A CRITICAL LITERATURE REVIEW OF BARRIERS TO SEXUAL HEALTH CARE FOR THE OLDER ADULT POPULATION WITH A PROPOSED INTERVENTION

by

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ABSTRACT

The current state of sexual health in the United States is a public health concern as incidence rates for sexually transmitted diseases (STDs) are at the highest level ever reported. According to the Center for Disease Control and Prevention, between 2010 to 2014, incidence rates of chlamydia, gonorrhea, and syphilis increased dramatically in the older adult population. Older adults are experiencing a significant rise in STD diagnoses. Residents of long-term care facilities are especially vulnerable to contracting a STD than other older adults due to a lack of aging-related sexual education for both residents and staff, as well as negative perceptions of older adult sexuality by medical staff. This literature review examines barriers to sexual health care for older adults and interventions that have been created to reduce these barriers. The results are categorized by: 1) attitudes and beliefs towards the sexual health of older adults, 2) attitudes and knowledge of health professionals, and 3) sexual health interventions created to address barriers to sexual health care for older adults. Findings suggest that older adults are unlikely to initiate conversations about their sexual health with their medical provider due to feelings of embarrassment and a lack of knowledge about aging-related sexual health issues. Findings also suggest the attitudes and behaviors of medical professionals in regards to older adult sexuality are based on societal misconceptions and a lack of training in aging-related sexual health. Current interventions are few in number and lack the elements to properly educate medical

professionals and older adults on aging-related sexual health. An intervention is proposed here to include aging-related sexual health training for nursing staff at long-term care facilities and an educational series for the residents. The proposed intervention includes sex education and the opportunity for medical professionals to build their capacity for older adult sexual health care and risk management. The public health significance lies in that STDs, while mostly preventable, unnecessary burden on our health care system. Future research needs to be conducted to account for additional barriers and effective evidence-based interventions to reduce barriers.

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1.0 INTRODUCTION

The current state of sexual health is a public health concern as rates for STDs, specifically gonorrhea, chlamydia, and syphilis, are at the highest level reported with more than two million cases in 2016 (CDC, 2017). Sexually transmitted diseases (STDs) are infections that are passed from one person to another through sexual contact (CDC, 2018). A dramatic increase of STD diagnoses from 2010 to 2016 can be linked to a lack of funding for prevention programming and a decrease in the amount of comprehensive sex education in school curricula around the nation (CDC, 2017; Planned Parenthood, 2017). Without proper sex education, people are not equipped with proper disease prevention techniques and are more susceptible to contracting a STD.

Despite common societal misconceptions that individuals 65 and older are completely post-sexual, there is no evidence that supports this claim. STDs significantly affect older adults. Older adults account for 1.3% of all STDs and are experiencing a disproportionate rise in diagnoses (CDC, 2017; Hillman, 2008; Lindau, et al., 2007). Between 2010 to 2014, prevalence rates of chlamydia, gonorrhea, and syphilis all increased by at least 50% in older adults (CDC, 2016). A lack of sex education and effective sexual health interventions play a key role in the significant increase (Planned Parenthood, 2016). These two factors create a barrier to sexual health care for older adults. Barriers to sexual health care lead to a lower likelihood that older adults will seek medical treatment for sexual health concerns and increase the potential of contracting an STD (Kleinplatz, 2008; McAuliffe, 2007; Taylor & Gosney, 2011).

The public health significance of older adults being diagnosed with STDs is that, while largely preventable, STDs add an unnecessary financial burden on the United States' heath care system and older adults themselves. In 2012, the average household that received Medicare spent 13.9% of their income on health care in general in comparison to households without Medicare, who only spent 5.2% of their income on health care (Kaiser Family Foundation, 2012). The cost of treating an STD increases the amount a household spends on healthcare. By understanding the complex issues that lead older adults to contract a STD, public health professionals can decrease the cost of healthcare for the senior population and the financial burden it places on the United States' healthcare system. Currently there is insufficient research that identifies effective interventions and educational methods to prevent the transmission of STDs in other populations.

This literature review examines how barriers to care for older adults in regards to their sexual health impacts the prevalence of STDs within the population and describes effective interventions that can eliminate these barriers. The background of sex education will be presented in a historical context. Demographic trends of older adults and STDs can be better understood through discussion of the history of sexual education and the values that influence how medical professionals and older adults view sexuality. Methods of research will be described, with findings and interventions presented. Discussion will outline implications for future interventions and present a proposed intervention based on the literature review. Suggestions to reduce the barriers to care will be presented.

2.0 BACKGROUND

2.1 POST-SEXUAL ASSUMPTION ABOUT OLDER ADULTS

Older adults are often excluded from sexual and reproductive health and rights agendas due to societal misconceptions surrounding sexuality at a later age. Widespread assumption that older adults are post-sexual permeate the decision to exempt older adults from the conversation around sexual health. Exemption from the conversation around sexual health can negatively affect an older adult's ability to discuss sexual health concerns (Aboderin, 2014; Angus & Reeve, 2006; Gott et al., 2004). The myth of older adult being post-sexual is strengthened by the lack of knowledge society has concerning the aging process and the visible physical decline related to older age (Aboderin, 2014; Angus & Reeve, 2006; Gott, et al., 2004; Hajjar & Kamel, 2004). In the youth-oriented culture of the United States, sexual health is considered a topic associated with younger populations and research into older adult sexuality may be assumed to be a waste of resources. This attitude towards older adult sexuality represents Western values of productivity, health, and independence, which are not popularly associated with the geriatric population (Angus & Reeve, 2006; Hajjar & Kamel, 2004).

Portrayals of older adults in the media further strengthen the assumption that older adults are post-sexual. Prevalent depictions of older adults in the media represent them as post-sexual or "dirty" if they express sexual desire (Hillman, 2008; Tarzia, 2012). An example in film can be

found in the movie *Dirty Grandpa*, a movie about a road trip between a man and his grandfather (Mazer, 2016). Throughout the movie it is suggested that the grandfather has perverted tendencies due to his vocal expression about his attraction to women, therefore labeling him as dirty. Another depiction of older adult sexuality in the media can be found in a Saturday Night Live sketch where two grandchildren visit their grandmother in a nursing home and are shocked to find her being treated for gonorrhea (King, 2017). The grandchildren are visibly disgusted to find out that the nursing home allows sexual relations between residents and assumes someone forced their grandmother to engage in sexual activity. Forms of entertainment that support these assumptions typically cater to younger and more impressionable demographics, and by association strengthen these societal misconceptions surrounding older adult sexuality.

2.2 HISTORY OF SEX EDUCATION IN THE UNITED STATES

Sexual education directly impacts how people view sexual activity and susceptibility to STDs. The continuously evolving values of American society influence the quality and components of sexual education that each generation receives. Current demographic trends of older adults and STDs can be better understood through discussion of the history of sexual education in the United States and the conflicting values surrounding it. The influence of changing societal values is evident in the contrasting forms of sex education that nurses and residents at long-term care facilities received in their youth. It can be assumed that differing sex education influences how nursing staff and residences view sexual health.

2.2.1 EARLY 20TH CENTURY

The turn of the twentieth century is known to many historians as a period of dramatic change, incorporating a shift from the Victorian mentality of sexual repression to the sexual revolution (Bashford & Strange, 2004; Cocks, 2006; Gordon, 1987). The Victorian era was defined by a strict moral code and families were expected to adhere by it in the strictest sense. At the turn of the century though, vices in urban areas, such as commercialized prostitution, alcohol consumption, gambling, and the viewing of pornography, became increasingly popular (Bashford & Strange, 2004, Gordon, 1987). The larger transition from an agrarian to an industrial society left many who profited from the agricultural business unemployed and turning to vices as coping mechanisms. The Victorian patriarchal family was also put at risk, and later known as "the crisis of family" (Bashford & Strange, 2004; Cocks, 2006). Rising divorce rates alongside the increasing authority of physicians on the causes of venereal disease threatened the Victorian strict moral code and in conjuncture, the Victorian family. Magazines played a large role in teaching sexual knowledge to the masses, as they were more accessible and cheaper than textbooks focusing on the subject (Bashford & Strange, 2004; Brandt, 1987; Katzive, 2015). Among these magazines, women's advice columns became the main source of sex education (Bashford & Strange, 2004).

