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Prevention and Education of Sexually Transmitted Diseases Within Lesbian, Gay, Bisexual, Transgender, and Queer Adolescents

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PREVENTION AND EDUCATION OF SEXUALLY TRANSMITTED DISEASES WITHIN LESBIAN, GAY, BISEXUAL, TRANSGENDER, AND QUEER ADOLESCENTS

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ABSTRACT

Sexually transmitted diseases (STDs) are becoming an increasingly significant issue faced by high school adolescents in the United States. According to the Centers for Disease Control and Prevention (CDC), adolescents 15 to 21 years of age account for over half of the STDs acquired in the United States every year. The lesbian, gay, bisexual, transgender, and queer (LGBTQ) sub-group of adolescent populations is at a higher risk for STDs than their heterosexual counterparts, and with ten percent of American adolescents identifying as lesbian, gay, bisexual, transgender, or queer, the prevention and education of STDs in this sub-population is of utmost importance. In the state of Minnesota, LGBTQ adolescents have the support of the state government and the majority of educators, but there is no standard STD curriculum in place. However, at Richfield High School, a group called GLOW (Gay, Lesian, or Whatever) was established to help support LGBTQ students. The community project team members partnered with the GLOW Program at Richfield High School to develop and deliver a LGBTQ-inclusive STD prevention and education presentation. This presentation was delivered successfully and was well received by the GLOW students at Richfield High School. However, the community project team acknowledges that there are many other contributing factors to the rise in STDs in the LGBTQ adolescent population that should be analyzed and addressed. These factors include peer victimization, family rejection, and lack of LGBTQ office-based health care. The community service project team recommends that other school districts in the state of Minnesota should adopt similar LGBTQ-inclusive STD prevention and education materials. This will ensure LGBTQ

adolescents have accurate and LGBTQ-inclusive STD information to enable to them to make more informed decisions in regards to their sexual health.

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Chapter One: Introduction

Introduction

Sexually transmitted diseases (STDs) are becoming an increasingly significant issue faced by high school adolescents in the United States. According to the Centers for Disease Control and Prevention (CDC), adolescents 15 to 21 years of age account for over half of the STDs acquired in the United States every year. This highlights the need for further prevention and education (Centers for Disease Control and Prevention [CDC], n.d.-a). The lesbian, gay, bisexual, transgender, and queer (LGBTQ) sub-group of adolescent populations is at a higher risk for STDs than their heterosexual counterparts. Eighty-one percent of adolescents that were diagnosed with HIV in 2016 identified as a gay or bisexual male (CDC, 2016). Approximately, ten percent of American adolescents identify as lesbian, gay, bisexual, transgender, or queer, showing the importance of prevention and education of STDs in this sub-population. This chapter will outline the background, problem statement, purpose, significance, and definitions of this community outreach project.

Background

According to the World Health Organization (WHO), more than one million STDs are acquired every day. Each year there are an estimated 357 million new infections worldwide (World Health Organization [WHO], 2016). Many physical and emotional health complications can arise from undetected STDs in adolescents (Wiesenfeld, Lowry, Heine, Krohn, Bittner, Kellinger, & Sweet, 2001). Homosexual and bisexual males account for 68 percent of all STDs in the United States suggesting LGBTQ individuals are at risk for acquiring such infections (Wood, Humara, &

Dowshen, 2016). Extensive studies regarding adolescents as a whole and the LGBTQ sub-population specifically have been conducted for the following STDs: syphilis, gonorrhea, chlamydia, human immunodeficiency virus, and human papillomavirus (CDC, n.d.-2).

Contributing factors to the high STD rates in the LGBTQ adolescent community include peer victimization, family rejection, the lack of LGBTQ office-based health care, and the lack of LGBTQ-inclusive education and prevention in secondary school settings (Hafeez, Zeshan, Tahir, Jahan, & Naveed, 2017). Gay and bisexual adolescents were 34 percent more likely to be victimized than their heterosexual counterparts. The increased likelihood of victimization was highly correlated with increased STDs in the LGBTQ population (Hafeez, et al., 2017). Lack of family support serves as a role in increased STD rates in the LGBTQ adolescent population. A study showed that LGBTQ adolescents without family support were three times more likely to engage in unprotected sex compared to LGBTQ adolescents with family support, leading to higher STD rates (Clay, 2013). In addition, LGBTQ adolescents are 68 percent less likely to reveal their sexual orientation to their healthcare provider compared to their heterosexual counterparts, leading to inadequate healthcare and prevention (Hafeez, et al., 2017). The lack of LGBTQ-inclusive education and prevention in secondary school settings contributes to the higher STD rates in the LGBTQ adolescent community. Over the last decade, sexual education has expanded from the abstinence-only-until-marriage program that was established in the 1980s to include more information regarding STDs and contraceptive methods (Advocates for Youth, n.d.). Due to state legislative barriers or the

lack of organization and curriculum at the school district level, STD education continues to exclude the LGBTQ adolescent community (Human Rights Campaign, n.d.).

In Minnesota, legislation does not serve as a barrier, and the Minnesota Health Commissioner and state and local government are generally supportive in providing health education to the LGBTQ community of high schools (Ehlinger, 2017, p. 2). However, there is still a lack of LGBTQ-inclusive STD education in Minnesota.

LGBTQ-inclusive education is defined as including sexual education information for all sexual orientations, depicting same-sex relationships in a positive matter and ensuring that prevention is not presented in a manner that only applies to heterosexual adolescents (Human Rights Campaign, n.d.). If LGBTQ adolescents are continually left out of STD education and prevention in secondary school settings, the prevalence of STDs among this specific sub population will continue to rise significantly.

Problem Statement

Sexually transmitted diseases are more prevalent in LGBTQ adolescents when compared to adolescents as a whole (Kann et al., 2018). A study conducted by Wood, Humara, and Dowshen (2016) found LGBTQ adolescents are more at risk for contracting an STD due in part to a lack of sexual preventative measures. This study showed that "LGBT adolescents were about half as likely to have used a condom at last intercourse (35.8 percent vs. 65.5 percent)" (Wood, et al., 2016, p.1027). The shortage of sexually inclusive sex education among LGBTQ adolescents that explicitly discusses same-sex sexual relationships and preventative measures for STDs can be partly attributed to the lack of knowledge around such subpopulations (Wood et al., 2016). Due to the lack of education and preventative strategies regarding STDs in LBGTQ adolescents, many

STDs go undetected that can lead to serious complications of physical and mental health in this subpopulation of adolescents (Wiesenfeld et al., 2001).

