • Webinar discussed important LGBTQIA+ concepts and terminology, highlighted the relationship between stigma and LGBT health disparities, and described best practices in LGBT health related to effective communication, data collection, and creating an inclusive environment. • LGBT-DOCSS Questions: 1, 2, 6, 8, 10, 11, 14, 15. • Project Evaluation Question: 3, 5
Cultural Skill	• Brings together the knowledge and expertise to provide culturally sensitive and knowledgeable care. • The ability to obtain a health history and physical exam in a culturally sensitive and appropriate way. • Assessing the patient's linguistic needs.	• Online learning module one explained the importance of effective communication to provide affirming care for LGBT patients. • Webinar described best practices in LGBT health related to effective communication, data collection, and creating an inclusive environment. • LGBT-DOCSS Questions: 4, 10, 11, 13, 14, 15, 16. • Project Evaluation Question: 4
Cultural Encounter	• Actively interacting with individuals and communities that are diverse from one's own that aims to bridge or connect the differences between cultures respectfully and thoughtfully. • This interaction will cultivate and transform current beliefs about a cultural group and will prevent possible stereotyping and implicit and explicit bias that may have occurred.	• Online learning module one summarized important LGBT terminology and explained the importance of effective communication to provide affirming care for LGBT patients. • Webinar described best practices for creating an inclusive environment and data collection. • LGBT-DOCSS Questions: 4, 13, 16, 18.
Cultural Desire	• The motivation to want to engage in the process of becoming culturally aware, culturally knowledgeable, culturally skilled, and seeking our cultural encounters. • A genuine passion for being open to others, accept and respect differences, and be willing to learn from others as cultural informants.	• Voluntarily participating in this quality improvement project and actively engaging in this education intervention represents cultural desire. • LGBT-DOCSS Question: 10, 11, 18. • Project Evaluation Question: 1

Conclusion

The LGBT community continues to experience worse health outcomes than their heterosexual counterparts. Due to inequities in health care, such as low rates of health insurance, high rates of stress due to systemic discrimination and stigma, and a lack of cultural competency in the health care system, GSM people are at higher risk of mental health disorders, sexually transmitted infections STIs and HIV, substance use and abuse, cancer, suicide, and other disorders/diseases. Additionally, GSM patients have unique health needs that differ from their cisgender counterparts. To reduce these health disparities and inequities in care, ensuring health professionals have the necessary knowledge, clinical skill, and less prejudicial attitudes towards the LGBT community is imperative. Table 3 provides a checklist for health care organizations and professionals to ensure inclusive, culturally sensitive care can be delivered to GSM patients and includes recommendations for practice to meet GSM patients' unique health needs.

Table 3

Checklist for Ensuring Inclusive, Culturally Sensitive Care and Key Recommendations for Practice

Provision of Care, Treatment, and Services
Create a welcoming environment that is inclusive of LGBT patients. • Post organization's nondiscrimination policy • Designate unisex or single-stall restroom • Ensure that fair and nondiscriminatory visitation polices are implemented • Foster an environment that supports and nurtures all patients and families
Avoid assumptions about sexual orientation and gender identity. • Be aware of misconceptions, bias, stereotypes, and other communication barriers • Recognize that self-identification and behaviors do not always align
Facilitate disclosure of sexual orientation and gender identity. • Honor and respect the individual's decision in providing information • All forms should contain inclusive, gender-neutral language that allows for self-identity • Use neutral and inclusive language in interviews and when talking with patients • Listen to and reflect patients' choice of language when they describe their own sexual orientation and how they refer to their relationship or partner
Provide information and guidance for specific health concerns facing LGBT people. • Become familiar with online and local resources available for LGBT people • Seek information and stay up to date on LGBT health topics

Table 3. *Checklist for Ensuring Inclusive, Culturally Sensitive Care and Key Recommendations for Practice* (continued)

Data Collection and Use

Identify opportunities to collect LGBT-relevant data and information during encounter.

- Identify a process to collect data
- Ensure that the disclosure of sexual orientation and gender identity information is voluntary
- Train staff to collect sexual orientation and gender identity data in a culturally sensitive manner
- Ensure that strong privacy protections for all patient data are in place

Use available population-level data to help determine the needs of surrounding community.

- Conduct community needs assessments that include LGBT demographics

Patient, Family, and Community Engagement

Collect feedback from LGBT patients and families and the surrounding LGBT community.

- Ask LGBT patients and families about staff responsiveness to their needs during care and treatment
- Invite LGBT patients and family members to share their experiences
- Encourage community input and collaboration by establishing a community advisory board
- Encourage LGBT organizations to provide feedback on internal and external written material and policies to ensure that they are LGBT-inclusive

Ensure that communications and community outreach activities reflect a commitment to the LGBT community offer educational opportunities that address LGBT health issues.

- Provide educational programs and forums that support the unique needs of the LGBT community
- Engage external LGBT community organizations in the development and review of existing education programming to ensure that it is LGBT-inclusive

Key Recommendations for Practice – MSM

- Offer vaccination for hepatitis A and B and for HPV (through 26 years of age) for all MSM
- Consider preexposure prophylaxis (PrEP) for MSM
- Consider postexposure prophylaxis for MSM who report a recent high-risk exposure to HIV
- Screen MSM for STIs at least annually or more often as necessitated by level of risk; urine, rectal, and pharyngeal NAAT based on risk
- Hepatitis C screen at least once or more often as necessitated by level of risk
- HIV serological test at least annually or more often as necessitated by level of risk
- Syphilis serological testing at least annually for sexually active MSM
- Annual digital anorectal examination with a history of receptive anal intercourse
- Baseline cytology and annual anal cancer screening for MSM who are HIV-positive
- Screen annually for behavioral disorders and substance use

Key Recommendations for Practice – WSW

- WSW should be screened for obesity, type 2 diabetes mellitus, cancer, and cardiovascular disease (CVD)
- Regular Pap and HPV testing
- Referral for mammography according to guidelines for all women
- Screening for depression, anxiety, and suicide risk
- Screening for substance use, including tobacco, alcohol, and illicit drugs
- Screening for STIs following standard guidelines for all females, according to behaviors and risks
- Screening for intimate partner violence
- Offer HPV and hepatitis B vaccination

Key Recommendations for Practice – Transgender individuals

- Transgender patients who have not been on hormonal therapy and had no surgery – the recommendations for screening and prevention are the same as those of the general population
- For patients who have received hormones and/or undergone surgery, recommendations for screening and preventative care may depend on the patient's hormonal and surgical status
- Assessing and treating risk factors for CVD as hormone therapy may increase CV risks:
- Screening for substance use, including tobacco, alcohol, and illicit drug
- HIV serological testing at least once, annually or more often as necessitated by level of risk
- Screening for depression, anxiety, suicide risk, PTSD, and intimate partner violence
- Screening for STIs according to behaviors and risks
- Offer HPV, hepatitis A & B vaccinations

Note: LGBT = lesbian, gay, bisexual, and transgender; HPV = human papillomavirus; HIV = human immunodeficiency virus; MSM = men who have sex with men; WSW = women who have sex with women. Data for checklist for ensuring inclusive, culturally sensitive care from The Joint Commission (2011), and key recommendations for practice from Knight, D.A. & Jarrett, D. (2015, 2017), and Feldman, J. & Deutsch, M.B. (2021).

CHAPTER THREE. METHODS

This practice improvement project was an evidence-based intervention in response to an extensive review of the literature and the federal government's call to action. Improving health outcomes and reducing health disparities are an important part of the health care professional's role. Many health care professionals lack the knowledge, skills, and attitudinal awareness needed to provide quality GSM care (Butler et al., 2016; Eckstrand & Ehrenfeld, 2016; Smalley et al., 2018). Due to the growing evidence of health disparities and adverse outcomes affecting GSM populations, numerous research studies and the federal government have identified improving GSM patient outcomes and reducing the health disparities and inequities in care as a priority (Blondeel et al., 2016; Butler et al., 2016; Healthy People 2020 [Internet]; IOM, 2011; The Joint Commission, 2011; Zeeman et al., 2019). Numerous studies have shown that an educational intervention effectively enhances health care professionals' cultural competency on GSM-specific health and health concerns (Butler et al., 2016; Felsenstein, 2018; Sekoni et al., 2017). This project's aim was to enhance health professionals' cultural competence of GSM health through an educational intervention in hopes to start addressing these disparities and inequities.

Setting

The setting for this educational intervention was at Coal Country Community Health Center (CCCHC) and the center's three sister sites, all of which offer primary care services. Coal Country Community Health Center is a federally qualified health center (FQHC) with locations in Beulah, Hazen, Killdeer, and Center North Dakota (CCCHC, 2020). Coal Country Community Health Center serves rural communities located in three counties in western North Dakota. A letter of support for the project implementation at CCCHC (Appendix A) was

received from the Medical Director of CCCHC, Dr. Aaron Garman, before project implementation.

Sample

The convenience sample for this project included health care professionals employed at CCCHC who voluntarily agreed to participate in the project, including medical doctors (MDs), doctors of osteopathy (DOs), physician assistants (PAs), nurse practitioners (NPs), counselors, registered nurses (RNs), licensed practical nurses (LPNs), laboratory technicians, certified nursing assistants (CNAs), medical assistants (MAs), and unlicensed assistant personnel (UAs). A list of the email addresses of all CCCHC health care professionals who were eligible to participate in the project was programmed into Qualtrics before the start of the project. A total of 76 participants were invited to take part in the study. Demographic characteristics including age, education, professional role, years of experience, religious and political affiliation, acquaintance with someone who identifies as a GSM person, and if the individual taking the survey interacts with patients who identify as GSM were collected as the first part of the presurvey.

Demographic Characteristics

Inadequate training on GSM-specific health needs and negative bias towards GSM patients by health care providers serve as a significant barrier to quality care for GSM individuals. Research has shown significant shortfalls in training and education on GSM health among health care professionals, at all levels (Carabez, Pellegrini, Mankovitz, Eliason, Ciano, et al., 2015; Greene et al., 2018; Lim et al., 2015, 2015; Sawning et al., 2017). Though training and education background is important, health care professionals' demographic characteristics, values, and attitudes toward patient sexuality are also influential factors to consider in the provision of care to GSM individuals (Schnabel, 2018; Wilson et al., 2014). Religion and

frequency of attending religious services have been associated to developing and reinforcing disapproving attitudes toward GSM behavior (Banerjee et al., 2018; Schnabel, 2018; Wilson et al., 2014). Religious affiliation, with individuals identifying as Christian, showed significantly lower scores on the Attitudes Toward LGBT Patients Scale (ATLPS) than atheists, Hindus, and those with "other" or no religious affiliation (Wilson et al., 2014). An individuals' level of education has been shown to affect a person's attitudes towards GSM individuals and their behaviors (Patrick et al., 2013). Individuals who did not finish secondary school were more likely to disapprove of the LGBT community. Individuals who identify as more politically conservative were associated with anti-GSM attitudes (Pew Research Center, 2020; Schnabel, 2018). Republicans are more likely to adhere to GSM stereotypes, are more homophobic, and are the least supportive of gay rights (Pew Research Center, 2020; Schnabel, 2018). In fact, between 2015 and 2018, support for laws aimed at protecting GSM individuals from discrimination fell by nearly ten percentage points among Republicans under the age of 30 (Public Religion Research Institute, 2018).

North Dakota. The majority of North Dakota's population is socially and politically conservative. Over 64% of the population voted for the Republican candidate in the 2016 presidential election (NPR, 2016). The religious composition of adults in North Dakota shows 77% of the population identifies as Christian, with 22% identifying as Evangelical Protestant, 28% identifying as Mainline Protestant, and 26% identifying as Catholic (Pew Research Center, 2020). The state of North Dakota does not prohibit discrimination based on sexual orientation and gender identity in regards to housing, employment, harassment, and/or bullying of students, education, and public accommodations (Human Rights Campaign, 2020a). The state does not have a law that addresses hate or bias crimes based on sexual orientation or gender identity. The

state has neither a ban on insurance exclusions for transgender health care nor does it provide transgender-inclusive health benefits to state employees. North Dakota has no restriction on the so-called "conversion therapy."

Mercer County. Two of the CCCHC sites are in Mercer County, North Dakota. Mercer County has a population of 8,424, with 94.4% of the population identifying as White alone (U.S. Census Bureau, 2010). The second most identified race is Hispanic or Latino, with 3.0% of the population. Over 92% of the Mercer County population aged 25+ are high school graduates or higher, with 21.6% aged 25+ having a bachelor's degree or higher (U.S. Census Bureau, 2018). Individuals with a disability under age 65 years, includes 6.7% of the population and 7.2% of the population under age 65, are without health insurance. The median household income between 2014-2018 was $79,890, and over 7% of the population is in poverty. In the 2016 presidential election, 81.4% of Mercer County's population voted for Donald Trump (NPR, 2016).

Dunn County. One of the CCCHC sites is located in Dunn County. Dunn County has a population of 3,536, with 85.5% of the population identifying as White, alone and the second most identified race being American Indian and Alaska Native, alone at 9.7% of the population (U.S. Census Bureau, 2010). Over 90% of the population aged 25+ is a high school graduate or higher, with 21.0% aged 25+ having a bachelor's degree or higher (U.S. Census Bureau, 2018). 14.4% under the age of 65 years are without insurance. The median household income between 2014-2018 was $70,500, and over 10% of the population is in poverty.

Oliver County. One of the CCCHC sites is located in Oliver Country. Oliver County has a population of 1,846, with 95.5% of the population identifying as White alone. The second most identified race is American Indian and Alaska Native, alone at 2.8% of the population (U.S. Census Bureau, 2010). Close to 90% of the population aged 25+ are a high school graduate or

higher, with 18.7% of the persons aged 25 years+ having bachelor's degrees or higher (U.S. Census Bureau, 2018). Individuals with a disability under age 65 years include 6.4% of the population, and 8.9% of the population under age 65 years, are without insurance. The median household income between 2014-2018 was $68,333, and over 10% of the population is in poverty.

Recruitment

The first step of the recruitment process was a PowerPoint presentation (Appendix B) on the project presented via Zoom to approximately 50 CCCHC health professionals, consisting mostly of MDs, DOs, NPs, PAs, RNs, and LPNs, 12 days before to the launch date of the presurvey. Following the project presentation at CCCHC, recruitment for the project relied on email invitations. On August 10, 2020, an email invitation (Appendix C) was sent to all 76 health care professionals at CCCHC, inviting them to participate in the project. The email invitation provided details on the project, the project's purpose, the project timeline, the CMEs/CEUs offered from participating in this project, and the chance for one random participant to win a $50 Amazon gift card. The email invitation was sent out to all health professionals on day one of the project's three-month timeframe. Reminder to participate emails were sent out to participants who had not completed the presurvey at the two-week mark, the four-week mark, and the six-week mark. Only eligible participants who had yet to complete the presurvey received the reminder emails. Twenty-four hours after completing the presurvey, a second email (Appendix D) was sent out providing information on the educational intervention and post-survey. Reminder emails to complete the educational intervention and post-survey were sent out approximately every ten days to participants who had completed the presurvey but had not completed the post-survey. Four weeks after completing the post-survey, participants received an

email containing the follow-up survey link (Appendix E). The follow-up email provided a list of GSM resources (Appendix F) for providers and clinicians, organizations, and for patients who identify as a GSM individual. The follow-up survey was sent to participants who had completed the presurvey, the educational intervention, and post-survey. Reminder emails to complete the follow-up survey were sent out three days and one week after the follow-up survey was available to complete.

Engagement of key stakeholders is crucial for successful project implementation and change (Miller & Oliver, 2015). A letter of support of the project (Appendix G) from the Medical Director of CCCHC was emailed to eligible participants on August 24, 2020, the same time the first reminder recruitment email was sent out to participants. Additionally, a team of leads was established to assist with the project implementation and included the Director of Patient Care and Innovation, the Clinic Director, and a Clinic Lead.

Informed consent forms (Appendix H) were secured electronically from the participants via Qualtrics, a data management and survey software available for free to North Dakota State University students, before the presurvey. The consent did not require a signature; therefore, no names were obtained. Clicking on the box at the end of the consent form and advancing to the next screen authorized consent. Participant engagement with all survey tools was secured and was provided by utilizing Qualtrics. Due to the project involving potentially sensitive topics, anonymity was paramount. Qualtrics administered the survey in a manner to ensure that all responses were anonymous. After inputting the participant's email addresses into Qualtrics, Qualtrics assigned a Respondent ID for each email address that became the participant's identifier throughout the project. The Respondent ID assigned to each participant remained the same throughout the project, and each participant had their unique Respondent ID. The principal

investigator and co-investigator could not connect the Respondent ID to the email addresses or other personal identifiers.

Project Description

This study was a one-group pre-, post-, and follow-up survey intervention using a quasi-experimental design to evaluate the effectiveness of an educational intervention on improving health professionals' knowledge, clinical preparedness, and attitudinal awareness of GSM health. This project consisted of a presurvey, an educational intervention, a post-survey, and a follow-up survey. The project timeline was three-months; in the first two of the three months, the presurvey, educational intervention, and post-survey needed to be completed. The follow-up survey was available for participants to complete four-weeks after completing the post-survey. The presurvey, post-survey, and follow-up survey all included the same instrument, the LGBT-DOCSS (Appendix I), an interdisciplinary LGBT clinical self-assessment for health and mental health care professionals (Bidell, 2017). The entirety of the project took place online. The initial and subsequent recruitment emails provided a link to the surveys. The instrument (the LGBT-DOCSS) and additional questions depending on the survey were programmed into Qualtrics.

Educational Intervention

The educational intervention consisted of one online module and one webinar developed and offered by the National LGBTQIA+ Health Education Center: A Program of the Fenway Institute. The National LGBTQIA+ Health Education Center provides training on GSM health needs and services to community health centers to optimize quality, cost-effective health care for GSM people (Human Rights Campaign, 2020b). The education center is part of The Fenway Institute, the research, training, and health policy division of Fenway Health, one of the world's largest GSM-focused health centers (Human Rights Campaign, 2020b). The online module and

webinar took approximately one hour each to complete, were free of charge, and each offered one continuing education unit/continuing medical education credit. Participants were provided with the necessary information on how to access the online learning module and webinar. Participants needed to set-up an account that consisted of an email and password. To receive the continuing education unit/continuing medical education credit, participants had to complete the entire learning module and webinar and answer the site's evaluation survey at the end.

The online learning module, Providing Quality Care to Lesbian, Gay, Bisexual, and Transgender Patients: An Introduction for Staff Training, summarized important GSM terminology, described health disparities faced by GSM people, and explained the importance of effective communication to provide affirming care (National LGBTQIA+ Health Education Center, 2016). The webinar, Achieving Health Equity for LGBTQIA+ People (2020), discussed important LGBTQIA+ concepts and terminology, highlighted the relationship between stigma and LGBTQIA+ health disparities, and described best practices in LGBTQIA+ health related to effective communication, data collection, and creating an inclusive environment. (National LGBTQIA+ Health Education Center, 2020). A systematic review of key reports and webinars on the quality of GSM health education identified five core themes that should be addressed when educating health care professionals on GSM health and health concerns (Matza et al., 2015). These core themes include terminology, differences within LGBT populations, health and health disparities, transgender-specific content, and diversity (Matza et al., 2015). These five core themes guided the selection of what learning module and webinar to include in the educational intervention. The module and webinar included in the educational intervention followed The Process of Cultural Competence in the Delivery of Healthcare Services by

Campinha-Bacote's by incorporating interventions reinforcing each element's development in the model (Campinha-Bacote, 2002).

Instrumentation

Surveys. After participants were provided with the project details and informed consent, the presurvey (Appendix J), which included questions on demographic characteristics and the LGBT-DOCSS were available to complete. Twenty-four hours after submitting the presurvey, a new email was sent to participants with the next step of the project, the educational intervention followed by the post-survey (Appendix K). The post-survey included the LGBT-DOCSS and program evaluation questions. Four-weeks after completion of the post-survey, the follow-up survey (Appendix L) was sent to participants, which included the LGBT-DOCSS. Only participants who completed the presurvey were sent the information to complete the educational intervention and post-survey. Only participants who completed the post-survey were sent the follow-up survey.

LGBT-DOCSS. The LGBT-DOCSS was created to further develop competent LGBT clinical services by creating a reliable and valid LGBT self-assessment scale for health and mental health professionals by Dr. Markus Bidell (Bidell, 2017). Among the varied health professions' LGBT clinical competency guidelines, differences exist, but three core domains are shared features across psychology, counseling, and medicine. These organizations have all highlighted that to work competently, ethically, and effectively with LGBT clients and patients, practitioners, at a minimum, need to (1) gain awareness of personal and societal LGBT prejudicial attitudes and biases, (2) develop appropriate clinical experience and skills to effectively treat LGBT clients/patients, and (3) gain a working knowledge of LGBT psychosocial and health issues. "This tripartite model – consisting of attitudinal awareness, skill,

and knowledge – draws heavily on earlier multicultural competency scholarship regarding ethnically and racially diverse client groups" (Bidell, 2017, p. 1434). This trichotomous framework aligns with the conceptual model of cultural competence, which is composed of knowledge, attitude, awareness, and skills.

Prior LGBT clinical self-assessment scales (LGB-Affirmative Counseling Self-Efficacy Inventory, Lesbian, Gay, and Bisexual Affirmative Counseling Self-Efficacy Inventory - Short form, Sexual Orientation Counselor Competency Scale, LGB Working Alliance Self-Efficacy Scale, and Attitudes Toward LGBT Patients Scale) lack gender identity (i.e., transgender) inclusiveness and all but one of the five self-assessments, were not initially developed within an interdisciplinary framework (Bidell, 2017). Additionally, none of the five clinical self-assessment scales include participants from outside the United States. The underlying goal of the LGBT-DOCSS was to develop a "reliable and valid self-assessment of LGBT clinical skills, attitudinal awareness, and basic knowledge within an interdisciplinary and multinational context" (Bidell, 2017, p. 1436).

Item development of the LGBT-DOCSS was adapted from the Sexual Orientation Counselor Competency Scale (Bidell, 2005) and the two revised versions of SOCCS (Bidell, 2015). Thirty-seven items were selected and adapted by the principal investigator from the original and modified versions of the SOCCS for developing items with maximum content validity (Bidell, 2017). The goal was to develop scale items that examined LGBT knowledge, clinical skills, and prejudicial attitudes; incorporated current LGBT clinical competency research and professional guidelines; used interdisciplinary language applicable to both the health and mental health professions; and were relevant within an international context (Bidell, 2017). From the United States, the United Kingdom, and European Union a group of experts in LGBT health

care, including those in applied psychology, nursing, counseling, psychotherapy, and primary care medicine further rated each of the 37 test items on level of importance (essential, somewhat essential, or not essential) and on competency domain (prejudicial attitudes, clinical skill, or knowledge). Items rated as "essential" by a minimum of 80% of the experts were considered for further factor structure, validity, and reliability analyses, with a total of 20 items meeting this requirement and focused on LGBT personal prejudices, clinical experiences, professional training, and health/mental health disparities.