The social purity movement was formed in the late 19th century in response to an increase in sexual images in entertainment. The movement included organizations such as the New York Society for the Suppression of Vice, Woman's Christian Temperance Union, and the American Purity Alliance (Kells, 2012; Moran, 1986). These organizations sought to promote Victorian morality and moral education. The most successful of these organizations was the New York

Society for the Suppression of Vice, founded in 1873 by Anthony Comstock (Kells, 2012). Comstock and his supporters advocated for federal legislature prohibiting selling or publishing "obscene" books, pamphlets, and advertisements including descriptions of a sexual nature, as well as the selling of any form of birth control (Kells, 2012; Moran, 2012). In 1873, federal legislature passed, popularly known as the Comstock Act, which included all of Comstock's objectives on public morality (Comstock Act, 1873).

During the turn of the twentieth century, the social purity movement was still in full effect and successfully influencing laws that would prevent what purists saw as the moral decline of the country (Bashford & Strange, 2004; Brandt, 1987; Cocks, 2006). These laws included the banning of birth control devices, abortion, and sexually explicit reading material (Brandt, 1987; Cocks, 2006). The Comstock Act was the most effective in regulating the ban of sexually explicit reading materials.

The largest offender of the Comstock Act was the activist and sex educator, Margaret Sanger (Brandt, 1987; Katzive, 2015). In 1912, Sanger's pamphlet *What Girls Should Know* was confiscated by the U.S. Postal Office for containing the words syphilis and gonorrhea, and government officials demanded Sanger to cease production due to the Comstock Act's provisions (Brandt, 1987). Another example of Sanger's defiance was her newspaper titled "The Woman Rebel", which described the need for contraceptives (Brandt, 1987; Katzive, 2015). The newspaper eventually came to the attention of the government and Sanger was indicted on charges of distributing material that was "obscene, lewd, lascivious, and filthy...and indecent of character" (Katzive, 2015). Sanger fled to the United Kingdom to avoid prosecution and continued to publish material on contraception and sexuality.

Early twentieth century concerns about the moral decline of the United States opened up public discussion about prostitution and venereal diseases (Brandt, 1987; Imber, 1982; Smolak, 2013). Scientific advances in the pathology and treatment of venereal diseases gave physicians a new authority to discuss the evolving morals of the country (Brandt, 1987; Smolak, 2013). During the first International Conference for the Prophylaxis of Syphilis and Venereal Disease (Brussels, September 1899), members stressed the destructive effects of syphilis on the families of infected men and on society as a whole (Imber, 1982). Members of the conference echoed that medical measures alone would not eradicate the venereal disease unless paired with educating young people about the risks and means of transmission. Prostitution was widely thought to be responsible for spreading venereal disease, although little evidence supported the claim (Imber, 1982; Smolak, 2013). Causes of the increasing popularity of prostitution, including the social issues of corruption in politics and low wages for women, were often overlooked by physicians and social purists who would rather focus on larger moral concerns (Imber, 1982; Smolak, 2013).

During the first decade of the twentieth century, a physician named Prince Morrow created an organization whose objectives were based on the conference's recommendations for eradicating venereal diseases through sexual education (Moran, 1986; Strong, 1972). His organization, the American Society for Sanitary and Moral Prophylaxis (ASSMP), called for the eradication of prostitution and venereal diseases (Muren, 1907). His ideas of how to create social hygiene and descriptions of the failings of institutions to eliminate modern vices eventually became so widespread that other groups formed to advocate for social hygiene. The advocates for social hygiene were later known to be part of the Social Hygiene Movement (1911-1934) (Moran, 1986; Strong, 1972). The Social Hygiene Movement was organized by a mix of people

from charity groups, churches, physicians, moral reformers and those involved in the settlement movement (Brandt, 1987; Imber, 1982; Moran, 1986). Social hygienists felt that if an individual fully understood the dangers of venereal disease, then that person would not be vulnerable to sexual immorality and would abstain from sexual activity until marriage (Moran, 1986; Strong, 1972).

The continuous spread of venereal diseases and increasing popularity of prostitution led those in the Social Hygiene Movement to assume that parents were failing at educating their children about venereal diseases. Associated causes for the parents' failure to teach sex education to their children included feeling uncomfortable about talking about sex as well as a lack of knowledge on how to teach sex education (Michael, 1971; Moran, 1986). The failure created a need for some type of formal sex education within the school system. The first attempt at a formal program of sex education was proposed by Ella Flagg Young, Chicago's superintendent of schools (Moran, 1986). Young recommended that all students in Chicago's public secondary schools attend lectures on sex hygiene. The lectures would include lessons on anatomy, venereal disease, and the need for abstinence until marriage. Young's idea was quickly shut down by the governor of Illinois and other opponents of sex education. Opponents of sex education stated that an open discussion on sex would defeat the purpose of teaching moral values and would cause young people to be more deviant (Michael, 1971; Moran, 1986).

Due to the denial of Ella Flagg Young's proposal, social hygienists believed it to be more acceptable to spread sex education throughout different school subjects rather than in a focused class (Bullough, 1998; Michael, 1971; Moran, 1986; Shenehon, 1950). The children of the Silent Generation (born 1925-1942) were the first to undergo the educational experiment of expanding sex education into different school subjects. By 1922, 20.3% of the secondary schools in the

country were teaching some form of sex education related to different school subjects, with 25% of the schools teaching in their biology courses, 11.5% in physiology and hygiene courses, and 8.5% in social studies (Strong, 1972). By the late 1940's, considerable support for sex education inclusion in public schools spread throughout the country, except for the Southeast due to a higher rate of social and political conservatism (Michael, 1971; Strong, 1972).

2.2.2 SEXUAL REVOLUTION ERA

Traditional Victorian values on sexuality continued to serve as the foundation of formal sex education until the 1960s. The 1960s were a time of sexual expression and revolution against traditional Victorian values on sexuality (Planned Parenthood, 2016; Martin, 1996; Smith, 1990; Winkler, 2005). Occurring in mainly urban areas, the sexual revolution was associated with the hippie counter-culture during the Vietnam War and the disintegration of traditional family values. The sexual revolution was influenced by a multitude of factors, including the increase in knowledge about sexuality brought to light by biologist Alfred Kinsey (Bullough, 1998; Martin, 1996). The majority of today's emerging elderly, Baby Boomers (1943-1964), were taught sex education in this time period of increasing sexual expression and evolving societal values. The experiences of today's emerging older adult in this era play a key role in their more open-minded and liberal views on sexuality and sexual health.

During this period, there was increasing approval of premarital sex, availability of birth control, and sex education (Smith, 1990). The changing viewpoints directly influenced the legalization of birth control and abortion (Planned Parenthood, 2015; Smith, 1990). Due to the recent introduction of penicillin to treat STD, a larger focus on the prevention of pregnancy greatly overshadowed the prevention of STDs. The FDA licensure of the oral birth control pill in

1960 and the 1973 Roe v. Wade Supreme Court decision to legalize abortion created more solutions to the possible outcome of heterosexual premarital sex, and more concern about a potential increase in unplanned pregnancies (Planned Parenthood, 2015; Smith, 1990).

The legalization of abortion and contraceptive devices influenced the government and schools to modify their stances on sex education (Planned Parenthood, 2015; Shornack & Shornack, 1982; Somerville, 1971). Approval of sex education in schools had been increasing since the 1960s, but there was no model for comprehensive sex education until SIECUS, the Sexuality Information and Education Council of the United States, was formed (SIECUS, 2018; Smith, 1990). SIECUS was formed in 1964 in response to a concern about the lack of accurate information on sexual health for children and adults (SIECUS, 2018). They created a model for comprehensive sex education that could be taught from kindergarten to high school that included topics like reproduction, anatomy, STDs, and homosexuality. Governmental organizations also took part the change. In 1966, the U.S. Office of Education funded 645 agencies to help develop sex education programs across America and in 1970, President Carter amended Title X of the Public Health Services Act, now including sex education and services devoted to unmarried teens (U.S. Department of Health, Education, and Welfare, 2018).

By the late 1970s, the last state, Louisiana, had overturned its century-long ban on sex education and more than half of the largest school districts in the United States had sex education programs (Family Planning Perspectives, 1980; Shornack & Shornack, 1982). However, limited training existed for sex educators with the majority being self-taught (Welbourne-Moglia & Moglia, 1989). Only until 1983 were there standards for teaching sex education developed by the American Association of Sex Educators, Counselors, and Therapists, but they were not mandatory for any school district to follow (Smith 1990; Welbourne-Moglia & Moglia, 1989).

Some Christians highly protested the increase in comprehensive sex education (Cornog & Perper, 1996; Irvine, 2004). In response, political organizations like the Christian Crusade and the John Birch Society aimed to revert sex education's focus back to more traditional values of abstinence and sexual repression (Cornog & Perper, 1996; Irvine, 2004). By the early 1980s, these organizations were successfully influencing political decision makers on how to implement sex education.