Significance of the Problem

The lack of prevention and education in most high schools is perpetuating the ongoing problem of higher STD rates in the LGBTQ community as a whole. Only 12 percent of adolescents surveyed nationally in 2015 had taken sexual education courses in which LGBTQ-pertinent information was discussed (Human Rights Campaign, n.d.). Due in part to the lack of education in secondary school settings, 68 percent of new STDs were in homosexual and bisexual men (Wood et al., 2016). The lack of LGBTQ-pertinent sexual education information exclusively highlights the nature of opposite sex relationships. This is true of the current sexual education curriculum in the United States (Gay, Lesbian & Straight Education Network, n.d.). While discussing STDs in the high school setting, generalized STD information addressing adolescents as a whole is not sufficient when addressing the LGBTQ sub-population (Advocates for Youth, n.d.). The increasingly high prevalence of new STDs among LBGTQ adolescent highlights the need for prevention and education programs in secondary school settings.

Purpose

Lesbian, gay, bisexual, transgender, and queer adolescents are at a significantly greater risk for contracting STDs due, in part, to a lack of protective sexual measures in secondary school settings. STD rates among LGBTQ adolescents are a result of the shortage of same sex inclusive programs in secondary school setting (Human Rights Campaign, n.d.).

The purpose of this community outreach project is to identify educational gaps and overcome barriers in providing adequate STD prevention and education to LGBTQ-identifying high school aged adolescents. A needs assessment was completed with the LGBTQ High School Group Director in order to adequately fulfill the school's needs. The LGBTQ-focused prevention program will serve as the basis for how STD education should be delivered to LGBTQ adolescents within local Minnesota high schools to reduce STD rates.

Definitions

The following definitions are outlined so that the reader better understands their use in this community outreach paper.

Abstinence-Only-Until-Marriage Education Program: Teaches abstinence as the only morally correct option of sexual expression for teenagers. This program prohibits including information about contraception and condoms for the prevention of STDs and unintended pregnancy in the curriculum (Advocates for Youth, n.d.).

Adolescent: A young person in the process of developing from a child into an adult ("Adolescent", n.d.). Our paper will use the term adolescents for a young person who is between the ages of 11 and 24

Contraceptives: A method or device, which serves to prevent pregnancy ("Contraceptive, n.d.).

LGBTQ: An umbrella term which includes a number of groups such as those that identify as either lesbian, gay, bisexual, transgender, or queer (Hafeez et al., 2017).

Secondary Education: The second stage traditionally found in formal education, beginning about age 11 to 13 and ending usually at age 15 to 18 (Editors of Encyclopedia Britannica, n.d.).

Sexually Transmitted Disease: A disease characteristically transmitted by sexual contact ("Sexually Transmitted Disease", n.d.). There are various types of STDs including syphilis, gonorrhea, and chlamydia. For the purpose of this study, sexually transmitted diseases will be used throughout instead of sexually transmitted infections, due to the fact that STD is all encompassing.

Summary

Sexually transmitted disease rates in the LGBTQ adolescent population will continue to rise without proper prevention and education in secondary school settings (Advocates for Youth, n.d.). Secondary educational settings remain a pertinent environment for proper education on how to prevent and handle different STDs as they pertain to homosexual adolescents (Gowen & Winges-Yanez, 2014). Chapter Two will focus on highlighting the need for STD prevention and education in LGBTQ adolescents at local high schools and will attempt to identify the main root causes of the rising STD rates in LGBTQ adolescent subpopulation. Chapter two will also outline the specific STDs of importance, general prevention strategies, and how they pertain to the LGBTQ sub-population of adolescents. The end result of this community service project will be the delivery of an STD prevention and education program at a local Minnesota high school to help bridge the gap that the school and community outreach team has identified.

Chapter Two: Literature Review

Introduction

According to the World Health Organization, more than one million STDs are acquired every day. Each year there are an estimated 357 million new infections worldwide (WHO, 2016). Ten million new STD infections occur every year in young adults aged 14 to 24 years old in the United States (CDC, n.d.-a).

LGBTQ adolescents are at an increased risk for acquiring STDs due to lack of specific education in the secondary school settings. Efforts to enhance education and prevention with at-risk adolescents are needed to decrease the prevalence of STD rates among LGBTQ adolescents. There are over 30 different types of sexually transmitted diseases worldwide, while only a few are more prevalent in the adolescent and LGBTQ populations, such as syphilis, gonorrhea, chlamydia, human papillomavirus (HPV), and human immunodeficiency virus (HIV) (WHO, 2016).

Sexually Transmitted Diseases

Risk factors for acquiring STDs include: age at first sexual experience, number of sexual partners, LGBTQ adolescents, lack of education, and poor access to healthcare services (Advocates for Youth, n.d.). Previous research has demonstrated that adolescents are more likely to acquire an STD than adults as 50 percent of new infections occur in adolescents in the United States (Fortenberry, 2018). Many STDs in adolescents go undetected, which leads to serious complications regarding physical and emotional health (Wiesenfeld, et al., 2001).

Syphilis. Worldwide, more than five million new cases of syphilis are diagnosed each year with the majority being in the adolescent population (Hook, 2016). Syphilis is a

chronic bacterial infection caused by a spirochaete, Treponema pallidum. Syphilis can be transmitted through oral, anal, and genital sexual contact, vertically during pregnancy, and blood transfusions. Syphilis is a bacterial infection that can cause a series of variable clinical manifestations during the primary, secondary phases, and prolonged latent phase years or decades after initial infection (CDC, n.d.-b).

Primary syphilis generally occurs roughly three weeks after initial infection and presents with a single painless ulcer at the site of inoculation and enlargement of regional lymph nodes (Sukthankar, 2017). Most common sites of syphilis ulcers are the penile shaft, perineum, anal vault, labia, and cervix. Non-genital ulcer sites may occasionally present on the lips and nipples of both males and females. Secondary syphilis ensues roughly six weeks to six months after initial infection and presents with a symmetrical erythematous rash on the trunk and extremities. Lesions are generally maculo-papular, macular, or scaly, and rarely occur as pustular. Mucosal patches are commonly seen on the tongue and tonsils accompanied by snail-track ulcers seen on the gingival margins and buccal mucosa. Latent syphilis lasts for two years after infection, in which the likelihood of relapse into secondary syphilis is remarkably high (Sukthankar, 2014).

