

Addressing the Lack of Clinical Knowledge in Managing LGBT+ Patients in a Safety Net

Primary Care Setting: A Quality Improvement Project

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Abstract

Purpose: The purpose of this quality improvement project is to implement and evaluate a clinical care protocol specific to caring for the LGBT+ population presenting in this safety net primary care setting.

Background: There is a lack of clinical knowledge in managing LGBT+ patients with a number of health disparities within the LGBT+ population including depression, anxiety, increased suicide attempt rates, alcohol consumption, STIs, and cancers. Significant health issues within this community are not prevented or identified early, leading to a decreased health status and poor healthcare outcomes.

Methods: The sample includes providers and students at a safety net primary care clinic located in Omaha, Nebraska. The framework that will be implemented for this will be the Plan-Do-Study-Act (PDSA) model. This project will implement a pre-test-post-test design to measure the impact of the education intervention. As such, the study of the intervention will include an evaluation administered to the participants immediately before and after the introduction of the education intervention. The pre- and post-test will seek to measure baseline knowledge of the LGBT+ community, unique health disparities and social determinants of health, and provider attitudes. Further LGBT+ education handouts and community resources will be provided to the facility as well for provider reference to guide future care.

Results: After educational intervention, the post-test results were higher across all three categories for every participant. Students scored the same or higher than the providers on both the pre- and post-tests. Students reported more prior LGBT+ education/training than the providers. There was not any large discrepancies between MD and DNP test scores

Conclusion: LGBT+ clinical education has shown to improve provider knowledge on the LGBT+ community, LGBT+ health disparities, and improve provider attitudes. Students within the Generation Z and Millennial generations may have more overall exposure to the LGBT+ community as it grows in numbers and visibility. Future education programs may need to be tailored to fill in the gaps in LGBT+ education for older providers.

Addressing the Lack of Clinical Knowledge in Managing LGBT+ Patients in a Safety Net Primary Care Setting: A Quality Improvement Project

It has only been seven years since the legalization of gay marriage in 2015. Since then, there has been an increase in lesbian, gay, bisexual, transgender, etc. (LGBT+) representation and awareness. Still, there are significant health disparities this community face due to a lack of clinical knowledge regarding the specific health and social issues within this community. As this community has grown, the understanding of both gender and sexuality has expanded with the inclusion of other identities such as queer, intersex, asexuality, and non-binary. There is then a concern that healthcare professions are not prepared or educated enough on this evolving demographic to properly address the many health disparities within this community. Many providers and facilities lack the clinical knowledge needed to anticipate the needs and specific health concerns of this growing minority group, which can have devastating health outcomes to this population.

Background

There are many facilities and clinics that lack a LGBT+ standard or plan of care. Because of this, health and social issues that this community face may be missed, causing health disparities and gaps in care. Mental health is large area of health care that is often missed within this community with LGBT+ adolescents being 2-3 times more likely to attempt suicide compared to their heterosexual peers (Healthy People 2020, 2022). This community faces a number of social issues as well such as LGBT+ youth homelessness, bullying in schools, loss of social supports and family rejection, and discrimination (Healthy People 2020, 2022). The discrimination in this population is associated with increased risk of developing psychiatric disorders, substance abuse, and suicide (Healthy People 2020, 2022). This population is also

more likely to partake in high-risk sexual activities with an increased risk of sexually transmitted diseases such as gonorrhea, chlamydia, syphilis, HPV, and HIV (Hafeez, et al., 2017). While the total number of HIV infections has decreased since 2015, gay and bisexual men still make up approximately 70% of new HIV infections despite preventative and post-exposure medications that are available (CDC, 2021). Gay men are also at an increased risk for different cancers including prostate, testicular, anal, and colon cancers (Hafeez, et al., 2017). The lack of provider knowledge of these issues can lead to greater health disparities, increased health costs, and worsening health states in this population. Furthermore, young members of the LGBT+ community may be uncomfortable with disclosing their sexual orientation and identity with providers, with 68% of youths not reporting their sexual orientation and 90% reporting hesitancy in disclosing this information to their providers (Hafeez, et al, 2017).

Significance

While the LGBT+ community is still a minority group, it is a growing demographic with 5.6% of the US identifying as LGBT+ in 2021 as opposed to 4.5% in 2017 (Jones, 2021). Particularly, younger generations have higher LGBT+ self-identification rates than all other generations before them, with 15.9% of Generation Z reporting LGBT+ status (Jones, 2021). Nonetheless, it is a marginalized group that still faces inequality, sometimes in the form of health care. It is also important to note that despite great strides made in reducing biases and spreading education about this community in general, this population still faces inequities in health care depending on region. For example, in one study, patients reported that Midwest hospitals show significantly less support for LGBT+ issues compared to hospitals in the Northeast (Hswen, et al., 2018). A factor that contributes to these disparities is a lack of education and training for providers and clinical research regarding LGBT+ health issues. Many of these disease states are

entirely preventable as well. By not identifying, anticipating, and addressing health disparities within this community, it allows the progression of multiple, and potentially life-threatening, disease processes. This population is also less likely to have health insurance coverage, social supports, and are more likely to have a delay in care, adding to overall increased health care costs (Cigna, 2021).

Clinical Problem Statement

The lack of clinical knowledge in managing LGBT+ patients can lead to a number of health disparities within this population. Many health issues within this community are not anticipated, prevented, or identified early, leading to progressively worsening health status, healthcare outcomes, and increased health care costs.

Available Knowledge

The clinical problem presented demonstrates an issue that can be addressed through the education of providers to be more aware of this minority population and their needs. Keywords used in the literature search included “LGBT,” “health disparities,” “clinical knowledge,” and “providers.” Databases used included JSTOR as well as JaySearch. Databases initially considered were CINAHL and PubMed, however both of these databases had few articles regarding the LGBT+ population. Searches were limited to a 10 year time frame as opposed to a 5 year time frame to expand upon the limited research done on this population.