2.2.3 MODERN SEX EDUCATION

The 1980s represents a shift back to early 19th century values of abstinence and the patriarchal family (Perrin & Dejoy, 2003; Planned Parenthood, 2016; Smith, 1990). This time period reflects the experiences of today's primary care physicians and nursing staff in sexual education. The trend of accepting birth control and premarital sex slowly decreased, as abstinence-only education gained more support. Organizations like the Christian Crusade and the John Birch Society heavily influenced the passing of laws to fund abstinence-only education (Perrin & DeJoy, 2003; Planned Parenthood, 2016). These organizations aimed to revert formal sex education back to focusing on Victorian values.

In 1981, the Adolescent Family Life Act, commonly known as the Chastity Act, passed Congress and funded educational programs to promote abstinence and moral purity. The funding was provided largely by churches and religious conservatives (Perrin & DeJoy, 2003). By 1983, a group of clergy and others filed a lawsuit, stating that the Act violated the separation of Church and State. The lawsuit led to an out-of-court-settlement in 1993 that stated programs funded by the Adolescent Family Life Act must not include religious references, must be medically accurate, and respect self-determination regarding use of contraceptives. (Perrin & DeJoy, 2003).

Comprehensive sex education continued in many states despite the upsurge in traditional values during the late twentieth century because of the HIV/AIDS epidemic and the early mystery surrounding it (HIV.gov, 2016; Smith, 1990). Five years after the initial 1981 outbreak, U.S. Surgeon General C. Everett Koop released a statement describing the nature of the infection and its modes of transmission (Koop, 1986). The report urged parents and schools to have discussions about HIV/AIDS with their children and an increase in sex education and condom use. By 1993, every state supported education on HIV/AIDS by implementing curriculum on prevention methods and the pathology of the virus (HIV.gov, 2016). Once treatment of HIV and the success of HIV suppression became a reality in the late twentieth and the early twenty-first centuries, many states began to re-evaluate their stance on sex education.

In the midst of the states' re-evaluation, federal legislation was passed on abstinence-only education. In 1996, Congress attached a provision to the Personal Responsibility and Work Opportunity Reconciliation Act that established a federal program to exclusively fund abstinence-only programs (Planned Parenthood, 2016). Since the implementation of the Act, more than \$1.5 billion have been spent on abstinence-only educational programming, in contrast to the \$190 million spent on prevention education beginning in the Obama administration (Planned Parenthood, 2016; SIECUS, 2010). Studies have shown that the impact of these programs have left an increasing amount of people without information on birth control and education on other aspects of their sexual health (Perrin & DeJoy, 2003; Planned Parenthood, 2016).

The most recent legislation passed impacting sex education in the United States is the Affordable Care Act (FYSB, 2016; Planned Parenthood, 2016). A provision of the ACA funds the Personal Responsibility Education Program (PREP), which provides 75 million dollars

annually for "evidence-based, medically accurate, age-appropriate programs to educate adolescents about both abstinence and contraception in order to prevent unintended teen pregnancy and STD" (FYSB, 2016). The ACA is one of few attempts to appeal to both advocates of abstinence-only programming and advocates of comprehensive sex education. As of 2018, funding for PREP has been extended through the fiscal year of 2019 (Federal Policy Action Center, 2018)

In 2018, there are only 20 states that mandate sex education and HIV education, only 19 states that mandate the provision of information about birth control, and only 13 states that mandate that instruction on sex education and HIV education be medically accurate (Planned Parenthood, 2016). Representative of a centuries long struggle between conservative fundamentalist and sex-positive liberal morals, the state of sex education directly reflects the values of the geographical area and society it is implemented in.

3.0 SCOPE OF THE PROBLEM

3.1 EPIDEMIOLOGICAL EVIDENCE

According to the United Nations Department of Economic and Social Affairs (UNDESA Population Division World Population Prospects, 2015), the number of individuals over the age of 60 worldwide is growing at a rate of 3.26% per year. The older adult population is expected to increase worldwide from 901 million in 2015 to 1.4 billion by 2030, and 2.1 billion by 2050. By 2060 in the United States, the number of individuals ages 65 and older is projected to increase from 46 million to over 98 million (Mather, 2016). Due to the startling growth rate, cases of age-related diseases will reflect this trend by drastically increasing.

The terms "sexually transmitted disease" and "sexually transmitted infection" are commonly used interchangeably. Sexually transmitted diseases (STDs) are symptomatic infections that are passed from one person to another through sexual contact (CDC, 2018). Sexually transmitted infections (STIs) only differ from STDs in that STIs are asymptomatic (Planned Parenthood, 2013). Specific STDs/STIs that commonly affect older adults are hepatitis C, chlamydia, gonorrhea, and syphilis. Hepatitis C is a liver disease that has multiple methods of transmission, including having sexual contact with a person infected by the Hepatitis C virus (CDC, 2018). Chlamydia is an STD/STI that is often asymptomatic. Left untreated, chlamydia can permanently damage a woman's reproductive system (CDC, 2017). Gonorrhea is a common

STD/STI that is often asymptomatic, but can cause infections in the genitals, rectum, and throat (CDC, 2017). Syphilis is an STD and can cause serious health problems if left untreated, including sores, rashes, and fevers (CDC, 2017).

Older adults only account for 1.3% of all STDs, yet older adults are experiencing a significant rise in diagnoses (CDC, 2017; Hillman, 2008; Lindau, et al., 2007). Between 2010 and 2014, incidence rates for chlamydia infections increased by 52% and gonorrhea cases increased by 90% among adults 65 and older (CDC, 2014). By 2016, the rate of reported chlamydia cases and the reported rate of gonorrhea cases was 7.4 per 100,000 among the same older population (CDC, 2016).

Cases of syphilis and hepatitis C are also rising among seniors. Between 2010 and 2014, the incidence rate for syphilis infections increased by 65 percent for adults over the age of 65 (CDC, 2014). In the time span between 2015 to 2016, the rate of syphilis increased further by 50 percent among the same age group (CDC, 2017). Of all individuals living with hepatitis C, at least 75 percent are at least 60 years old (CDC, 2016). The over 60 population is cited to be five times more likely to be infected with hepatitis C than any other population (CDC, 2016). The older adult population is more likely to contract hepatitis C than any other population due to a lack of universal precautions and infection control procedures when they were younger (CDC, 2016). Another reason older adults have a higher likelihood of being infected with Hepatitis C is that they may have become infected in the 1970s and 1980s when rates of Hepatitis C were the highest (CDC, 2018). Hepatitis C screening recommendations are the only screening recommendations through the Center for Disease Control and Prevention (CDC) for sexually transmitted infections that are available for those 65 and older (CDC, 2017).

Throughout this paper, the term "STD" will be used to include both symptomatic and asymptomatic sexually transmitted infections. Rarely do reporting agencies, including the CDC, track and evaluate STDs among individuals 65 and older in long-term care facilities (CDC, 2017; Hillman, 2008). A higher prevalence rate of STDS in younger populations is associated with the lack of importance reporting agencies place on evaluating STDS among older adults (CDC, 2017). Therefore, it is difficult to accurately assess the rates of infection in this specific age group. The previously stated statistics are based on individual state health department records. In 2018, there is no requirement for mandated reporting of STD incidences in long-term care facilities (CDC, 2017). While the CDC does provide a disease tracking system for long-term care facilities called the National Healthcare Safety Network, the reporting of STDs in the system is optional. The only mandated reporting to the CDC by long-term care facilities are incidences of UTIs, C. difficile, and MRSA infections (CDC, 2017). The lack of accurate reporting in long-term care facilities strengthens the assumption that true incidence rates of STDs are much higher.

3.2 DEMOGRAPHIC TRENDS

The Silent Generation and the Baby Boomer Generation together form the current aging population. These two generations are most affected by the increasing incidence rates of STDs (Egri & Ralston, 2004; Gott, et al., 2004; Hartman-Stein & Potkanowicz, 2003; Kleinplatz, 2008). The Silent Generation is often viewed as valuing tradition (Egri & Ralston, 2004; Hajjar & Kamel, 2004). The Silent Generation reflects the values of the Social Purity Movement that was prevalent during the Great Depression and World War II. The Silent Generation were born at the height of the Social Purity Movement. At a young age, the Silent Generation was

influenced by the Social Purity Movement on how to behave and what was appropriate. Areas deemed inappropriate to discuss included sexuality and sexual health (Bullough, 1998; Michael, 1971; Moran, 1986; Shenehon, 1950).