Adolescent men account for a significant amount of new infectious cases of syphilis each year, while men who have sex with men (MSM) reported 58 percent of new infections in the United States from 2016-2017 (CDC, n.d.-b). The incidence of syphilis has been steadily increasing over the years and has progressively shown disproportionate occurrence in homosexual and bisexual men (Hook, 2016). Syphilis is known to be co-occurring with HIV and has the highest prevalence rate in gay and bisexual men, especially of African American descent (Wood, etc., 2016).

Gonorrhea. Gonorrhea is a gram-negative bacterial infection caused by the organism, Neisseria gonorrhoeae. Transmission commonly occurs via oral, anal, or vaginal intercourse. Pregnant women can pass the disease along to their newborns during childbirth (CDC, 2018). Physical manifestations generally take place five to ten days after initial infection and present with urethral discharge, dysuria, pruritus, and occasionally bleeding from the vaginal or penile orifice (Morgan & Decker, 2016). Systemic symptoms may co-occur such as fever, chills, nausea, and vomiting. In general, men more commonly present with symptoms such as urethritis while women will remain asymptomatic greater than 85 percent of the time. Undetected gonorrhea in men and women can disseminate causing serious complications such as polyarthralgias, pelvic inflammatory disease, tenosynovitis, osteomyelitis, endocarditis, and meningitis (Morgan & Decker, 2016).

Gonorrhea is the second most common reported STD in the United States (Morgan & Decker, 2016). According to the CDC, over 350,000 cases of gonorrhea were reported in the United States in 2014, which was a 10.5 percent increase since 2010 (CDC, n.d.-a). In the United States, higher rates of infection continue to show prevalence in certain demographic populations such as adolescents aged 15 to 24 years old and homosexual males compared to heterosexual counterparts (Morgan & Decker, 2016). Prevalence rates of gonorrhea among MSM that reported to STD clinics are estimated to be 15.3 percent greater in those that have HIV (Wood, et. al., 2016).

Chlamydia. Chlamydia trachomatis is a gram-negative obligate intracellular parasite that has two distinct life cycle phases: elementary bodies and reticulate bodies. Elementary bodies are highly infectious and do not divide while reticulate bodies are metabolically

active and do divide. After initial infection, symptoms generally present within seven to twenty-one days after inoculation. Women present with dysuria, urethral discharge, vaginal discharge, or pelvic inflammatory disease (Bebear & de Barbeyrac, 2009). Most chlamydia infections remain asymptomatic, which makes detection extremely difficult.

In the United States, chlamydia is the most common reportable sexually transmitted infection. According to the CDC in 2017, there were over 1.7 million new cases of chlamydia in the United States alone, which was a 22 percent increase from 2013 (CDC, n.d.-a). Like a multitude of other STDs, chlamydia targets demographic populations such as adolescents ages 15 to 24, LGBTQ adolescents, and individuals with multiple sex partners. Adolescents aged 15 to 24 years old account for over 50 percent of newly acquired chlamydia infections each year (CDC, n.d.-a). One study found that adolescents aged 15 to 24 years that identify as lesbian or bisexual were at a greater risk of contracting chlamydia compared to their counterparts (Singh, Fine, & Morrazzo, 2011). The CDC recommends screening for all women less than 25 years of age and MSM (CDC, n.d.-b). Education in adolescent populations needs to be enacted for those at risk for acquiring STDs such as chlamydia.

Human Immunodeficiency Virus. Human immunodeficiency virus is a retrovirus that weakens a person's immune system by destroying important cells that fight disease (CD 4 T-Cells) and infection. Individuals can contract or transmit HIV only through certain activities such as anal or vaginal intercourse without the use of condoms or improper needle/syringe usage. Infected bodily fluids (blood, semen, vaginal secretions) must come in contact with and break mucous membrane barriers in order to enter the bloodstream and infect individuals. HIV often goes undetected in the early stages due to

individuals being asymptomatic and constitutional symptoms mimicking numerous viral infections such as the common cold or influenza (CDC, n.d.-a). If symptoms do present themselves with HIV, they may include fever, fatigue, myalgias, lymphadenopathy, sore throat, rash, and headaches (Sax, 2017).

According to the CDC, individuals that acquire syphilis, gonorrhea, or chlamydia are at a higher risk for acquiring HIV (CDC, n.d.-a). In 2010, a study was conducted in Florida that found among all persons diagnosed with infectious syphilis, 42 percent were infected with HIV (Florida Health, 2018). Acquiring HIV while having an STD currently or in the past may be attributed to multiple sex partners, risky sexual behaviors, anonymous sexual partners, and engaging in sexual relations while under the influence of alcohol or drugs (CDC, n.d.-a).

In 2016 gay and bisexual men accounted for 67 percent of the 40,324 new HIV diagnoses with majority being in adolescent males ages 13 to 24 (CDC, n.d.-b) Adolescent homosexual men, bisexual men, and transgender women who have sex with men have the largest number of new HIV infections in the United States compared to heterosexual individuals. Undetected HIV can be detrimental as seen in 2015. The deadly retrovirus killed 6,531 gay and bisexual men in the United States alone (CDC, n.d.-b). Clinicians should maintain a high index of suspicion in male patients that identify as gay or bisexual when evaluating adolescents with fever, lympthadenopathy, myalgias, rash, and headaches (Wood, et al., 2016). Education in at risk adolescent populations such as LGBTQ adolescents needs to be enforced in secondary education settings to reduce the prevalence of HIV.

Human Papillomavirus. Human Papilloma Viruses are double-stranded DNA viruses that constitute the Papilloma Virus genus of the Papillomaviridae family (CDC, n.d.-b). Like the majority of STDs, HPV is most prevalent in adolescents aged 15 to 25 years of age or within first decade of sexual debut (Palefsky, 2018). It is estimated that roughly 80 percent of all sexually active adolescents and adults have been exposed to HPV at some point in their lifetime. Many strains go undetected, as they are transient, while others are more symptomatic and detrimental. HPV viruses are highly species specific in that HPV only affects humans. There are over 200 species that can be further divided into subgroups dependent on mucosal or cutaneous tissue invasion (Palefsky, 2018).