Theoretical Framework for the Project

The framework implemented was the Plan-Do-Study-Act (PDSA) model. The PDSA model breaks down what is planned for the project implementation or intervention, what is observed during the intervention, what is learned from the intervention based on the project’s results, and what is concluded from the implementation of the intervention (Agency for

Healthcare Research and Quality, 2020). The PDSA model is often used in quality improvement (QI) projects as a way to implement research studies (Chen, LanderLaan, & Heher, 2021). While it lacks the analytical complexity of other models, a number of benefits this framework provides includes easy application without complex engineering, requires few resources, and allows for immediate implementation (Chen, LanderLaan, & Heher, 2021). A benefit of the simplistic nature of this framework is that when original plans fail, modifications can be made in a timely manner and retested (Chen, LanderLaan, & Heher, 2021). After much consideration, the PDSA model was determined to be the most efficient theoretical framework for this QI project.

Health Disparities and Care Outcomes Related to the LGBT+ Population

Hatzenbuehler, Flores, and Gates' article, *Social Attitudes Regarding Same-Sex Marriage and LGBT Health Disparities: Results from a National Probability Sample*, is a cross-sectional study that looks at data gathered from a Gallup survey measuring political and social attitudes and demographics in adults across 50 US states age 18 and older (Hatzenbuehler, Flores, & Gates, 2017). The survey was conducted via live interviews available in English and Spanish through the random digit dialing method by landline and cell phone (Hatzenbuehler, Flores, & Gates, 2017). Through qualitative means, the interviews were coded and variables were analyzed through multilevel logistic regression models. Something that was also considered were demographics at the individual level to see how they correlated with the interview answers (Hatzenbuehler, Flores, & Gates, 2017). What the researchers found was that LGBT responders reported higher levels of smoking and lower self-reported health statuses than non-LGBT responders (Hatzenbuehler, Flores, & Gates, 2017). It was noted that smoking rates lowered and there were better self-reported health outcomes in higher LGBT-approving communities as well (Hatzenbuehler, Flores, & Gates, 2017). While this article does a great job at comparing

local demographics to interviewee answers and also considers morbidity and mortality of the LGBT population, something worth noting is that the data that they pulled from was published in 2012, which was before the legalization of gay marriage. LGBT rights, the outlook on this community by the rest of society, and this population's evolution as a whole has changed drastically over the last ten years since these interviews were conducted. It would be more interesting and relevant to see a similar study done on more recent data regarding this population.

Branstrom's article, *Minority Stress Factors as Mediators of Sexual Orientation Disparities in Mental Health Treatment: a Longitudinal Population-based Study*, takes note of the mental health disparities in the LGBT+ community compared to the general population. It is a longitudinal study that re-evaluates a cohort of 30,730 adults from a separate public health study via surveys with a response rate of 61% (Branstrom, 2017). This survey evaluated sexual orientation, living situation, mental health history and treatments, and social background (Branstrom, 2017). Using a regression model, they further evaluated sexual orientation differences in threats of assault, social supports, and mental health outcomes (Branstrom, 2017). From his findings, Branstrom found that bisexuals had the highest rates of psychiatric health care visits at 13.3%, followed by gay or lesbian individuals at 5.8%, and heterosexual individuals at 3.25% (Branstrom, 2017). Gay and lesbian individuals were more likely to be treated for anxiety disorders and bisexuals were more likely to receive mental health treatment, use antidepressants, and have substance-use disorders compared to their heterosexual peers (Branstrom, 2017). From his data measures, Branstrom also found a statistically significant relationship between sexual orientation and mental health treatment for victimization, threats of violence, and social support (Branstrom, 2017). This study does a good job of contributing support for the minority stress theory and the influence of victimization and violence on the mental health outcomes. In relation

to provider knowledge, it is important that providers understand the social stressors this population face, how that affects their health, and to be aware not to add to these social stressors through unintentional ignorance.

Provider Attitudes Towards the LGBT+ Community

The article *Health Care Providers' Implicit and Explicit Attitudes Toward Lesbian Women and Gay Men* detail researches look into explicit and implicit biases healthcare workers have towards lesbian women and gay men in comparison to their heterosexual counterparts (Sabin, Riskind, & Nosek, 2015). The researchers administered tests to providers, nurses, and non-providers age 22 and older internationally through a Harvard website. Participants took the test of their own volition and were brought to the site through employer assignments, word of mouth, media coverage and marketing, and web surfing (Sabin, Riskind, & Nosek, 2015). The implicit association test (IAT) compared associations between gay people and heterosexual people represented through wedding cake toppers and two attitudes, that being good and bad, represented by coded adjectives (Sabin, Riskind, & Nosek, 2015). The explicit measure in this study was through participant reported Likert scale on a preference for straight people versus gay people (Sabin, Riskind, & Nosek, 2015). Data was collected over the course of six years between 2006 and 2012. From their results, they found that in general, heterosexual men showed more implicit preferences for heterosexual people than heterosexual women (Sabin, Riskind, & Nosek, 2015). Both heterosexual male and female nurses showed a strong preference for heterosexual people (Sabin, Riskind, & Nosek, 2015). Heterosexual non-providers showed similar results with a preference for heterosexual people (Sabin, Riskind, & Nosek, 2015). Lesbian providers showed implicit preferences for lesbian women while in contrast, gay providers showed an implicit preference for heterosexual men over gay men (Sabin, Riskind, & Nosek, 2015). In the explicit

data, heterosexual, lesbian, and gay participants had a strong tendency to report moderate to strong explicit preference for people of their own sexual identity (Sabin, Riskind, & Nosek, 2015). While biases were found in all participant groups, lesbian and gay health professionals held weaker biases than their heterosexual counterparts (Sabin, Riskind, & Nosek, 2015). From their data, the researchers emphasize the importance of health care professional training in sexual minority care and issues and disparities within different health disciplines in order to reduce biases and prejudices, especially since sexual prejudices are very prevalent among the majority of health care professionals nationwide (Sabin, Riskind, & Nosek, 2015).