In contrast, the Baby Boomer generation is larger and more liberal of the two populations (Egri & Ralston, 2004; Hartman-Stein & Potkanowicz, 2003). The Baby Boomer generation consists of 76 million children born following World War II (Hartman-Stein & Potkanowicz, 2003). This generation was significant in the social movements of the 1960s and 1970s and is often cited as the hippie generation (Egri & Ralston, 2004; Gott, et al., 2004). The sexual revolution's values of sexual expression and liberation influenced the Baby Boomer Generation's willingness to discuss sexuality and sexual health ((Planned Parenthood, 2016; Martin, 1996; Smith, 1990; Winkler, 2005). The Baby Boomer Generation also has a better understanding of their sexual health due to the greater amount of comprehensive sex education curricula in the 1960s and 1970s (see above Section 2.2.2) (HIV.gov, 2016; Smith, 1990).

Aging, especially after the age of 65, is associated with increased risk for health problems. Activities that require physical strength and stamina, such as sex, can be more difficult to perform due to health problems associated with aging (Coronoa, et la., 2010; Gott, et al., 2004; Lindau, et al., 2007; Napoli, et al., 2013; Schick, et la., 2010). Fortunately for the older adult population, there is a growing market of medical products to treat sexual health related problems. Available medical products include drugs to treat erectile disfunction and vaginal dryness (ACRIA, 2017; Gott, et al., 2004; Lindau, et al., 2007; Schick, et al., 2010). Older adults are engaging in more sexual activity due to the increasing usage of these products and are often not utilizing methods of protection (Gott, et al., 2004; Schick, et al., 2010). According to one study (Schick, et al., 2010), two out of three men and women over the age of 65 reported not using a

condom the last time they engaged in intercourse. Common reasons for this were the inability to conceive after menopause and lack of concern about obtaining a STD due to a lack of receiving comprehensive sex education.

While some medications can relieve the negative side effects of health problems for the older adult population, many older adults require direct-care assistance due to debilitating health problems and lack of a support system (AARP, 2007; AARP Public Policy Institute, 2011; CDC, 1996; Napoli, et al., 2013). This can lead older adults to move into long-term care facilities, like nursing homes. In 2013, it was estimated that around 1.5 million older adults receive care in nursing homes (Napoli, et al., 2013). When agreeing to reside in a nursing home, independence in decision-making is often sacrificed for constant medical care (AARP Public Policy Institute, 2011; CDC, 1996). Aging in their own home is a more popular choice for seniors since retaining a sense of independence is critical for many older adults. Due to advancements in medical technology and home health care, more older adults are able to continue to live in their own home (CDC, 1996). In despite of these improvements, older adults who need more intensive care often have no choice but to turn to long-term care facilities. These older adults tend to have a greater likelihood of accidentally harming themselves without constant supervision (AARP Public Policy Institute, 2011).

Many people residing in long-term care facilities continue to engage in sexual activity despite the loss of privacy and independence (Frankowski & Clark, 2009; Napoli, et al., 2013; Tarzia, 2012). While there is little current data on the incidence rates of STDs in long-term care facilities, residents are disproportionately more vulnerable than other older adults due to a lack of aging-related sexual education for both residents and staff as well as negative perceptions of older adult sexuality by medical staff.

The residents' increased vulnerability to contracting an STD strengthens the assumption that the true incidence rates of STDs in the United States for those 65 and older is much higher than reported. The thesis will continue to explore barriers to sexual health care for the older adult population, especially for older adults residing in long-term care facilities. Barriers to sexual health care include generational perceptions of older adult sexuality, a lack of aging-related sexual education, and an unwillingness to initiate discussion on sexual health by both the medical provider and patient.

4.0 METHODS

This paper is a critical review of the literature on older adult sexuality, specifically the barriers to receiving proper medical care for aging-related sexual health concerns. Information and peer-reviewed articles were collected using the search engine Google Scholar, PubMed and JSTOR. Seven searches were completed for literature on the Silent Generation and Baby Boomers as aging populations; and focused on attitudes or interventions in the United States on older adult sexuality. Study inclusion criteria included: published in English; an academic journal article, book, or published report; published between 2000 and 2017. Relevance was determined by study inclusion criteria and whether an article contains new information regarding barriers to sexual health care and recent interventions or strengthens another article's claim.

Two searches were completed in PubMed included the terms "Sexuality" and "Aging" to include only "free full text". The search yielded 262 results. After review of the abstracts and titles, one article was found to be relevant, determined by the study inclusion criteria. The second search included the terms "Sexuality" and "Assisted Living". The search yielded 70 results. After review of the abstracts and titles, one article was found to be relevant according to the study inclusion criteria.

The search in JSTOR included the search terms "Sexual Health" and "Older Adult" and "Policies". The search was restricted to results associated with public health and social work. I expanded the publishing year range to 1995 to 2017 since policies including rhetoric on older

adult sexuality are limited in order to incorporate a broader range. The search resulted in 81 articles. Title and abstracts were reviewed for relevance and a total of three articles were chosen for due to incorporating study inclusion criteria.

The first search in Google Scholar included the search terms "Sexuality" and "Older Adults or Elderly". The first 100 articles found were reviewed to determine inclusion of study criteria. These abstracts were reviewed to determine which articles contained information beneficial to the thesis. Ten articles were found to be relevant due to incorporation of study inclusion criteria and containing new information regarding sexual health care barriers. The same process was conducted for the two other searches in Google Scholar. The second search in Google Scholar included the search terms "Sexuality" and "Primary Care" and "Older Adults". Two articles were determined to be relevant. The third search in Google Scholar included the search terms "Sexuality" and "Older Adults" and "Nursing Home". One article was determined to be relevant. The led to a total of 19 included studies for the current review.

The American Association of Retired Persons (AARP) website was also accessed for relevant articles, two of which were included here. The study inclusion criteria were utilized to determine that the AARP website included relevant information in regards to barriers for older adults in receiving medical care for sexual health concerns.

5.0 FINDINGS

The results of the literature review are found in Table 1 below. Due to the limited scope of research, the below authors mainly focus on heterosexual sex and sexuality in their articles.

Table 1. Results of Literature Review

Author (y)	Type of Study	Older Adult	Medical Profession	Sexual Health	Key Findings
	Study	S	als	Intervention	
AARP (1999)	Survey	Х			Older adults are optimistic have positive attitudes towards sex. Key influencing factors include gender, age, health, and sexual partner.
Aboderin (2014)	Literature Review			Х	Older adults are excluded from sexual and reproductive rights agendas based on a lack of existing knowledge.
ACRIA (2017)	Resource Guide			Х	A supportive resource for the New York State aging services network to promote sexual health as a part of healthy aging.
Davila (2009)	Online Article			X	San Jose Office of Aging has created educational seminars on comprehensive sex education for older adults.
Dessel (1995)	Policy Manual			X	The Hebrew Home at Riverdale's sexual rights policy recognizes and supports the older adult's right to engage in sexual activity.
Frankowski & Clark (2009)	Ethnograp hic Study	Х	Х		Sex in assisted living settings is resident dependent and facilities have minimal policies.
Gott et al. (2004)	Interviews	Χ	Χ		Analysis identified that general practitioners do not address sexual health with older people.
Hajjar & Kamel (2004)	Literature Review	X			Physicians and staff in nursing homes should address this need as part of their duty to enhance the quality of life and well-being of their patients.
Hillman (2008)	Literature Review	Х			The majority of older men and women maintain moderate or high levels of sexual interest well into their 70s but often experience sexual dysfunction.
Hughes & Wittmann (2015)	Survey		Х		Knowledge of aging sexuality scores reflected good knowledge; however, only 3% of the sample felt that they had adequate knowledge of older adult sexuality.
Kleinplatz (2008)	Literature Review		Х		Sexual satisfaction is increasing in older adults, especially in women, even if sexual dysfunctions are present.

Table 1 Continued

Lindau et al. (2007)	Survey	Х	Х		Many older adults are sexually active. Sexual problems are frequent among older adults and these problems are infrequently discussed with physicians.
McAuliffe et al. (2007)	Literature Review	X			Older people frequently experience barriers to the expression of their sexuality. Many of these barriers are influenced by the health professionals that care for them.
Napoli et al. (2013)	Focus Groups		Χ		Staff at nursing homes endorsed neutral attitudes about latelife sexuality.
Roach (2004)	Grounded Theory	Х			Staff perceptions and responses to residents' sexual behavior were found to be influenced by their own level of comfort related to sexuality issues.
Sarkadi & Rosenqvist (2001)	Interviews/ Survey	X		X	Personal characteristics, such as age, sex, experience and attitude of the doctor in the primary care setting significantly influence women's willingness to discuss sexual matters with physicians.
Schick et al. (2010)	Survey		X		Age was related to a lower likelihood of solo and most partnered sexual behaviors. When controlling for age, relationship status and health remained significant predictors of select sexual behaviors.
Tarzia et al. (2012)	Literature Review		X		Residents with dementia's ability to consent to sexual activity poses a challenge to nursing staff. Negative attitudes towards older people's sexuality can lead to residents' sexual expression being overlooked.
Taylor & Davis (2006)	Literature Review			Х	The PLISSIT model is proposed as a tool for nurses working in primary care to address sexuality and sexual health.
Taylor & Gosney (2011)	Literature Review	Χ	X		Many residents find it difficult and embarrassing to talk to health care professionals about sexual problems.
Wallace (2008)	Literature Review	Х	X	X	Nurses must be aware of the continuing sexual needs of older adults and develop plans of care that promote dignity and respect. The PLISSIT model is an example of a tool to be utilized in developing plans of care.