For the purpose of this study, HPV types 6, 11, 16, and 18 will be discussed extensively due to the prevalence in the LGBTQ adolescent population. HPV type 6 and 11 account for 90 percent of the genital warts or Condyloma accuminata reported globally (Palefsky, 2018). HPV types 6 and 11 can appear as skin-colored, flat, papillary, or pedunculated lesions with a cauliflower like appearance. Although most warts are asymptomatic, some can cause burning, itching, bleeding, decreased hygiene, or irritation. Although there are over 90 identified HPV strains, HPV 16 and 18 are linked to oncogenic properties which could cause detrimental effects. (Palefsky, 2018).

Risk factors for progression of cervical or anal dysplasia in female and male adolescents respectively include HIV, increased number of sexual partners, homosexual or bisexual males, or the presence of external genital or anal warts (Palefsky, 2018). Human papillomavirus causes a wide variety of clinical syndromes in LGBTQ adolescents based on site of inoculation such as anogenital warts, anal cancer, or cervical cancer (Wood, et al., 2016). HPV vaccinations are available to men and women starting

at the age of 11 to prevent types 6, 11, 16, and 18 from being acquired in adolescents throughout adulthood (Palefsky, 2018). Due to the high-risk nature of STDs in LGBTQ adolescents, education needs to be implemented in secondary school settings to increase knowledge regarding infections and decrease the prevalence of transmission.

Contributing Factors to High STD Rates in LGBTQ Adolescents

There are many contributing factors to the higher incidence of STDs in the LGBTQ adolescent community. Factors include peer victimization, family rejection, lack of LGBTQ office-based health care, and the lack of LGBTQ-inclusive education and prevention in secondary school settings (Hafeez, et al., 2017). LGBTQ adolescents often face peer victimization in school settings leading to increased aggression, engagement in truancy, struggles with mental health issues, and high-risk sexual behaviors. According to a study completed by Hafeez et al. (2017), gay and bisexual adolescents were 34 percent more likely to be victimized than their heterosexual counterparts and accounted for 50 percent of the disparities between LGBTQ and heterosexual adolescents in regards to emotional distress (Hafeez, et al., 2017). Gay, lesbian, and bisexual individuals are often flagged for such victimization due to their orientation, which is generally coined with a negative connation in the public eye. Studies have shown that physical and sexual victimization in adolescents is linked to increased STDs within the subpopulation (Haydon, Hussey, & Halpern, 2011).

Family rejection plays an important role for increased STD rates among LGBTQ adolescents. A study conducted with 245 LGBTQ adolescents showed that family acceptance of orientation correlated with overall better physical and emotional health (Hafeez, et al., 2017). Many LGBTQ adolescents that are not accepted by their family

often end-up homeless and do not have adequate access to health care and lack essential STD prevention knowledge (Hafeez, et al., 2017). LGBTQ adolescents that lack family support are three times more likely to engage in unprotected sex, increasing their likelihood for contracting an STD (Clay, 2013). When family support is present LGBTQ adolescents experience positive health outcomes even in the face of significant institutional barriers (Hafeez, et al., 2017).

LGBTQ adolescents that do have access to adequate healthcare rarely report their sexual identity to providers during health care visits, and when they do, it has been shown that clinicians lack the necessary skills to address specific health concerns by LGBTQ adolescents (Hafeez, et al., 2017). An overwhelming 68 percent of homosexual adolescents did not discuss their sexual identity with their healthcare providers (Hafeez, et al., 2017). Even when sexual identity is revealed to a healthcare provider, the "lack of training can strain the therapeutic relationship between the provider and patient. It can influence the quality of care and appropriate delivery of health care" (Hafeez, et al., 2017 para. 5).

The lack of LGBTQ-inclusive STD prevention and educational programs in secondary school settings inhibit LGBTQ students from acquiring the knowledge to reduce the occurrence of STDs. STD education and prevention of STDs for LGBTQ adolescents will be the contributing factors that are focused on as a part of this community outreach project (Hafeez, et al., 2017).

Types of Sexual Education Programs

The first sexual education program implemented and supported by the Federal Government was the Abstinence-Only-Until-Marriage Education Program (Advocates for

Youth, n.d.). The Abstinence-Only-Until-Marriage Sexual Education Program received significant support from the Ronald Reagan and George W. Bush administrations in which the focus was exclusively on abstaining from sexual intercourse outside of marriage. The Abstinence-Only-Until-Marriage Program highlighted the failure rates of birth control and did not include any STD content (Kantor, Santelli, Teitler, & Balmer, 2008). Seventy percent of all single U.S. females and 62 percent of all single U.S. males have initiated in vaginal intercourse by age 18 eluding to the ineffectiveness of the Abstinence-Only-Until-Marriage Program (Kantor, et al., 2008). If adolescents are going to engage in sexual intercourse, steps need to be taken to prevent the prevalence of STDs and pregnancy (Advocates for Youth, n.d.).

In 2010, the Teen Pregnancy Prevention and Personal Responsibility Education Programs were established and helped initiate the United States to take the first step to broadening sexual education curriculum (Advocates for Youth, n.d.). The Teen Pregnancy Prevention and Personal Responsibility Education Programs award grants to state organizations that aim to educate adolescents on both abstinence and contraception use to decrease the prevalence of pregnancy and STDs (Family & Youth Services Bureau [FYSB], 2016). According to the FYSB, "the program targets adolescent ages 10-19 who are homeless, in foster care, live in rural areas or geographic areas with high teen birth rates, or come from racial or ethnic minority groups" (FYSB, 2016, para 2). Since the start of the Teen Pregnancy Prevention and Personal Responsibility Education Program in 2010, 40.8 million dollars have been awarded to numerous organizations through the United States and in 2015, approximately 98,520 adolescents were served (FYSB, 2016). While advancements have been made in the educational sector to decrease the prevalence

of STDs, the LGBTQ community has been continually left out in the curriculum and program development. At the national and state level, there are legislative issues that serve as a barrier to adequate sexual education curriculum development and implementation.