The 2019 article, *Rural Primary Care Providers' Attitudes Towards Sexual and Gender Minorities in a Midwestern State in the USA*, is more recent than the previous article. Another important point to note is that it is published and derives its data from a time after the legalization of gay marriage. The researchers sought to assess the attitudes of primary care providers in rural Michigan towards different groups within the LGBT+ population (Sharma, Shaver & Stephenson, 2019). The researchers identified potential participants through public rural health clinics across rural Michigan. The providers were then mailed study packets containing the surveys and follow up phone calls were made to ask for provider participation (Sharma, Shaver & Stephenson, 2019). The survey contained 84 questions and a number of provider variables were also considered including age, race, gender identity, sexual orientation, previous LGBT+ health education, religion, and depth of religiosity (Sharma, Shaver & Stephenson, 2019). After analyzing the results, the researchers found that attitudes were generally favorable towards the LGBT+ community among primary care providers (Sharma, Shaver & Stephenson, 2019). Something that they noted, however, was that those who had received LGBT+ health education were associated to have more favorable attitudes while

increasing levels of religiosity were associated with less favorable attitudes (Sharma, Shaver & Stephenson, 2019). The researchers concluded with the importance of LGBT+ health education for providers and that improving attitudes of rural providers may improve health outcomes for this population that already faces many health disparities (Sharma, Shaver & Stephenson, 2019). Something worth noting is that results may have been affected by providers that chose not to participate in the mailed-in survey.

Provider LGBTQIA+ Clinical Education and Training in Schools

The systematic review, *The Effects of Educational Curricula and Training on LGBT-Specific Health Issues for Healthcare Students and Professionals*, identifies and analyzes the effects of LGBT+ health education on healthcare students and providers (Sekoni, et al., 2017). Internationally, the researchers identified a total of 1171 publications with the majority being from the US (Sekoni, et al., 2017). Through their assessment, the researchers identified themes and trends. Time dedicated to LGBT+ training , LGBT+-identifying people involvement, healthcare knowledge, attitudes, patient exposure post-training, and constraints to applying new LGBT+ values in clinical practice (Sekoni, et al., 2017). The researchers noted that one study assessed care changes indirectly among medical residents by noting changes in documentation of sexual history in patient charts, which improved after training was provided but only in select areas including current sexual activity, number of partners, and gender of partners (Sekoni, et al., 2017). All relevant studies reported improvement in student and provider knowledge, attitudes, or clinical practice post-training, however, many studies also noted that constraints included pre-existing cultural and religious prejudice against the LGBT+ community (Sekoni, et al., 2017). In their discussion, the researchers note that a high number of medical schools report a lack of formal LGBT+ health education with a large number of medical students and providers reporting

to have received minimal or no training in LGBT+ health (Sekoni, et al., 2017). However, through their review it seems as though LGBT+ healthcare education positively improves attitudes, clinical knowledge, and practice behaviors among students and providers (Sekoni, et al., 2017).

Interventions Related to Increasing Provider Knowledge and Competency

In the article, *Web-based LGBT Cultural Competency Training Intervention for Oncologists: Pilot Study Results*, the researchers conduct a quasi-experimental pilot study regarding LGBT-related knowledge, attitudes, and clinical practice among oncologists from three different facilities in Florida (Seay, et al., 2019). The researchers administered a pretest, followed by a LGBT+ competency training and post-training test to 44 participants, with 33 participants completing the training (Seay, et al., 2019). The training itself was provided in an interactive web-based format developed by an interdisciplinary team including researchers, LGBT cancer survivors, cultural competency experts, oncologists, web designers, and instructional designers (Seay, et al., 2019). The data was further processed using descriptive statistics, t-tests, and chi-square analysis (Seay, et al., 2019). They found that there was statistically significant improvements regarding LGBT-related knowledge, attitudes, and clinical practice among the participating oncologists and that 97% of participants recommended the trainings to colleagues (Seay, et al., 2019). This pilot study was the first to be specifically tailored to oncologists and it does a great job at including LGBT+ cancer survivors and designers to the development team. Something to consider is that the number of participants to this initial study was fairly low with only 33 participants and there might be population bias related to participants only being from facilities in Florida and predominantly Caucasian males (Seay, et al., 2019). Convenience sampling was used, lending further to a less diverse population (Seay, et al., 2019).

The article, *Do LGBT Aging Trainings Effectuate Positive Change in Mainstream Elder Service Providers*, assesses how provider attitudes, beliefs, and intentions are effected by LGBT+ clinical education when caring for elderly LGBT+ patients (Porter & Krinsky, 2013). As the elder LGBT+ population is projected to double by 2030, the researchers found interest in provider education in caring for this particular population given that they are a sexual minority and are more vulnerable given their age (Porter & Krinsky, 2013). The researchers particularly assessed a Massachusetts training program developed by LGBT+ providers working in elder care services. Data was derived from four training sessions that took place in 2003 that included a five-hour workshop as well as pre and post-test surveys (Porter & Krinsky, 2013). This curriculum particularly included addressing and debunking myths surrounding this community, prejudice and barriers to quality care, and knowledge about LGBT+ public policies (Porter & Krinsky, 2013). The researchers noted that the participant population was predominantly white, female, and had not received previous LGBT+ awareness training before (Porter & Krinsky, 2013). In analyzing the pre and post-tests, they found that there was a statistically significant positive improvement in provider knowledge, attitudes, and behavioral intentions among providers who completed the LGBT+ elder training (Porter & Krinsky, 2013). They conclude that LGBT+ training programs will improve provider knowledge and clinical practice, and that further fostering of these programs may improve quality of care for this particular population (Porter & Krinsky, 2013).

Rationale

The patient population of interest is the LGBT+ community, however, this project will involve clinicians, doctorate nurse practitioner (DNP) students, and medical students who are directly involved in patient care. It was determined that providers and students involved in

patient care planning would be receiving the intervention due to a number of considerations. One concern was identifying enough LGBT+ participants for this study while ensuring that these patients feel comfortable disclosing their LGBT+ status with us. Another consideration was patient confidentiality and monitoring. Making sure that a returning patient is not counted twice as a participant while also maintaining patient confidentiality would not be impossible, but it would be difficult. The need for clinician clinical education on this population was also deemed important to address. As such, the intervention developed for this project was clinician education regarding LGBT+ care and the unique health issues and disparities they have. The intention of this education was to improve clinician and DNP students' knowledge of the LGBT+ patient population in order to recognize health issues and disparities, create more informed care plans, help improve treating this population with dignity, and improve health outcomes.

Purpose and Aims

This quality improvement project was implemented at the Heart Ministry Center in Omaha, Nebraska among the DNP students and providers facilitating patient care. The purpose of this quality improvement project was to implement and evaluate a clinical care protocol specific to caring for the LGBT+ population presenting in this safety net primary care setting. The objectives of this project was to design, implement, and evaluate a protocol to assure that all LGBT+ patients receive equitable primary health care services; to improve the baseline knowledge of health care providers related to the primary care needs of the LGBT+ patients; and to evaluate provider utilization and acceptance of the developed protocol and resource materials.