Table 1 categorizes the articles by: barriers to sexual health care created by older adults, barriers to sexual health care created by medical professionals, and description of a sexual health intervention. In addition, the key findings are outlined below.

5.1 ATTITUDES AND BELIEFS TOWARDS SEXUAL HEALTH OF THE COHORT

Sexuality is an important component of late-life because it reaffirms a person's independence and sense of functioning (AARP, 1999; Hajjar & Kamel; Wallace, 2008). One barrier to sexual health care is older adults' attitudes and beliefs towards sexuality and sexual health. Attitudes towards sexual activity tend to vary between genders. For heterosexual sex, studies find that

older men value the quality and frequency of sex more than older women. Older women are more likely to be indifferent towards sex due to a larger unavailability of male partners (AARP, 1999; Frankowski & Clark, 2009; Lindau, et la., 2007). Older women are also less likely to discuss sexual health concerns with a physician and to report using medical products to treat such issues (AARP, 1999; Lindau, et al., 2007). Reasons for the disparity can be linked to gender norms and the differing methods of sexual education between sexes.

Members of the Silent Generation and the Baby Boomers also differ generationally in terms of how they view sexuality (Hajjar & Kamel, 2004; Hillman, 2008; Roach, 2004). The older and smaller Silent Generation are known for their Victorian-like values of conservatism and sexual purity. While members may be sexually active, the Silent Generation may be less likely discuss their sexual health concerns for fear of being seen as immoral (Hajjar & Kamel, 2004; Hillman, 2008). "Permission granting" by a health professional, indicating that a patient's sexual health can be discussed, enables members of the Silent Generation to feel more at ease in divulging information on their sexual health due to their high respect of authority (Gott et al., 2004; Lindau et al., 2007). In contrast, Baby Boomers are commonly described as nonconformist having grown up during the sexual revolution and would be more likely to seek support related to sexual health concerns (Hajjar & Kamel, 2004; Hillman, 2008).

Other barriers that would prevent an older adult from seeking treatment for sexual health concerns are embarrassment, fear of being seen as abnormal, and a lack of knowledge about sexuality later in life (Gott, et al., 2004; McAuliffe, 2007; Taylor & Gosney, 2011). Failure to seek medical attention for sexual health concerns can lead to worsening symptoms and spreading of an STD. Despite the various barriers, older adults state that if a medical professional initiated

a conversation on sexual health that they would gladly accept the opportunity to participate (McAuliffe, 2007; Sarkadi & Rosenqvist, 2001; Taylor & Gosney, 2011).

The majority of older adults reside outside of long-term care facilities. Research on the sexual health care of older adults living outside of long-term care facilities reveal similar barriers to sexual health care to that of older adults living within the facilities (Gott et al., 2004; Lindau et al., 2007; McAuliffe et al., 2001; Sarkadi & Rosenqvist, 2001; Schick et al., 2010). But barriers to sexual health are not as severe for older adults outside of long-term care facilities due to greater availability of resources on aging-related sexual health and a lesser dependence on medical professionals (Gott et al., 2004; McAuliffe et al., 2001).

The quality of sexual health care an older adult receives is influenced by their attitudes about, and beliefs towards, their own sexual health. Negative attitudes and beliefs create barriers to receiving adequate sexual health care by preventing older adults from seeking treatment due to gender norms, embarrassment, and a lack of knowledge about sexuality later in life. Generational differences can influence the severity of the negative attitude or belief.

5.2 ATTITUDES AND KNOWLEDGE OF HEALTH PROFESSIONALS

Little known training exists for health professionals on the sexual health of older adults (Gott, et al., 2004; Hughes & Wittmann, 2015; Kleinplatz, 2008; Napoli, et al., 2013; Schick, et al., 2010; Wallace, 2008). Studies indicate the amount of sexual health curricula is declining in medical schools, with the remaining content focusing on the sexual health of younger populations (Gott, et al., 2004; Hughes & Wittmann, 2015). The majority of medical curricula on older adult sexual

health revolves around HIV/AIDS risk and sexual performance issues (Kleinplatz, 2008; Schick, et al., 2010). The combination of these factors can lead health professionals to believe that older adults seldom engage in sexual activity. Due to the preconceived notion that older adults are post-sexual, medical professionals may be unlikely to take sexual histories and initiate conversations around safe sex (Gott, et al., 2004; Kleinplatz, 2008).

The prevalent idea within primary care that sexual health should be targeted towards younger populations has created a cohort of medical professionals that lack the skills to address older adult sexual health concerns. The absence of proper training leads medical professionals to become uncomfortable when the subject of sexual health is broached with the elderly (Gott, et al., 2004; Kleinplatz, 2008; Lindau, 2007; Napoli, et al., 2013; Wallace, 2008). Medical staff express fear of offending an older patient if initiation of the topic ensues and that there would be a loss of patient-doctor relationship (Gott, et al., 2004). The implementation of permission granting is impossible to conduct since there is a lack of proper training in the technique (Gott, et al., 2004; Napoli, et al., 2013). The inability of medical professionals to address the sexual health concerns of older adults increases the vulnerability of an older adult to contract a STD (Gott et al., 2004; Lindau, 2007; Napoli et al., 2013). An older adult will not be able to learn about STD prevention methods or know their sexual health status if their medical provider does not engage them on the topic.

Negative attitudes surrounding older adult sexual health creates an additional barrier to receiving proper sexual health care (Frankowski & Clark, 2009; Napoli, et al., 2013; Taylor & Gosney, 2011). Medical staff regularly use elder-speak when engaging with patients, which is a patronizing tone that is similar to how some adults engage with children (Frankowski & Clark,

2009). Elder-speak connotes a lack of respect to a person's age and experiences, and can be detrimental to an older adult's willingness to discuss concerns with a provider.

In long term care facilities, the utilization of elder-speak by nursing staff adds to the perception that sexual expression is not relevant for seniors (Napoli, et al., 2013). Elder-speak aids the notion that older adults are innocent and do not have the capacity to consent to sexual activity. Staff frequently perceive older adults engaging in sexual activity as inappropriate and tend to respond with condemnation due to misconceptions and lack of understanding (Frankowski & Clark, 2009; Napoli, et al., 2013). The negative attitudes of medical personnel towards the sexual expression of older adults not only damages the long-term care facilities' goal of preserving independence for their client but creates an environment of disrespect and insecurity.

Elder-speak is often utilized by nursing staff when speaking with residents who have dementia. Dementia is present in many long-term care facilities and poses a barrier to sexual health care (Frankowski & Clark, 2009; Hajjar & Kamel, 2004; Napoli et al., 2013; Roach, 2004; Tarzia et al., 2012; Taylor & Gosney, 2011; Wallace, 2008). Possible effects of dementia can include increased sexually inappropriate behavior or sexual aggression (Frankowski & Clark, 2009; Tarzia et al., 2012). Long-term care residents with dementia who do not exhibit these effects are able to retain a desire for sexual activity (Frankowski & Clark, 2009; Hajjar & Kamel, 2004; Taylor & Gosney, 2011; Wallace, 2008). Their ability to express desire for sexual activity is impacted by the amount of independence they receive in the long-term care facility based on their level of dementia.

Long-term care nursing staff are often concerned about the definition of consent for residents with dementia (Frankowski & Clark, 2009; Hajjar & Kamel, 2004; Napoli et al., 2013;

Roach, 2004). National guidelines do not currently exist for determining the capacity of older adults with dementia to consent to sexual activity (Napoli et al., 2013). Some older adults with dementia may not be able to verbalize their decisions, which makes determining consent more complicated (Tarzia et al., 2012). Nursing staff are then faced with the dilemma of whether to promote autonomous behavior or to remove all potential harm (Napoli et al., 2013; Tarzia et al., 2012). The confusion surrounding the definition of consent can lead nursing staff to exhibit negative attitudes towards older adult sexual health since inability to consent to sexual activity can cause physical and emotional harm (Frankowski & Clark, 2009; Roach, 2004). These negative attitudes can impact the quality of care that long-term care residents with dementia receive (Napoli et al., 2013; Tarzia et al., 2012).