LGBTQ Education Legislation Restrictions

Currently, there are eight states (Alabama, Arizona, Louisiana, Mississippi, Oklahoma, South Carolina, Texas, and Utah) restricting the inclusion of LGBTQ content in sexual education curriculums (Human Rights Campaign, n.d.). An article regarding the prohibitory legislative language in these states outlined:

> While some states like Arizona, prohibit instruction that promotes a homosexual life-style, others like Alabama, require teachers to emphasize […] that homosexuality is not a lifestyle acceptable to the general public and that homosexual conduct is a criminal offense under the laws of the state. In addition to this list, states such as Florida and North Carolina mandate that sex education focus on monogamous heterosexual marriage (Human Rights Campaign, n.d., p.3)

However, 12 states do require sexual orientation be discussed, but most of the content and extent to which LGBTQ applicable material is covered is decided at the local level or by individual educators (Human Rights Campaign, n.d.). Only 8 to 44 percent of sexual education in middle and high schools contained LGBTQ-inclusive content in states where it is legal to do so according to the CDC's 2012 School Health Profiles (Demissie, et al., 2013). If even present at all, LGBTQ sexual education curriculum inclusiveness is inconsistent in the classroom in the United States (Human Rights Campaign, n.d.).

Research shows that STD prevention programs have impacted student behaviors significantly by reducing the frequency of sexual intercourse, increasing the use of condoms, and decreasing occurrence of STDs and pregnancies in adolescents as a whole (Gillman, Bryan, Hansen, 2016). No such sexual education programs are eligible for federal funding due to the prohibitory mandates around birth control utilization (Advocates for Youth, n.d.). The common misconception is that non-abstinence sex education programs will increase the frequency of sexual behavior in adolescents; however, this is not true (Advocates for Youth, n.d.). A study completed by Kirby (2007) found that comprehensive sexual education programs resulted in 40 percent delay in sexual initiation (Kirby, 2007). Non-inclusive sexual education programs can have a negative impact on LGBTQ adolescent by promoting fear and exclusion (Advocates for Youth, n.d.). Advocates for Youth stated,

> [The existing programs] promote fear of same-sex attraction: Young persons may sense affection and even infatuation for a member of the same sex. This is not the same thing as 'being' homosexual. Any same sex 'sexual experimentation' can be confusing to young persons and should be strongly discouraged (Advocates for Youth, n.d., p. 4).

With the current language and negative legislation guidance regarding STD preventative programs, studies have shown a rising incidence of STDs in the LGBTQ adolescent community (Advocates for Youth, n.d).

Current Minnesota LGBTQ Sexual Education Climate

In the state of Minnesota, the initiative around LGBTQ-inclusive sexual education is quite different from the national landscape. According to the Minnesota Department of

Health, “over 60 percent of teachers in Minnesota believe sexuality education is one of the most important topics they teach” (Ehlinger, 2017, p. 2). The support for the LGBTQ adolescent community is evident in the mission statement signed by the health commissioner of Minnesota (Ehlinger, 2017, p. 2),

> Beyond preventing STDs and unintended pregnancies, sexuality education can help improve academic success; prevent sexual abuse, dating violence, and bullying; help adolescents develop healthier relationships; delay sexual initiation; advance gender equity; and reduce sexual health disparities among lesbian, gay, bisexual, transgender, and queer (LGBTQ) adolescent (Ehlinger, 2017, p. 2).

While support for LGBTQ education among adolescents exists in the state of Minnesota, specific STD curriculum is not in place. This community service project will focus on delivering a high-quality STD education and prevention program at Richfield High School located in Minneapolis. The goal in partnering with the existing LGBTQ adolescent group at the high school is to reduce the STD rates and increase prevention utilization by the local LGBTQ adolescents within the Minneapolis suburb.

LGBTQ-Inclusive STD Education

The lack of LGBTQ-inclusive STD education programs at high schools in the United States not only leads to adverse outcomes in regard to STD prevention, the educational shortcoming also perpetuates “interpersonal stress and discrimination [in] their homes, schools or communities [and] can lead to adverse mental and physical health outcomes” (Herek, 1998, p. 123). According to a study completed by the CDC, of 150,000 students, LGBTQ adolescents engaged more frequently in practices that could threaten their welfare, including suicide, tobacco use, alcohol use, and other drug use

(Kann et al., 2011). The increasingly high number of LGBTQ adolescents that engage in the above behaviors result in intercourse at an earlier age without STD prevention utilization. Risky behavior among the LGBTQ population of adolescents can be largely attributed to the lack of support not only at home but in secondary school settings as well (Advocates for Youth, n.d.). An alarming 22 percent increase of new STD occurrences was observed within the LGBTQ community between 2008 and 2010 (CDC, n.d.-b). In 2010, gay and bisexual men only made up four percent of the male population while accounting for 68 percent of all STDs and 78 percent of the cases of HIV (Wood, et al., 2016).

The increasing STD trends seen in the LGBTQ adolescent populations will continue to rise without addressing the health inequalities faced by the LGBTQ community (Human Rights Campaign, n.d.). A significant improvement in STD education for the LGBTQ adolescent community must be addressed in order to prevent the deteriorating mental and physical health among LGBTQ adolescents. STD education programs that are defined as LGBTQ-inclusive should include the following (Human Rights Campaign, n.d.):

- Include information for all students about sexual orientation and gender identity that is medically accurate and age-appropriate.
- Be designed with the needs of LGBTQ students in mind and be implemented with awareness that all classes are likely to have some LGBTQ students.
- Include depictions of LGBTQ people and same-sex relationships in a positive light in stories and role-plays.

- Use gender-neutral terms such as “they/them” and “partner” whenever possible.
- Ensure that prevention messages related to condom and birth control use are not relayed in a way that suggests only heterosexual adolescent or cisgender male/female couples need to be concerned about unintended pregnancy and STD prevention.
- Avoid making assumptions about students’ sexual orientation or gender identity (Human Rights Campaign, n.d., p. 6).

In summary, implementing LGBTQ-inclusive STD education in secondary school settings will have a significant impact on reducing the STD rates in this subpopulation of adolescent by enabling them with the necessary knowledge for prevention.