Methods

Sample and Setting

The project intervention sample was comprised of both providers and students at the Heart Ministry Center in Omaha, Nebraska. This clinic is located in an urban population of North Omaha, a more impoverished area of the city, and has received institutional approval for project implementation. It is a free clinic and the patient population is typically uninsured. Social issues and social determinants of health are also heavily considered when making care plans for this patient population. Providers at this clinic have direct patient interaction and create care plans based off their assessments. DNP and medical students operate similarly, though under the supervision of a provider at the facility. The goal was to distribute the intervention to all available providers and students operating at this clinic. There were a total of two providers – one MD and one DNP – and two students – one medical student and one DNP student – that participated in this project intervention.

Interventions

An education intervention was administered to participants of this study via power point presentation. This education program was separated into two parts including awareness of the difference aspects of the LGBT+ community in order to promote patient dignity in care and teachings on the unique health issues, disparities, and social determinants of health that are commonly seen within this community. A transcription of this intervention is provided in Appendix A. Patient educational materials were also supplied to the clinic along with community resources that may be helpful for this population for future reference. Materials can be found in Appendix C.

Measures

This project implemented a pretest-posttest design to measure the impact of the education intervention. Similar to the intervention, the pre- and post-test will seek to measure baseline

knowledge of the LGBT+ community, unique health disparities and social determinants of health, and provider attitudes. An example of the pre-test and post-test can be found in Appendix B.

Analysis

The scores of the pre- and post-tests were quantified and analyzed by a number of variables. The questions vary between true or false, select all that apply, interval scale, and open-ended and total possible points between questions will vary. Categories considered include Provider Attitudes, LGBT+ Knowledge, and LGBT+ Health Disparities and Social Determinants of Health. Provider Attitudes measured provider self-reported confidence in their ability to treat this population compared to non-LGBT+ patients, LGBT+ Knowledge measured how much the participants know about this population, and LGBT+ Health Disparities and Social Determinants of Health measured how well the participants know risk factors and care gaps often seen in this population.

Ethical Considerations

This project was submitted to Creighton University's IRB and determined to be a quality improvement project, which can be found in Appendix D. Ethical concerns I had when forming this project was maintaining patient confidentiality while making sure there were no accidental repeat participants and while monitoring patient outcomes, especially for patients who haven't disclosed their sexuality to others yet. This paired with the longitudinal nature of monitoring health outcomes kept me from using this approach. Instead, I decided to keep my population of interest the same, but shift my intervention implementation to providers instead. There were no conflicts of interests identified in the making of this project.

Results

The pre- and post-test questions were coded into three different categories: Provider Attitudes, LGBT+ Knowledge, and LGBT+ Health Disparities and Social Determinants of health. After the educational intervention, the post-test results were higher across all three categories for every participant. Something worth noting is that the students scored the same or higher than the providers on both the pre-test and the post-test overall. The students also reported that their previous healthcare education and training had helped prepare them to care for LGBT+ patients compared to the providers who disagreed with this sentiment. There did not seem to be a large discrepancy between DNP and MD specialties either, with the DNP student scoring higher than the medical student on both tests and the MD provider scoring higher than the DNP provider on both tests.

| Pre-test Participants | Provider attitudes (out of 35 possible points) | LGBT+ Knowledge (out of 19 possible points) | LGBT+ health disparities and social determinants of health (out of 15 possible points) | Total score (out of 69 possible points) |
|-----------------------|--|---|--|---|
| Medical Student | 18 | 17 | 7 | 42 |
| DNP Student | 18 | 15 | 12 | 45 |
| DNP Provider | 13 | 14 | 12 | 39 |
| MD Provider | 20 | 11 | 11 | 42 |

| Post-test Participants | Provider attitudes (out of 35 possible points) | LGBT+ Knowledge (out of 19 possible points) | LGBT+ health disparities and social determinants of health (out of 15 possible points) | Total score (out of 69 possible points) |
|------------------------|--|---|--|---|
| Medical Student | 28 | 19 | 15 | 62 |
| DNP Student | 29 | 19 | 15 | 63 |
| DNP Provider | 25 | 19 | 14 | 58 |
| MD Provider | 28 | 17 | 15 | 60 |

Discussion

The results of this project implementation show an improvement in provider knowledge of the LGBT+ community, their care gaps and risk factors, as well as provider confidence in treating this population. While the students somewhat agreed that their previous education and training prepared them to care for this population, the providers either somewhat disagreed or entirely disagreed with this. As such, it is important to make sure providers are receiving critical education on this population that they may have missed in order to improve health outcomes for this patient population.

With the students scoring higher than the providers on both the pre- and post-tests, something to consider is exposure to the LGBT+ population and healthcare education. As aforementioned, the students had higher reports of LGBT+ education in their healthcare training. The LGBT+ population has also grown in size and visibility over the last decade with social acceptance improving over these years with the legalization of gay marriage and the influence and education the surge in social media provides to younger generations. The LGBT+ population is a growing community with younger generations having higher rates of self-reported LGBT+ identification. As such, younger individuals – such as the student participants – are more likely to have peers that identify as LBGT+ or identify themselves as LGBT+. This would grant them wider exposure and a better understanding of the LGBT+ population compared to their older counterparts, such as the DNP and MD provider in this study. Something to consider in future studies is tailoring provider education to those of older generations who had not received LGBT+ healthcare education in their initial healthcare education.

While almost all participants had perfect scores in LGBT+ Knowledge and LGBT+ Health Disparities and Social Determinants of Health on the post-test, none of the participants

received a perfect score or a near perfect score in Provider Attitudes, which particularly measures provider confidence levels to treat the LGBT+ population. Periodic education may be beneficial to continue to educate and inform providers in the future.

A challenge during the project implementation process was having to remind the participants to review the materials and take the post-test. At the start of the intervention, the clinic closed one of the two days of the week that they were open. Because of this, there was a large influx of patients during the time all the providers and students participating in the project were present at the clinic. This made it difficult to allot time towards the project intervention and post-test during clinic hours, so the power-point intervention and post-test was sent home for the participants to review and test.