Medical professionals receive little training on the sexual health of older adults. A lack of knowledge on aging-related sexual health leaves medical professionals unable to engage older adults on the topic. Negative perceptions of older adults engaging in sexual activity further limits the ability of medical professionals to engage older adults in conversation about their sexual health. These barriers increase older adults' vulnerability of contracting an STD and damages their sense of independence.

5.3 SEXUAL HEALTH INTERVENTIONS

Interventions have been conducted to address the need for aging-related sexual education for older adults and medical providers. Most interventions focus on supportive resources for medical providers, aging-related sexual expression policies, and sexual education for older adults

(ACRIA, 2017; Davila, 2009; Dessel, 1995; Wallace, 2008). Only one intervention in the literature has been tested for efficacy (Wallace, 2008).

Two interventions have been identified that focus on sexual expression and education for older adults (Davila, 2009; Dessel, 1995). In 1995, the Hebrew Home in Riverdale, New York created the first sexual expression policy for nursing homes in the United States (Dessel, 1995). The policy acknowledged the client's right to sexual expression and sexual health services. In addition, the sexual expression policy outlined the development of a sensitization training program for all staff in order to support the sexual expression of their clients. The second intervention occurred fourteen years later as a seminar series on sexual education principles, called "Sexuality and Aging", through the San Jose Office on Aging (Davila, 2009). The series covered topics such as STD prevention methods and proper condom usage. In addition, the series discussed age-related sexual health issues including Viagra use and safe dating advice.

One intervention supporting primary care physicians on the topic of older adult sexual health is the adaption of the PLISSIT model (Permission, Limited Information, Specific Interventions, Intensive Therapy) to be used with older adults (Taylor & Davis, 2006; Wallace, 2008). The PLISSIT model was originally created by Jack Annon in 1976 in order to be used by medical professionals in meeting the sexual healthcare needs of their patients (Taylor & Davis, 2006). In 2008, the PLISSIT model was adapted to enable medical professionals to utilize the model with their geriatric patients (Wallace, 2008). The adapted version contains open-ended questions about concerns and dispels misconceptions about sexuality with their patients. The model also includes several suggestions for initiating and maintaining the discussion of sexuality with older adults (Wallace, 2008). The PLISSIT model is created to be a routine part of a

medical assessment and to not be diagnostic, but enable discussion between the medical provider and patient.

The most recent intervention created for the purpose of supporting medical providers in discussions with their older patients on sexual health is the resource guide "Older Adults and Sexual Health: A Guide for Aging Service Providers" (ACRIA, 2017). Multiple organizations including ACRIA, the New York State Department of Health AIDS Institute, and the New York State Office of Aging collaborated to produce the guide with the intended purpose of promoting sexual health as a part of healthy aging. The informational guide for medical professionals includes information on aging-related sexual health issues (including for lesbian, gay, bisexual and transsexual [LGBT]), how to plan a successful discussion around sexual health at senior and community centers, and a sample sexual education workshop outline aimed towards older adults (ACRIA, 2017).

Researchers have made a variety of policy recommendations (Aboderin, 2014; Sarkadi & Rosenqvist, 2001). The most significant policy recommendation was made in July of 2013 at the International Conference on Human Rights, where older adults were identified as one of four populations who are marginalized and have little access to sexual and reproductive health and rights (Aboderin, 2014). Recommendations to address this issue included multi-method needs assessments and situational analyses. As of 2018, there is no evidence of action on these recommendations.

6.0 DISCUSSION

6.1 OVERVIEW OF FINDINGS

The older adult population in the United States is significantly affected by STDs. Despite the prevalence of STDs in this population, older adults are underrepresented in sexual health research due to an orientation towards youth. The attitudes and behaviors of medical professionals in regards to older adult sexuality reflects the youth-centric culture of the United States and discourages older patients to initiate conversations about sexual health concerns. The importance of medical care intensifies with advancing age due to diminishing physical health. The avoidance of these conversations is damaging to the well-being of an older adult if they feel irrelevant and invisible in the health care system.

The societal misconception that older adults are post-sexual creates a barrier to care. Older adults continue to engage in sexual activity in despite of the misconception that they are post-sexual and do so without the proper sexual education. Without proper sexual education, older adults are left at risk to contract STDs. As the Baby Boomers age, their liberal perspective on sexuality will negatively affect their well-being if a lack of communication with medical professionals persists. While the Baby Boomers are more willing to initiate conversations around sexual health concerns than members of the Silent Generation, their medical provider will be unable to advise them knowledgeably unless education on aging-related sexual health issues

becomes mandatory in medical training. By advising them without proper training, the medical professional is increasing their patient's vulnerability to STDs.

The growing research on aging-related sexual health symbolizes a positive direction in better understanding the needs of older adults. Unfortunately, the growing research also fails to identify evidence-based interventions that medical professionals can utilize to meet the sexual health needs of older adults. The majority of interventions identified in the literature review do not aid in building the capacity of medical professionals to address the sexual health concerns of their older patients. In order to decrease the susceptibility of older adults in contracting STDs, an increase in capacity building sexual education interventions for both older adults and medical professionals is necessary.

6.2 IMPLICATIONS FOR INTERVENTIONS IN LONG-TERM CARE FACILITIES

The involvement of medical professionals in future initiatives targeting older adults who may be vulnerable to contracting STDs is critical. Messages about sexual safety are best received when they are cited by figures of authority since older adults have an innate respect for medical professionals (Greene et al., 1986; Ouchida & Lachs, 2015). The most effective way to spread messages about sexual safety will be to broadcast them in a setting where a large population of the older adult community reside, which would be a long-term care facility or nursing home. These facilities are disproportionately susceptible to STDs due to the large concentration of older adults who did not receive proper sex education (Frankowski & Clark, 2009; Napoli, et al., 2013; Tarzia, 2012).

Sexual health group discussions should be readily available as well as individual sessions with nursing and other medical staff (Gott, et al., 2004; McAuliffe, 2007; Taylor & Gosney, 2011). Patients may find themselves unable to participate in a group setting due to feelings of embarrassment or shame. Individual sessions with their medical provider can alleviate this burden. In order to increase efficacy in providing older adults with proper sexual education, medical providers must adopt a person-centered holistic approach (Taylor & Davis, 2006; Wallace, 2008). This approach reaffirms that older adults are individuals with separate histories and needs. A person-centered holistic approach will also aid in countering misconceptions about the older adult population by viewing each resident as an individual and not a cohort. Preserving an older adult's right to self-determination is an additional benefit to medical providers adopting a person-centered holistic approach. Medical providers would view each older adult as separate individuals with unique needs. The person-centered holistic approach promotes an older adult's right to make their own decisions based on their own history and not as part of a collective group.

Before initiating group or individual discussion with the residents, educational training must be provided for the nursing and medical staff. Increased medical knowledge about older adult sexual health and sexual practices will improve their ability to counsel the residents and identify sexual concerns (Gott, et al., 2004; Kleinplatz, 2008). Topics covered should include misconceptions, anatomical changes, basic sexual education principles, and screening methods. Group sessions will need to cover a majority of these topics and the medical professional must be knowledgeable in order to properly counsel the residents. Discussions in group settings should cover basic sexual education principles, lifestyle factors that may impact sexual functioning, safe dating advice, and normal anatomical changes due to aging (Bullough, 1998; Michael, 1971;

Moran, 1986; Shenehon, 1950). In creating the intervention, the primary objective of the medical staff is to create a judgement-free zone for the residents. Residents may feel embarrassed or shame as they may have never prior to the sessions disclosed sexual information in front of their peers or a medical professional.

6.3 INTERVENTION PROPOSAL

Older adults residing in long-term care facilities are disproportionately more vulnerable to contracting a STD than other older adults (Frankowski & Clark, 2009; Napoli, et al., 2013; Tarzia, 2012). The proposed intervention presented in the following logic model is designed to decrease in STDs in older adults who reside in long-term residential care sites in the city of Pittsburgh. An overarching goal will be to educate the medical community and the older adults they serve about aging-related sexual health issues through an implementation of educational seminars and open discussion. Another overarching goal will be to create an environment in long-term residential care sites where residents can feel comfortable and safe approaching medical staff with questions about their sexual health, and where the medical staff can provide that information accurately and not based on societal misconceptions.