The final version of the LGBT-DOCSS scale is an 18-item three-factor structure (clinical preparedness, attitudinal awareness, and basic knowledge) self-assessment scale (Bidell, 2017). All 18-items of the tool uses a 7-point Likert scale on level of agreement of each item ranging from 1 (*strongly disagree*), 4 (*somewhat agree/disagree*), to 7 *(strongly agree*). Reverse scoring is done for eight questions (3), (4), (5), (7), (9), (12), (17), and (18) where 1=7, 2=6, 3=5, 4=4,5=3, 6=2, 7=1. To calculate the total LGBT-DOCSS mean score, all test items (using reverse scoring for items in parentheses) were added together and then divided by 18, with the total score ranging from 1.00 – 7.00. For each subscale score, the scores of the questions listed for each subscale were added up and divided by the number of questions in each subscale. Higher scores are indicative of higher levels of clinical preparedness and rudimentary knowledge and less prejudicial attitudinal awareness regarding GSM patients.

Factor structure, reliability, and validity of the LGBT-DOCSS. The LGBT-DOCSS has been tested for factor structure, reliability, and validity (Bidell, 2017). Exploratory factor analysis was used to analyze the factor structure of the scale items, with structural equation modeling was used to confirm the factor structure. Confirmatory factor analysis was used to test factor stability. Test-retest correlation coefficients were strong for the overall LGBT-DOCSS (r

= 0.87), for the clinical preparedness subscale (r = 0.85), and for the basic knowledge subscale (r = 0.86). To assess construct validity, relationships between scores on the LGBT-DOCSS with specific participant characteristics and with scores on established assessment scales were compared. It was hypothesized that GSM respondents would have higher LGBT-DOCSS scores than straight counterparts. This hypothesis was tested and supported using a one-way analysis of variance, showing statistically significant differences between the groups. Strong internal validity on the LGBT-DOCSS was demonstrated by psychometric testing. Given the purpose of the project, the LGBT-DOCSS was the most psychometrically sound instrument found in the extensive literature review.

Use of the LGBT-DOCSS. According to Bidell (2017), the LGBT-DOCSS is "well suited for research purposes as an outcome variable…and can be used by facilitating trainees' and providers' self-exploration of their LGBT clinical preparedness, attitudinal awareness, and basic knowledge" (p. 1453-1454). The LGBT-DOCSS was utilized in this practice improvement project as an outcome variable. Permission to use the LGBT-DOCSS was obtained from Dr. Bidell prior to implementing the project (Appendix M). The LGBT-DOCSS was completed before the educational intervention in the presurvey and upon completion of the educational intervention in the post-survey. A follow-up survey consisting of the LGBT-DOCSS was available to complete four-weeks after completing the post-survey to assess retention of cultural competence of GSM health. Mean scores for the presurvey, post-survey, and follow-up LGBT-DOCSS overall and the three subscales, clinical preparedness, knowledge, and attitudinal awareness were analyzed and used to measure the outcome variable of providing GSM-specific education to health professions.

Evidence-Based Model for Implementation

The evidence-based model used to guide the project implementation was the Plan, Do, Study, Act (PDSA) Cycle by Dr. W. Edward Deming. Deming's PDSA Cycle evolved from Shewhart Cycle (1939), the Deming Wheel (1950), the Japanese Plan, Do, Check, Act Cycle (1955 and 1985), and Deming's PDSA (1986 through 1993) to what the model is today (Moen & Norman, 2009). The PDSA Cycle is a four-stage problem-solving model based on the scientific method used to improve a process or carry out change (Institute of Healthcare Improvement, 2020; Minnesota Department of Health, n.d.). The PDSA Cycle provides a framework for developing, testing, and implement changes leading to improvement (Institute of Healthcare Improvement, 2020). When applying the PDSA Cycle to a change or project, three questions should be addressed 1) What is the change/project trying to accomplish, 2) How will the project/change is an improvement, 3) What changes can be made that will result in an improvement (Minnesota Department of Health, n.d.). Testing the change is performed by planning it, trying it, observing the results, and acting on what is learned. The four steps in the PDSA Cycle include plan, do, study, act. Table 4 provides the correlation of the PDSA cycle to this project.

Table 4

Steps of the PDSA Cycle

Step	PDSA Cycle Step	Correlation to Project
Plan	• Recruit a team, identify roles and responsibilities • Describe what the test/project wants to accomplish in an aim statement – state the objectives of the test/project • Determine the who, what where, and when of the project implementation • Determine how the project will evaluate if the objectives were met • Describe the problem • Develop an action plan for implementation of the test/project	• Formulated Clinical Dissertation Chair and Committee • Sought approval from health care facility where the project was implemented. • The project aimed to address the inequities in health and health care that the LGBT community faces by improving the knowledge and cultural competence of health professionals on LGBT health. • Who, What, Where, When: Health care professionals' at CCCHC that participated in three surveys and an online educational intervention over a three-month timeframe. • Comparison of presurvey scores on the LGBT-DOCSS to the postsurvey scores on the LGBT-DOCSS; comparison of the post-survey scores to the follow-up scores, the comparison of the presurvey scores to the follow-up scores; frequency table for evaluation survey; frequency of demographic characteristics, correlation of demographic characteristics to LGBT-DOCSS scores • Problem: Many health care professionals lack the knowledge, skills, and cultural competencies needed to provide quality GSM care (Butler et al., 2016). This inadequacy perpetuates the health disparities, propagate poor health outcomes, and act as barriers to care among the LGBT community. • Action plan: Implemented an educational intervention that focuses on LGBT-specific education to improve the knowledge and cultural competence of health professionals on LGBT health.
Do	• Implement the action plan • Participants complete presurvey, educational intervention, post-survey, and follow-up survey • Collect data throughout the implementation • Document limitations, problems, unexpected effects, and general observations	• Implemented the educational intervention, (3) surveys: presurvey (demographic characteristics and LGBT-DOCSS), post-survey (LGBT-DOCSS and evaluation questions), follow-up survey (LGBT-DOCSS) • Collected data using Qualtrics
Study	• Did the action plan for the project/change result in improvement? By how much/little? • Was the action worth the investment? • Complete analysis of data – are there trends? Or unintended side effects? • Summarize what was gained from test/project	• Did post-survey LGBT-DOCSS scores show improved knowledge and cultural competence on LGBT health compared to presurvey LGBT-DOCSS scores? Were knowledge and cultural competence retained four-weeks after educational intervention? • How significantly improved were the post-survey and follow-up LGBT-DOCSS scores for individual participants and all the participants as a whole • Completed analysis of data: descriptive analysis for demographic characteristics and evaluation survey, mean scores for each questionnaire item, and the subscales for the areas of knowledge, clinical preparedness, and attitudinal awareness between the presurvey and post-survey, and the follow-survey to the presurvey. • Presented the findings for each objective, including to what extent each objective was met using summarized data from the evaluation/data analysis.
Act	• Reflect on plan and outcomes • Make long-term plans for additional improvement	• Dissemination of findings.

Each step of the PDSA Cycle provided the framework for planning, implementing, observing the results, and reflecting on the plan and the outcomes of this quality improvement project.

Stage: Plan

This project aimed to address the inequities in health and health care that the LGBT community faces by improving health professionals' cultural competence on GSM health through an online educational intervention. This inadequacy perpetuates the health disparities, propagate poor health outcomes, and act as barriers to care among the LGBT community.

Three questions from the planning stage included 1) What can be done to enhance health care professionals' knowledge and cultural competency on GSM health? 2) Will an educational intervention enhance health care professionals' knowledge and cultural competency on GSM health? 3) Will health care professionals who participated in the education intervention have increased cultural competence and knowledge on GSM health, as measured by higher scores on the LGBT-DOCSS overall and higher scores on the subscale's clinical preparedness, knowledge, and cultural awareness? The who, what, where, and when of the project were health care professionals employed by CCCHC that voluntarily participated in the surveys and online educational intervention over a three-month timeframe. The project consisted of three surveys and an online educational intervention. The project implementation (Appendix N) took place over a three-month timeframe from August 10, 2020, to November 12, 2020. The presurvey, the post-survey, and the follow-up survey was administered using Qualtrics. Data was collected from the presurvey, the post-survey, and the follow-up survey.

Stage: Do

This quality improvement project was implemented for health care professionals who voluntarily agreed to participate in the educational intervention and complete the surveys. The educational intervention included one online learning module and one webinar. The three surveys included the presurvey, the post-survey, and the follow-up survey. The presurvey included the demographic characteristic questions and the LGBT-DOCSS. The second survey, the post-survey, was to be completed after the educational intervention and included the LGBT-DOCSS and program evaluation questions. The follow-up survey included the LGBT-DOCSS.

Stage: Study

A comparison of scores from the presurvey LGBT-DOCSS to the post-survey LGBT-DOCSS, and a comparison of scores from the follow-up survey LGBT-DOCSS to the presurvey LGBT-DOCSS, and a comparison of scores from the follow-up survey to the post-survey was performed. The education intervention was evaluated based on whether the intervention improved health care professionals' cultural competence of GSM health, as measured by higher scores on the LGBT-DOCSS overall and higher scores on the subscale's clinical preparedness, knowledge, and attitudinal awareness. The demographic characteristics questions described the population of health care professionals who participated in the project and was used to determine any correlation between a specific demographic characteristic and LGBT-DOCSS scores. The evaluation survey collected data on each objective of this project and evaluated how well the participants felt they met the project objectives.

Stage: Act

Upon completing the project implementation and data analysis, a reflection of the project on its success, the project's limitations, and discussion with recommendations took place. Due to

this project being implemented only once, the project's evaluation and the long-term plans for additional improvements served as future guidance and recommendations for other quality improvement projects focused on improving health care professionals' cultural competence on GSM health. It is important to note that cultural competence is an ever-evolving process that requires individuals to actively engage in interventions to maintain and progress in the process of cultural competency (Campinha-Bacote, 2002).

Data Collection and Analysis

Data collection for the surveys was obtained using the survey software, Qualtrics. Qualtrics is an online survey tool that serves as a platform to create and distribute surveys and analyze responses (Duong, 2020). Qualtrics uses Transport Layer Security encryption (also known as HTTPS) for all transmitted data. The data were exported from Qualtrics into text format and imported directly into SAS 9.4 for analysis. This data included information from the demographic characteristic questionnaire, the three LGBT-DOCSS, and the project evaluation questionnaire.

Demographic Characteristics Questionnaire

The demographic characteristic questionnaire included eight demographic characteristics, with participants selecting one of the provided choices for each characteristic. The demographic characteristics included age, level of education, professional role, years of experience, political affiliation, religious affiliation, acquaintance with someone who identifies as a GSM person, and frequency of interaction with GSM patients. Gender was not included in the demographic questionnaire to maintain the participant's anonymity due to small sample size within individual clinics. These data were collected to describe the population of health care professionals who participated in the education intervention and compare specific demographic characteristics to

the LGBT-DOCSS scores. Descriptive analysis of the demographic characteristics were done by the frequency distributions and percentages of the sample size represented by the specific characteristics being depicted. Analysis of specific demographic characteristics was performed to evaluate the influence of specific demographic characteristics on LGBT-DOCSS scores. Two-sample t-tests were used to identify the correlation of specific demographic characteristics to overall LGBT-DOCSS scores pre- and post-intervention.

Project Evaluation Questionnaire

The project evaluation questions consisted of a 7-item Likert scale rating the overall value and satisfaction of this project and a specific item that pertains to each of the project objectives. All 7-items of the evaluation used a 5-point Likert scale on level of agreement, of each item ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The project evaluation data collected were analyzed using a frequency table, with the number of times each score occurred in the respective data set, with the distribution of results shown.

LBGT-DOCSS

Inferential statistical analyses were utilized to evaluate the educational intervention's impact on enhancing health professionals' cultural competence of GSM health. The pre-, post-, follow-up test design allowed for a comparison of the LGBT-DOCSS at baseline, immediately after the intervention, and four-weeks after the intervention. The three subscales of the LGBT-DOCSS, clinical preparedness, attitudes, and knowledge were compared at baseline, immediately after the intervention, and four-weeks post-intervention. Mean scores for participants responses for each item on the LGBT-DOCSS for the pre-, post-, and follow-up survey were calculated. Mean scores were calculated for the overall LGBT-DOCSS and the subscales, clinical preparedness, knowledge, and attitudinal awareness, for the presurvey, post-survey, and follow-

up survey. Paired t-tests were used to compare mean scores from the presurvey to the mean scores from the post-survey and follow-up survey and post-survey mean scores to follow-up mean scores.

Descriptive of LBGBT-DOCSS. To obtain the overall score on the LGBT-DOCSS, all test items were added together (using reverse scoring for eight questions as indicated by the creator of the scale) and divided by the number of test items in the LGBT-DOCSS. Higher scores on the LGBT-DOCSS are indicative of higher levels of clinical preparedness and rudimentary knowledge and less prejudicial attitudinal awareness regarding GSM patients/clients. The possible range of score for the total LGBT-DOCSS is 1.00 – 7.00.

Clinical preparedness. Seven items (questions 4, 10, 11, 13, 14, 15, and 16) on the LGBT-DOCSS comprised the clinical preparedness subscale that inquired about GSM clinical experiences, training/supervision, assessment skills, and overall feelings of competence with GSM patients/clients (Bidell, 2017). A higher score (> 5.00) on the clinical preparedness subscale implies the participant felt more clinically prepared to provide care to GSM patients/clients. The clinical preparedness subscale can range from 1.00 – 7.00

Attitudinal awareness. Seven items (questions 3, 5, 7, 9, 12, 17, and 18) on the LGBT-DOCSS comprised the attitudinal awareness subscale that inquired about participants' awareness of their LGBT-based prejudicial attitudes (Bidell, 2017). All seven items that belonged under the attitudinal awareness subscale were reversed scored. A higher score (> 5.00) in the attitudinal awareness subscale indicated that the participant had less prejudicial attitudes towards GSM patients/clients. The attitudinal awareness subscale score can range from 1.00 – 7.00.

Basic knowledge. Four items (questions 1, 2, 6, and 8) on the LGBT-DOCSS comprised the basic knowledge subscale that inquired about participants' awareness of basic GSM health

disparities (Bidell, 2017). Low scores indicated less self-reported knowledge, and higher scores indicated more self-reported knowledge. The basic knowledge subscale score can range from 1.00 – 4.00.

Table 5

Project Objectives and Data Analysis

Indicators	Evaluation	Data Analysis
Objective 1: To increase health care professionals' understanding of the unique health needs and health disparities of the LGBT community.		
LGBT-DOCSS Questions		
• 1. I am aware of institutional barriers that may inhibit transgender people from using health care services. • 2. I am aware of institutional barriers that may inhibit LGB people from using health services. • 6. I am aware of research indication that LGB individuals experience disproportionate levels of health and mental health problems compared to heterosexual individuals. • 8. I am aware of research indicating that transgender individuals experience disproportionate levels of health and mental health problems compared to cisgender individuals.	• Comparison of the presurvey LGBT-DOCSS scores to post-survey and follow-up survey LGBT-DOCSS scores on the subscale knowledge.	• Descriptive statistics using central tendency (mean). • Inferential statistics using paired t-test.
Program Evaluation Questions		
• Participating in the online learning modules increased my understanding of the unique health needs and health disparities of the LGBT community? • This activity increased my awareness of the needs of LGBT patients.	• Self-reported Likert scale items measuring an increased understanding of the unique health needs and health disparities of the LGBT community since participating in this educational intervention.	• Frequency distributions.
Objective 2: To increase health care professionals' level of clinical preparedness when caring for GSM patients.		
LGBT-DOCSS Questions		
• 4. I would feel unprepared talking with a LGBT client/patient about issues related to their sexual orientation or gender identity. • 10. I have received adequate clinical training and supervision to work with transgender clients/patients. • 11. I have received adequate clinical training and supervision to work with transgender clients/patients. • 13. I have experience working with LGB clients/patients. • 14. I feel competent to assess a person who is LGB in a therapeutic setting. • 15. I feel competent to assess a person who is transgender in a therapeutic setting. • 16. I have experience working with transgender clients/patients.	• Comparison of the presurvey LGBT-DOCSS scores to post-survey and follow-up survey LGBT-DOCSS scores on the subscale clinical preparedness.	• Descriptive statistics using central tendency (mean). • Inferential statistics using paired t-test.
Program Evaluation Questions		
• I feel more clinically prepared to care for GSM patients since participating in this educational intervention.	• Self-reported Likert scale item evaluating improved clinical preparedness after completion of the educational intervention.	• Frequency distributions.

Table 5. *Project Objectives and Data Analysis* (continued)

Objective 3: To increase health professionals' LGBT-affirming attitudes.		
LGBT-DOCSS Questions		
• 3. I think being transgender is a mental disorder. • 5. A same sex relationship between two men or two women is not as strong and committed as one between a man and a woman. • 7. LGB individuals must be discreet about their sexual orientation around children. • 9. When it comes to transgender individuals, I believe they are morally deviant. • 12. The lifestyle of an LGB individual is unnatural or immoral. • 17. People who dress opposite to their biological sex have a perversion. • 18. I would be morally uncomfortable working with a LGBT client/patient.	• Comparison of the presurvey LGBT-DOCSS scores to post-survey and follow-up survey LGBT-DOCSS scores on the subscale attitudinal awareness.	• Descriptive statistics using central tendency (mean). • Inferential statistics using paired t-test.
Program Evaluation Questions		
• After completing the online learning modules, my attitudes towards GSM patients are more positive than before the online learning modules.	• Self-reported Likert scale item measuring more positive attitudes towards GSM patients after completion of online learning modules.	• Frequency distributions.
Objective 4: To improve health care professionals' competence in providing culturally competent GSM health care.		
LGBT-DOCSS Questions		
• All 18 questions on the LGBT-DOCSS.	• Comparison of overall scores on the presurvey LGBT-DOCSS scores to the overall scores on the post-survey and follow-up survey LGBT-DOCSS scores.	• Descriptive statistics using central tendency (mean). • Inferential statistics using paired t-test.
Program Evaluation Questions		
• The online learning modules were useful in improving my knowledge and cultural competence of GSM health.	• Self-reported Likert scale item measuring improved knowledge and cultural competence of GSM health from participating in the online learning modules.	• Frequency distributions.
Objective 5: To assess health care professionals' satisfaction with GSM health online learning modules.		
Program Evaluation Questions		
• I was satisfied with the overall learning experience from this educational intervention on GSM health. • The content and online learning modules were valuable to my practice.	• Self-reported Likert scale item measuring overall satisfaction with educational intervention on GSM health.	• Percentages of responses in each category. • >50% of participants reporting "agree" or "strongly agree."

Table 5. *Project Objectives and Data Analysis* (continued)

Demographic Characteristic Questions		
Description		
• Age, level of education, professional role, years of experience, religious affiliation, political affiliation, acquaintance with someone who identifies as a GSM person, and frequency of interaction with patients who identify as a gender or sexual minority.	• Multiple-choice questionnaire • Correlation of demographic characteristics to LGBT-DOCSS mean scores on presurvey and post-survey.	• Frequency distributions, measures of central tendency (mean), and percentages of the sample size represented by the specific characteristics being depicted. • Inferential statistics using two sample t-test correlating demographic characteristics to LGBT-DOCSS mean scores.

Institutional Review Board Approval

This practice improvement project was certified as exempt (Appendix O) by the North Dakota State University Institutional Review Board on July 27, 2020. The online educational intervention did not involve direct patient contact, and there were minimal risks to the participants throughout the project. One minimal risk of the study identified was that some participants might feel uncomfortable answering one or more of the survey questions and/or may have feelings of discomfort regarding the subject area of this study. All of the data remained anonymous throughout the project.

The anonymity of participants was maintained throughout the project. Individual consent forms were obtained using Qualtrics, with participants agreeing to informed consent by clicking a box on the informed consent page before any survey questions being available to answer. Participants' email addresses were obtained through CCCHC. A panel of the email addresses was created in Qualtrics, with Qualtrics then assigning a Respondent ID code to each email address provided in the panel. When reviewing the raw data from Qualtrics, only the Respondent

ID code was shown, with no possible link between the specific email address and the Respondent ID code being established. Additionally, the IP addresses were disabled for the surveys.

CHAPTER FOUR. RESULTS

Participants

A recruitment email was sent to 79 health care professionals employed by CCCHC whose email addresses were provided by the clinic. Initially, two emails bounced back as "undeliverable," decreasing the potential participants' pool to 77 health care professionals. Of that number, one potential participant ended his/her employment with CCCHC five days after the project was implemented, decreasing the pool of potential participants to 76. Forty-five participants started the presurvey; only 41 were identified as completing the survey per Qualtrics. Upon reviewing the data, four participants had not answered part of or all of the presurvey, resulting in 37 participants completing the presurvey. Accounting only for participants who completed all the presurvey questions resulted in a 48% response rate. Further data mining resulted in one additional participant's response being removed due to the results appearing inconsistent, or random compared to the participants' response in the post-survey and follow-up survey. The presurvey final sample included 36 health care professionals (N = 36) and a total response rate of 47%.

The majority of the participants were between the ages of 26 and 45 (n=25) and had an associate, or bachelor's degree (n=22) were either a nurse (LPN, Associate degree nurse, and, BSN-prepared; n = 15), PA or NP (n=7), or MD/DO (n=3). A vast majority of participants had a religious affiliation (n=31) and identified politically as Republican (n=25). The majority of participants either had five years or less of experience (n=11) or more than 20 years of experience (n=12). Half of the participants (n=18) were acquaintances with an individual who identified as GSM. The other half of the participants (n=18) were not acquaintances with an individual who identified as GSM. A majority of the participants indicated interacting with a

GSM patient only once a month (n=16) or never (n=15). Demographic characteristics for the sample are included in table 6.

Table 6

Participants Demographics (n=36)

Characteristic	N	%
Age		
26-45 years of age	25	69
46-65 years of age	10	28
>65 years of age	1	3
Level of Education		
HS/GED	1	3
Some Post-secondary school	3	8
BA/Associates	22	61
Completed Graduate/Medical School	10	28
Professional Role		
MD/DO	3	8
FNP/PA	7	19
LPN/ADN/BSN	15	42
Ancillary	6	17
CMT/CNA/UAP	5	14
Years of Experience		
0-5 years	11	31
6-10 years	7	19
11-20 years	6	17
>20 years	12	33
Religious Affiliation		
Yes	31	86
No	1	3
Prefer not to answer	4	11
Political Affiliation		
Republican	25	69
Democrat	1	3
Independent	1	3
Other	9	25
Acquaintance with an Individual who Identifies as GSM		
Yes	18	50
No	18	50
Interaction with a GSM Patient		
< 2 days a week	1	3
Less than once a week but more than once a month	4	11
Once a month	16	44
Never	15	42

LGBT-DOCSS Responses

The table below provides the mean score for participant responses for each item on the LGBT-DOCSS for the pre-, post-, and follow-up survey. The items are categorized by the subscale they represent.