Conclusion

The overall data in regards to LGBT+ health disparities and provider knowledge is lacking. There were even fewer studies that implemented interventions to help aid provider knowledge in regards to this population. A number of databases initially used had few LGBT+ resources overall despite the growing visibility of this patient population and its acknowledged disparities, further lending to the fact that this patient population is often overlooked. While still published within the last five years, some research studies also pulled off survey data that pre-dated the legalization of gay marriage. More updated information is needed on this population, especially with changing perspectives and greater visibility of the LGBT+ community.

This project intervention helps to fill a gap in the literature. A caveat that studies prior to 2015 or studies that derive their findings from older data collections may miss is that students and future providers that identify as Generation Z or Millennials have had more exposure to the LGBT+ community and programs are integrating LGBT+ healthcare education. As this

population continues to grow, it is important that we continue to educate providers on care gaps and risk factors associated with the LGBT+ community, especially providers who have not received formal education and training on the LGBT+ community, in order to improve their clinical knowledge and confidence in caring for this population.

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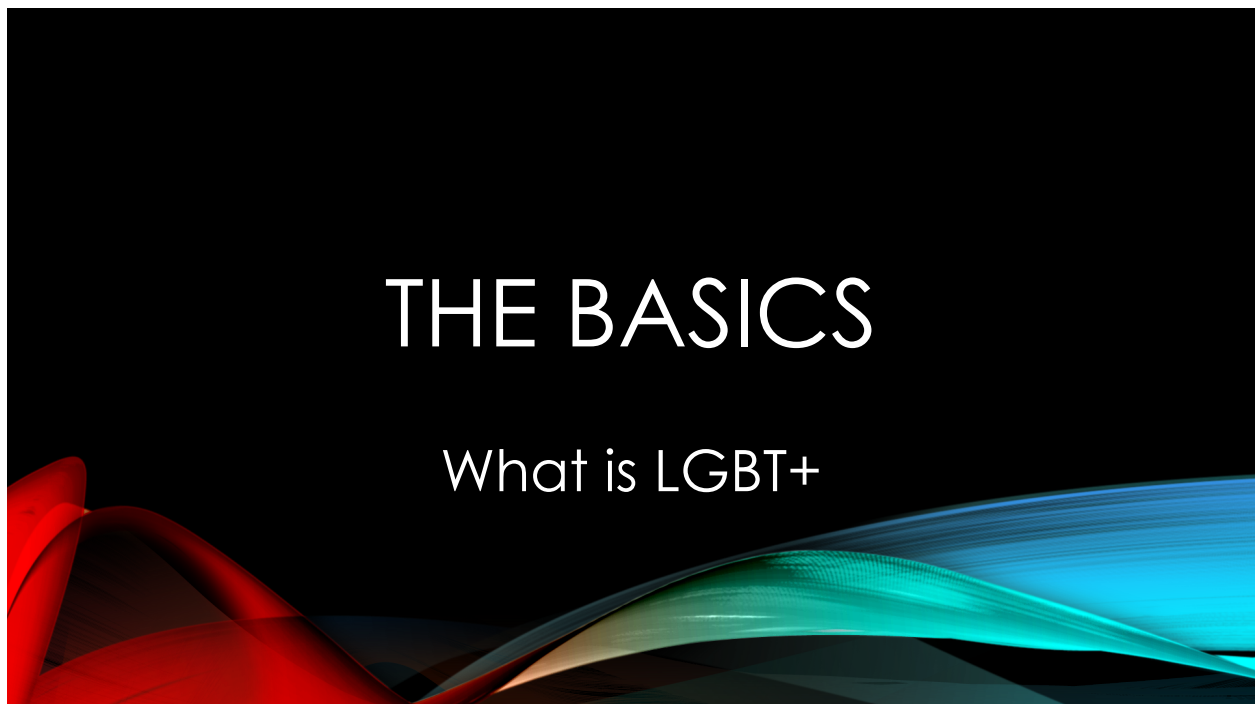
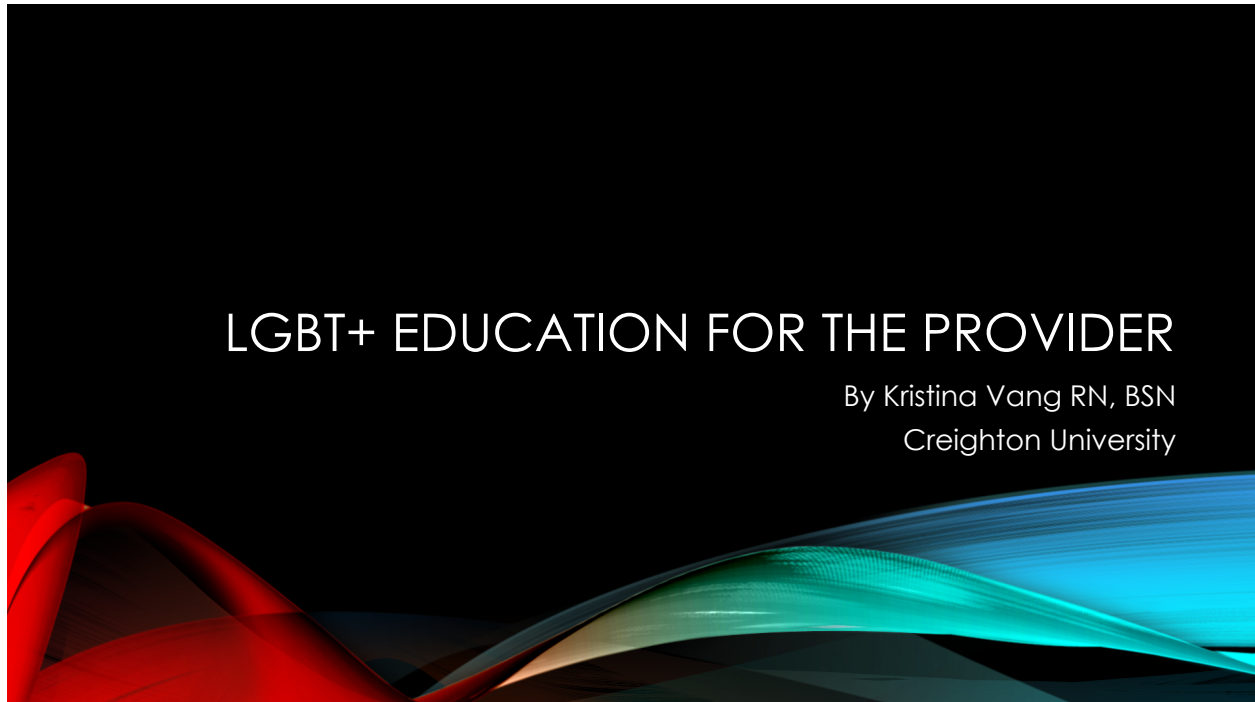
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Appendix