Conclusion

STDs are a major health concern among adolescents as a whole, while STDs within the LGBTQ population have steadily increased even more significantly over the last two decades (Wood, 2016). In regard to sexually active adolescents, studies have suggested that homosexual and bisexual behavior in men is associated with increased risk for contracting STDs compared to heterosexual individuals (Hafeez, 2017). There are many barriers keeping LGBTQ adolescents from receiving STD education. Barriers include prohibitory legislation, lack of LGBTQ inclusive sexual education programs, lack of LGBTQ office-based health care, and the lack of LGBTQ-inclusive education and prevention in secondary school settings (Hafeez, et al., 2017). Kaestle and Waller (2011)

stated, “the invisibility of sexual minorities and sexual minority issues in many sex education and intervention programs may leave these groups vulnerable to STDs and misperceptions about their level of risk” (p. 161). Through LGBTQ inclusive sexual education in secondary school settings, prevention of STDs reaches its maximum effectiveness to practice sexuality with minimal health risks (Wood, 2017). The delivery of STD education and prevention in secondary school settings will equip LGBTQ adolescents with the knowledge necessary to lower STD rates in their community. As a part of this community service project, an STD presentation will be given to the LGBTQ community at Richfield High School in a suburb of Minneapolis, Minnesota. The goal will be to provide education and prevention strategies to the LGBTQ adolescents with the hope that it will help combat the increasing STD rates in this subpopulation of adolescents. In Chapter 3, the methodology of the community service project will be outlined.

Chapter 3: Methodology

Introduction

Over the recent years, Richfield Senior High School has grown tremendously in their student body as well as the diversity of their population including but not limited to demographic, socioeconomic status, and sexual identity. Richfield Senior High School reported that approximately two percent of their student population ages 14-18 identify as either lesbian, gay, bisexual, transgender, or queer (LGBTQ). In their student body, that is approximately 22 students of the 1,113 total population. According to a student survey Richfield High School conducted in 2017, the percentage of identifying LGBTQ high school aged students has increased by three percent, which is up from one percent in 2000. The prevalence of STD rates among LGBTQ adolescents has steadily increased over the last decade with minimal advancement of education to the teenage LGBTQ community. Due to funding and government regulations, not all high schools in Minnesota are able to provide specific STD education to their LGBTQ student populations.

The purpose of this community service project is to provide prevention and education strategies regarding various sexually transmitted diseases (STDs) that exist among LGBTQ identifying adolescents. The community service project will target a local high school's LGBTQ program in Minnesota. Richfield Senior High School began a gay, lesbian, or whatever (GLOW) program eleven years ago to integrate identifying LGBTQ adolescents with one another and provide pertinent resources such as mental health recognition, social concerns, sexuality, and career opportunities. It is within the GLOW

program, that this project will implement our STD education and prevention program for the adolescent LGBTQ population.

Rationale for the Project

The prevalence of STDs in the LGBTQ adolescent community is exponentially rising despite the push for LGBTQ-inclusive sex education by the state of Minnesota. A study completed by the Minnesota Department of Health in 2010 found 62-69 percent of ninth grade students reported receiving their sexual education information from their friends rather than an educational institution or health professional (Ehlinger, 2017, p. 2). Despite having support from the state government, there is no structured curriculum for LGBTQ sexual education, which leads to individual educators developing their own. Both the misguidance from peers and the lack of standardized education contributes to the rising STD rate in adolescents. The goal of the project is to implement an educational program that gives an overview of all applicable STDs from an LGBTQ perspective, as well as outline prevention strategies. This community service project aims to properly educate LGBTQ adolescents regarding STD health and prevention to equip them with the knowledge and prevention tools to lower STD rates in their community.

The community service project team met with the GLOW Program Director at Richfield Senior High School to discuss a variety of education opportunities that would significantly benefit the LGBTQ sub-group and agreed to work with the community service project team (see Appendix A). During the meeting, the community service project team, in conjunction with the GLOW Director, agreed that STDs within the LGBTQ adolescent group is a rising problem that should be more adequately addressed. There is a lack of LGBTQ-inclusive STD education, and as a result, the GLOW Director

reiterated the significant need to address the STD disparity among LGBTQ population at Richfield High School.

Population

Richfield Senior High School is located south of Minneapolis, Minnesota and has a student body size of approximately 1,113 students, which comprises grades 9-12. Over 70 percent of the total population of Richfield High School is made up of a diverse group including: LGBTQ, Hmong, Muslin, Hispanic, and African American individuals and families (Public School Review, n.d.). This community service project will focus on the LGBTQ individuals from grades 9-12 that attend Richfield Senior High School's GLOW program.

The GLOW program began in 2008 and meets twice per month during the school day with approximately 28 students in attendance for each session. GLOW is not associated with any other program at the state or national level but is a student group that supports and affirms all genders and identities that Richfield High School has created for their own community. Each meeting lasts roughly 45 minutes in which all students are able to engage in conversation around issues impacting the LGBTQ community at a state, national, and global level. The program also creates a safe and supportive space for all of the student body to gather and share their own thoughts, ideas, and questions around the LGBTQ community. The program is run by one of the school social workers although other educators and staff are welcome to join and offer input. It is important to note that group participation in the presentation and discussion will not be anonymous as each GLOW student will know each other and will interact openly. The community service project team will not take attendance or ask for names.

Project Plan and Implementation

The project plan is to develop a presentation with a focus on STD prevalence and prevention from the LGBTQ adolescent's perspective in an effort to educate the GLOW group at Richfield High School.

The research team first set out to research the latest information on STDs affecting the LGBTQ adolescent's community and relevant statistical information. In fact, homosexual boys between 14 to 24 years old in the United States accounted for 82 percent of new HIV infections in 2016 (CDC, n.d.-b). The lack of STD education and prevention in primary school settings is one of the major contributing factors to the increase in STD rates amongst LGBTQ adolescent population. The Human immunodeficiency virus (HIV) is a significant problem amongst homosexual males, but it is not the only concerning STD affecting the LGBTQ adolescent community (CDC, n.d.-b). Homosexual and bisexual men account for 58 percent of all syphilis cases in 2016-2017 with adolescents as a whole aged 14 to 24 accounting for at least 50% of all new chlamydia cases in the United States (CDC, n.d.-a).