Table 7

Mean Score for Participants Responses per LGBT-DOCSS Items for Pre-, Post-, and Follow-up Survey

	Mean Score (range)		
Survey Time	Pre-survey	Post-survey	Four-week follow up
Clinical Preparedness			
I would feel unprepared talking with a LGBT patient about issues related to their sexual orientation or gender identity.	3.72 (1.00 – 7.00)	4.82 (1.00 – 6.00)	6.17 (4.00 – 6.00)
I have received adequate clinical training and supervision to work with transgender patients.	2.25 (1.00 – 5.00)	3.36 (1.00 – 6.00)	4.50 (3.00 – 6.00)
I have received adequate clinical training and supervision to work with LGB patients.	2.50 (1.00 -7.00)	3.55 (1.00 – 6.00)	4.50 (3.00 – 6.00)
I have experience working with LGB patients.	3.33 (1.00 – 7.00)	3.55 (1.00 – 6.00)	4.00 (2.00 – 6.00)
I feel competent to assess a person who is LGB in a therapeutic setting.	3.53 (1.00 – 7.00)	3.73 (1.00 – 6.00)	5.00 (3.00 -7.00)
I feel competent to assess a person who is transgender in a therapeutic setting.	3.08 (1.00 – 7.00)	3.73 (1.00 – 6.00)	5.00 (3.00 – 7.00)
I have experience working with transgender patients.	2.58 (1.00 – 6.00)	3.00 (1.00 – 5.00)	3.67 (1.00 – 6.00)
Attitudinal Awareness			
I think being transgender is a mental disorder.	5.17 (1.00 – 7.00)	5.73 (3.00 – 7.00)	5.00 (4.00 – 6.00)
A same sex relationship between two men or two women is not as strong and as committed as one between a man and a woman.	5.86 (1.00 -7.00)	6.00 (4.00 – 7.00)	5.83 (4.00 -7.00)
LGB individuals must be discreet about their sexual orientation around children.	4.69 (1.00 – 7.00)	4.73 (2.00 -7.00)	5.17 (4.00 -7.00)
When it comes to transgender individuals, I believe they are morally deviant.	5.25 (1.00 -7.00)	5.64 (2.00 – 7.00)	5.50 (4.00 -7.00)
The lifestyle of a LGBT individual is unnatural or immoral.	4.67 (1.00 – 7.00)	5.18 (1.00 – 7.00)	4.50 (3.00 – 6.00)
People who dress opposite to their biological sex have a perversion.	5.81 (1.00 -7.00)	6.09 (4.00 -7.00)	5.00 (4.00 – 7.00)
I would be morally uncomfortable working with a LGBT patient.	5.83 (3.00 – 7.00)	5.82 (2.00 – 7.00)	5.17 (3.00 – 7.00)
Basic Knowledge			
I am aware of institutional barriers that may inhibit transgender people from using health care services.	3.47 (1.00 – 6.00)	4.55 (1.00 – 6.00)	5.67 (4.00 -7.00)
I am aware of institutional barriers that may inhibit LGB people from using health services.	3.36 (1.00 – 5.00)	4.27 (1.00 – 6.00)	5.33 (4.00 – 7.00)
I am aware of research indicating that LGB individuals experience disproportionate levels of health and mental health problems compared to heterosexual individuals.	4.11 (1.00 -7.00)	5.18 (4.00 – 6.00)	5.67 (4.00 -7.00)
I am aware of research indicating that transgender individuals experience disproportionate levels of health and mental health problems compared to cisgender individuals.	4.03 (1.00 -7.00)	5.09 (4.00 -7.00)	5.83 (4.00 -7.00)

Note. Score ranges from 1.00 to 7.00 with 1.00 indicating strongly disagree and 7.00 indicating strongly agree.

Findings

Overall, participants who completed the online intervention scored significantly higher on the post-intervention LGBT-DOCSS ($p = 0.00$) compared to baseline. In particular, scores on the clinical preparedness ($p = 0.02$) and basic knowledge ($p = 0.02$) subscales were statistically higher on the post-intervention LGBT-DOCSS compared to baseline. Participants LGBT-DOCSS mean score were significantly higher on the follow-up LGBT-DOCSS ($p = 0.01$) compared to baseline, notably on the clinical preparedness ($p = 0.01$) and knowledge ($p = 0.05$) subscale. From the post-survey to the follow-up survey, overall, participants' mean scores were slightly higher on the follow-up survey but not to a statistically significant extent. For the subscale clinical preparedness, follow-up LGBT-DOCSS mean scores were significantly higher compared to the post-survey ($p = 0.05$). For the subscale basic knowledge, follow-up LGBT-DOCSS mean scores were slightly higher on the follow-up survey compared to the post-survey but not to a statistically significant extent. The subscale attitudinal awareness revealed a slightly lower score on the follow-up survey compared to the post-survey, although not to a statically significant extent. Table 8 provides a comparison of LGBT-DOCSS pre, post-, and follow-up mean scores.

Table 8

Comparison of LGBT-DOCSS Pre, Post-, and Follow-up Mean Scores

	Presurvey VS Post-Survey LGBT-DOCSS			Presurvey VS Follow-up Survey LGBT-DOCSS			Post-survey VS Follow-up LGBT-DOCSS		
	Pre M (SD)	Post M (SD)	P-value	Pre M (SD)	Follow-up M (SD)	P-value	Post M (SD)	Follow-up M (SD)	P-value
Total	4.07 (.07)	4.67 (0.63)	**0.00**	4.07 (.07)	5.03 (0.90)	**0.01**	4.67 (0.63)	5.03 (0.90)	0.82
Clinical Preparedness	3.00 (1.48)	3.68 (1.20)	**0.02**	3.00 (1.48)	4.55 (1.13)	**0.01**	3.68 (1.20)	4.55 (1.13)	**0.05**
Attitudinal Awareness	5.33 (1.49)	5.60 (1.07)	0.6224	5.33 (1.49)	5.17 (0.97)	0.56	5.60 (1.07)	5.17 (0.97)	0.45
Basic Knowledge	3.74 (1.12)	4.77 (1.21)	**0.02**	3.74 (1.12)	5.63 (0.77)	**0.05**	4.77 (1.21)	5.63 (0.77)	0.83

Note. LGBT-DOCSS scores range from 1.00 to 7.00. Higher scores on the LGBT-DOCSS are indicative of higher levels of clinical preparedness and rudimentary knowledge and less prejudicial attitudinal awareness regarding GSM patients/clients.

Program Evaluation

After the post-survey LGBT-DOCSS, a program evaluation survey was also administered to participants. The project evaluation questions consisted of a 7-item questionnaire rating the overall value and satisfaction of this project, and a specific item that pertains to each of the project objectives. Items were scored using a 5-point Likert scale on level of agreement, of each item ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Ten participants completed the program evaluation survey.

Table 9

Program Evaluation and Objectives

Question	Response Options	N	%
Objective 1: To increase health professionals' understanding of the unique health needs and health disparities of the LGBT community.			
Participating in the online learning modules increased my understanding of the unique health needs and health disparities of the LGBT community.	Strongly disagree	-	-
	Disagree	-	-
	Neither Agree or Disagree	3	30
	Agree	6	60
	Strongly Agree	1	10
This activity increased my awareness of the needs of GSM patients.	Strongly disagree	-	-
	Disagree	-	-
	Neither Agree or Disagree	3	30
	Agree	6	60
	Strongly Agree	1	10
Objective 2: To increase health professionals' level of clinical preparedness when caring for GSM patients.			
I feel more clinically prepared to care for GSM patients since participating in this educational intervention.	Strongly disagree	-	-
	Disagree	-	-
	Neither Agree or Disagree	5	50
	Agree	4	40
	Strongly Agree	1	10
Objective 3: To increase health professionals' LGBT-affirming attitudes.			
After completing the online learning modules, I feel my attitudes towards GSM patients will be more positive in the future.	Strongly disagree	-	-
	Disagree	-	-
	Neither Agree or Disagree	5	50
	Agree	4	40
	Strongly Agree	1	10
Objective 4: To improve health professionals' competence in providing culturally competent GSM care.			
The online learning modules were useful in improving my knowledge and cultural competence of GSM patients.	Strongly disagree	-	-
	Disagree	-	-
	Neither Agree or Disagree	3	30
	Agree	6	60
	Strongly Agree	1	10
Objective 5: To assess health professionals' satisfaction with the GSM health online educational intervention.			
I was satisfied with the overall learning experience from this educational intervention on GSM health.	Strongly disagree	-	-
	Disagree	-	-
	Neither Agree or Disagree	4	40
	Agree	5	50
	Strongly Agree	1	10
This content and online learning modules were valuable to my practice.	Strongly disagree	1	10
	Disagree	-	-
	Neither agree or Disagree	3	30
	Agree	4	40
	Strongly Agree	2	20

Overall, participants reported that participating in the online learning module and webinar increased their understanding of the unique health needs and health disparities of the LGBT community. Seventy percent of participants reported that the educational intervention increased their awareness of the needs of GSM patients. Half of the participants reported feeling more clinically prepared to care for GSM patients since participating in the educational intervention. The majority of participants reported that the educational intervention was valuable to their practice. Half of the participants reported that their attitudes towards GSM patients would be more positive in the future after completing the online educational intervention. In contrast, the other half of the participants neither agreed nor disagreed with this statement. Seventy percent of the participants reported that the online learning module and webinar were useful in improving knowledge and cultural competence of GSM patients. The majority of participants reported being satisfied with the GSM health online educational intervention. The majority of participants reported that the educational intervention was valuable to their practice.

Independent Variables

Two-sample t-tests were used to identify the correlation of specific demographic characteristics to overall LGBT-DOCCS scores pre-and post-intervention. A two-sample t-test was conducted on the demographic characteristic years of experience, political affiliation, age, and acquaintance with an individual who identifies as a GSM. Professional roles, religious affiliation, and frequency of interaction with patients who identify as a GSM were not analyzed due to an unequal distribution of responses for these particular variables.

Table 10

Correlation of Demographic Characteristics with Presurvey and Post-survey LGBT-DOCSS Mean Scores

	Presurvey			Post-survey		
	N	M (SD)	P-value	N	M (SD)	P-value
Independent Variable						
Years of Experience			0.43			0.25
0-10 years	18	4.16 (0.68)		6	4.87 (0.73)	
11+ years	18	3.98 (0.72)		5	4.42 (0.45)	
Political Affiliation			0.08			0.51
Republican	25	3.94 (0.71)		9	4.64 (0.70)	
Democrat/Independent/Other	11	4.36 (0.60)		2	4.81 (0.12)	
Age			0.38			0.79
26-45	25	4.00 (0.70)		8	4.65 (0.75)	
> 45	11	4.23 (0.71)		3	4.72 (0.17)	
Acquainted with GSM			**0.03**			**0.03**
Yes	18	4.31 (0.57)		6	5.04 (0.47)	
No	18	3.82 (0.74)		5	4.22 (0.53)	

Note. LGBT-DOCSS scores range from 1.00 to 7.00. Higher scores on the LGBT-DOCSS are indicative of higher levels of clinical preparedness and rudimentary knowledge and less prejudicial attitudinal awareness regarding GSM patients/clients.

Overall, the demographic characteristics did not significantly affect LGBT-DOCSS mean scores for both the presurvey and post-survey, except for acquaintance with an individual who identifies as a GSM. Being acquainted with an individual who identifies as GSM was associated with a significantly higher mean score at both pre- and post-survey compared to not being acquainted with an individual who identifies as GSM, (M = 4.31, SD = 0.57 and M = 3.82, SD = 0.74, respectively).

A two-sample t-test was used to explore if LGBT-DOCSS mean scores were significantly different based on if participant only took the presurvey LGBT-DOCSS compared to those participants who took both the presurvey and post-survey LGBT-DOCSS. Baseline scores were slightly higher for those participants who only took the presurvey LGBT-DOCSS (M = 4.12, SD = 0.65) compared to those participants who took both the presurvey and post-survey LGBT-DOCSS (M = 3.96 SD = 0.81, p = 0.57), although not statistically significant. These results are shown in table 11.

Table 11

Baseline LGBT-DOCSS Scores

	N	Baseline LGBT-DOCSS Scores M (SD)	P-value
Presurvey Only	25	4.12 (0.65)	0.57
Presurvey and Post-survey	11	3.96 (0.81)	

Note. LGBT-DOCSS scores range from 1.00 to 7.00. Higher scores on the LGBT-DOCSS are indicative of higher levels of clinical preparedness and rudimentary knowledge and less prejudicial attitudinal awareness regarding GSM patients/clients.

CHAPTER FIVE. DISCUSSION AND RECOMMENDATIONS

To improve the health outcomes and the quality of patient care delivered to the LGBT community, ensuring that health care professionals are equipped with the necessary knowledge, tools, and cultural sensitivity to care for this vulnerable population is essential. There is significant evidence that health care professionals lack the formal education and training need when caring for diversified groups. Additionally, health professionals report a lack of knowledge, clinical skills, and confidence when caring for the LGBT community. Increased knowledge and cultural sensitivity among health professionals are essential in reducing health disparities and inequities that burden the LGBT community.

Interpretation of Results

All five of this project's objectives were met. Furthermore, findings from this project support that as little as a two-hour online educational intervention enhances health professionals' knowledge, including the health disparities the LGBT community faces and GSM patients' unique health needs, and clinical preparedness, and lessens prejudicial attitudinal awareness of GSM health. Further, this project indicates that just a few hours of education on GSM health has lasting gains for the learner.

This project revealed that 86% of the presurvey participants reported interacting with a patient who identified as GSM once a month or never. This finding emphasizes the importance of asking all patients SOGI questions. Failure to ask SOGI questions results in the erroneous belief that all patients are cisgender heterosexuals and further perpetuates heteronormativity. Additionally, health professionals cannot provide evidence-based, patient-centered care if they fail to know their patients' sexual behaviors and practices. This finding highlights the importance of a panel discussion or vignettes of lived experiences of being GSM, which humanizes

individuals who are GSM and maybe more impactful at stressing the value of SOGI collection. Furthermore, health professionals explicitly identifying themselves as GSM affirming provides a welcoming, inclusive environment where GSM patients will feel more at ease with SOGI disclosure.

An extensive literature review found no studies to date that examined health professionals' retention on GSM cultural competence after an educational intervention. This study examined retained knowledge, attitudinal awareness, and clinical preparedness immediately following the educational intervention and, again, four weeks post-intervention. The findings from this project revealed that the follow-up overall LGBT-DOCSS mean score was statistically higher ($M = 5.03$, $SD = 0.90$) compared to the presurvey overall LGBT-DOCSS mean score ($M = 4.07$, $SD = 0.07$; $p = 0.01$). For both the subscales, clinical preparedness and basic knowledge, follow-up LGBT-DOCSS mean scores for these subscales were statistically higher than the presurvey LGBT-DOCSS subscales mean scores. Additionally, follow-up LGBT-DOCSS mean score overall and for the subscales, clinical preparedness and basic knowledge were higher than post-survey LGBT-DOCSS mean score overall and for the subscale's clinical preparedness and basic knowledge. The follow-up subscale clinical preparedness mean score was significantly higher than the post-survey subscale clinical preparedness mean score. This increase in follow-up LGBT-DOCSS mean scores overall and for the subscales clinical preparedness and knowledge potentially reflects the participants practicing what they had learned from the educational intervention over the time period between the post-survey and follow-up survey. These findings offer further support of the effectiveness of an educational intervention of GSM health for health professionals. This study provides a starting point for evaluating the long-

term outcome of LGBT-specific cultural competency training for health professionals, which is missing from existing literature.

The project's findings indicated that attitudinal awareness, or less explicit prejudicial attitudes towards GSM patients, was not significantly altered from a two-hour educational intervention on GSM health. The attitudinal awareness subscale mean score on the post-survey LGBT-DOCSS was slightly higher than the presurvey attitudinal awareness subscale mean score; however, the difference was not statistically significant. Furthermore, the follow-up LGBT-DOCSS attitudinal awareness subscale mean score was lower than the presurvey attitudinal awareness subscale mean score. Existing research shows conflicting results on the impact of GSM-specific educational interventions at reducing bias towards GSM patients. A systematic review of reducing GSM-related bias among health professionals and students found some studies showing significant and positive attitude changes towards GSM patients (Morris et al., 2019). In contrast, other studies found only anecdotal evidence of positive attitude changes. . This finding highlights the need for health professionals to be aware of their own cultural histories, beliefs and values and how these may affect or hinder their views on individuals with different cultural histories, beliefs, and values; and attempt to rectify these differences. Furthermore, this finding from the attitudinal awareness subscales highlights the value of including a panel discussions or vignettes of lived experiences of being a GSM individual into the educational intervention content; this may 'humanize' individuals who are GSM.

The findings of this project are supported within the context of existing literature. A systematic review of cultural competency interventions found that interventions aimed at improving cultural competence among the health care workforce resulted in positive outcomes, in particular for improving practitioner's knowledge, skills, and to a lesser degree,

attitudes/belief (Jongen et al., 2018; Morris et al., 2019). Educational interventions on LGBT health effectively increase comfort levels and decrease anxiety levels among health care professions students and providers (Morris et al., 2019). In another systematic review on the effectiveness of cultural competency training in health care, cultural competence training positively impacted health care providers' cultural competence (Govere & Govere, 2016). It was significantly associated with increased patient satisfaction.

Recommendations

A recommendation found consistently throughout the literature to reduce GSM-related bias in health care was the inclusion of GSM individuals in the educational intervention, such as a panel discussion (Morris et al., 2019; Parkhill et al., 2014). Furthermore, education on becoming self-aware of the biases and attitudes that one holds, and how he/she may overcome these biases would be a step in the right direction for reducing LGBT-related bias, prejudicial attitudes, and discrimination throughout the health care delivery system (Leslie et al., 2018; Morris et al., 2019; Sabin et al., 2015; Salkind et al., 2019; Sukhera & Watling, 2018).

Implications to Practice

Findings from this project support the need for health professionals to receive GSM-specific education. This project indicates that overall, health professionals lack the necessary knowledge on GSM health, are not clinically prepared to care for GSM patients, and to a lesser extent, hold explicit prejudicial biases towards GSM patients. This project reveals a significant gap in health professionals being clinically prepared to care for GSM patients and having the fundamental knowledge needed when caring for the LGBT community. This project shows that an online educational intervention that was two-hours in length effectively enhanced health professionals' knowledge, clinical preparedness, and to a lesser degree, attitudinal awareness on

GSM health. The majority of participants in this project reported value and satisfaction with the educational intervention.

Content areas recommended for GSM-specific education to cover includes GSM terms and terminology, differences within GSM populations and addressing the unique health needs of GSM patients, the health and health disparities faced by the LGBT-community, transgender-specific content, stigma and discrimination, and diversity (Ard & Makadon, 2012; Matza et al., 2015; McNamara & Ng, 2016; Qureshi et al., 2020; The Joint Commission, 2011). Education on obtaining a sexual health history from GSM patients in a culturally sensitive manner, data collection of SOGI, and creating a welcoming and inclusive environment for GSM patients are additional content area recommendations (Ard & Makadon, 2012; McNamara & Ng, 2016; Qureshi et al., 2020). A recurring recommendation found throughout the literature for content development was to include input from LGBT community-based research institutes and/or ensure input and feedback from individuals who identify as GSM (McCann & Brown, 2018; Salkind et al., 2019; Sekoni et al., 2017).

Effective methods for the delivering GSM-specific education are vast and may include didactic presentations, written materials, online modules and webinars, expert panels, and local opinion leaders' engagement. Using multiple educational strategies to engage the learner has been more effective than using one method (D. R. D. Felsenstein, 2018). Computer-based learning can be more cost-efficient and effective than live instruction using effective techniques (Bluestone et al., 2013). Computer-based learning allows for learning to be self-directed, convenient, and at a comfortable pace for each learner. Webinars meet both auditory and visual learners' needs and present information to accommodate different learning styles, helping engage learners and model new skills (Matza et al., 2015). A systematic review of the effects of

educational curricula and training on GSM health for health care students and professionals revealed that the educational intervention duration could vary significantly (Sekoni et al., 2017). Single-session and more time-intensive educational interventions effectively improve GSM health knowledge (Morris et al., 2019).

The process of becoming culturally competent is complex, ever-evolving, and exists on a continuum (Substance Abuse and Mental Health Services Administration, 2014). Gaining cultural competence is never completed. "Becoming culturally competent is a developmental process that begins with awareness and commitment and evolves into skill-building and culturally responsive behaviors within organizations and among health professionals" (Substance Abuse and Mental Health Services Administration, 2014, p. 9). Historically, the focus of cultural competency training has been on individuals; however, attaining and sustaining cultural competence relies on the organization's commitment to support and allocate resources to promote cultural competence.

Cultural competence is embedded in respect, validation, and openness toward someone whose social and cultural background is different from one's own. An essential step in cultural competency relies on the health professional examining and understanding his/her cultural histories, beliefs, and values. Furthermore, health professionals need to examine his/her cultural histories, beliefs, and values and become self-aware of how these influence his/her attitudes, beliefs, and judgments of those individuals/communities that are socially and culturally different from his/her own. A conscious effort to adjust his/her worldview may be warranted to practice in a culturally competent manner. Increasing the cultural competence of the health care workforce is crucial to increasing health equity.

Implications for Project Site

Participants' presurvey LGBT-DOCSS mean score revealed that participants were not clinically prepared nor had the necessary knowledge to provide culturally sensitive care to GSM patients. Findings from this project support that a brief, cost-effective (free) online educational intervention effectively enhanced participants' cultural competence of GSM health, particularly for helping participants be more clinically prepared to care for GSM patients and build their knowledge base of GSM health. According to these findings, a recommendation is to ensure all staff is equipped to care for GSM patients in a culturally sensitive manner through mandatory GSM-specific training or professional development. An excellent place to start with this training would be during the onboarding process of employment. Due to the evolving nature of health and health care and the on-going, evolving cultural competency process, LGBT-specific education should be continuously supported with appropriate resources being readily available and easily accessible from the organization. Providing staff education of GSM health and creating an inclusive, welcoming environment for GSM patients is essential. Collecting SOGI data and putting this data to meaningful use is crucial. Additional recommendations include ensuring staff use appropriate pronouns and preferred names, creating an environment that respects the importance of confidentiality, and providing care tailored to GSM patients' unique needs such as preventive health care services, screenings, and education.

Implications for Future Research

There are numerous recommendations for applying the findings from this practice improvement project to future research and projects. This project evaluated the outcome of a GSM-specific educational intervention on improving the knowledge, clinical preparedness, and attitudinal awareness of health professionals. Future projects may consider using a panel

discussion or provide training to identify, understand, and, if needed, adjust one's own cultural and social beliefs, values, and histories as part of the educational intervention. Self-awareness of one's social and cultural beliefs, values, and histories may enhance the educational intervention's ability to improve participants' attitudinal awareness and reduce prejudicial bias.

Findings from this study indicate that practicing health professionals lack the cultural competence needed when caring for GSM patients. Future practice improvement projects may consider implementing an educational intervention of GSM health into the student health professions curriculum. Adding GSM health into the curriculum would allow health professionals who are newly entering the workforce to be prepared and knowledgeable to provide culturally sensitive care to the LGBT community. An additional benefit of including LGBT-specific education in health professions curriculum may result in sparking students' interest in pursuing or specializing in GSM health or becoming a GSM champion at their future organization.

Future research may want to explore if the educational intervention duration correlates to the amount of or the level of enhanced cultural competence that can be gained. This would provide a framework for the ideal length of an educational intervention to produce the greatest gains. Research that evaluates the outcome of different educational intervention delivery methods would help determine the best delivery methods of LGBT-specific education. Building on this project, longitudinal research on the effects of a GSM-specific cultural competence training is much needed. Considerations to achieve this include extending the length of post-intervention follow-up or adding additional follow-up past the four-week mark as was done in this study.

Future research needs to evaluate if enhanced GSM cultural competence from an educational intervention equates to positive behavior change in health professionals. Having the necessary knowledge and clinical skills to provide quality, culturally sensitive care does not necessarily equate to actually delivering quality, culturally sensitive care. Additionally, research is needed to evaluate if enhanced GSM cultural competence equates to improved patient experiences and outcomes. This research is paramount in figuring out how to reconstruct the health care delivery system to be welcoming and inclusive of the LGBT community and eliminate the stigma and bias experienced by GSM individuals when interacting with the health care delivery system.