Appendix A

Provider Education Intervention



THE BASICS: IMPORTANCE

- It's important to understand the basics of the LGBT+ community including sex, gender identity, and pronouns
- A provider's priority is ensuring that patients are receiving quality care
- Understanding and respecting patients' identities will aid in ensuring patient dignity and a continuity of care by establishing a trusting rapport
- The LGBT+ community is a growing population that is gaining more visibility. As these numbers increase, providers can expect to see more LGBT+ individuals in their practice
- Nearly 25% of LGBT+ respondents to the US Census Bureau were between the ages of 18-24
- 12.2% of respondents identified as a sexuality other than heterosexual
- LGBT+ individuals account for >9% of adults in California, Nevada, Arizona, Colorado, Oregon, Washington, and New Mexico

(US Census Bureau, 2021)



THE BASICS: LESBIAN

- L – Lesbian: Women who are attracted to women
- They may also identify as Gay or Queer Bisexual or pansexual individuals may be in relationships that are lesbian-presenting
- A consideration is that a lesbian couple may still need contraceptive use if one of the partners is a sperm-producing transgender woman
- It is also important to note that lesbian women may have had relationships with males in the past and have an OB history

(WCSU, n.d.), (UC Davis, 2020)



THE BASICS: GAY

- G – Gay: Men who are attracted to men Men who fit this description may also identify or prefer to identify as Queer
- Gay may also be used to refer to anyone in the LGBT+ community
- Bisexual or pansexual individuals may be in relationships that are gay-presenting
- A consideration is that a gay couple may still need contraceptive use if one of the partners is a transgender man with a functioning reproductive system
- Reproductive health and contraceptive use is still important for this group and providers should still ask about sexual practices

(WCSU, n.d.), (UC Davis, 2020)



THE BASICS: BISEXUAL

- B – Bisexual: An individual who is attracted to more than one gender
- Originally, this included traditional genders such as men and women – hence the bi prefix. However, this has expanded overtime to include men, women, transgender individuals, non-binary individuals, etc. As such, it is defined as being attracted to more than one gender rather than just two genders
- Bisexual individuals may be in relationships that are lesbian or gay-presenting if their partner is of the same gender as themselves or in heterosexual-presenting relationships – often termed “straight passing” in the community – if the individual and their partner appear to be a heterosexual couple

(WCSU, n.d.), (UC Davis, 2020)



THE BASICS: TRANSGENDER

- T – Transgender (Trans): An individual who does not identify as the sex they were assigned to at birth. The internal knowledge of their gender is different than cultural or societal expectations or notions.
 - E.g. A transgender male identifies as male but was assigned female at birth
- Trans can also be used as an umbrella term for those who are non-conforming to the sex they were assigned at birth. Non-binary or genderfluid individuals may also identify as being trans.
- Trans individuals may also consider themselves heterosexual, gay, lesbian, bisexual, queer, etc. depending on their sexuality
 - E.g. A transgender male may consider himself heterosexual if he exclusively seeks out female partners and relationships. However, he may also identify as queer due to his transgender status

(WCSU, n.d.), (UC Davis, 2020)



THE BASICS: TRANSGENDER CONT.

- Trans individuals may choose to undergo hormone therapy or gender affirming surgeries during transition
- Gender Affirming Surgeries
 - Feminizing vaginoplasty, masculinizing phalloplasty/scrotoplasty, masculinizing chest surgery (top surgery), facial feminization procedures, etc.
- Trans individuals do not need to undergo hormone therapy or gender affirming surgeries in order to be considered trans or transitioning. Many individuals choose not to for various reasons or cannot afford to.
- Reproductive health and contraceptive use is still important for this group and providers should still ask about sexual practices, especially if individuals have functioning reproductive systems

(WCSU, n.d.), (UC Davis, 2020), (UCSF, 2016)



THE BASICS: QUEER

- Q – Queer: An individual who does not identify with cultural or societal expectations of sexuality or gender. Like the term “Gay,” it can be used as an umbrella term for someone in the LGBT+ community.
- It is a term that is broader and is more gender-neutral than the term “Gay,” which makes it more appealing for individuals who don’t identify as male or masculine

(WCSU, n.d.), (UC Davis, 2020)



THE BASICS: INTERSEX

- I – Intersex: A general term for those whose bodies differ outside of the traditional male or female anatomy
- This may include individuals who have both male and female sets of genitalia, different combinations of chromosomes including Klinefelter, androgen insensitivity, late onset adrenal hyperplasia, etc.
- It is estimated that 1-2 in 100 people in the US are intersex, though this covers a large number of different conditions other than having both male and female genitalia

(WCSU, n.d.), (UC Davis, 2020), (ISNA, n.d.)



THE BASICS: ASEXUAL

- A – Asexual: Individuals who experience little to no sexual attractions to others
- Sexuality is a spectrum and those who identify as asexual may have varying degrees of sexual experiences and desires than other asexual individuals
- Individuals who identify as asexual may still experience sexual urges
- Asexual individuals may be in relationships with varying degrees of sexual intimacy from no sexual intimacy to regular sexual intimacy
- Reproductive health and contraceptive use is still important for this group and providers should still ask about sexual practices

(WCSU, n.d.), (UC Davis, 2020)



THE BASICS: PANSEXUAL

- P – Pansexual: Individuals whose attraction for others is not dependent on gender identity. Pansexuality and bisexuality are sometimes used interchangeably by identifying individuals
- Similar to bisexuality, pansexuals may also be attracted to men, women, transgender persons, non-binary individuals, etc. Their relationships may also reflect gay, lesbian, or heterosexual-presenting partnerships

(WCSU, n.d.), (UC Davis, 2020)