A presentation will be developed that outlines the symptoms, applicable statistics, and prevention with an LGBTQ focus for a variety of STDs. Such STDs that will be presented include human immunodeficiency virus (HIV), human papilloma virus (HPV), syphilis, gonorrhea, and chlamydia. The community service research team will present the LGBTQ-focused STD material on May 1st during the GLOW program's designated 45-minute class period at Richfield High School. The following points will be presented for each of the previously mentioned STDs in a PowerPoint to the class: overview, applicable LGBTQ-specific statistics, risk factors, symptoms, treatment, and

complications of each STD identified. The information presented will be at a High School level. For example, when discussing the treatment for chlamydia, the recommendation will be to schedule an appointment with a medical provider to be tested and treated for with antibiotics if indicated. The presentation will not specify that 1 gram of azithromycin is used to treat chlamydia, as the presentation is not being given to medical professionals. Prevention strategies will be presented, including condoms, long-term relationships, annual testing, vaccinations, and PREP therapy. Following the presentation, a question and answer session will be held to ensure all members have an opportunity to address all of their concerns and unanswered questions.

The presentation will be made and given according to the LGBTQ-inclusive education definitions outlined in the "LGBTQ-Inclusive STD Education" section in Chapter Two (see Appendix B). All materials will be discussed and presented to the Richfield Senior High School Administration and GLOW Director for approval with adequate time for necessary modifications before the May 1st presentation. In addition, the team will be partnering with Clinic 555 in Ramsey County. This free clinic will be providing educational materials such as pens and hats with their clinic information. The materials will be given to the GLOW Director and distributed when she deems appropriate.

During the project, if a participating GLOW student approaches the community project service team members with specific individual health questions or concerns during the presentation, the students will be referred to the free, on campus Richfield Health and Resource Clinic for a licensed medical professional to assess their concerns. This protocol will be followed according to established GLOW guidelines. The

community service project team will not offer medical advice on an individual basis. An IRB application was submitted and approved by Bethel University to ensure the privacy and protection of all individuals who participated in the interview (see Appendix C).

Potential Project Barriers

The community service project aims to educate LGBTQ adolescents on applicable STD health and prevention; however, there are potential project barriers that may limit its effectiveness. A foreseen barrier to the community service project is the GLOW group attendance the day of the presentation. Although attendance may serve as a potential barrier to the community service project, the goal is aimed towards educating as many students as possible for them to share with their colleagues.

Administrative approval for the presentation will be needed before it is given at the GLOW organization meeting at Richfield Senior High School. If approval is not obtained initially, the community service project team will sit down and meet to discuss modifications of the presentation with school officials. While approval is of relevant concern, time should not be a major inhibiting barrier as long as the initial approval is requested with adequate amount of time to allow for necessary modifications.

While the administrative approval to implement a LGBTQ-based STD presentation was not a problem at Richfield High School, the community service project team recognizes that the lack of LGBTQ support could have been a barrier had a different high school been selected. Richfield High School has already established a LGBTQ organization called GLOW, which serves to support its LGBTQ adolescent population.

The school district's full support of the LGBTQ students made the implementation of this community service project a possibility.

The lack of successful communication and connection with a student audience is a barrier that could prevent the community service project team from delivering proper STD education. To overcome this barrier, the students will be encouraged to ask questions throughout the presentation and ensured that the team is there to equip them with STD knowledge that will enable them to live a healthier life. The goal is to make the presentation as interactive as possible to ensure that the students are engaged. One way in which engagement will be promoted is by asking the audience questions throughout the presentation. For example, the following question might be asked at the beginning of the presentation: "What STDs are common in the adolescent population?". At the end, questions about the presentation will be answered as needed to ensure that the participants feel supported and are properly educated.

Although there are several barriers that could prevent the proper implementation of this community service project, the community service project team has considered each barrier, and a plan has been put in place to lower the probability of the issues arising.

Project Tools

STD education and prevention can be quite complex and can cause significant stress or anxiety to a student's life. After the community service project is completed, the presentation will be given to the GLOW director to reference if questions arise in the future. The use of the free, onsite clinic at Richfield High School will be encouraged in reference to STD problems or concerns. The presentation outlines signs, symptoms,

prevention, and treatment of STDs that predominately exist within the LGBTQ high school aged population. The STDs that will be included are human immunodeficiency virus (HIV), human papilloma virus (HPV), syphilis, gonorrhea, and chlamydia. In the presentation, close attention will be given to various methods of prevention regarding STDs, such as condoms, long-term relationships, annual testing, vaccinations, and prep therapy. Due to the extensive research evident in the literature review of the community service project paper, the research team believes that providing education and prevention strategies to the students of the GLOW program will be a helpful first step in reducing the prevalence of STD rates in this community.

Conclusion

A needs assessment was performed with the GLOW's program director at Richfield Senior High School, which concluded that the LGBTQ students in the GLOW program have little knowledge regarding STDs that manifest within their specific population. This community service project decided to direct its efforts toward the goal of providing the educational tools the GLOW program will be able to reference for further sessions to come. The research identified many possible methods that could contribute to increasing the knowledge and education around STDs to LGBTQ adolescents ranging from legislation to parents talking to their children at home. After discussing such techniques with the GLOW program director, the research team was able to narrow down these methods that would make the biggest impact on the students and be time sensitive for the research team and program director.

Chapter 4: Discussion

Introduction

The goal of the community service project was to provide education and prevention strategies regarding STDs to an LGBTQ high school aged population. The high school was located in Richfield, Minnesota that already had an LGBTQ group in place (GLOW). The final outcomes of the community service project are discussed below along with successes and limitations. In conclusion, future projects will be suggested to overcome such limitations and further improve the LGBTQ STD educational presentation for Richfield High School.

Summary of results

Richfield High School has a large population that identifies as LGBTQ. Richfield does not currently have an STD curriculum in place solely for the LGBTQ sub population. The GLOW program director acknowledges that STDs have steadily increased over the years due to the lack of education. The GLOW program director believes that a specifically created LGBTQ STD program for the high school students would be beneficial to increase education and prevention.

The STD presentation that was created and implemented for the GLOW program at Richfield High School had three main goals. The goals were to provide awareness of various STDs that present most often within the LBGTQ adolescent population, provide education, and promote prevention strategies. To meet these goals, a plan with three parts was implemented.