Much needed research is needed that focuses on enhancing health professionals' cultural competence in transgender health, their unique health needs, and the health disparities that burden this community is much needed. Additionally, a project that examines the knowledge, clinical preparedness, and attitudinal awareness of health professionals on diverse GSM populations or those with double-minority status, such as African Americans who identify as GSM, is certainly needed. Existing literature dedicated to improving health professionals' cultural competence of individuals with double-minority status is extremely limited.

Limitations

This practice improvement project is associated with several limitations. The first limitation was the sample. The sample was obtained through convenience sampling, which could have resulted in the sample being highly vulnerable to selection bias and influences beyond the researchers' control. Furthermore, this project's sample size was small, particularly for the post-survey and follow-up survey. This could lead to a poor representation of the entire population,

which affects the project's reliability. A small sample size decreases the power of the project and undermines the internal and external validity.

Another limitation is that this project's implementation was the demographic characteristics of the sample. Findings from the demographic questions on the presurvey revealed that approximately 86 percent of health professionals reported that they interacted with a patient who identified as GSM less than once a month or never. This could potentially have led to potential participants not finding this project valuable to their practice and therefore, not choosing to partake in the educational intervention.

An additional limitation of this project was the attrition rate of survey responses. The project went from 36 participants completing the presurvey to 11 of those 36 participants completing the educational intervention and post-survey to six of those 11 participants completing the follow-up survey. A closer look at the specific demographic characteristics and program evaluation responses from the six participants who completed the entirety of the project failed to identify a distinguishing characteristic that would account for participation throughout the project's entirety. Perhaps with additional or different demographic questions a better understanding or explanation of the attrition rate would have been able to be made.

With the current socio-political climate of the United States, addressing the inequities, health disparities, and overt discrimination, stigma, and bias experienced by minority populations, in particular people of color, not only in the health care delivery system but in every arena of their lives is more crucial and evident now more than ever. When this project was set forth, it was acknowledged that this paper failed to capture and address the unique needs, health disparities, discrimination, violence, and stigma experienced by those who represent the double-minority LGBT community. In hindsight, merely acknowledging that this paper and project does

not divulge more in-depth into the struggles and inequities of those with double-minority status is not enough. This is a significant inadequacy of this project.

Instrumentation Limitations

Although the LGBT-DOCSS was created as an interdisciplinary scale, three-fourths of the sample composition used for the factor analyses and validity testing were mental health students and clinicians (Bidell, 2017). Only one-quarter of the overall sample being medical health providers and trainees; furthermore, the sample was void of nurses, nurse practitioners, physician assistants, allied health professionals, and clinical social workers. Additionally, the LGBT-DOCSS does not include input from LGBT patients/clients, feedback from clinical supervisors and professional peers, nor treatment outcomes. The LGBT-DOCSS assesses explicit prejudicial attitudes, failing to assess implicit prejudicial attitudes. Implicit prejudicial attitudes influence decisions and interactions, systematically producing discrimination in health care and, ultimately, perpetuate health disparities.

The instrumentation of this project relied on self-reporting. Health care professionals may answer the questions to reflect how they should answer the questions, not honestly on what they believed or their actual attitudes towards GSM individuals. Assessment of clinical preparedness and skills via simulated patient provider interaction and scenarios or the development of observer checklists and grading rubrics may better evaluate actual behavior change.

The instrumentation selected for this project was not intended to evaluate the outcome of an educational interventions effect on patients' experiences or how an educational intervention that enhances health professionals' GSM health cultural competence correlates to improved patient experiences or outcomes. This project did not assess if enhanced cultural competence equates to a change in providers' behavior or improved patient outcomes.

Strengths

A strength of this project was the setting that the project was implemented. This project took place in a rural setting, expanding across three counties with a combined population of less than 14,000. Research has shown that GSM individuals living in rural areas face additional barriers to health care access, experience more negative attitudes and an increase in isolation, have lower disclosure rate and levels of social engagement, less social support, and have a higher prevalence of depression when compared with their urban counterparts (Rosenkrantz et al., 2017). These additional barriers that rural GSM individuals face further necessitates the need and the importance for rural health professionals to be culturally competent in GSM health and the unique health needs and health disparities that burden the LGBT community. An extensive literature review resulted in a handful of studies that evaluated rural health professionals' GSM health cultural competence. However, no studies were found that implemented and evaluated the impact of an educational intervention to enhance health professionals' GSM health cultural competence in the rural setting, as this study did. Additionally, no studies were found that evaluated health professionals' GSM health cultural competence in North Dakota. Nor were any studies found that implemented and evaluated an educational intervention's effects to enhance health professionals' GSM health cultural competence in North Dakota.

A significant strength of this project was reevaluating the outcome of the educational intervention four weeks post-intervention. Throughout the literature, an implication for research consistently cited was the need for longitudinal studies that examined the outcome of educational interventions not just immediately after the intervention but further down the road. As mentioned above, an extensive review of the literature found no prior study that evaluated the outcome of

the educational intervention on GSM health cultural competence quantitatively beyond immediately after the intervention.

Dissemination of Findings

Project Site

The dissemination of this project findings was shared with the project site, CCCHC. An executive summary was provided to the key stakeholders of CCCHC. An opportunity to discuss the findings and the recommendations for this organization based on these findings was offered.

Academically

A DNP final examination occurred, where this project was defended, and a presentation of this clinical dissertation project was carried out. Upon the successful defense of this clinical dissertation project, this paper was published in ProQuest. This project's poster presentation was displayed at the North Dakota Nurse Practitioner Association Pharmacy Conference in 2020. This project's poster presentation and its finding was displayed in May 2021 at North Dakota State University (NDSU) in Fargo, ND.

Application

Application to Other Nurse Practitioners

Health care disparities among GSM individuals, and other vulnerable and marginalized populations have been well documented. Nurses are the largest group of direct patient care providers in this country, providing them an excellent position to bridge health care disparities and provide culturally sensitive care across the lifespan. Nurse practitioners are an essential component in delivering health care services nationwide, but particularly in rural communities. In the rural setting, nurse practitioners may be the only point of contact within the health care delivery system and provide care to a diverse group of patients, including the LGBT-community.

The Joint Commission and Institute of Medicine, along with *Healthy People 2020,* have highlighted the need to eliminate health care disparities and inequities in care that have burdened the LGBT community. Improving health professionals' GSM health cultural competence is an essential step in eliminating these health disparities and inequities in care. Being culturally competent to care for GSM patients will allow nurse practitioners to deliver evidence-based care that addresses the unique health needs of the LGBT community and be comfortable while doing so. Through providing culturally competent and sensitive care to the GSM patient, nurse practitioners may help reduce the burden of these health disparities and inequities in care that the LGBT community faces.

Application to the Doctor of Nursing Practice Role

Practice-focused nursing doctoral programs prepare graduates with an enhanced knowledge to improve nursing practice and patient outcomes and provides enhanced leadership skills to strengthen practice and health care delivery. These enhancements in knowledge and leadership skills uniquely position the Doctor of Nursing Practice (DNP) role to address health disparities and promote excellence in practice through their leadership role and strong scientific foundation for practice. Hallmarks of the doctoral education include scholarship and research. The DNP curriculum equips graduates to be clinical scholars that enable evidence-based nursing and the development of best practices to effectively and proficiently meet the needs of patients. The DNP role "epitomizes the scholarship of application through its position where the sciences, human caring, and human needs meet and new understandings emerge" (American Association of Colleges of Nursing, 2006).

Practice-focused doctoral nursing programs prepare the graduate to critically analyze health policy to advocate for social justice and the nursing profession as a whole. Doctoral

prepared advanced practice nurses are uniquely qualified to develop, implement, and evaluate health policies. The DNP clinician is equipped with the practice experience, leadership skills, and knowledge needed to advocate for social justice and equity for marginalized and vulnerable populations, such as the LGBT community.

Conclusion

Gender and sexual minorities continue to experience worse health outcomes compared to their cisgender heterosexual counterparts. The synergistic effect of inequities in care and the lack of cultural competence of GSM health within the health care systems perpetuates the health disparities that burden this community. Eliminating these inequities in care and health disparities within the LGBT community is a national priority. This project demonstrates that as little as a two-hour online educational intervention effectively enhances health professional's cultural competence of GSM health. Furthermore, this project supports that these gains in cultural competence are retained four weeks post-intervention. More importantly, this project serves as a call to action for all health professionals to take the needed steps to better understand the unique needs and health disparities across marginalized populations and to be part of the solution in reducing these health disparities and inequities in care. Delivering culturally sensitive, patient-centered care, particularly among marginalized and vulnerable populations, should be a priority for all health professionals.

REFERENCES

Alpert, A. B., CichoskiKelly, E. M., & Fox, A. D. (2017). What lesbian, gay, bisexual, transgender, queer, and intersex patients say doctors should know and do: A qualitative study. *Journal of Homosexuality*, *64*(10), 1368–1389. https://doi.org/10.1080/00918369.2017.1321376

American Association of Colleges of Nursing. (2006). *The Essentials of Doctoral Education for Advanced Nursing Practice*.

American Association of Medical Colleges. (2014). *Implementing curricular and institutional climate changes to improve health care for individuals who are LGBT, GN, or born with DSD: A resource for medical educations*. https://store.aamc.org/implementing-curricular-and-institutional-climate-changes-to-improve-health-care-for-individuals-who-are-lgbt-gender-nonconforming-or-born-with-dsd-a-resource-for-medical-educators.html

American Psychiatric Association. (1968). *Diagnostic and Statistical Manual of Mental Disorders* (2nd ed.). American Psychiatric Press.

American Psychiatric Association. (1980). *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed.). American Psychiatric Press.

American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.). American Psychiatric Press.

Ard, K. L., & Makadon, H. J. (2012). *Improving the health care of lesbian, gay, bisexual and transgender (LGBT) people: Understanding and eliminating health disparities*. National LGBT Health Education Center. https://www.lgbthealtheducation.org/publication/improving-the-health-care-of-lesbian-

gay-bisexual-and-transgender-lgbt-people-understanding-and-eliminating-health-disparities/

Avert. (2019). *Men who have sex with men (MSM), HIV and AIDS*. Avert. https://www.avert.org/professionals/hiv-social-issues/key-affected-populations/men-sex-men

Banerjee, S. C., Walters, C. B., Staley, J. M., Alexander, K., & Parker, P. A. (2018). Knowledge, beliefs, and communication behavior of oncology health-care providers (HCPs) regarding lesbian, gay, bisexual, and transgender (LGBT) patient health care. *Journal of Health Communication*, *23*(4), 329–339. https://doi.org/10.1080/10810730.2018.1443527

Barefoot, K. N., Warren, J. C., & Smalley, K. B. (2017). Women's health care: The experiences and behaviors of rural and urban lesbians in the USA. *Rural and Remote Health*, *17*(1), 3875. https://doi.org/10.22605/rrh3875

Beagan, B., Fredericks, E., & Bryson, M. (2015). Family physician perceptions of working with LGBTQ patients: Physician training needs. *Canadian Medical Education Journal*, *6*(1), e14-22.

Becasen, J. S., Denard, C. L., Mullins, M. M., Higa, D. H., & Sipe, T. A. (2019). Estimating the prevalence of HIV and sexual behaviors among the US transgender population: A systematic review and meta-analysis, 2006-2017—PubMed. *American Journal of Public Health*, *109*(1), e1–e8. https://doi.org/10.2105/AJPH.2018.304727

Bidell, M. P. (2005). The sexual orientation counselor competency scale: Assessing attitudes, skills, and knowledge of counselors working with lesbain, gay, and bisexual clients. *Counselor Education and Suppervision*, *44*, 267–279. https://doi.org/10.1002/j.1556-6978.2005.tb01755.x

Bidell, M. P. (2015). *Utilizing the sexual orientation counselor competency scale (SOCCS) in mental health and healthcare settings: An instructor's guide.* https://www.mededportal.org/publications/10040

Bidell, M. P. (2017). The lesbian, gay, bisexual, and transgender development of clinical skills scale (LGBT-DOCSS): Establishing a new interdisciplinary self-assessment for health providers. *Journal of Homosexuality*, *64*(10), 1432–1460. https://doi.org/10.1080/00918369.2017.1321389

Bidell, M. P., & Stepleman, L. M. (2017). An interdisciplinary approach to lesbian, gay, bisexual, and transgender clinical competence, professional training, and ethical care: Introduction to the special issue. *Journal of Homosexuality*, *64*(10), 1305–1329. https://doi.org/10.1080/00918369.2017.1321360

Blondeel, K., Say, L., Chou, D., Toskin, I., Khosla, R., Scolaro, E., & Temmerman, M. (2016). Evidence and knowledge gaps on the disease burden in sexual and gender minorities: A review of systematic reviews. *International Journal for Equity in Health*, *15*. https://doi.org/10.1186/s12939-016-0304-1

Bluestone, J., Johnson, P., Fullerton, J., Carr, C., Alderman, J., & BonTempo, J. (2013). Effective in-service training design and delivery: Evidence from an integrative literature review. *Human Resources for Health*, *11*, 51. https://doi.org/10.1186/1478-4491-11-51

Bostwick, W., & Hequembourg, A. (2014). "Just a little hint": Bisexual-specific microaggressions and their connection to epistemic injustices. *Culture, Health & Sexuality*, *16*(5), 488–503. https://doi.org/10.1080/13691058.2014.889754

Bristowe K., Hodson M., Wee B., Almack K., Johnson K., Daveson, B.A, Koffman J., McEnhill L., & Harding R. (2018). Recommendations to reduce inequalities for LGBT people

facing advanced illness: ACCESSCare national qualitative interview study. Palliative Medicine, 32(1), 23-35. doi: 10.1177/0269216317705102

Brooks, H., Llewellyn, C. D., Nadarzynski, T., Pelloso, F. C., De Souza Guilherme, F., Pollard, A., & Jones, C. J. (2018). Sexual orientation disclosure in health care: A systematic review. *The British Journal of General Practice: The Journal of the Royal College of General Practitioners*, *68*(668), e187–e196. https://doi.org/10.3399/bjgp18X694841

Brown, K. D., Sessanna, L., & Paplham, P. (2020). Nurse practitioners' and nurse practitioner students' LGBT health perceptions. *The Journal for Nurse Practitioners*, *16*(4), 262–266. https://doi.org/10.1016/j.nurpra.2019.12.028

Burke, E., Dovidio, F., Przedworski, M., Hardeman, R., Perry, P., Phelan, M., Nelson, B., Burgess, J., Yeazel, W., & Van Ryn, W. (2015). Do contact and empathy mitigate bias against gay and lesbian people among heterosexual first-year medical students? A report from the medical student CHANGE study. *Academic Medicine*, *90*(5), 645–651. https://doi.org/10.1097/ACM.0000000000000661

Burwick, A., Gates, G., Baumgartner, S., & Friend, S. (2015). *Human Services for Low-income and At-risk LGBT Populations: An Assessment of the Knowledge Base and Research Needs*.

Butler, M., McCreedy, E., Schwer, N., Burgess, D., Call, K., Przedworski, J., Rosser, S., Larson, S., Allen, M., Fu, S., & Kane, R. L. (2016). *Improving cultural competence to reduce health disparities*. Agency for Healthcare Research and Quality (US). http://www.ncbi.nlm.nih.gov/books/NBK361126/

Byne, W. (2015). LGBT health equity: Steps toward progress and challenges ahead. *LGBT Health*, *2*(3), 193–195. https://doi.org/10.1089/lgbt.2015.0084

Cahill, S., Singal, R., Grasso, C., King, D., Mayer, K., Baker, K., & Makadon, H. (2014). Do ask, do Tell: High levels of acceptability by patients of routine collection of sexual orientation and gender identity data in four diverse American community health centers. *PLOS ONE*, *9*(9), e107104. https://doi.org/10.1371/journal.pone.0107104

Calzo, J. P., Roberts, A. L., Corliss, H. L., Blood, E. A., Kroshus, E., & Austin, S. B. (2014). Physical activity disparities in heterosexual and sexual minority youth ages 12-22 years old: Roles of childhood gender nonconformity and athletic self-esteem. *Annals of Behavioral Medicine; Oxford*, *47*(1), 17–27. http://dx.doi.org.ezproxy.lib.ndsu.nodak.edu/10.1007/s12160-013-9570-y

Campinha-Bacote, J. (1999). A model and instrument for addressing cultural competence in health care. | Semantic Scholar. *The Journal of Nursing Education*, *38*(5), 203–207. https://doi.org/10.3928/0148-4834-19990501-06

Campinha-Bacote, J. (2002). The Process of cultural competence in the delivery of healthcare services: A model of care. *Journal of Transcultural Nursing*, *13*(3), 181–184. https://doi.org/10.1177/10459602013003003

Campinha-Bacote, J., & Munoz, C. (2001). A guiding framework for delivering culturally competent services in case management. *The Case Manager*, *12*(2), 48–52. https://doi.org/10.1067/mcm.2001.114902

Carabez, R., Pellegrini, M., Mankovitz, A., Eliason, M., Ciano, M., & Scott, M. (2015). "Never in all my years…": Nurses' education about LGBT health. *Journal of Professional Nursing*, *31*(4), 323–329. https://doi.org/10.1016/j.profnurs.2015.01.003

Carabez, R., Pellegrini, M., Mankovitz, A., Eliason, M. J., & Dariotis, W. M. (2015). Nursing students' perceptions of their knowledge of lesbian, gay, bisexual, and transgender issues:

Effectiveness of a multi-purpose assignment in a public health nursing class. *The Journal of Nursing Education*, *54*(1), 50–53. https://doi.org/10.3928/01484834-20141228-03

Center for Young Women's Health. (2018). *What is sexuality and sexual orientation?* What Is Sexuality and Sexual Orientation? https://youngwomenshealth.org/2018/10/26/what-is-sexuality-and-sexual-orientation/

Centers for Disease Control and Prevention. (2014a). *Likely Female-to-Female Sexual Transmission of HIV — Texas, 2012*. Morbidity and Mortality Weekly Report. https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6310a1.htm

Centers for Disease Control and Prevention. (2014b). *Preexposure prophylaxis for the prevention of HIV infection in the United States—2014: A clinical practice guideline*. http://www.cdc.gov/hiv/pdf/prepguidelines2014.pdf.

Center for Disease Control and Prevention. (2015). *The benefits of physical activity*. https://www.cdc.gov/physicalactivity/basics/pa-health

Center for Disease Control and Prevention. (2016). *Behavioral and clinical characteristics of persons receiving medical care for HIV infection—Medical monitoring project, United States, 2013 cycle* (June 2013–May 2014) [HIV Surveillance Special Report 16]. http://www.cdc.gov.ezproxy.lib.ndsu.nodak.edu/hiv/pdf/library/reports/surveillance/cdc-hiv-hssr-mmp-2013.pdf

Centers for Disease Control and Prevention. (2019). *Estimated HIV incidence and prevalence in the United States, 2010–2016*. HIV Surveillance Supplemental Report. http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html.

Centers for Disease Control and Prevention. (2020). *PrEP (Pre-exposure prophylaxis).* https://www.cdc.gov/hiv/basics/prep.html

Chatterjee, S. (2014). Problems faced by LGBT people in the mainstream society: Some recommendations. Corpus ID: 151373092.

Chhim, S., Ngin, C., Chhoun, P., Tuot, S., Ly, C., Mun, P., Pal, K., Macom, J., Dousset, J.-P., Mburu, G., & Yi, S. (2017). HIV prevalence and factors associated with HIV infection among transgender women in Cambodia: Results from a national integrated biological and behavioral survey. *BMJ Open*, *7*(8). https://doi.org/10.1136/bmjopen-2016-015390

Choi, E. P.-H., Wong, J. Y.-H., Lo, H. H.-M., Wong, W., Chio, J. H.-M., & Fong, D. Y.-T. (2016). The impacts of using smartphone dating applications on sexual risk behaviours in college students in Hong Kong. *PLOS ONE*, *11*(11), e0165394. https://doi.org/10.1371/journal.pone.0165394

Clark, H., Babu, A. S., Wiewel, E. W., Opoku, J., & Crepaz, N. (2017). Diagnosed HIV infection in transgender adults and adolescents: Results from the National HIV Surveillance System, 2009–2014. *AIDS and Behavior*, *21*(9), 2774–2783. https://doi.org/10.1007/s10461-016-1656-7

Coal Country Community Health Center. (2020). *Coal Country Community Health Center*. https://www.coalcountryhealth.com/

Cohen, J. M., Blasey, C., Barr Taylor, C., Weiss, B. J., & Newman, M. G. (2016). Anxiety and related disorders and concealment in sexual minority young adults. *Behavior Therapy*, *47*(1), 91–101. https://doi.org/10.1016/j.beth.2015.09.006

Cooper, M. B., Chacko, M., & Christner, J. (2018). Incorporating LGBT Health in an Undergraduate Medical Education Curriculum Through the Construct of Social Determinants of Health. *MedEdPORTAL: The Journal of Teaching and Learning Resources*, *14*, 10781. https://doi.org/10.15766/mep_2374-8265.10781

Cornelius, J. B., & Carrick, J. I. (2015). A survey of nursing students' knowledge of and attitudes toward LGBT health care concerns. *Nursing Education Perspective*, *36*, 176–178. https://doi.org/10.5480/13-1223

Cross, T., Bazron, B., Dennis, K., & Isaacs, M. (1989). *Towards a culturally competent system of care* (Volume 1). Georgetown University Center for Child and Human Development, CASSP Technical Assistance Center.

Curmi, C., Peters, K., & Salamonson, Y. (2014) Lesbians' attitudes and practices of cervical cancer screening: A qualitative study. *BMC Womens Health, 14*(153). doi: 10.1186/s12905-014-0153-2

Dean, M. A., Victor, E., & Guidry-Grimes, L. (2016). Inhospitable healthcare spaces: Why diversity training on LGBTQIA Issues is not enough. *Journal of Bioethical Inquiry*, *13*(4), 557–570. https://doi.org/10.1007/s11673-016-9738-9

Dentato, M. P. (2012). *The minority stress perspective*. https://www.apa.org/pi/aids/resources/exchange/2012/04/minority-stress

Dorsen, C., & Van Devanter, N. (2016). Open arms, conflicted hearts: Nurse-practitioner's attitudes towards working with lesbian, gay and bisexual patients. *Journal of Clinical Nursing*, *25*(23–24), 3716–3727. https://doi.org/10.1111/jocn.13464

Drescher, J. (2015). Out of DSM: Depathologizing homosexuality. *Behavioral Sciences (Basel, Switzerland)*, *5*(4), 565–575. http://dx.doi.org.ezproxy.lib.ndsu.nodak.edu/10.3390/bs5040565

Duong, K. (2020). *Research Guides: Qualtrics: What is Qualtrics?* //csulb.libguides.com/qualtrics/about

D'Souza, G., Wentz, A., Wiley, D., Shah, N., Barrington, F., Darragh, T. M., Joste, N., Plankey, M., Reddy, S., Breen, E. C., Young, S., & Cranston, R. D. (2016). Anal cancer screening in men who have sex with men in the multicenter AIDS cohort study. *Journal of Acquired Immune Deficiency Syndromes (1999)*, *71*(5), 570–576. https://doi.org/10.1097/QAI.0000000000000910

Eckstrand, K. L., & Ehrenfeld, J. M. (2016). *Lesbian, Gay, Bisexual, and Transgender Healthcare: A Clinical Guide to Preventive, Primary, and Specialist Care*. New York City: Springer.