THE BASICS: NON-BINARY & GENDERFLUID

- N – Non-binary: An individual that does not identify as either traditionally male or female
- Non-binary individuals may prefer non-gendered pronouns such as they/them. Some individuals may use they/them pronouns interchangeably with their assigned at birth pronouns as well
- Genderfluid: In contrast, an individual may consider their gender expression per societal and cultural norms as fluctuating. Like non-binary individuals, their preferred pronouns may also vary.
- With both non-binary and genderfluid individuals, it may be offensive to assume their pronouns. It is important to ask



(WCSU, n.d.), (UC Davis, 2020)

HEALTH DISPARITIES & SOCIAL DETERMINANTS OF HEALTH

HEALTH DISPARITIES: HEALTHCARE

- Young members of the LGBTQ+ community may be uncomfortable with disclosing their sexual orientation and identity with providers, with 68% of youths not reporting their sexual orientation and 90% reporting hesitancy in disclosing this information to their providers. This may lead to greater health disparities, increased health costs, and worsening health states in this population when common conditions in this population are not accounted for
- Patients reported that Midwest hospitals showed significantly less support for LGBT+ issues compared to hospitals in the Northeast
- The LGBT+ population is also more likely to have a delay in care

(Hafeez, et al., 2017) (Hswen, et al., 2018), (Cigna, 2021)

HEALTH DISPARITIES: HORMONE THERAPY

| Benefits of Hormone Therapy | Risk of Feminizing Hormones | Risk of Masculinizing Hormones |
|---------------------------------------|--|--|
| Improve gender dysphoria | Blood clots (deep vein thrombosis or pulmonary embolism) | Blood clots (deep vein thrombosis or pulmonary embolism) |
| Decrease mental and emotional stress | Stroke | Male-pattern baldness |
| Improve mental and social functioning | Infertility | Infertility |
| Improve sexual satisfaction | Hypertension | Hypertension |
| Improve quality of life | Type 2 Diabetes | Type 2 Diabetes |
| | Cardiovascular disease Increased cholesterol levels | Cardiovascular disease Increased cholesterol levels |
| | Breast cancer Prostate cancer | Atrophic vaginitis |

(Mayo Clinic, 2021)

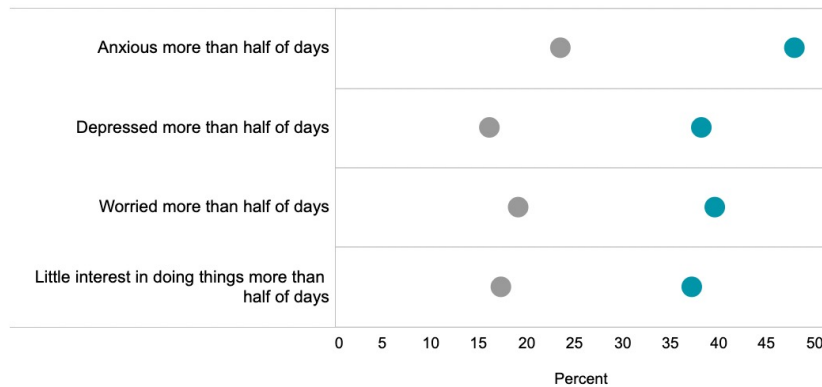
HEALTH DISPARITIES: STDS AND HIV

- This population is more likely to partake in high-risk sexual activities with an increased risk of gonorrhea, chlamydia, syphilis, HPV, and HIV within the population
- While the number of HIV cases have been trending down since 2015 with the use of prophylactic medications, 70% of new HIV infections were among gay and bisexual men, putting them at a higher risk of contracting HIV
- As providers, it is important to educate gay and bisexual male patients about the risk for HIV and AIDS
- HIV Prevention methods
 - Condom use
 - Pre-exposure prophylaxis (PrEP)
 - Post-exposure prophylaxis (PEP)
- 85% of gay and bisexual men without HIV were aware of PrEP – Only 25% of gay and bisexual men without HIV use PrEP

(Hafeez, et al., 2017),(CDC, 2021)

HEALTH DISPARITIES: MENTAL HEALTH

Experiences of Mental Health Hardships for LGBT and non-LGBT Adults



Note: All differences are statistically significant at the 90 percent confidence level.

(US Census Bureau, 2021)

- LGBT+ adults are nearly twice as likely than non-LGBT adults to have anxiety, depression, worries, and little interest in doing things more than half of days
- Nearly half of LGBT respondents reported anxiety more than half of days

HEALTH DISPARITIES: MENTAL HEALTH CONT.

- LGBT+ adolescents are 2-3 times more likely to attempt suicide compared to their heterosexual peers
- LGBT+ individuals have higher rates of psychiatric health care visits compared to their heterosexual peers



(Branstrom, 2017), (Healthy People 2020, 2022), (University Health Services, 2021)

HEALTH DISPARITIES: DRINKING AND DRUG USE

- Approximately 25% of the LGBT+ community has moderate alcohol dependency. This is compared to 5-10% of heterosexual adults with moderate alcohol dependency
 - The demographic with the highest drinking rates in the LGBT+ community are bisexual women with 25% reporting heavy drinking
- LGBT+ adults are more likely to be cigarette smokers than heterosexual adults
 - 13.7% of heterosexual adults smoke
 - 20.6% of gay or lesbian adults smoke
 - 18.3% of bisexual adults smoke

(Alcohol Rehab Guide, n.d.), (Healthy People 2020, 2018)

SOCIAL DETERMINANTS OF HEALTH

LGBT+ individuals are:

- More likely to have lived in households experiencing food insecurity
- More likely to experience loss of employment income in their household
- More likely to experience youth homelessness, family rejection, and loss of social supports
- More likely to experience bullying in schools and discrimination
- More likely to have overall increased health care costs
- Less likely to have health insurance coverage
- Nearly four times more likely to experience violent victimization (i.e. physical assault, sexual assault) in general.