The purpose of the following logic model is to identify the main components of the proposed intervention in a concise way (CDC, 2014). Each column heading describes process and outcome components. The input column establishes the resources necessary to implement the intervention. Inputs include staff, budgets, and materials. The outputs column includes the intervention's participants and activities. The activities column describes the different program events that the intervention will complete. For the proposed intervention, activities will include

training seminars for the nursing staff and an educational series for the residents. The logic model also serves as a tool to identify what to evaluate and how to define success. Evaluation is necessary in order to analyze whether the desired short, medium, and long-term outcomes were achieved. For example, the nursing staff must be surveyed on their knowledge about aging-related health before and after the intervention in order to determine whether a change has occurred. The logic model also describes the theoretical constructs and external factors that may influence the outcome of the intervention.

Problem Statement: Older adults living in long-term care facilities are especially vulnerable to contracting STDs in the United States

INDUTE		OUTPUTS		OUTCOMES		
INPUTS		Activities	Participants	Short	Medium	Long
-Nursing staff at Long-Term Care Facilities -PLISSIT Model -Male and Female Sex Educators -Long-Term Care Facility Budget for educational programming -Greenblatt Certificate of Holistic Health -Hired gynecologist and urologist -Social workers	4	-Sex educators will teach nursing staff about aging-related sexual health issues and common misconceptions about older adult sexuality -Sex educators will train nursing staff on the PLISSIT model -Sex educators will facilitate an eight-session educational series on aging-related sexual health topics to residents -Nursing staff will shadow sex educators during educational series -Sex educators will administer surveys to the residents and staff in order to determine changes in knowledge and beliefs	-180 residents in Long-Term Care Facilities in Pittsburgh -30 members of nursing staff in Long-Term Care Facilities in Pittsburgh	-80% of nursing staff demonstrate increased knowledge about aging-related sexual health -60% of residents participating in the program demonstrate increased knowledge about aging-related sexual health -70% of residents participating in the program demonstrate increased likelihood to initiate conversation with nursing staff about sexual heath -90% of nursing staff demonstrate a decrease in misconceptions about residents	-60% of residents will demonstrate 25% more conversations about sexual health with nursing staff -70% of nursing staff demonstrate increased confidence in initiating conversations about sexual health with residents	-Decreased rate of STDs diagnosed within Long-Term Care Facilities in the city of Pittsburgh

Assumptions/Theoretical Constructs

Increasing an older adult's perception of risk for STD and the health effects, cues to action, and the expectation that a proper sexual education will help prevent STDs (Health Belief Model)

External Factors

- -Operating within a long-term care facility, residents can influence one another to make safe sexual decisions
- -The long-term care facility will make the educational training for nursing staff mandatory
- -Due to conservative values, residents may choose to not receive sexual education

Figure 1. Logic Model

The intervention will be in long-term residential care, specifically a chain of long-term residential care sites. Bucktin Senior Living facilities (fictional name based on actual care site) will be used in this proposed intervention as the example for which this approach can be implemented. The Bucktin Senior Living facilities are based on an actual nursing care company residing in Pittsburgh that caters towards older adults who desire long-term care and whom have multiple facilities in the area with each facility containing two hundred residents.

The intervention will be implemented in at least three of Bucktin Senior Living's nine long-term residential care sites in order to test the efficacy of the approach. The intervention will be conducted bi-monthly for four months. The intervention approach will appeal to the target population by having the educational seminars in their place of residence and therefore allow them to be able to learn about issues related to sexual health alongside their peers. By creating a safe and interactive learning experience, older adults will be more likely to participate and be open to discussion of what they may deem a taboo subject. By training medical staff to help lead discussion, it will allow residents to feel more comfortable as they may see their medical staff already as experts on most medical topics and having them be a facilitator may put them at ease.

There is no previously applied evidence-based intervention to use as a foundation for this specific proposed intervention, therefore the foundation will be built around the Health Belief Model. The Health Belief Model is a theory that explains and predicts health behaviors by focusing on the attitudes and beliefs of individuals (Rosenstock, Strecher, & Becker, 1988; LaMorte, 2016). The Health Belief Model states that an individual's course of action depends on their perception of the benefits and barriers related to health behavior. The model's six tenets are perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy (Rosenstock, Strecher, & Becker, 1988; LaMorte, 2016). The

intervention will utilize the Health Belief Model by increasing older adults' and nursing home medical staffs' perception of risk of STDs and their health consequences, cues to action, and the expectation that sexual education will prevent STDs through open discussion and educational seminars.

The Greenblatt Certificate of Holistic Health will be created as incentive for long-term care facilities to pilot the program. The certificate will enable the facilities to be attractive to a larger clientele due to the progressive nature of the certificate as well as the selective process in which the facility must undergo in order to receive it. By including the Greenblatt Certificate of Holistic Health on their websites and other promotional materials, the long-term care facilities will be able advertise their commitment to all aspects of health and continuing education on this topic.

6.3.1 TRAINING

Many long term residential care sites, including Bucktin Senior Living, have health services that include educational seminars for residents on lifestyle, nutrition and disease management. Bucktin Senior Living frequently brings in experts on health care topics, therefore the intervention proposed can be easily implemented as there is space in the budget for such activities. The key staff members that will carry out the training for the nursing staff will be a male and female certified sex educator. The training sessions for the nursing staff will take place on three consecutive days, each consisting of a two-hour session taking place in the site's conference room. In order to ensure appropriate coverage of the residents, there will be two rounds of training. The first round will train half of the nursing staff and the second round will train the remaining. Thirty members of the nursing staff in total will be trained, in accordance

with regulations that the ratio of nurse to resident must be at maximum one to 20 at long-term care facilities. The facility's social workers will have the opportunity to attend the sessions. The social workers will be able to uphold their field's ethic of respecting the importance and centrality of human relationships by learning about aging-related sexual health in a comprehensive way.

The first day of training will be conducted by the certified sex educators and consist of a discussion about stereotypes and misconceptions surrounding older adult sexual health. At the beginning of the training, the sex educators will administer two tests to the nursing staff. The first test will ascertain the prevalence of stereotypes and misconceptions that the staff may have about older adults. The test will contain ten multiple choice questions based on scenarios that the staff may encounter at the facility. An example of a possible question is what the nursing staff should do when a resident mentions they are sexually active. Another example of a possible question is what proportion of residents the nursing staff believes to be interested in engaging in sexual activity. The second test contains ten multiple-choice questions about aging-related sexual health. Possible questions include determining normal aging-related anatomical changes and STD prevention methods an older adult should use. At the end of the third day of training, the two tests will be administered again to determine if any changes occurred. The first day of training will also include an open dialogue between the sex educators and nursing staff in order to address any questions that the staff may have. The questions may include any general inquiries or specifics surrounding older adult sexuality.

The second day of training will be conducted by the sex educators as well as a gynecologist and a urologist. They will present information on aging-related sexual health issues as well as review normal changes expected in an older adult's anatomy. Training in this area is

pertinent as studies have shown that medical professionals lack training in aging-related sexual health issues. During the second day, the sex educators will also train the nursing staff on how to utilize the adapted PLISSIT model for initiating conversations around sexual health with the residents. The PLISSIT model will be a helpful resource for the nursing staff in the event they feel uncertain how they should broach the topic of sexual health with the residents.

On last day of training, the nursing staff will be split by sex and complete the training with their respective sex educator on how to conduct the educational seminars and the open discussion that will accompany them. Topics covered will include how to ascertain confidentiality, specific sexual education teaching methods, and creating ground rules for an open discussion with the target population. At the end of the training, nursing staff who desire to learn more about aging-related sexual health are able to shadow the sex educators during the educational series for the long-term care facility residents. A maximum of two nurses may accompany a sex educator per session in order for there to be a larger proportion of residents to staff.

6.3.2 ACTIVITIES

An informational session on the educational series will be provided and open to anyone at the long-term care residence. The informational session will be mixed-gender, unlike the educational series. The educational series will be separated by gender due to differing sexual health issues and the desire for the residents to have a high level of comfort in the open discussions. During the informational session, the sex educators will discuss what the educational seminars will consist of as well as how the open discussions will be conducted. The sex educators will establish the ground rules of the educational series, including a judgement-free attitude,

confidentiality, and granting permission to disclose sexual health concerns. The sex educators will state that while the educational series will mainly focus on heterosexual health issues, homosexual health issues will overlap and there will be an opportunity for a separate discussion during the eighth educational seminar. The facilitators will also ensure all residents that if they choose not be a part of the series that they may feel free to discuss their sexual health concerns with any medical staff personnel at the site as they have all received the same relevant training. Food and drink will be provided at the session and all seminars as incentive to the residents. At the end of the session, a sign-up sheet will be available that will allow a maximum of sixty residents, half of each sex, to register.