Federal Bureau of Investigation. (2020). *2019 hate crime statistics*. 2019 Hate Crime Statistics. https://ucr.fbi.gov/hate-crime/2019/topic-pages/victims

Feldman, J., & Duetsch, M.B. (2021). Primary care of transgender individuals. In J.G. Elmore (Ed.), *UpToDate*. Retrieved January 30th, 2021 from https://www.uptodate.com/contents/primary-care-of-transgender-individuals

Felsenstein, D. R. (2018). Enhancing lesbian, gay, bisexual, and transgender cultural competence in a midwestern primary care clinic setting. *Journal for Nurses in Professional Development*, *34*(3), 142–150. https://doi.org/10.1097/NND.0000000000000450

Flanders, C.E., Dobinson, C., & Logie, C. (2015). "I'm never really my full self": Young bisexual women's perception of their mental health. *Journal of Bisexuality, 15*(4), 454-480. https://doi.org/10.1080/15299716.2015.1079288

Fredriksen-Goldsen, K. I., Cook-Daniels, L., Kim, H.-J., Erosheva, E. A., Emlet, C. A., Hoy-Ellis, C. P., Goldsen, J., & Muraco, A. (2014). Physical and mental health of transgender older adults: An at-risk and underserved population. *The Gerontologist*, *54*(3), 488–500. https://doi.org/10.1093/geront/gnt021

Gallup, Inc. (2018). *In U.S., estimate of LGBT population rises to 4.5%.* https://news.gallup.com/poll/234863/estimate-lgbt-population-rises.aspx

Gallup, Inc. (2021). *LGBT identification rises to 5.6% in latest U.S. estimate. https://news.gallup.com/poll/329708/lgbt-identification-rises-latest-estimate.aspx*

Georgetown University - National Center for Cultural Competence. (n.d.). *Conscious and unconscious biases in health care*. Retrieved January 26, 2020, from https://nccc.georgetown.edu/bias/module-3/1.php

Glick, S. N., Feng, Q., Popov, V., Koutsky, L. A., & Golden, M. R. (2014). High rates of incident and prevalent anal human papillomavirus infection among young men who have sex with men. *The Journal of Infectious Diseases*, *209*(3), 369–376. https://doi.org/10.1093/infdis/jit441

Gorczynski, P. F., & Brittain, D. R. (2016). Call to action: The need for an LGBT-focused physical activity research strategy. *American Journal of Preventive Medicine*, *51*(4), 527–530. https://doi.org/10.1016/j.amepre.2016.03.022

Govere, L., & Govere, E. M. (2016). How effective is cultural competence training of healthcare providers on improving patient satisfaction of minority groups? A systematic review of literature. *Worldviews on Evidence-Based Nursing*, *13*(6), 402–410. https://doi.org/10.1111/wvn.12176

Greene, M. Z., France, K., Kreider, E. F., Wolfe-Roubatis, E., Chen, K. D., Wu, A., & Yehia, B. R. (2018). Comparing medical, dental, and nursing students' preparedness to address lesbian, gay, bisexual, transgender, and queer health. *PLoS ONE*, *13*(9). https://doi.org/10.1371/journal.pone.0204104

Grosz, A. M., Gutierrez, D., Lui, A. A., Chang, J. J., Cole-Kelly, K., & Ng, H. (2017). A student-led introduction to lesbian, gay, bisexual, and transgender health for first-year medical students. *Family Medicine*, *49*(1), 52–56.

Hafeez, H., Zeshan, M., Tahir, M. A., Jahan, N., & Naveed, S. (2017). Health care disparities among lesbian, gay, bisexual, and transgender youth: A Literature Review. *Cureus*, *9*(4). https://doi.org/10.7759/cureus.1184

Halkitis, P. N., Wolitski, R. J., & Millett, G. A. (2013). A holistic approach to addressing HIV infection disparities in gay, bisexual, and other men who have sex with men. *American Psychologist*, *68*(4), 261–273. https://doi.org/10.1037/a0032746

Harris, N. S., Johnson, A. S., Huang, Y. A., Kern, D. K., Fulton, P., Smith, D. K., Valleroy, L. A., & Hall, I. (2019). *Vital signs: Status of human immunodeficiency virus testing, viral suppression, and HIV preexpsoure prophylaxis—United States, 2018* (No. 68; MMWR Morbidity and Mortality Weekly Report, pp. 1117–1123). DOI: http://dx.doi.org/10.15585/mmwr.mm6848e1

Healthy People 2020 [Internet]. *Lesbian, gay, bisexual, and transgender health*. U.S Department of Health and Human Services, Office of Disease Prevention and Health Promotion [cited [January 31, 2021]]. Available from http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=25

Healthy People 2020 [Internet]. *Social determinants of health*. U.S Department of Health and Human Services, Office of Disease Prevention and Health Promotion [cited [January 31, 2021]]. Available from https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

Henry, A. (2017). Educational program to improve provider knowledge, attitudes, and behavior in lesbian, gay, bisexual, and transgender self-disclosure. *Journal of Doctoral Nursing Practice*, *10*(1), 65–70. https://doi.org/10.1891/2380-9418.10.1.65

Herman, J. L., Haas, A. P., & Rodgers, P. L. (2014). *Suicide attempts among transgender and gender non-conforming adults*. https://escholarship.org/uc/item/8xg8061f

Hernandez, A. L., Efird, J. T., Holly, E. A., Berry, J. M., Jay, N., & Palefsky, J. M. (2014). Incidence of and risk factors for type-specific anal human papillomavirus infection among HIV-positive MSM. *AIDS (London, England)*, *28*(9), 1341–1349. https://doi.org/10.1097/QAD.0000000000000254

Hollenbach, A., Eckstrand, K., & Dreger, A. (2014). *Implementing curricular and institutional climate changes to improve health care for individuals who are LGBT, gender nonconforming, or born with DSD*. Association of American Medical Colleges, Washington, DC.

Hoornenborg, E., Krakower, D. S., Prins, M., & Mayer, K. H. (2017). Preexposure prophylaxis for men who have sex with men and transgender persons in early adopting countries: A narrative review. *AIDS (London, England)*, *31*(16), 2179–2191. https://doi.org/10.1097/QAD.0000000000001627

Hottes, T. S., Bogaert, L., Rhodes, A. E., Brennan, D. J., & Gesink, D. (2016). Lifetime prevalence of suicide attempts among sexual minority adults by study sampling strategies: A systematic review and meta-analysis. *American Journal of Public Health*, *106*(5), e1–e12. https://doi.org/10.2105/AJPH.2016.303088

Humans Right Campaign. (2015). *Beyond marriage equality: A blueprint for federal non-discrimination protections*. http://www.hrc.org/campaigns/beyond-marriage-equality-a-blueprint-for-fedral-non-discrimination-protect

Human Rights Campaign. (2020a). *HRC North Dakota*. Human Rights Campaign. https://www.hrc.org/local-issues/north-dakota/

Human Rights Campaign. (2020b). *The National LGBT Health Education Center*. Human Rights Campaign. https://www.hrc.org/hei/the-national-lgbt-health-education-center/

Institute of Healthcare Improvement. (2020). *Science of improvement: Testing changes*. http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementTestingChanges.aspx

Institute of Medicine Committee on Lesbian, Gay, Bisexual, and Transgender Health Issues and Research Gaps and Opportunities. (2011). *The health of lesbian, gay, bisexual, and transgender people: Building a foundation for a better understanding*. National Academies Press. https://www.ncbi.nlm.nih.gov/books/NBK64806/doi: 10.17226/13128

Jaffee, K. D., Shires, D. A., & Stroumsa, D. (2016). Discrimination and delayed health care among transgender women and men: Implications for improving medical education and health care delivery. *Medical Care*, *54*(11), 1010–1016. https://doi.org/10.1097/MLR.0000000000000583

Jenness, S.M., Goodreau, S.M., Rosenberg, E., Beylerian, E.N., Hoover, K.W., Smith, D.K., & Sullivan, P. (2016). Impact of the Centers for Disease Control's HIV preexposure prophylaxis guidelines for men who have sex with men in the United States. *The Journal of Infectious Disease, 214*(12), 1800-1807. https://doi.org/10.1093/infdis/jiw223

Jennings, L., Barcelos, C., McWilliams, C., & Malecki, K. (2019). Inequalities in lesbian, gay, bisexual, and transgender (LGBT) health and health care access and utilization in Wisconsin. *Preventive Medicine Reports*, *14*, 100864. https://doi.org/10.1016/j.pmedr.2019.100864

Johnson, M. J., Nemeth, L. S., Mueller, M., Eliason, M. J., & Stuart, G. W. (2016). Qualitative study of cervical cancer screening among lesbian and bisexual women and transgender men. *Cancer Nursing*, *39*(6), 455–463. https://doi.org/10.1097/NCC.0000000000000338

Jongen, C., McCalman, J., & Bainbridge, R. (2018). Health workforce cultural competency interventions: A systematic scoping review. *BMC Health Services Research*, *18*(232). https://doi.org/10.1186/s12913-018-3001-5

Kann, L., Olsen, E. O., McManus, T., Harris, W. A., Shanklin, S. L., Flint, K. H., Queen, B., Lowry, R., Chyen, D., Whittle, L., Thornton, J., Lim, C., Yamakawa, Y., Brener, N., & Zaza, S. (2016). Sexual identity, sex of sexual contacts, and health-related behaviors among students in grades 9-12—United States and selected sites, 2015. *Morbidity and Mortality Weekly Report. Surveillance Summaries (Washington, D.C.: 2002)*, *65*(9), 1–202. https://doi.org/10.15585/mmwr.ss6509a1

Katz-Wise, S. L., Rosario, M., & Tsappis, M. (2016). LGBT youth and family acceptance. *Pediatric Clinics of North America*, *63*(6), 1011–1025. https://doi.org/10.1016/j.pcl.2016.07.005

Kemp, C. (2018). Racial/ethnic minority LGBT youths face many challenges; find out how you can help. *AAP News*. https://www.aappublications.org/news/2018/10/09/nce18lgbtqresilience100918

Khalili, J., Leung, L. B., & Diamant, A. L. (2015). Finding the perfect doctor: Identifying lesbian, gay, bisexual, and transgender-competent physicians. *American Journal of Public Health*, *105*(6), 1114–1119. https://doi.org/10.2105/AJPH.2014.302448

King, M. (2015). Attitudes of therapists and other health professionals towards their LGB patients. *International Review of Psychiatry (Abingdon, England)*, *27*(5), 396–404. https://doi.org/10.3109/09540261.2015.1094033

Klein, E. W., & Nakhai, M. (2016). Caring for LGBTQ patients: Methods for improving physician cultural competence. *International Journal of Psychiatry in Medicine*, *51*(4), 315–324. https://doi.org/10.1177/0091217416659268

Knight, D.A., & Jarrett, D. (2015). Preventive health care for men who have sex with men. *American Family Physician, 91*(12), 844-851. PMID: 26131944

Knight, D.A, & Jarret, D. (2017). Preventive health care for women who have sex with women. A*merican Family Physician, 95*(5), 314-321. PMID: 28290645

Lambda Legal. (2010). *When health care isn't caring: Lambda Legal's Survey of Discrimination Against LGBT People and People with HIV.* Lambda Legal.

Law, M., Mathai, A., Veinot, P., Webster, F., & Mylopoulos, M. (2015). Exploring lesbian, gay, bisexual, and queer (LGBQ) people's experiences with disclosure of sexual identity to primary care physicians: A qualitative study. *BMC Family Practice*, *16*, 175. https://doi.org/10.1186/s12875-015-0389-4

Lee, C., Oliffe, J. L., Kelly, M. T., & Ferlatte, O. (2017). Depression and suicidality in gay men: Implications for health care providers. *American Journal of Men's Health*, *11*(4), 910–919. https://doi.org/10.1177/1557988316685492

Leslie, K. F., Sawning, S., Shaw, M. A., Martin, L. J., Simpson, R. C., Stephens, J. E., & Jones, V. F. (2018). Changes in medical student implicit attitudes following a health equity curricular intervention. *Medical Teacher*, *40*(4), 372–378. https://doi.org/10.1080/0142159X.2017.1403014

Lim, F. A. D., Brown, D. V. J., & Justin Kim, S. M. B. (2014). Addressing health care disparities in the lesbian, gay, bisexual, and transgender population: A review of best practices. *Journal of Nursing*, *114*(6), 24–34. https://doi.org/10.1097/01.NAJ.0000450423.89759.36

Lim, F., Johnson, M., & Eliason, M. (2015). A national survey of faculty knowledge, experience, and readiness for teaching lesbian, gay, bisexual, and transgender health in baccalaureate nursing programs. *Nursing Education Perspectives*, *36*(3), 144–152.

Longares, L., Escartín, J., & Rodríguez-Carballeira, Á. (2016). Collective self-esteem and depressive symptomatology in lesbians and gay men: A moderated mediation model of self-stigma and psychological abuse. *Journal of Homosexuality*, *63*(11), 1481–1501. https://doi.org/10.1080/00918369.2016.1223333

Macapagal, K., Moskowitz, D. A., Li, D. H., Carrión, A., Bettin, E., Fisher, C. B., & Mustanski, B. (2018). Hookup app use, sexual behavior, and sexual health among adolescent men who have sex with men in the United States. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, *62*(6), 708–715. https://doi.org/10.1016/j.jadohealth.2018.01.001

Mansh, M., Garcia, G., & Lunn, M. R. (2015). From patients to providers: Changing the culture in medicine toward sexual and gender minorities. *Academic Medicine: Journal of the*

Association of American Medical Colleges, *90*(5), 574–580. https://doi.org/10.1097/ACM.0000000000000656

Matza, A. R., Sloan, C. A., & Kauth, M. R. (2015). Quality LGBT health education: A review of key reports and webinars. *Clinical Psychology: Science and Practice*, *22*(2), 127–144. https://doi.org/10.1111/cpsp.12096

McCann, E., & Brown, M. (2018). The inclusion of LGBT+ health issues within undergraduate healthcare education and professional training programmes: A systematic review. *Nurse Education Today*, *64*, 204–214. https://doi.org/10.1016/j.nedt.2018.02.028

McNamara, M. C., & Ng, H. (2016). Best practices in LGBT care: A guide for primary care physicians. *Cleveland Clinic Journal of Medicine*, *83*(7), 531–541. https://doi.org/10.3949/ccjm.83a.15148

Mayer, K.H., Bradford, J.B., Makadon, H.J., Stall, R., Goldhammer, H., & Landers, S. (2008). Sexual and gender minority health: What we know and what needs to be done. *American Journal of Public Health 98*(6), 989-995. https://doi.org/10.2105/AJPH.2007.127811

Mera, R. M., Palmar, B., Mayer, G., Magnuson, D., & Rawlings, K. (n.d.). *Changes in Truvada® for HIV pre-exposure prophylaxis utilization in the USA: 2012-2016—Disparities*. Retrieved November 16, 2019, from http://www.natap.org/2017/IAS/IAS_72.htm

Mereish, E. H. (2014). The weight of discrimination: The relationship between heterosexist discrimination and obesity among lesbian women. *Psychology of Sexual Orientation and Gender Diversity*, *1*(4), 356–360. https://doi.org/10.1037/sgd0000056

Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, *36*(1), 38–56

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, *129*(5), 674–697. https://doi.org/10.1037/0033-2909.129.5.674

Miller, D., & Oliver, M. (2015). Engaging Stakeholders for Project Success. *PMI White Papers*. https://www.pmi.org/learning/library/engaging-stakeholders-project-success-11199

Minnesota Department of Health. (n.d.). *PDSA: Plan-Do-Study-Act (Rapid Cycle Improvement)*. Retrieved April 5, 2020, from https://www.health.state.mn.us/communities/practice/resources/phqitoolbox/pdsa.html

Moen, R., & Norman, C. (2009, September 17). *The history of the PDCA Cycle*. 7th ANQ Congress, Tokyo. http://www.idemployee.id.tue.nl/g.w.m.rauterberg/lecturenotes/DG000%20DRP-R/references/Moen-Norman-2009.pdf

Moody, R. L., Starks, T. J., Grov, C., & Parsons, J. T. (2018). Internalized homophobia and drug use in a national cohort of gay and bisexual men: Examining depression, sexual anxiety, and gay community attachment as mediating factors. *Archives of Sexual Behavior*, *47*(4), 1133–1144. https://doi.org/10.1007/s10508-017-1009-2

Morris, M., Cooper, R. L., Ramesh, A., Tabatabai, M., Arcury, T. A., Shinn, M., Im, W., Juarez, P., & Matthews-Juarez, P. (2019). Training to reduce LGBTQ-related bias among medical, nursing, and dental students and providers: A systematic review. *BMC Medical Education*, *19*(1), 325. https://doi.org/10.1186/s12909-019-1727-3

Movement Advancement Project. (2020). *Equality Maps: Hate Crime Laws*. https://www.lgbtmap.org/equality-maps/hate_crime_laws

Murphy, M. (2016). Hiding in plain sight: The production of heteronormativity in medical education -. *Journal of Contemporary Ethnography*, *45*(3), 256–289.

Nadarzynski, T., Smith, H., Richardson, D., Jones, C. J., & Llewellyn, C. D. (2014). Human papillomavirus and vaccine-related perceptions among men who have sex with men: A systematic review. *Sexually Transmitted Infections*, *90*(7), 515–523. https://doi.org/10.1136/sextrans-2013-051357

Nam, B., Jun, H.-J., Fedina, L., Shah, R., & DeVylder, J. E. (2019). Sexual orientation and mental health among adults in four U.S. cities. *Psychiatry Research*, *273*, 134–140. https://doi.org/10.1016/j.psychres.2018.12.092

National LGBT Health Education Center. (2020). *Achieving Health Equity for LGBT People*. LGBT Health Education Center. https://www.lgbthealtheducation.org/courses/achieving-health-equity-for-lgbt-people/

National LGB&T Partnership. (2016). *Lesbian, gay, bisexual & trans people and physical activity: What you need to know*. https://nationallgbtpartnershipdotorg.files.wordpress.com/2016/02/lgbt-people-and-physical-activity-what-you-need-to-know.pdf

NCCC: Curricula Enhancement Module Series. (n.d.). Retrieved November 27, 2019, from https://nccc.georgetown.edu/curricula/awareness/index.html

Ngamake, S. T., Walch, S. E., & Raveepatarakul, J. (2016). Discrimination and sexual minority mental health: Mediation and moderation effects of coping. *Psychology of Sexual Orientation and Gender Diversity*, *3*(2), 213–226. https://doi.org/10.1037/sgd0000163

NPR. (2016). *North Dakota 2016 Presidential and State Election Results*. *NPR.org.* https://www.npr.org/2016/11/08/501067313/north-dakota-2016-presidential-and-state-election-results

Obedin-Maliver, J., Goldsmith, E. S., Stewart, L., White, W., Tran, E., Brenman, S., Wells, M., Fetterman, D. M., Garcia, G., & Lunn, M. R. (2011). Lesbian, gay, bisexual, and transgender-related content in undergraduate medical education. *JAMA*, *306*(9), 971–977. https://doi.org/10.1001/jama.2011.1255

Oliver, S., Gorbach, P., Gratzer, Beau, Steinau, Martin, & et. al. (2018). Risk factors for oral human papillomavirus infection among young men who have sex with men-2 Cities, United States, 2012-2014. *Sexually Transmitted Diseases*, *45*, 660–665. https://doi.org/10.1097/OLQ.0000000000000845

Paradiso, C., & Lally, R. M. (2018). Nurse practitioner knowledge, attitudes, and beliefs When caring for transgender people. *Transgender Health*, *3*(1), 47–56. https://doi.org/10.1089/trgh.2017.0048

Parameshwaran, V., Cockbain, B. C., Hillyard, M., & Price, J. R. (2017). Is the lack of specific lesbian, gay, bisexual, transgender and queer/questioning (LGBTQ) health care dducation in medical school a cause for concern? Evidence from a survey of knowledge and practice among UK medical students—*PubMed*. https://pubmed.ncbi.nlm.nih.gov/27184023/

Parkhill, A. L., Mathews, J. L., Fearing, S., & Gainsburg, J. (2014). A transgender health care panel discussion in a required diversity course. *American Journal of Pharmaceutical Education*, *78*(4), 81. https://doi.org/10.5688/ajpe78481

Patrick, K., Heywood, W., Simpson, J. M., Pitts, M. K., Richters, J., Shelley, J. M., & Smith, A. M. (2013). Demographic predictors of consistency and change in heterosexuals' attitudes toward homosexual behavior over a two-year period. *Journal of Sex Research*, *50*(6), 611–619. https://doi.org/10.1080/00224499.2012.657263

Patton, M. E., Kidd, S., Llata, E., Stenger, M., Braxton, J., Asbel, L., Bernstein, K., Gratzer, B., Jespersen, M., Kerani, R., Mettenbrink, C., Mohamed, M., Pathela, P., Schumacher, C., Stirland, A., Stover, J., Tabidze, I., Kirkcaldy, R. D., & Weinstock, H. (2014). Extragenital gonorrhea and chlamydia testing and infection among men who have sex with men—STD Surveillance Network, United States, 2010-2012. *Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America*, *58*(11), 1564–1570. https://doi.org/10.1093/cid/ciu184

Peitzmeir, S. M., Malik, M., Kattari, S. K., Marrow, E., Stephenson, R., Agenor, M., & Reisner, S. L. (2019). Intimate partner violence in transgender populations: Systematic review and meta-analysis of prevalence and correlates. *American Journal of Public Health*, *110*(9), e1–e14. https://doi.org/10.2105/AJPH.2020.305774

Pew Research Center. (2020). *Attitudes on same-sex marriage*.