- Many of these factors can lead to risk-taking behaviors, addiction, stress, psychiatric disorders, suicidal tendencies, and difficulty with healthcare access

(Cigna, 2021), (Healthy People 2020, 2018), (Healthy People 2020, 2022), (Flores, 2020)

LOCAL RESOURCES

- PrEP and PEP are covered by most insurance including Medicaid and Medicare. Medication cost without insurance is around \$600-1000
 - Providers can apply for free PEP for patients without insurance through medication programs by manufacturers
- Douglas County does Chlamydia and Gonorrhea testing for the Heart Ministry Clinic
- Heart Ministry offers food pantry, social work, and therapy services
- Every Woman Matters: Medical care
- Planned Parenthood: Medical care, family planning
- Youth Emergency Services: Emergency housing, food pantry, clothing donation aimed towards children and young adults

(CDC, 2022)

MAJOR TAKEAWAYS

- Sexuality and gender is a spectrum
- Be sure to be respectful of patients' pronouns.
- It's important to get a thorough sex and reproductive history of patients in order to assess their health risks. Don't assume even if it's uncomfortable to ask!
- When treating a patient on hormone therapy, remember what risk factors are associated with replacement and what to look for. It is also important to educate your patients on the risk factors as well.
- Gay and bisexual men are at an increased risk of contracting HIV
- Contraceptive use is still important in this community
- Anxiety, depression, suicide attempts, and psychiatric inpatient stays are more common in the LGBT+ community than among heterosexual people
- There are higher rates of cigarette smoking and moderate to heavy alcohol use in this community
- Consider social determinants of health when assessing resources and tailoring care plans

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Appendix B

Pre- and Post-test for LGBT+ Education for the Provider

Knowledge of the LGBT+ Community

1. In general, I am knowledgeable about the LGBT+ community (1-5)
2. Do you know what the letters in LGBTQIA+ stand for?
 - a. I can list the terminology all and know the definitions
 - b. I can list the terminology all but I only know some of the definitions
 - c. I can list some of the terminology
 - d. I cannot list any of the terminology
3. A transgender male is:
 - a. An individual assigned male at birth who identifies as female
 - b. An individual assigned female at birth who identifies as male
4. Are you familiar with the importance of pronouns in the LGBT+ community
 - a. I am familiar with the importance of pronoun usage in the LGBT+ community
 - b. I am somewhat familiar with the importance of pronoun usage in the LGBT+ community
 - c. I am not familiar with the importance of pronoun usage in the LGBT+ community, but I am willing to learn
 - d. I am not familiar with the importance of pronoun usage in the LGBT+ community and do not think it is important in patient care (*also keyed for provider attitudes*)
5. Intersex includes
 - a. People who have anatomy or genes that do not correlate with traditional ideas of male or female anatomy
 - b. People who identify as transgender
 - c. People who have reproductive genes or chromosomes that do not correlate with traditional ideas of male or female anatomy
 - d. A & C
 - e. All of the above
6. List what the letters in LGBTQIA stand for – short answer

Health Disparities and Social Determinants of Health

1. Hormone replacement therapy can cause: [Select all that apply]
 - a. Blood clots
 - b. Cardiovascular disease
 - c. Type 2 Diabetes
 - d. Certain cancers
 - e. Infertility
2. The gay and bisexual men are at a higher risk for HIV and AIDS
 - a. Myth, gay and bisexual men are not at a higher risk than heterosexual individuals
 - b. Fact, gay and bisexual men are at a higher risk for HIV and AIDS
3. Is contraception and condom-use relevant in care plans for the LGBT+ community?
 - a. Yes, contraception and condom-use is important in health maintenance
 - b. Contraception and condom-use is only important sometimes
 - c. No, contraception and condom-use is not needed for this population
4. Which of these statements are true
 - a. Rates of depression and anxiety in the LGBT+ community are similar to heterosexual individuals

- b. Rates of depression and anxiety in the LGBT+ community are about double the rates of depression and anxiety in heterosexual individuals
- c. Rates of depression and anxiety in the LGBT+ community are about triple the rates of depression and anxiety in heterosexual individuals
- 5. What increased risks do LGBT+ youth face? [select all that apply]
 - a. Bullying
 - b. Suicide
 - c. Delayed puberty
 - d. Homelessness
- 6. What increased risks do LGBT+ adults face? [select all that apply]
 - a. Anxiety and depression
 - b. Alcohol dependency
 - c. Sexual assault
 - d. No insurance coverage

Provider Attitudes

1. I am familiar with caring for and treating LGBT+ patients (1-5)
2. I find it easier to make care plans for non-LGBT+ patients (1-5)
3. I take into consideration patient-identified sexuality and gender when creating care plans (1-5)
4. My prior healthcare education and training has prepared me to care for LGBT+ patients (1-5)
5. I am comfortable addressing sexual practices and partners with an LGBT+ patient (1-5)
6. I am comfortable with preparing care plans for LGBT+ patients within my primary care scope (1-5)

Appendix C

LGBTQIA+ Healthcare: Patient Handout

Resources at Heart Ministry Center

- Medical services
 - Includes STI testing and smoking cessation
- A Way Forward: Social work services
- Therapy services
- Food pantry

Resources in the community

- Federally qualified health centers: Charles Drew, One World, Every Woman Matters
 - Medical care with larger resource pool
 - PEP and PrEP is often covered by Medicaid. For those without insurance, providers often can apply for free PEP through medication assistance programs
- Planned Parenthood
- Siena Francis House

- Homelessness and addiction treatment
- Youth Emergency Services
 - Food pantry, emergency shelter, clothing donations for children and adolescents

Appendix D



Office of the Provost
Research Compliance

| | |
|---------------------|---|
| DETERMINATION DATE: | 24-Oct-2022 |
| TO: | Kristina Vang |
| FROM: | Social / Behavioral IRB |
| PROJECT TITLE: | Addressing the Lack of Clinical Knowledge in Managing LGBTQ+ Patients in a Safety Net Primary Care Setting: A Quality Improvement Project |
| REVIEW CATEGORY | Quality Improvement Project |
| SUBMISSION #: | 2003576-01 |
| SUBMISSION TYPE: | Initial Application |
| REVIEW METHOD | Administrative Review |
| DETERMINATION: | Acknowledged |

Thank you for your Initial Application materials for this project. The following items were reviewed with this submission:

Creighton University HS eForm~

It has been determined this project does not meet the definition of research under 45 CFR 46.102(d). IRB review and oversight are not required. No further follow-up is required.

If you have any questions, please contact the IRB Office at 402-280-2126 or irb@creighton.edu. Please include your project title and number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained in Creighton University's IRB records.