First, a meeting with the Richfield GLOW program director was initiated to further our understanding of the specific needs for the LGBTQ adolescent population.

The meeting provided information to the attendance size, dates of their regular meeting times, and ideas as to how best present the information. The date and time were confirmed along with the format for the presentation that would be suit the high school aged audience.

Second, a presentation was created by the community service project members in a power point format with information regarding various STDs such as chlamydia, gonorrhea, HIV, HPV, and syphilis. The presentation included exhibiting symptoms, risk factors, prevention, and treatment. The power point was created in such format that would be easily readable and understandable to the high school population. The pictures used in the presentation were approved by the GLOW program director prior to presenting to the students.

Third, a connection was made with Clinic 555 out of St. Paul, Minnesota. The clinic has a non-profit government funded sexual education program that is committed to providing educational resources to the community that we were able to incorporate into our community project. The clinic provided resources to supplement the presentation with items such as condoms, key chains, lubrication, STD self-examination guide, bags, additional resources, and pens. The resources were gathered and given to the GLOW program director to distribute to the GLOW students as she saw appropriate.

On the day of the presentation we met with the GLOW program director to review our presentation and provide her with the resources Clinic 555 had donated. There were 23 students in attendance for the time of the presentation. We introduced ourselves using proper pronouns and started the meeting with the invitation that questions were welcome at anytime. We made a specific effort to ensure the atmosphere was casual and non-

formal to keeps students engaged and at ease. The students were given the opportunity to voluntarily introduce themselves and their pronouns. This was not mandatory as we wanted to keep all information confidential. The presentation from start to finish was 40 minutes long and the students were engaged and asked questions throughout.

Following the presentation, we were given feedback from the GLOW program director and she was very satisfied with the resources presented. The director asked if she could use our presentation for future GLOW students that go through her program at Richfield High School.

Overall, we agree that our research from Chapter 2 was supported by our general observations from our presentation delivered to the GLOW program. Clinic 555 and Richfield High School were introduced to each other through our community service project and we hope they continue to partner in the coming years regarding STD prevention and education for the LBGTQ adolescent population at Richfield. We further hope that our presentation will be utilized in the future to provide education and prevention of STDs within the LGBTQ population.

Limitations

The project team anticipated several limitations to carrying out the STD presentation including GLOW student attendance and lack of successful communication and connection with the student audience. With 23 students in attendance and consistent attention throughout, demonstrated by inquisitive questions and even correct answers to questions posed by the presenters, these two barriers proved to not be an issue during the project implementation. The only limitation the day of the project was the lack of proper technology setup in the presentation room. Roughly ten minutes of project time was used

to set up the technology to allow for a successful presentation; however, all of the material was presented and there was adequate time at the end for student questions. Overall, the project barriers outlined in Chapter 3 were well managed to prevent project interference.

Future Projects

The project team has created a relationship between Richfield's GLOW Program and Bethel University's PA Program. The project team member's hope is to encourage future Bethel University PA cohorts to provide an annual education event for the GLOW Program. This event can be hosted at any time during the academic school year and could serve as a potential community service project for future first year Bethel PA students. With the rise of STDs in the LGBTQ adolescents, the continued prevention and education of this community is of utmost importance. In addition, the STD educational material created as a part of this community service project has been to the GLOW Director for future use. The goal of this project was to provide LGBTQ-inclusive STD prevention and education to the LGBTQ adolescents at Richfield High School. In doing so, the hope is that the material created will set the standard for what LGBTQ-inclusive STD prevention and education should look like in the state of Minnesota.

Conclusion

The community service project was completed to provide LGBTQ-inclusive STD prevention and education to the GLOW Program at Richfield High School. Overall, the material was well accepted by the GLOW students who were attentive and asked inquisitive questions both during and after the presentation.

In the literature review, the project focused on specific STDs affecting the LGBTQ adolescent community, including syphilis, gonorrhea, chlamydia, HIV, and HPV. Furthermore, LGBTQ-inclusive education standards were outlined. While Minnesota's LGBTQ adolescents have the support of the state government and the majority of educators, there is no standard STD curriculum in place. With STDs steadily increasing over the last two decades in the LGBTQ adolescent population, it is apparent that LGBTQ-inclusive STD prevention and education is needed to combat these trends in the state (Wood, 2016).

However, the community project team acknowledges that there are many other contributing factors to the rise in STDs in the LGBTQ adolescent population that should be analyzed and addressed. These factors include peer victimization, family rejection, and lack of LGBTQ office-based health care. Future project plans include future STD educational events coordinated by future Bethel PA Program cohorts as well the future use of the STD prevention and education materials created at the discretion of the GLOW Program Director. The community service project team recommends that other school districts in the state of Minnesota should adopt similar LGBTQ-inclusive STD prevention and education materials. This will ensure LGBTQ adolescents have accurate and LGBTQ-inclusive STD information to enable to them to make more informed decisions in regards to their sexual health.

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APPENDIX A

GLOW Program Approval


Project
Inbox ×
Marisa Zimmerman <Marisa.Zimmerman@rpsmn.org>
to me
Sun, Jan 13, 9:52 AM
Hello,
I am willing to work with Kalie Johnson and Hayden Middleton for their community service thesis project.
Sincerely,
Marisa Zimmerman
Reply
Forward

Appendix B

STD Education Training Materials

The research team partnered with Clinic 555 of St. Paul, Minnesota. Clinic 55 donated education materials such as drawstring bags, condom keychains, pencils, pens, hand sanitizer, and brochures regarding access to healthcare in the area. Other materials used for education training included a presentation desiged by the research team.

Appendix C

Bethel University IRB Approval

BETHEL
UNIVERSITY

4/30/2019

Kalie Johnson and Hayden Middleton,

As granted by the Bethel University Human Subjects committee as the program director, I write this letter to you in approval of Level 3 Bethel IRB of your project entitled: "Prevention and Education of Sexually Transmitted Diseases within the Lesbian, Gay, Bisexual, Transgender and Queer High School Aged Adolescents." This approval is good for one year from today's date. You may proceed with data collection and analysis. Please let me know if you have any questions.

Sincerely;

Cynthia G. Goetz, MPAS, PA-C
Interim Program Director
Physician Assistant Program
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