Pew Research Center, Washington, S. 800, & Inquiries, D. 20036 U.-419-4300 | M.-419-4349 | F.-419-4372 | M. (2020). *Adults in North Dakota - Religion in America: U.S. Religious Data, Demographics and Statistics*. Pew Research Center's Religion & Public Life Project. https://www.pewforum.org/religious-landscape-study/

Project Implicit. (2011). *Sexuality IAT.* https://implicit.harvard.edu/implicit/Study?tid=-1

Public Religion Research Institute. (2018). Fifty Years After Stonewall: Widespread Support for LGBT Issues - Findings from American Values Atlas 2018. *PRRI*.

https://www.prri.org/research/fifty-years-after-stonewall-widespread-support-for-lgbt-issues-findings-from-american-values-atlas-2018/

Qureshi, R., Zha, P., & Porter, S. (2020). An assessment of lesbian, gay, bisexual, and transgender health competencies among bachelors-prepared registered nurses in graduate-level study. *Academic Medicine*, *95*(12), S113–S120. https://doi.org/10.1097/ACM.0000000000003681

Reisner, S. L., White, J. M., Mayer, K. H., & Mimiaga, M. J. (2014). Sexual risk behaviors and psychosocial health concerns of female-to-male transgender men screening for STDs at an urban community health center. *AIDS Care*, *26*(7), 857–864. https://doi.org/10.1080/09540121.2013.855701

Reisner, S. L., Katz-Wise, S. L., Gordon, A. R., Corliss, H. L., & Austin, S. B. (2016). Social epidemiology of depression and anxiety by gender identity. *Journal of Adolescent Health*, *59*(2), 203–208. https://doi.org/10.1016/j.jadohealth.2016.04.006

Reisner, S. L., Poteat, T., Keatley, J., Cabral, M., Mothopeng, T., Dunham, E., Holland, C. E., Max, R., & Baral, S. D. (2016). Global health burden and needs of transgender populations: A review. *The Lancet*, *388*(10042), 412–436. https://doi.org/10.1016/S0140-6736(16)00684-X

Reiter, P. L., & McRee, A.-L. (2017). HPV infection among a population-based sample of sexual minority women from USA. *Sexually Transmitted Infections*, *93*(1), 25–31. https://doi.org/10.1136/sextrans-2016-052536

Rendina, H. J., Millar, B. M., & Parsons, J. T. (2018). The critical role of internalized HIV-related stigma in the daily negative affective experiences of HIV-positive gay and

bisexual men. *Journal of Affective Disorders*, *227*, 289–297. https://doi.org/10.1016/j.jad.2017.11.005

Ricca, P., Wahlskog, C., & Bergren, M. D. (2018). Enhancing cultural sensitivity in a community health care setting for LGBTQ patients. *Journal of Community Health Nursing*, *35*(4), 165–178. https://doi.org/10.1080/07370016.2018.1516420

Roberts, A. L., Austin, S. B., Corliss, H. L., Vandermorris, A. K., & Koenen, K. C. (2010). Pervasive trauma exposure among US sexual orientation minority adults and risk of posttraumatic stress disorder. *American Journal of Public Health*, *100*(12), 2433–2441. https://doi.org/10.2105/AJPH.2009.168971

Robertson, W. (2016). The irrelevance narrative: Queer (in)visibility in medical dducation and practice. *Medical Anthropology Quarterly*, *31*(2), 159–176. https://doi.org/10.1111/maq.12289

Ronan, W. (2020). *New FBI hate crimes report shows increases in anti-LGBT attacks*. Retrieved on December 12, 2020 from https://www.hrc.org/press-releases/new-fbi-hate-crimes-report-shows-increases-in-anti-lgbtq-attacks

Rosenkrantz, D. E., Black, W. W., Abreu, R. L., Aleshire, M. E., & Fallin-Bennett, K. (2017). Health and health care of rural sexual and gender minorities: A systematic review. *Stigma and Health*, *2*(3), 229–243. https://doi.org/10.1037/sah0000055

Rossi, A. L., & Lopez, E. J. (2017). Contextualizing competence: Language and LGBT-based competency in health care. *Journal of Homosexuality*, *64*(10), 1330–1349. https://doi.org/10.1080/00918369.2017.1321361

Rossman, K., Salamanca, P., & Macapagal, K. (2017b). “The doctor said I didn’t look gay”: Young adults’ experiences of disclosure and non-disclosure of LGBTQ identity to

healthcare providers. *Journal of Homosexuality*, *64*(10), 1390–1410. https://doi.org/10.1080/00918369.2017.1321379

Sabin, J. A., Riskind, R. G., & Nosek, B. A. (2015). Health care providers' implicit and explicit attitudes toward lesbian women and gay men. *American Journal of Public Health*, *105*(9), 1831–1841. https://doi.org/10.2105/AJPH.2015.302631

Sadlier, C., Rowley, D., Morley, D., Surah, S., O'Dea, S., Delamere, S., O'Leary, J., Smyth, P., Clarke, S., Sheils, O., & Bergin, C. (2014). Prevalence of human papillomavirus in men who have sex with men in the era of an effective vaccine: A call to act. *HIV Medicine*, *15*(8), 499–504. https://doi.org/10.1111/hiv.12150

Salfas, B., Rendina, H. J., & Parsons, J. T. (2019). What is the role of the community? Examining minority stress processes among gay and bisexual men. *Stigma and Health*, *4*(3), 300–309. https://doi.org/10.1037/sah0000143

Salkind, J., Gishen, F., Drage, G., Kavanagh, J., & Potts, H. W. W. (2019). LGBT+ Health Teaching within the Undergraduate Medical Curriculum. *International Journal of Environmental Research and Public Health*, *16*(13). https://doi.org/10.3390/ijerph16132305

Sawning, S., Steinbock, S., Croley, R., Combs, R., Shaw, A., & Ganzel, T. (2017). A First Step in Addressing Medical Education Curriculum Gaps in Lesbian-, Gay-, Bisexual-, and Transgender-Related Content: The University of Louisville Lesbian, Gay, Bisexual, and Transgender Health Certificate Program. *Education for Health: Change in Learning & Practice*, *30*(2), 108–115. https://doi.org/10.4103/efh.EfH_78_16

Schnabel, L. (2018). Sexual Orientation and social attitudes. *Socius*. https://doi.org/10.1177/2378023118769550

Sekoni, A. O., Gale, N. K., Manga-Atangana, B., Bhadhuri, A., & Jolly, K. (2017). The effects of educational curricula and training on LGBT-specific health issues for healthcare students and professionals: A mixed-method systematic review. *Journal of the International AIDS Society*, *20*(1), 21624. https://doi.org/10.7448/IAS.20.1.21624

Shapiro, G., Tatar, O., Sutton, A., Fisher, W., Naz, A., Perez, S., & Rosberger, Z. (2017). Correlates of tinder use and risky sexual behaviors in young adults. *Cyberpsychology, Behavior and Social Networking*, *20*. https://doi.org/10.1089/cyber.2017.0279

Skehan, J., & Muller, L. S. (2016). Reducing disparities in the LGBT community. *Professional Case Management*, *21*(3), 156–160. https://doi.org/10.1097/NCM.0000000000000156

Skopec, L., & Long, S. K. (2015). Lesbian, gay, and bisexual adults making gains in health insurance and access to care. *Health Affairs*, *34*(10), 1769–1773. https://doi.org/10.1377/hlthaff.2015.0826

Smalley, K. B., Warren, J. C., & Barefoot, K. N. (2018). *LGBT health: Meeting the needs of gender and sexual minorities*. New York City: Springer Publishing Company, LLC.

Smith, B. C., Armelie, A. P., Boarts, J. M., Brazil, M., & Delahanty, D. L. (2016). PTSD, depression, and substance sse in relation to suicidality risk among traumatized minority lesbian, G=gay, and bisexual youth. *Archives of Suicide Research*, *20*(1), 80–93. https://doi.org/10.1080/13811118.2015.1004484

Snowden, J. M., Chen, Y.-H., McFarland, W., & Raymond, H. F. (2017). Prevalence and characteristics of users of pre-exposure prophylaxis (PrEP) amongst men who have sex with men, San Francisco, 2014 in a cross-sectional survey: Implications for disparities. *Sexually Transmitted Infections*, *93*(1), 52–55. https://doi.org/10.1136/sextrans-2015-052382

Snowdon, S. (2016). *Healthcare Equality Index 2016: Promoting equitable and inclusive care for lesbian, gay, bisexual, and transgender patients and their families*. Human Rights Campaign.

Stenersen, M., Ovrebo, E., Emery, H., Brown, E., New, C., Brasfield, C., & Turner, L. (2019). Interpersonal trauma, and PTSD symptomology among lesbian, gay, and bisexual individuals: A closer look at gender, minority stress, and help-seeking behaviors. *Journal of LGBT Issues in Counseling, 33*(3), 216-231. https://doi.org/10.1080/15538605.2019.1627976

Strong, K. L., & Folse, V. N. (2015). Assessing undergraduate nursing students' knowledge, attitudes, and cultural competence in caring for lesbian, gay, bisexual, and transgender patients. *The Journal of Nursing Education*, *54*(1), 45–49. https://doi.org/10.3928/01484834-20141224-07

Substance Abuse and Mental Health Services Administration. (2014). *Improving cultural competence.* (HHS Publication No. 59; Treatment Improvement Protocol (TIP) Series). Substance Abuse and Mental Health Services Administration.

Sukhera, J., & Watling, C. (2018). A Framework for Integrating Implicit Bias Recognition Into Health Professions Education. *Academic Medicine: Journal of the Association of American Medical Colleges*, *93*(1), 35–40. https://doi.org/10.1097/ACM.0000000000001819

Takemoto, M. (2019). Prevalence of sexually transmitted infections and bacterial vaginosis among lesbian women: Systematic review and recommendations to improve care. *Cadernos de Saúde Pública, 35(3)*, *35*(3). https://doi.org/10.1590/0102-311x00118118

Talan, A. J., Drake, C. B., Glick, J. L., Claiborn, C. S., & Seal, D. (2017). Sexual and gender minority health curricula and institutional support services at U.S. schools of public health. *Journal of Homosexuality*, *64*(10), 1350–1367. https://doi.org/10.1080/00918369.2017.1321365

The Human Rights Campaign. (2020). *2020 Fatal violence against transgender and gender non-confirming people report*. https://hrc-prod-requests.s3-us-west-2.amazonaws.com/FatalViolence-2020Report-Final.pdf?mtime=20201119101455&focal=none

The Joint Commission. (2010). *Advancing effective communication, cultural competence, and patient- and family-centered Care: A roadmap for hospitals.* The Joint Commission.

The Joint Commission. (2011). *Advancing effective communication, cultural competence, and patient- and family-centered care for the lesbian, gay, bisexual, and transgender (LGBT) community: A field guide.* https://www.jointcommission.org/assets/1/18/LGBTFieldGuide_WEB_LINKED_VER.pdf

The Williams Institute. (2015). *Intimate partner violence and sexual abuse among LGBT people: A review of existing research*.

UNAIDS. (2014). *90-90-90: An ambitious treatment target to help end the AIDS epidemic*. https://www.unaids.org/sites/default/files/media_asset/90-90-90_en.pdf

UNAIDS. (2018). *UNAIDS (2018) Miles to go: Closing gaps, breaking barriers, fighting injustices p.47*. https://www.unaids.org/sites/default/files/media_asset/miles-to-go_en.pdf

U.S. Census Bureau. (2010). *U.S. Census Bureau QuickFacts: Mercer County, North Dakota*. https://www.census.gov/quickfacts/fact/table/mercercountynorthdakota/AGE295218

U.S. Census Bureau. (2018). *U.S. Census Bureau QuickFacts: Mercer County, North Dakota*. https://www.census.gov/quickfacts/fact/table/mercercountynorthdakota/AGE295218

U.S. Department of Health and Human Services, Office of Minority Health (2000). Assuring cultural competence in health care: Recommendations for national standards and an outcomes-focused research agenda. https://minorityhealth.hhs.gov/Assets/pdf/checked/Assuring_Cultural_Competence_in_Health_Care-1999.pdf

Utamsingh, P. D., Richman, L. S., Martin, J. L., Lattanner, M. R., & Chaikind, J. R. (2016). Heteronormativity and practitioner–patient interaction. *Health Communication*, *31*(5), 566–574. https://doi.org/10.1080/10410236.2014.979975

van Rijn, V. M., Mooij, S. H., Mollers, M., Snijders, P. J. F., Speksnijder, A. G. C. L., King, A. J., de Vries, H. J. C., van Eeden, A., van der Klis, F. R. M., de Melker, H. E., van der Sande, M. A. B., & van der Loeff, M. F. S. (2014). Anal, penile, and oral high-risk HPV infections and HPV seropositivity in HIV-positive and HIV-negative men who have sex with men. *PLoS ONE*, *9*(3). https://doi.org/10.1371/journal.pone.0092208

VanKim, N. A., Porta, C. M., Eisenberg, M. E., Neumark-Sztainer, D., & Laska, M. N. (2016). Lesbian, gay and bisexual college student perspectives on disparities in weight-related behaviours and body image: A qualitative analysis. *Journal of Clinical Nursing*, *25*(23–24), 3676–3686. https://doi.org/10.1111/jocn.13106

White, W., Brenman, S., Paradis, E., Goldsmith, E. S., Lunn, M. R., Obedin-Maliver, J., Stewart, L., Tran, E., Wells, M., Chamberlain, L. J., Fetterman, D. M., & Garcia, G. (2015). Lesbian, gay, bisexual, and transgender patient care: Medical students' preparedness and

comfort. *Teaching and Learning in Medicine*, *27*(3), 254–263. https://doi.org/10.1080/10401334.2015.1044656

Whitehead, J., Shaver, J., & Stephenson, R. (2016). Outness, stigma, and primary health care utilization among rural LGBT populations. *PLOS ONE*, *11*(1), e0146139. https://doi.org/10.1371/journal.pone.0146139

Williams, A. D., Bleicher, R. J., & Ciocca, R. M. (2020). Breast cancer risk, screening, and prevalence among sexual minority women: An analysis of the national health interview survey. *LGBT Health*, *7*(2), 109–118. https://doi.org/10.1089/lgbt.2019.0274

Wilson, C. K., West, L., Stepleman, L., Villarosa, M., Ange, B., Decker, M., & Waller, J. L. (2014). Attitudes Toward LGBT Patients Among Students in the Health Professions: Influence of Demographics and Discipline. *LGBT Health*, *1*(3), 204–211. https://doi.org/10.1089/lgbt.2013.0016

World Health Organization. (1992). The tenth revision of the International Classification of Diseases and Related Health Problems (ICD-10).

Yildiz, E. (2018). Suicide in sexual minority populations: A systematic review of eveidence-based studies. *Archives of Psychiatric Nursing*, *32*(4), 650–659. https://doi.org/10.1016/j.apnu.2018.03.003

Yingling, C. T., Cotler, K., & Hughes, T. L. (2017). Building nurses' capacity to address health inequities: Incorporating lesbian, gay, bisexual and transgender health content in a family nurse practitioner programme. *Journal of Clinical Nursing*, *26*(17–18), 2807–2817. https://doi.org/10.1111/jocn.13707

Zeeman, L., Sherriff, N., Browne, K., McGlynn, N., Mirandola, M., Gios, L., Davis, R., Sanchez-Lambert, J., Aujean, S., Pinto, N., Farinella, F., Donisi, V., Niedźwiedzka-

Stadnik, M., Rosińska, M., Pierson, A., Amaddeo, F., & Network, H. (2019). A review of lesbian, gay, bisexual, trans and intersex (LGBTI) health and healthcare inequalities. *European Journal of Public Health*, *29*(5), 974–980. https://doi.org/10.1093/eurpub/cky226

APPENDIX A. CONSENT TO IMPLEMENT PROJECT

04/04/2020
Dr. Aaron Garman
Medical Director of Coal Country Community Health Center
1312 Hwy 49 N Beulah, ND 58523

RE: Permission to Conduct Dissertation Project

Dear Dr. Garman

I am writing to request permission to implement my dissertation project at Coal Country Community Health Center. I am currently enrolled in the Doctor of Nursing Program at North Dakota State University and developing my dissertation. The dissertation is entitled Enhancing Health Professionals' Knowledge and Cultural Competence on Gender and Sexual Minority Health.

The goal for implementing this educational intervention on cultural competence on gender and sexual minority health is to improve quality of care of this population. The clinics participation would involve health care professionals (i.e., physicians, advanced practice clinicians, nurses, social workers) from the clinics to complete a self-assessment scale, the Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCSS) (copy enclosed), followed by two online learning modules on gender and sexual minority health provided by the National LGBT Health Center: A Program of the Fenway Institute (copy enclosed). Upon completion of each online learning modules, (1) continuing education credit will be awarded to participants. At the end of the two online learning modules, participants will then complete the same self-assessment scale (LGBT-DOCSS) they completed prior to the online learning modules.

If approval is granted, clinic participants will complete the anonymous self-assessment scales online or on paper, followed by the two learning modules. The self-assessment scales should take no longer than 15 minutes each time, and the online learning modules take approximately one hour each. The learning modules can be completed at any time throughout the 2 months of implementation. The pre- and post-self-assessment scale results will be analyzed. No costs will be incurred by either Coal Country Community Health Center or the individual participants. The timeframe for this project is two-month time span, that tentatively will take place from July 01, 2020 – September 01, 2020.

Your approval to implement this education intervention will be greatly appreciated. I would be happy to answer any questions or concerns that you may have. You may contact me at my email address: megan.b.thuney@ndsu.edu

If you agree, kindly sign below and return the signed form in the enclosed self-addressed envelope or via email to megan.b.thuney@ndsu.edu. Alternatively, kindly submit a signed letter

of permission on your institution's letterhead acknowledging your consent and permission for me to conduct this survey/study at your institution.

Sincerely,

Megan Thiel, North Dakota State University

Enclosures

Approved by:

Aaron Garman, MD

Print your name and title here

Signature Date

4/13/20

Date

APPENDIX B. PROJECT PRESENTATION – COAL COUNTRY COMMUNITY HEALTH CENTER

1

Enhancing Health Professionals' Knowledge and Cultural Competence on Gender and Sexual Minority Health

Megan Thiel, DNP-S, BSN, RN
Clinical Dissertation
North Dakota State University
School of Nursing

2

Problem

- Gender and sexual minority (GSM) patients face inequities and barriers to care that negatively influence and propagate poor health outcomes among the LGBT community, as well as perpetuate the health disparities that challenge this vulnerable population.
- **Barriers to equitable care**
  - Experiences of stigma
  - Lack of awareness
  - Insensitivity to their unique health needs
  - Refusal of care
  - Delayed or substandard care
  - Mistreatment
  - Inequitable policies and practices
  - Little or no inclusion in health outreach or education
- **Social Determinants of Health**
  - Poverty
  - Homelessness
- **Disparities**
  - Less access to insurance and health care services
  - Lower overall health status
  - Higher rates of smoking, alcohol, and substance abuse
  - Higher risk for mental health illnesses
  - Higher rates of STDs, including HIV infection
  - Increased incidence of some cancers
  - Obstacles to education
  - Family disruptions

3

Problem

- Despite an increase in the acceptance of GSM persons and attainment of equality in many sectors, health professionals' knowledge and cultural competence on GSM health continues to fall short
  - The need for increased GSM-specific education be provided to health professionals has been emphasized by The Joint Commission, The Office of Disease Prevention and Health Promotion, and the Institute of Medicine
  - On average, only 2.12 hours is spent covering LGBT health in bachelor of nursing (BSN) programs and 5 hours total (undergraduate and medical school) in medical schools
  - The lack of education and training on GSM-specific content has led to more than half of physicians agreeing that they do not have the skills needed to address issues related to sexual orientation with their patients.
  - Moderate to strong implicit preferences for straight people over lesbian or, in particular, gay men, are widespread among heterosexual providers. Nurses held the strongest implicit preference for heterosexual people. Implicit preferences can predict the quality of patient-provider communication, treatment recommendations, and contribute to health and health care disparities.

4

Needs Assessment

- Needs Assessment performed in 2019 – 25 total participants
- Three parts for health professionals: Sexuality IAT, hours received on LGBT-specific education/training, open-ended questions
  - Sexuality Implicit Association Test
    - 13/25 showed some level (strong, moderate, or slight) of automatic preference for straight people over gay people
  - Number of hours on LGBT-specific education/training that the health professional had received
    - 15/25 reported receiving no LGBT-specific education

5

Needs Assessment

- Open-ended questions
  - 5 providers completed (4 FNP/1 PA)
  - What are some of the challenges for you in caring for LGBT patients?
    - Difficulty or not knowing what questions to ask LGBT patients in a culturally sensitive way
    - Lack of education on LGBT health
  - What would make it easier to care for LGBT patients
    - Education: specific health concerns, special considerations when caring for LGBT patients, not aware of the specific health concerns or disparities that affect the LGBT community
  - What do you need to know in order to provide high quality care for LGBT patients?
    - Education: on unique health concerns, disparities, and "issues" faced by LGBT patient/individuals
    - "Same as any other patient"

6

Purpose

- The purpose of this project is to enhance equitable care, quality care, and patient-centered care for GSM patients in the clinic setting by improving health professionals' knowledge and cultural competence on GSM health.
  - Education has been demonstrated to be highly effective in increasing knowledge about GSM persons and moderately effective in reducing negative attitudes toward gender and sexual minorities.
  - GLBT Health Access Project Standards, which the AMA supports as the standards of practice in caring for LGBT patients, recommends training and education on LGBT health.
  - An educational program intervention will be implemented.

NDSU NORTH DAKOTA STATE UNIVERSITY

7

Project Objectives

1. To increase health professionals' understanding of the unique health needs and health disparities of the LGBT community.
2. To increase health care professionals' level of clinical preparedness when caring for GSM patients.
3. To increase health professionals' LGBT-affirming attitudes.
4. To improve health care professionals' competence in providing culturally competent GSM care.
5. To assess health care professionals' satisfaction with GSM health online learning modules

NDSU NORTH DAKOTA STATE UNIVERSITY

8

Project Design

- Surveys will be distributed through email and all components of the project will take place online.
- Pretest survey (LGBT-DOCSS and demographic questions)
- Complete (2) one-hour online educational modules provided by the National LGBT Health Education Center: A Program of the Fenway Institute
  - 1 CME/CEU per online module completed (must complete evaluation questions at the end of each online modules)
    - Providing Quality Care to Lesbian, Gay, Bisexual, and Transgender Patients: An Introduction to Staff Training
    - Achieving Health Equity for LGBT People
- Posttest survey (LGBT-DOCSS and project evaluation questions)
- Follow-up survey (LGBT-DOCSS)

NDSU NORTH DAKOTA STATE UNIVERSITY

9

Project Design

- Instrumentation: The Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCSS)
  - 18-item three-factor structure (clinical preparedness, attitudinal awareness, and basic knowledge) self-assessment scale
  - 7-point Likert scale on level of agreement
  - Higher scores: higher levels of clinical preparedness and knowledge and less prejudicial attitudinal awareness regarding GSM patients
    - Pretest survey
    - Posttest survey
    - Follow-up survey
- Pretest survey: Demographic questionnaire
- Posttest survey: Project evaluation

NDSU NORTH DAKOTA STATE UNIVERSITY

10

Project Design

- Setting: Coal Country Community Health Center (CCCHC)
- Sample: Health professionals who voluntarily agree to participate in project
- Recruitment: An email invitation to participant in the project will be sent to all health care professionals employed by CCCHC
- Dissemination of the results of the project will be shared with key stakeholders at CCCHC.

NDSU NORTH DAKOTA STATE UNIVERSITY

11

Protection of Human Subjects

- Informed Consent
  - Risk to subjects: Minimal risks
    - Some participants may feel uncomfortable answering one or more of the questions in the survey and/or may have feelings of discomfort regarding the subject area of this study.
  - Benefit: you may benefit by enhancing your cultural competence and knowledge on LGBT health, which in turn may equip you with being able to provide culturally sensitive and unbiased quality care to LGBT patients. Culturally competent care is widely seen as a foundational pillar for reducing disparities.
    - Incentive: An incentive for participating in this project and completing the two, online learning modules through the National LGBTQIA+ Health Education Center is that participants will receive one CME/CEU credit for each online educational module completed (must complete the evaluation section of each module) for a total of two CME/CEU credits. All participants who complete the project will be entered into a drawing to win one $50.00 Amazon gift card. The drawing will be random.
- NDSU IRB: Exempt status(July 27th, 2020)
- Maintaining anonymity of participants will occur throughout the project.

NDSU NORTH DAKOTA STATE UNIVERSITY

12

Timeline

- Implement project: 08/10/2020
  - Two-month timeframe that participants can complete the pretest survey, the (2) online learning modules, and complete the posttest survey
  - Follow-up survey: 4 weeks after posttest survey
- Project end date: 11/10/2020
- Dissemination of results: 02/01/2021

NDSU NORTH DAKOTA STATE UNIVERSITY

13

References

- Alpert, A. B., Cirbus-Kelly, P. M., & Fox, A. D. (2017). What lesbian, gay, bisexual, transgender, queer, and intersex patients say doctors should know and do: A qualitative study. *Journal of Homosexuality, 64*(10), 1368–1389. https://doi.org/10.1080/00918369.2017.1321376
- Bidell, M. P. (2017). The lesbian, gay, bisexual, and transgender development of clinical skills scale (LGBD DOCS): Establishing a new interdisciplinary self-assessment for health providers. *Journal of Homosexuality, 64*(10), 1450–1460. https://doi.org/10.1080/00918369.2017.1321380
- Barnett, A., Cates, O., Baumgartner, S., & Friend, L. (2016). Human Services for Low-Income and At-risk LGBT Populations: An Assessment of the Knowledge Base and Research Needs.
- Carabez, R., Pellegrini, M., Mankovitz, A., Eliason, M., Ciecior, M., & Scott, M. (2015a). "Never in all my years…": Nurses' education about LGBT health. ***Journal of Professional Nursing, 31***(5), 323–329. https://doi.org/10.1016/j.profnurs.2015.01.005
- Carabez, R., Pellegrini, M., Mankovitz, A., Eliason, M., & Ciecior, M. (2015b). Nursing students' perceptions of their knowledge of lesbian, gay, bisexual, and transgender issues: Effect of course of a multi-purpose assignment in a public health nursing class. ***The Journal of Nursing Education, 54***(1), 50–53. https://doi.org/10.3928/01484834-20141128-03
- Georgetown University | National Center for Cultural Competence. (n.d.). Consensus and controversial issues in health care. Retrieved January 26, 2020, from https://nccc.georgetown.edu/bias/module-5/5-1.php
- Hellerstedt, A., Pritstrud, E., & Dreger, A. (2014). Implementing curricular and institutional climate changes to improve health care for individuals who are tGBT, gender nonconforming, or born with DSD. Association of American Medical Colleges, Washington, DC
- Institute of Medicine (IOM). (2011). The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding. Washington, DC: National Academy Press.

NDSU NORTH DAKOTA STATE UNIVERSITY

14

References

- Lim, F., Johnson, M., & Flowers, M. (2015). A national survey of faculty knowledge, experience, and readiness for teaching lesbian, gay, bisexual, and transgender health in baccalaureate nursing programs. ***Nursing Education Perspectives, 36***(5), 164–162. https://doi.org/10.5480/14-1355
- Obedin-Maliver, Jane, Goldsmith, E. S., Stewart, L., White, W., Tran, E., Brenman, S., Wells, M., Fetterman, D. M., Garcia, G., & Lunn, M. R. (2011). Lesbian, gay, bisexual, and transgender-related content in undergraduate medical education. ***JAMA, 306***(9), 971–977. https://doi.org/10.1001/jama.2011.1255
- Office of Disease Prevention and Health Promotion, HealthyPeople 2020. (2014). Social determinants of health. https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health
- Sabin, J. A., Riskind, R. G., & Nosek, B. A. (2015). Health care providers' implicit and explicit attitudes toward lesbian women and gay men. ***American Journal of Public Health, 105***(9), 1831–1841. https://doi.org/10.2105/AJPH.2015.302631
- Smalley, K. B., Warren, J. C., & Barefoot, K. N. (2016). ***LGBT health: Meeting the needs of gender and sexual minorities***. Springer Publishing Company, LLC.
- Strong, K. L., & Pelter, M. M. (2015). Assessing undergraduate nursing students' knowledge, attitudes, and cultural competence in caring for lesbian, gay, bisexual, and transgender patients. ***The Journal of Nursing Education, 54***(1), 49–49. https://doi.org/10.3928/01484834-20141216-07
- Talan, A. J., Drabe, C. B., Clark, J. L., Claiborn, C. C., & Seal, D. (2017). Sexual and gender minority health curricula and institutional support services at U.S. schools of public health. ***Journal of Homosexuality, 64***(10), 1360–1367. https://doi.org/10.1080/00918369.2017.1321365
- The Joint Commission. (2011). Advancing effective communication, cultural competence, and patient- and family-centered care for the lesbian, gay, bisexual, and transgender (LGBT) community: A field guide. Retrieved from https://www.jointcommission.org/assets/1/18/LGBTFieldGuide_WEB_LR&EPD_WEB.pdf

NDSU NORTH DAKOTA STATE UNIVERSITY

15

Questions?

megan.b.thuney@ndsu.edu

701-880-8923

Thank you for the opportunity to implement my dissertation project at CCCHC and for giving me the opportunity to provide some information on my project today.

NDSU NORTH DAKOTA STATE UNIVERSITY

16

APPENDIX C. INITIAL PROJECT INVITATION EMAIL

Title of Research Study: Enhancing Health Professionals' Cultural Competence of GSM Health

Dear CCCHC Health Professional:

My name is Megan Thiel, and I am a Doctor of Nursing Practice (DNP) student at North Dakota State University. I want to invite you to participate in a practice improvement project I am conducting to enhance health care professionals' knowledge and cultural competence on gender and sexual minority (GSM) health. Research has shown that health care professionals receive inadequate training and education of GSM health. This lack of knowledge and cultural competence perpetuates the numerous health disparities that burden this community and serve as barriers to care.

You have been asked to participate in this project because you are a health professional employed by Coal Country Community Health Center (CCCHC). Your name and email were obtained by CCCHC. Informed consent will be obtained before the pretest survey. Your participation is anonymous and voluntary, and all the information gathered will remain confidential. You are free to withdraw your consent and/or to discontinue participation at any time without penalty.

If you decide to participate, you will be asked to complete a pretest survey, followed by an online learning module (approximately 30 minutes to complete) and a webinar (approximately 50 minutes). Once finished with the learning module and webinar, you will complete a post-test survey. A follow-up survey will be sent to your email four weeks after submitting the post-test survey. The surveys will include basic demographics, attitudinal awareness, knowledge, clinical preparedness on GSM patients and health, and project evaluation questions. The surveys should take approximately 10-15 minutes to complete and be distributed via your email and completed online. After completion of the presurvey, you will receive an email providing details of the next step of the project, completing the educational intervention (the learning module and webinar) and post-test survey. The timeframe for this project is three months, with the presurvey, the learning module, webinar, and post-survey that need to be completed within the first two months.

Upon completion of the learning module and webinar, one free CME/CEU credit will be available for participants, for a total of two, free CME/CEU credits (You must complete the evaluation portion provided after completing the module and webinar for your CME/CEU credit(s)). Additionally, one participant will be chosen at random for a $50 gift card to Amazon. Your participation in the project is much appreciated.

If you have any questions or concerns about this project, please feel free to contact me at megan.b.thuney@ndsu.edu. I can also send you a copy of the consent form, which gives you more information about this project.

Sincerely,

Megan Thiel
DNP-S, BSN, RN

The presurvey link is found below.

APPENDIX D. INITIAL POST-SURVEY EMAIL

Title of Research: Enhancing Health Professionals' Cultural Competency of GSM Health

Dear CCCHC Health Professional:

Thank you for completing the pretest survey; your participation in this project is much appreciated. Please keep this email until you have completed the online learning module, watched the webinar, and submitted the post-test survey in this email (link to the post-test survey provided below).

The next step of this practice improvement project includes completing the educational intervention, a learning module, and watching a webinar provided by the National LGBTQIA+ Health Education Center. After completing the educational intervention, you will need to complete the post-test survey. The first part of the educational intervention is completing the learning module titled "Providing Quality Care to Lesbian, Gay, Bisexual, and Transgender Patients: An Introduction to Staff Training" and can be accessed here. To complete the educational intervention, you will need to register an account and login to enroll. To register, you will need to create a username, provide an email address, and your first and last name. An email from the LGBTIA+ Health Education Center will be sent to the email address you provided, which you need to access to create your password for your account (the email is sent rather quickly if you do not see the email, please check your spam/junk folder). Once you have created your password, a link is provided to log in. To log in, you will need to provide your username or your email address used when creating the account and enter the password you set when creating your account. You will then be redirected to the first module. To begin the module, click on the banner "Module- Providing Quality Care to Lesbian, Gay, Bisexual, and Transgender Patient: An Introduction for Staff Training." Once you have completed the module, towards the bottom of the page will be a banner "Evaluation – Providing Quality Care to Lesbian, Gay, Bisexual, and Transgender Patients: An Introduction to Staff Training," that you will need to complete if you would like to receive your CME/CEU credit for the learning module. Complete the evaluation questions provided on the site and click finish evaluation (NOTE: it takes some time [1-2 minutes] for the finish evaluation to work and to redirect you to the webpage for your CME/CEU credit. Do not refresh the web page, or you will need to re-answer the evaluation questions again). You will be directed to a page to view the questions from the modules or given the option to continue. To access your certificate, click continue. A new page will load where you will be able to download your certificate.

Upon completion of the first learning module, the next part of the educational intervention, the webinar, can be accessed here or on the National LGBTQIA+ Health Education Center webpage. You can click the drop-down under Learning Resources and choose Webinars. From Webinars, you can scroll down (most recently located on page three of webinars) to find the webinar, "Keynote: Advancing Health Equity for Sexual and Gender Minority People (2020)." You will be redirected to a webpage where you will need to login to enroll if you are not currently logged into your account. Once logged in, you will click on the "Recorded Webinar – Advancing Health Equity for Sexual and Gender Minority People (2020)." After finishing the webinar, you will see a banner towards the bottom of the screen "Evaluation – Advancing Health Equity for Sexual

and Gender Minority People (2020)" that you will need to complete if you would like to receive your CME/CEU credit for the webinar. Directions for the CME/CEU credit is the same as the learning module.

Additionally, you can access the learning module and webinar by going to the National LGBTQIA+ Health Education Center and using the search bar in the right upper hand corner of the screen and search "Providing Quality Care to Lesbian, Gay, Bisexual, and Transgender Patients: An Introduction to Staff Training," or "Advancing Health Equity for Sexual and Gender Minority People (2020)."

Upon completion of educational intervention, please take the post-test survey found at the bottom of this email. When you are finished with the educational intervention and have submitted the post-test survey, an email will be sent in four weeks to complete the follow-up survey, which is the final step. Once again, your participation in this doctoral project is much appreciated.

Sincerely,

Megan Thiel
DNP-S, BSN, RN

Note: You do not need to complete the learning module or webinar in one sitting, you may leave and resume where you left off at for the learning module and may fast forward to your spot for the webinar.
Slides from the webinar can be found here or are provided at the bottom of this email.

Link to National LGBTQIA+ Health Education Center
https://www.lgbtqiahealtheducation.org/
Link to the learning module: Providing Quality Care to Lesbian, Gay, Bisexual, and Transgender Patients: An Introduction for Staff Training
https://www.lgbtqiahealtheducation.org/courses/providing-quality-care-to-lesbian-gay-bisexual-and-transgender-patients-an-introduction-for-staff-training/
Link to the webinar: Keynote: Advancing Health Equity for Sexual and Gender Minority People (2020)
https://www.lgbtqiahealtheducation.org/courses/keynote-advancing-health-equity-for-sexual-and-gender-minority-people-2020/
Link to webinar pdf
https://www.lgbtqiahealtheducation.org/wp-content/uploads/2020/06/1.-Key-Note-Advancing-Health-Equity-for-LGBTQ-People.pptx.min_.pdf

Additional Publications
Understanding the Health Needs of LGBT People
https://www.lgbtqiahealtheducation.org/wp-content/uploads/LGBTHealthDisparitiesMar2016.pdf

Providing Inclusive Services and Care for LGBT People: A Guide for Health Care Staff
https://www.lgbtqiahealtheducation.org/wp-content/uploads/Providing-Inclusive-Services-and-Care-for-LGBT-People.pdf
Improving the Health Care of LGBT People: Understanding and Eliminating Health Disparities
https://www.lgbtqiahealtheducation.org/wp-content/uploads/Improving-the-Health-of-LGBT-People.pdf
Health Disparities for LGBT People
https://www.lgbtqiahealtheducation.org/wp-content/uploads/2020/06/3.-Health-Disparities-for-LGBTQ-People.pptx.min_.pdf

APPENDIX E. INITIAL FOLLOW-UP EMAIL

Title of Research: Enhancing Health Professionals' Cultural Competence of GSM Health

Dear CCCHC Health Professional:

Thank you for participating in this practice improvement project up to this point; it is much appreciated. The last step of this project is a follow-up survey provided at the bottom of this email that will take ten minutes to complete. All follow-up surveys must be submitted by November 17th, 2020. Once the follow-up survey is submitted you will be entered into the drawing for a $50 Amazon gift card.

Additionally, in this email you will find a list of GSM resources and organizations tailored towards health professionals, as well as towards patients. If you would like to receive the results of this study, please email me at megan.b.thuney@ndsu.edu. Once again, I cannot thank you enough for your time, participation, and being a part of my doctoral journey.

Sincerely,

Megan Thiel
DNP-S, BSN, RN

APPENDIX F. LIST OF GSM RESOURCES PROVIDED IN INITIAL FOLLOW-UP EMAIL

Resources and publications for clinicians, researchers, and other health professionals

Healthy People 2020

Advancing Effective Communication, Cultural Competence, and Patient- and Family-Centered Care for the Lesbian, Gay, Bisexual, and Transgender (LGBT) Community, A Field Guide (The Joint Commission)

Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding (The Institute of Medicine)

Understanding the Health Needs of LGBT People
- https://www.lgbtqiahealtheducation.org/wp-content/uploads/LGBTHealthDisparitiesMar2016.pdf

Providing Inclusive Services and Care for LGBT People: A Guide for Health Care Staff
- https://www.lgbtqiahealtheducation.org/wp-content/uploads/Providing-Inclusive-Services-and-Care-for-LGBT-People.pdf

Improving the Health Care of LGBT People: Understanding and Eliminating Health Disparities
- https://www.lgbtqiahealtheducation.org/wp-content/uploads/Improving-the-Health-of-LGBT-People.pdf

LGBTQIA+ Glossary of Terms for Health Care Teams
- https://www.lgbtqiahealtheducation.org/publication/lgbtqia-glossary-of-terms-for-health-care-teams/

Health Disparities for LGBT People
- https://www.lgbtqiahealtheducation.org/wp-content/uploads/2020/06/3.-Health-Disparities-for-LGBTQ-People.pptx.min_.pdf

Advancing Health Equity for LGBTQ People
- https://www.lgbtqiahealtheducation.org/wp-content/uploads/2020/06/1.-Key-Note-Advancing-Health-Equity-for-LGBTQ-People.pptx.min_.pdf

LGBT Health-Related National Organizations/Coalitions

Fenway Institute

GLMA: Health Professionals Advancing LGBT Equality

LGBT HealthLink Network

National Association of Lesbian and Gay Addiction Professionals

National LGBT Cancer Network

Preexposure Prophylaxis (PrEP) Resources for Clinicians

WHO Implementation tool for PrEP of HIV Infection
- https://www.who.int/hiv/pub/prep/prep-implementation-tool/en/

Quick guide for a provider starting a patient on Prep
- http://paetc.org/wp-content/uploads/2016/01/PAETC-PrEP-primer-1.pdf

Printable pocket PrEP reference card
- https://getsfcba.org/wp-content/uploads/2016/10/prep-card-providers-hiv-pdf.pdf

PrEP Action Kit

- https://www.lgbtqiahealtheducation.org/wp-content/uploads/2020/06/PrEPActionKit_Updated-Spring-2020.pdf

PrEP - Resources for Patients

Printable Brochure on PrEP

- https://www.cdc.gov/hiv/pdf/library/pocket-guides/cdc-hiv-prep-pocket-guide.pdf

Financial Assistance for PrEP

Gileada Advancing Access

- https://www.gileadadvancingaccess.com/

LGBTQ Organizations in North Dakota

Dakota OutRight

- http://dakotaoutright.org/

Pride Collective and Community Center – Fargo

- https://www.fmpridecollective.org/

North Dakota Human Rights Coalition

- https://www.ndhrc.org/

Magic City Equality

- https://www.magiccityequality.com/

Tri State Transgender

- http://tristatetransgender.weebly.com/

Community Uplift Program

- https://www.communityupliftprogram.org/

Kaleidoscope

- Kaleidoscope is a LGBT youth support group that is available to all persons, ages 14 – high school graduation, who want to participate in a safe place where hate and discrimination does not exist. Look for Kaleidoscope on Facebook to find more information.

LGBT Affirmative Health Care Services in ND

Harbor Health Clinic

- Harbor Health Clinic provides access to healthcare for transgender individuals with low income. It is the only informed consent clinic for 250 miles in the Fargo-Moorhead area.

Gay and Lesbian Medical Association Provider Directory for LGBT Inclusive Providers

- https://glmaimpak.networkats.com/members_online_new/members/dir_provider.asp?action=search&affiliate=&address_zip=&address_zip_radius=25&location_type=S&address_state_code=ND&address_city=&country_name=&community_partner=&advanced_search=&ind_last_name=&ref_specialtytypes=&specialt_MEDICAL=&specialt_BEHAVE=&specialt_DENTIST=&specialt_COMPLALT=&gender=&clfc=&TG=&lang=&refcarri=&refiplan_PRIV=&refiplan_PUB=

LGBT Affirmative Therapists

- https://www.ndsu.edu/hdfs/ftc/lgbtmha/resources_for_clients/lgbt_affirmative_therapists_list/

National LGBT Organizations and Resources

LGBT Rights (ACLU - American Civil Liberties Union)

- "The ACLU works to ensure that lesbian, gay, bisexual, and transgender people can live openly without discrimination and enjoy equal rights, personal autonomy, and freedom of expression and association."

GLAAD - Gay & Lesbian Alliance Against Defamation

- "GLAAD rewrites the script for LGBT acceptance. As a dynamic media force, GLAAD tackles tough issues to shape the narrative and provoke dialogue that leads to cultural change. GLAAD protects all that has been accomplished and creates a world where everyone can live the life they love."

Gay, Lesbian, Bisexual & Transgender Round Table (GLBTRT, American Library Association)

- "The Gay, Lesbian, Bisexual, and Transgender (GLBT) Round Table of the American Library Association is committed to serving the information needs of the GLBT professional library community, and the GLBT information and access needs of individuals at large."

Human Rights Campaign (HRC)

- "As the largest national lesbian, gay, bisexual, transgender and queer civil rights organization, HRC envisions a world where LGBTQ people are ensured of their basic equal rights, and can be open, honest and safe at home, at work and in the community."

Immigration Equality

- "Since 1994, Immigration Equality has been proud to advocate for and represent lesbian, gay, bisexual, transgender, queer (LGBTQ), and HIV-positive immigrants seeking safety, fair treatment, and freedom."

Lambda Legal

- "Lambda Legal, a 501(c)(3) nonprofit, is a national organization committed to achieving full recognition of the civil rights of lesbians, gay men, bisexuals, transgender people and those with HIV through impact litigation, education and public policy work."

National Center for Lesbian Rights (NCLR)

- "The National Center for Lesbian Rights (NCLR) has been advancing the civil and human rights of lesbian, gay, bisexual, and transgender people and their families through litigation, legislation, policy, and public education since it was founded in 1977."

National LGBTQ Task Force

- "The National LGBTQ Task Force advances full freedom, justice and equality for LGBTQ people."

PFLAG

- "Uniting people who are lesbian, gay, bisexual, transgender, and queer (LGBTQ) with families, friends, and allies, PFLAG is committed to advancing equality through its mission of support, education, and advocacy."

The Williams Institute

- "The Williams Institute is dedicated to conducting rigorous, independent research on sexual orientation and gender identity law and public policy. A think tank at UCLA Law, the Williams Institute produces high-quality research with real-world relevance and disseminates it to judges, legislators, policymakers, media and the public."

Understanding the Health Needs of LGBT People
https://www.lgbtqiahealtheducation.org/wp-content/uploads/LGBTHealthDisparitiesMar2016.pdf
Providing Inclusive Services and Care for LGBT People: A Guide for Health Care Staff
https://www.lgbtqiahealtheducation.org/wp-content/uploads/Providing-Inclusive-Services-and-Care-for-LGBT-People.pdf
Improving the Health Care of LGBT People: Understanding and Eliminating Health Disparities
https://www.lgbtqiahealtheducation.org/wp-content/uploads/Improving-the-Health-of-LGBT-People.pdf
LGBTQIA+ Glossary of Terms for Health Care Teams
https://www.lgbtqiahealtheducation.org/publication/lgbtqia-glossary-of-terms-for-health-care-teams/
Health Disparities for LGBT People
https://www.lgbtqiahealtheducation.org/wp-content/uploads/2020/06/3.-Health-Disparities-for-LGBTQ-People.pptx.min_.pdf
Advancing Health Equity for LGBTQ People
https://www.lgbtqiahealtheducation.org/wp-content/uploads/2020/06/1.-Key-Note-Advancing-Health-Equity-for-LGBTQ-People.pptx.min_.pdf

APPENDIX G. MEDICAL DIRECTOR EMAIL OF SUPPORT

August 10, 2020

Dear Colleagues and Staff:

It is my pleasure to write an email in support of the current project, Megan Thiel (DNP/FNP-S) is implementing at our clinics as part of her doctoral studies.

Enhancing health professionals' knowledge and cultural competence of gender and sexual minority health is important in providing patient-centered care and addressing the health disparities that disproportionately affect this population.

In conclusion, I fully support this project's efforts and strongly encourage each of you to participate in this project. Any project that helps us as health professionals provide the highest quality of care that is patient-centered is beneficial to our patients.

Sincerely,

Dr. Garman
Coal Country Community Health Center Medical Director

APPENDIX H. INFORMED CONSENT

North Dakota State University
Department of Nursing
Campus Address
NDSU Dept. of Nursing
PO Box 6050
Fargo, ND 58108-6050
701.231.7395

Title of Research Study: Enhancing Health Professionals' Cultural Competence of GSM Health

Dear CCCHC Health Professional:

My name is Megan Thiel. I am a graduate student in the Department of Nursing at North Dakota State University. I am conducting a project to enhance the knowledge and cultural competence of health professionals on gender and sexual minority (GSM) health. This will be done using three surveys that include the Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCSS) and an educational intervention consisting of an online learning module and a webinar. This first step of this project is completing the pretest survey, followed by participants completing an online learning module on lesbian, gay, bisexual, and transgender (LGBT) health (approximately 30 minutes) and a 50-minute webinar on LGBT health and health disparities. Upon completing the learning module and webinar, participants will be asked to complete a post-test survey, which includes the LGBT-DOCSS and project evaluation questions. Four weeks after completing the post-test survey participants will then complete a follow-up survey, with the LGBT-DOCSS. The results from the LGBT-DOCSS survey questions will be used to assess if the educational intervention enhanced health professionals' knowledge and cultural competence of GSM health. We hope that with this research, we will learn more about health professionals' knowledge and cultural competence of GSM health, particularly in rural areas. Additionally, we hope this project improves the delivery of care to GSM patients and addresses the health disparities and barriers to care that disproportionately affect this marginalized community.

Because you are a health professional employed by Coal Country Community Health Center, you are invited to participate in this research project. Your participation is entirely your choice, and you may change your mind or quit participating at any time, with no penalty to you.

It is not possible to identify all potential risks in research procedures, but we have taken reasonable safeguards to minimize any known risks. This study includes minimal risks. Some participants may feel uncomfortable answering one or more of the questions in the survey and/or may feel having feelings of discomfort regarding the subject area of this study.

By taking part in this research, you may benefit by improving your knowledge and cultural competence of LGBT health. Benefits to others and/or society are likely to include the advancement of knowledge and cultural competence on LGBT health and/or possible benefits to individuals who identify as members of the LGBT community. However, you may not get any benefit from being in this study.

It should take about 15 minutes to complete the pretest survey questions, which includes demographic questions and the LGBT-DOCSS. The online learning module takes approximately 30 minutes to complete, and the webinar approximately 50 minutes to watch. You do not need to complete the online learning module or webinar in one sitting and pick up from where you left off for the online learning module and webinar. The post-test LGBT-DOCSS and evaluation survey should take about 15 minutes to complete. The follow-up LGBT-DOCSS that will be completed four weeks from the completion of the post-test LGBT-DOCSS should take approximately ten minutes. Instructions on how to complete the surveys will be provided in the emails with the survey links. The surveys will be sent out via email to complete each of the surveys prompting a new email with the next step of this project and a new survey link. Following the pretest survey completion, you will receive an email providing details of the next step of this project and the post-test survey link. The post-test survey should only be taken after completing both the online learning module and watching the webinar. An additional email will be sent to you to complete the follow-up survey when it has been four weeks since you completed the post-test survey.

An incentive to participate in this project and complete the learning module and webinar through the National LGBTQIA+ Health Education Center is that participants will receive one CME/CEU credit for each activity for a total of two CME/CEU credits. All participants who complete the project will be entered into a drawing to win one $50.00 Amazon gift card. The drawing will be random. The drawing will be held after the project timeline, which will be three months in length. The probability of winning depends on the overall number of participants.

This study is anonymous. That means that no one, not even members of the research team, will know that the information you give comes from you.

If you have any questions about this project, please contact me at 701-880-8923 or megan.b.thuney@ndsu.edu, or contact my advisor, Dr. Molly Secor-Turner at 701-231-7517 or molly.secor-turner@ndsu.edu.

You have rights as a research participant. If you have questions about your rights or complaints about this research, you may talk to the researcher or contact the NDSU Human Research Protection Program at 701.231.8995, toll-free at 1-855-800-6717, by email at ndsu.irb@ndsu.edu, or by mail at NDSU HRPP Office, NDSU Dept. 4000, P.O. Box 6050, Fargo, ND 58108-6050.

Thank you for taking part in this research. If you wish to receive a copy of the results, please email megan.b.thuney@ndsu.edu, indicating that you would like to receive a copy of the results. The completion of this project, in its entirety, is expected to be within the first few months of 2021.

By continuing with the survey, you agree to informed consent.

APPENDIX I. THE LESBIAN, GAY, BISEXUAL, AND TRANSGENDER DEVELOPMENT OF CLINICAL SKILLS SCALE

Instructions: Items on this scale are intended to examine clinical preparedness, attitudes, and basic knowledge regarding lesbian, gay, bisexual, and transgender (LGBT) clients/patients. Please use the provided scale to rate your level of agreement or disagreement for each item. Please note, items on this scale primarily inquire about either sexual orientation (LGB = lesbian, gay, and bisexual) or gender identity (transgender). Two questions are inclusive and refer collectively to lesbian, gay, bisexual, and transgender (LGBT) clients/patients.

1. I am aware of institutional barriers that may inhibit transgender people from using health care services.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	4	5	6	7

2. I am aware of institutional barriers that may inhibit LGB people from using health services.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	4	5	6	7

3. I think being transgender is a mental disorder.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	4	5	6	7

4. I would feel unprepared talking with a LGBT client/patient about issues related to their sexual orientation or gender identity.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	4	5	6	7

5. A same sex relationship between two men or two women is not as strong and as committed as one between a man and a woman.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	4	5	6	7

6. I am aware of research indicating that LGB individuals experience disproportionate levels of health and mental health problems compared to heterosexual individuals.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	4	5	6	7

7. LGB individuals must be discreet about their sexual orientation around children.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	4	5	6	7

8. I am aware of research indicating that transgender individuals experience disproportionate levels of health and mental health problems compared to cisgender individuals.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	**4**	5	6	**7**

9. When it comes to transgender individuals, I believe they are morally deviant.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	**4**	5	6	**7**

10. I have received adequate clinical training and supervision to work with transgender clients/patients.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	**4**	5	6	**7**

11. I have received adequate clinical training and supervision to work with lesbian, gay, and bisexual (LGB) clients/patients

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	**4**	5	6	**7**

12. The lifestyle of a LGB individual is unnatural or immoral.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	**4**	5	6	**7**

13. I have experience working with LGB clients/patients.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	**4**	5	6	**7**

14. I feel competent to assess a person who is LGB in a therapeutic setting.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	**4**	5	6	**7**

15. I feel competent to assess a person who is transgender in a therapeutic setting.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	**4**	5	6	**7**

16. I have experience working with transgender clients/patients.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	**4**	5	6	**7**

17. People who dress opposite to their biological sex have a perversion.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	**4**	5	6	**7**

18. I would be morally uncomfortable working with a LGBT client/patient.

Strongly Disagree			Somewhat Agree/Disagree			Strongly Agree
1	2	3	**4**	5	6	**7**

Scoring Instruction for the LGBT-DOCSS

1) Reverse score all 8 questions in parentheses: (3), (4), (5), (7), (9), (12), (17), and (18). Use the reverse scoring Likert scale (1 = 7, 2 = 6, 3 = 5, 4 = 4, 5 = 3, 6 = 2, 7 = 1).

2) Calculate total LGBT-DOCSS mean score: Add all test items (using the reverse score for items in parentheses) and divide by 18.

> The total LGBT-DOCSS mean score is equal to: 1 + 2 + (3) + (4) + (5) + 6 + (7) + 8 + (9) + 10 + 11 + (12) + 13 + 14 + 15 + 16 + (17) + (18) = LGBT-DOCSS Total Raw Score. Divide by 18 to obtain mean score.

3) Calculate Subscale scores: For each subscale, add up the scores of the questions listed (using the reverse score for items in parentheses) and divide by the number of questions in each subscale.

> **Clinical Preparedness subscale**: (4) + 10 + 11 + 13 + 14 + 15 + 16 = LGBT-DOCSS Clinical Preparedness subscale Total Raw Score. Divide by 7 to obtain mean score.
>
> **Attitudes subscale**: (3) + (5) + (7) + (9) + (12) + (17) + (18) = LGBT-DOCSS Attitudes subscale Total Raw Score. Divide by 7 to obtain mean score.
>
> **Knowledge**: 1 + 2 + 6 + 8 = LGBT-DOCSS Knowledge subscale Total Raw Score. Divide by 4 to obtain mean score.

4) Higher scores are indicative of higher levels of clinical preparedness and rudimentary knowledge and less prejudicial attitudinal awareness regarding LGBT clients/patients.

Suggested Citation: Bidell, M. P. (2017). The Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCSS): Establishing a new interdisciplinary self-assessment for health providers. *Journal of Homosexuality*, 10, 1432–1460. doi: 10.1080/00918369.2017.1321389

APPENDIX J. PRESURVEY

Q2 Demographic

Q3 Age

- ○ <25 years of age
- ○ 26-45 years of age
- ○ 46-65 years of age
- ○ >65 years of age

Q4 Level of Education

- ○ Graduated from high school/GED
- ○ Completed some post-secondary education
- ○ Graduated from post-secondary (Bachelors, Associate degree)
- ○ Completed some graduate school
- ○ Completed graduate school

Q5 Professional Role

- ○ Medical Doctor/Doctor of Osteopathic Medicine
- ○ Advanced Practice Clinicians (FNP, PA)
- ○ Nurse (LPN, ADN, BSN)
- ○ Ancillary Provider/Staff (laboratory, radiology, rehabilitative services)
- ○ Certified Medical Technician/Assistant, Certified Nurse Assistant, Unlicensed Assistive Personnel

Q6 Years of Experience

- ○ 0-5 years
- ○ 6-10 years
- ○ 11-20 years
- ○ >20 years

Q7 Religious Affiliation

- ○ Yes
- ○ No
- ○ Prefer not to answer

Q8 Political Affiliation

- ○ Republican
- ○ Democrat
- ○ Independent
- ○ Other

Q9 Acquainted with someone who identifies as a GSM (gender and sexual minority) person

- ○ Yes
- ○ No

Q10 How frequently do you interact with patients who identify as a gender or sexual minority (GSM)?

- ○ Daily
- ○ Most days of the week
- ○ Once a week
- ○ Less than once a week but more than once a month
- ○ Once a month
- ○ Never

Q11
LGBT-DOCSS

Instructions: Items on this scale are intended to examine clinical preparedness, attitudes, and basic knowledge regarding lesbian, gay, bisexual, and transgender (LGBT) clients/patients. Please use the provided scale to rate your level of agreement or disagreement for each item. Please note, items on this scale primarily inquire about either sexual orientation (LGB = lesbian, gay, and bisexual) or gender identity (transgender). Two questions are inclusive and refer collectively to lesbian, gay, bisexual, and transgender (LGBT) clients/patients.

Q12 I am aware of institutional barriers that may inhibit transgender people from using health care services.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q13 I am aware of institutional barriers that may inhibit LGB people from using health services.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q14 I think being transgender is a mental disorder.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6 Strongly Agree?

Q15 I would feel unprepared talking with a LGBT client/patient about issues related to their sexual orientation or gender identity.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q16 A same sex relationship between two men or two women is not as strong and as committed as one between a man and a woman.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q17 I am aware of research indicating that LGB individuals experience disproportionate levels of health and mental health problems compared to heterosexual individuals.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q18 LGB individuals must be discreet about their sexual orientation around children.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q19 I am aware of research indicating that transgender individuals experience disproportionate levels of health and mental health problems compared to cisgender individuals.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q20 When it comes to transgender individuals, I believe they are morally deviant.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q21 I have received adequate clinical training and supervision to work with transgender clients/patients.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q22 I have received adequate clinical training and supervision to work with lesbian, gay, and bisexual (LGB) clients/patients

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q23 The lifestyle of a LGB individual is unnatural or immoral.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q24 I have experience working with LGB clients/patients.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q25 I feel competent to assess a person who is LGB in a therapeutic setting.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q26 I feel competent to assess a person who is transgender in a therapeutic setting.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q27 I have experience working with transgender clients/patients.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q28 People who dress opposite to their biological sex have a perversion.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q29 I would be morally uncomfortable working with a LGBT client/patient.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

APPENDIX K. POST-SURVEY

Q1
LGBT-DOCSS
Instructions: Items on this scale are intended to examine clinical preparedness, attitudes, and basic knowledge regarding lesbian, gay, bisexual, and transgender (LGBT) clients/patients. Please use the provided scale to rate your level of agreement or disagreement for each item. Please note, items on this scale primarily inquire about either sexual orientation (LGB = lesbian, gay, and bisexual) or gender identity (transgender). Two questions are inclusive and refer collectively to lesbian, gay, bisexual, and transgender (LGBT) clients/patients.

Q2 I am aware of institutional barriers that may inhibit transgender people from using health care services.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q3 I am aware of institutional barriers that may inhibit LGB people from using health services.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q4 I think being transgender is a mental disorder.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q5 I would feel unprepared talking with a LGBT client/patient about issues related to their sexual orientation or gender identity.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q6 A same sex relationship between two men or two women is not as strong and as committed as one between a man and a woman.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q7 I am aware of research indicating that LGB individuals experience disproportionate levels of health and mental health problems compared to heterosexual individuals.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q8 LGB individuals must be discreet about their sexual orientation around children.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q9 I am aware of research indicating that transgender individuals experience disproportionate levels of health and mental health problems compared to cisgender individuals.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q10 When it comes to transgender individuals, I believe they are morally deviant.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q11 I have received adequate clinical training and supervision to work with transgender clients/patients.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q12 I have received adequate clinical training and supervision to work with lesbian, gay, and bisexual (LGB) clients/patients

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q13 The lifestyle of a LGB individual is unnatural or immoral.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q14 I have experience working with LGB clients/patients.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q15 I feel competent to assess a person who is LGB in a therapeutic setting.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q16 I feel competent to assess a person who is transgender in a therapeutic setting.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q17 I have experience working with transgender clients/patients.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q18 People who dress opposite to their biological sex have a perversion.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q19 I would be morally uncomfortable working with a LGBT client/patient.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q20 Project Evaluation

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
The content and online learning modules were valuable to my practice.	○	○	○	○	○
This activity increased my awareness of the needs of LGBT patients.	○	○	○	○	○
The online learning modules were useful in improving my knowledge and cultural competence of GSM health.	○	○	○	○	○
I feel more clinically prepared to care for GSM patients since participating in this educational intervention.	○	○	○	○	○
Participating in the online learning modules increased my understanding of the unique health needs and health disparities of the LGBT community.	○	○	○	○	○
After completing the online learning modules, I feel my attitudes towards GSM patients will be more positive in the future.	○	○	○	○	○
I was satisfied with the overall learning experience from this educational intervention on GSM health.	○	○	○	○	○

APPENDIX L. FOLLOW-UP SURVEY

Q1
LGBT-DOCSS
Instructions: Items on this scale are intended to examine clinical preparedness, attitudes, and basic knowledge regarding lesbian, gay, bisexual, and transgender (LGBT) clients/patients. Please use the provided scale to rate your level of agreement or disagreement for each item. Please note, items on this scale primarily inquire about either sexual orientation (LGB = lesbian, gay, and bisexual) or gender identity (transgender). Two questions are inclusive and refer collectively to lesbian, gay, bisexual, and transgender (LGBT) clients/patients.

Q2 I am aware of institutional barriers that may inhibit transgender people from using health care services.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q3 I am aware of institutional barriers that may inhibit LGB people from using health services.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q4 I think being transgender is a mental disorder.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q5 I would feel unprepared talking with a LGBT client/patient about issues related to their sexual orientation or gender identity.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q6 A same sex relationship between two men or two women is not as strong and as committed as one between a man and a woman.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q7 I am aware of research indicating that LGB individuals experience disproportionate levels of health and mental health problems compared to heterosexual individuals.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q8 LGB individuals must be discreet about their sexual orientation around children.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q9 I am aware of research indicating that transgender individuals experience disproportionate levels of health and mental health problems compared to cisgender individuals.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q10 When it comes to transgender individuals, I believe they are morally deviant.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q11 I have received adequate clinical training and supervision to work with transgender clients/patients.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q12 I have received adequate clinical training and supervision to work with lesbian, gay, and bisexual (LGB) clients/patients

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q13 The lifestyle of a LGB individual is unnatural or immoral.

- ○ Strongly Disagree1
- ○ 2
- ○ 3
- ○ Somewhat Agree/Disagree 4
- ○ 5
- ○ 6
- ○ Strongly Agree7

Q14 I have experience working with LGB clients/patients.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q15 I feel competent to assess a person who is LGB in a therapeutic setting.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q16 I feel competent to assess a person who is transgender in a therapeutic setting.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q17 I have experience working with transgender clients/patients.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q18 People who dress opposite to their biological sex have a perversion.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

Q19 I would be morally uncomfortable working with a LGBT client/patient.

- Strongly Disagree1
- 2
- 3
- Somewhat Agree/Disagree 4
- 5
- 6
- Strongly Agree7

APPENDIX M. PERMISSION TO USE THE LGBT-DOCSS

Thiel, Megan
Thu 4/30/2020 4:02 PM
mbidell@hunter.cuny.edu

Dear Dr. Bidell,

I am a doctoral student at North Dakota State University completing a dissertation in the Doctor of Nursing program. I am writing to ask for written permission to use the LGBT-DOCSS in my dissertation. My dissertation will entail implementing an online educational intervention to health care professionals in rural North Dakota on gender and sexual minority health. This project will use a pretest-posttest quasi-experimental design, using the LGBT-DOCSS. My dissertation is being supervised by my chair, Dr. Secor-Turner, Ph.D., MSN, RN.

I plan to use the entire instrument which will serve as the pretest instrumentation and posttest instrumentation. The LGBT-DOCSS will be administered online using Qualtrics. The data from the LGBT-DOCSS will be analyzed following the scoring instructions for the LGBT-DOCSS. This project and my dissertation will be completed by May 2021.

In addition to using the instrument, I also ask your permission to reproduce it in my dissertation appendix. The dissertation will be published by UMI – Dissertation Publishing and deposited in the ProQuest Dissertations & Theses database.

I would like to use and reproduce the LGBT-DOCSS under the following conditions:

- I will use the LGBT-DOCSS only for my dissertation and will not sell or use it for any other purposes
- At your request, I will send a copy of my completed research study to you upon completion of the study and/or provide a hyperlink to the final manuscript

If these are acceptable terms and conditions, please indicate so by replying to me through e-mail at megan.b.thuney@ndsu.edu

Sincerely,

Megan Thiel, DNP-S

megan.b.thuney@ndsu.edu

Markus P Bidell <mbidell@hunter.cuny.edu>
Tue 5/5/2020 4:28 PM
Thiel, Megan

Megan - Thank you for inquiring about the LGBT-Development of Clinical Skills Scale (LGBT-DOCSS) and you are free to utilize the scale in your research and educational endeavors in accordance with your institutional and professional approvals. I've included several publications that I hope will support your work.
Good Luck with your research,
Markus Bidell

Markus P. Bidell, Ph.D., LMHC
He, him, his – what's this?
NYS-LMHC & School Counselor (Permanent Certificate)
Associate Professor
Counseling & Psychology
Hunter College & CUNY Graduate Center

APPENDIX N. PROJECT TIMELINE

Planning	Pre-implementation	Implementation	Evaluation	Completion Date
Obtain support from key stakeholders				04.13.2020
	Project proposal meeting			05.28.2020
	Obtain IRB approval			07.27.2020
	Project Presentation – CCCHC			07.29.2020
		Send initial recruitment email		08.10.2020
		Implement online learning intervention and post-test survey		08.11.2020
		Implement Follow-up survey		08.10.2020
		Project completed		11.12.2020
			Stop Data Collection	11.12.2020
			Program evaluation/Data analysis	12.01.2020 – 01.20.2021
			Dissemination of results	01.21.2021 – 01.29.2021
			Defense	03.05.2021

APPENDIX O. INSTITUTIONAL REVIEW BOARD

NDSU NORTH DAKOTA STATE UNIVERSITY

July 27, 2020

Dr. Molly Secor-Turner
Nursing/Public Health

Re: IRB Determination of Exempt Human Subjects Research:
Protocol #PH21004, "Enhancing Health Professionals' Knowledge and Cultural Competence on GSM Health"

NDSU Co-investigator(s) and research team: Megan Thiel
Date of Exempt Determination: 7/27/2020 Expiration Date: 7/26/2023
Study site(s): Coal Country Community Health Centers in Beulah, Hazen, Killdeer, and Center, ND Funding Agency: n/a
The above referenced human subjects research project has been determined exempt (category 1) in accordance with federal regulations (Code of Federal Regulations, Title 45, Part 46, Protection of Human Subjects). This determination is based on the original protocol received 7/1/2020 with updated training documentation received 7/20/2020.

Please also note the following:
• If you wish to continue the research after the expiration, submit a request for recertification several weeks prior to the expiration.
• The study must be conducted as described in the approved protocol. Changes to this protocol must be approved prior to initiating, unless the changes are necessary to eliminate an immediate hazard to subjects.
• Notify the IRB promptly of any adverse events, complaints, or unanticipated problems involving risks to subjects or others related to this project.
• Report any significant new findings that may affect the risks and benefits to the participants and the IRB.

Research records may be subject to a random or directed audit at any time to verify compliance with IRB standard operating procedures.

Thank you for your cooperation with NDSU IRB procedures. Best wishes for a successful study.
Sincerely,

Kristy Shirley

Kristy Shirley, CIP, Research Compliance Administrator

For more information regarding IRB Office submissions and guidelines, please consult https://www.ndsu.edu/research/for_researchers/research_integrity_and_compliance/institutional_review_board_irb/. This Institution has an approved FederalWide Assurance with the Department of Health and Human Services: FWA00002439.

INSTITUTIONAL REVIEW BOARD
NDSU Dept 4000 | PO Box 6050 | Fargo ND 58108-6050 | 701.231.8995 | Fax 701.231.8098 | ndsu.edu/irb

Shipping address: Research 1, 1735 NDSU Research Park Drive, Fargo ND 58102

APPENDIX P. EXECUTIVE SUMMARY

Enhancing Health Professionals' Cultural Competence of Gender and Sexual Minority Health

Introduction

The lesbian, gay, bisexual, and transgender (LGBT) community continue to experience worse health outcomes than their heterosexual counterparts. Due to inequities in health care, such as low rates of health insurance, high rates of stress due to systemic discrimination and stigma, and a lack of cultural competency in the health care system, gender and sexual minority (GSM) people are at higher risk of mental health disorders, sexually transmitted infections (STIs) and human immunodeficiency virus (HIV), substance use and abuse, cancer, suicide, and other disorders/diseases. A lack of cultural competence of GSM health in the health care systems perpetuate these health disparities and inequities in care that burden the LGBT community. Therefore, targeting interventions on improving health professionals' cultural competence of GSM health is essential in eliminating these inequities and health disparities.

Purpose

This project's purpose was to evaluate the effectiveness of an online educational intervention on enhancing health professionals' cultural competence of GSM health.

Project Design

This study was a one-group pre-, post-, and follow-up test intervention using a quasi-experimental design to evaluate the knowledge, clinical preparedness, and attitudinal awareness of health professionals of GSM health. The instrument used for the presurvey, post-survey, and follow-up survey was the Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCSS).

Results

A paired sample t-test was used to analyze data. The results indicated a statistically significant improvement in LGBT-DOCSS mean score on the post-survey LGBT-DOCSS ($p = 0.0011$) and follow-up LGBT-DOCSS ($p = 0.0116$) compared to the presurvey LGBT-DOCSS.

	N	Mean (SD)	Range
LGBT-DOCSS_presurvey_mn	36	4.07 (0.70)	2.50 – 5.58
LGBT-DOCSS_post_mn	11	4.67 (0.63)	3.67 – 5.78
LGBT-DOCSS_followup_mn	6	5.02 (0.90)	4.11 – 6.39

Program Evaluation: Overall, participants reported that participating in the online educational intervention increased their understanding of the unique health needs and health disparities of the LGBT community.

Findings from this project support that as little as a two-hour online educational intervention enhances health professionals' knowledge, clinical preparedness, and attitudinal awareness of GSM health, including the health disparities this community faces and GSM patients' unique health needs. Further, this project indicates that just a few hours of education on GSM health has lasting gains for the learner.

Recommendations

Implications to Practice

- ✓ Ensure all staff are equipped to provide culturally sensitive and patient-centered care for GSM patients through mandatory GSM-specific training or professional development.
- ✓ Gender and sexual minority education should be continuously supported with appropriate resources being readily available and easily accessible form the organization.
- ✓ Additional recommendations include collecting sexual orientation and gender identity (SOGI) data and putting this data to meaningful use, ensure staff use appropriate pronouns and preferred names, create an inclusive, welcoming environment for GSM patients that respects the importance of confidentiality, and provide care tailored to GSM patients' unique health needs such as preventative health care services, screenings, and education.

Implications to Future Research/Projects

- ✓ Implementing an educational intervention of GSM health into the student health professions curriculum
- ✓ Longitudinal research on the effects of GSM-specific cultural competence education or professional development
- ✓ Evaluate if enhanced GSM cultural competence from an educational intervention equates to positive behavior change in health professionals
- ✓ Evaluate if enhanced GSM cultural competence from an educational intervention equates to improved patient experiences and outcomes
- ✓ Examine health professionals' cultural competence on diverse GSM populations or those with double-minority status