Table 2. Seminar Series Topics

SEMINAR	MAIN TOPIC	SUB-TOPICS		
NUMBER				
One	Lifestyle Factors	Sedentary lifestyle, alcohol consumption, and depression		
		-Coping Mechanisms		
		-Proper consumption of alcohol		
		-Management		
Two	Condom Use	Importance and Proper Application		
		-Challenges for those with physical disabilities		
		-Flaccidity and Condom Usage		
Three	Pathology of Sexually Transmitted	Methods of Transmission and Symptoms		
	Diseases	-Chlamydia, Gonorrhea, Herpes, Syphilis		
		-Hepatitis C and Generational Differences		
Four	Prevention of Sexually Transmitted	Vulnerability and Methods of Prevention		
	Diseases	-Abstinence versus Other Prevention Methods		
		-Changes in views on susceptibility		
Five	Normal Aging-Related Anatomical	Post-Menopausal Changes, Erectile Dysfunction, and Medical		
	Changes	Products		
		-Vaginal Dryness and Lubrication		
		-Proper Usage of Medication		
Six	Safe Dating Advice	Sexual Consent and Personal Boundaries		
		-Current Norms versus Historical Norms		
		-Individual Boundaries		
Seven	Safe Dating Advice	Sexual Assault and Harassment		
		-Proper Precautions		
		-Contacting Authorities		
Eight	To be determined by residents	To be determined by residents		

Detailed summary of the seminar series and topics discussed.

The eight seminars will be two hours long with thirty-minute breaks at the hour. During the first half of the seminar, the sex educators will dedicate a specific topic to educate the residents on (Table 2). The shadowing nursing staff member's main objective during this time is to observe the series, but may aid the sex educator on the educational aspect of the seminar if the educator desires. The second half of the seminar will be dedicated to open discussion with the residents. The residents may speak about sexual health concerns, concerns about their love life, and any other questions pertaining to their sexual health and well-being.

At the beginning of the first session, the sex educator will administer a ten-question survey to determine the registered residents' level of knowledge about sexual health and their level of comfort asking questions about their sexual health concerns to the medical staff. The survey will be administered again after the eighth session in order to determine if any changes occurred. The desired outcome of the survey is an increase in knowledge about aging-related sexual health and an increase in confidence in discussing sexual health concerns with their providers.

The first seminar will discuss lifestyle factors that may impact sexual health, including a sedentary lifestyle, alcohol consumption, and depression. The sexual education the residents received in their youth is molded around the concept of abstinence, therefore the relevance of teaching a student how to improve their sexual health at the time would have been deemed irrelevant and immoral. A possible challenge identified in educating the residents about lifestyle factors affecting sexual health is residents being unwilling to accept behavior as harmful due to their lack of education and continued sexual ability in despite of detrimental lifestyle factors.

The second educational session will focus on proper condom use and its importance. In response to an inability to conceive after menopause, a low rate of older adults utilizes condoms.

The sex educator will educate the residents on why continued condom use is pertinent to sexual health and how to properly apply a condom. The third and fourth educational sessions will continue discussing the importance of condom use by educating the residents on the methods of transmission and symptoms of STDs. The sex educators will also discuss why older adults are increasingly vulnerable to contracting these diseases and methods to prevent transmission.

The fifth educational session will present on normal anatomical changes expected due to aging. The sex educators will discuss post-menopausal changes in women such as vaginal dryness and the shortening of the vagina. For the male counterpart, erectile dysfunction, and other sexual changes will be discussed. Medical products that treat aging-related sexual health issues will be reviewed alongside certain precautions necessary in order to take the products safely.

The sixth and seventh educational sessions will discuss safe dating advice. Safe dating advice will include how to provide consent, understanding sexual boundaries, and defining sexual assault and harassment. A major challenge for the sexual educators will be encountering conservative gender norms and expectations. Women in the late Silent and early Baby Boomer generation are more likely to have been raised to be obedient and nonresistant to their male counterpart and the sex educators will need to be prepared to counter these concepts. The topic of the eighth session will be decided by the residents during the seventh session. This will allow the residents to either continue discussion on a previous topic or learn about an area in sexual health that they feel a gap of knowledge in.

6.3.3 EVALUATION

In order to determine the effectiveness of the intervention for the nursing staff, the sexual educator will administer two pre-tests to the nursing staff at the beginning of the first training session as data collection tools. The first test will ascertain the prevalence of stereotypes and misconceptions that the staff may have. The test will contain ten multiple choice questions based on scenarios that the staff may encounter at the facility. At the end of the third day of training, the post-test will be administered to determine if any changes occurred. The desired short-term outcome is that 90% of nursing staff will report a decrease in misconceptions about residents (see figure 1).

The second test contains ten multiple-choice questions about aging-related sexual health. At the end of the third day of training, the post-test will be administered again to determine if any changes occurred. The desired short-term outcome will be that 80% of nursing staff report increased knowledge about aging-related sexual health (see figure 1). The results of the two tests will be anonymous and shared with the medical staff of all three sites in order to compare differences in change and to determine possible causes for differences.

In order to evaluate the effectiveness of the intervention for the residents, the sex educator will create a ten-question survey with a Likert-scale as a data collection tool. The questions will include the registered residents' level of knowledge about sexual health and their level of comfort asking questions about their sexual health concerns to the medical staff. The survey will be conducted at the beginning of the first seminar and at the end of the eighth seminar. The desired short-term outcomes to be measured by the survey are that 60% of residents participating in the program report increased knowledge about aging-related sexual health and

70% of residents participating in the program report better likelihood to initiate conversation with nursing staff about sexual health (see figure 1). The results of the survey will be anonymous. The two surveys will be compared separately by the sex educator. The results of the pre and post survey will be shared with the medical staff of all three sites in order to compare differences in change, determine causes for the differences, and identify best practices.

6.3.4 SUSTAINABILITY

At the termination of the program, each facility will attain the Greenblatt Certificate of Holistic Health. Interested nursing staff may choose to continue shadowing the sex educators at their practice and train in conducting the educational series for the residents in order to build capacity in aging-related sexual health. The curriculum for the series is permanent and therefore does not need to be sustained, unless updates are necessary. The educational series should not be administered more than once a year in order to allow an influx of new residents to be able to join. Additional financial incentives do not have to be created to sustain the program as the budget for the program is previously built into the overall budget of the long-term care facility.

6.4 LIMITATIONS

The literature review has several limitations. The literature reviewed is limited to articles found through the University of Pittsburgh's online library access. Very few relevant articles were found due to the gap in research in STD prevention for older adults. In the relevant articles, the age ranges for older adults reported are inconsistent and created difficulty when attempting to

compare studies. Many of the studies only focus on one institution, which made it difficult to generalize the results. Access to all studies that have been conducted on the topic is limited and the majority of interventions found focus on medical interventions for treating STDs in the elderly. The literature on interventions to change attitudes and perceptions of older adult sexuality is also limited in scope.

A significant limitation of the literature review is the focus of heterosexuality within the findings. The data generated focuses on heteronormative ideals and does not include those in the LGBT community. Research on LGBT sexual health tends to have a narrow focus on younger populations and HIV/AIDS prevention (Addis et al., 2009; Wallace et al., 2011). Articles focusing on LGBT older adults are typically restricted to small studies, which make it difficult to generalize the results. Another possible reason for the limitation includes a lack of support in expression of sexuality in the older adult population (Addis et al., 2009). Older adults who identify as LGBT experience further discrimination surrounding their sexual expression than older adults who identify as heterosexual. Older adults who identify as LGBT may be less likely to participate in studies that explore sexual health care due to the past discrimination based on their sexuality.

The proposed intervention is limited by the lack of evidence-based interventions on long-term sexual health for older adults. Since there are a lack of evidence-based interventions to aid in the design of the program, the basis of the proposed intervention is concentrated around the Health Belief Model. The theoretical framework will increase the efficacy of the program, but until the intervention is implemented it will be difficult to determine its potential for success.

An additional limitation of the proposed intervention is that attendance for residents is optional and that it assumes widespread participation. Mandatory attendance is not a component

of this intervention in order for the residents to preserve their right to choose and assess whether they want to discuss a topic deemed taboo. Due to attendance being optional, the possibility that the group discussions will consist of a modest number of participants increases. Components of the intervention can still be implemented despite lower attendance, although without the desired widespread effect that the intervention is created to achieve.

7.0 CONCLUSION

STDs, while mostly preventable, lay an unnecessary burden on our health care system. Public health officials can decrease the cost of healthcare for the elderly population by understanding the complex issues that have led to a disproportionate number of older adults contracting STDs. As older adults grow to become the largest population in the United States, it is even more imperative that effective interventions be created to eliminate this disparity. Policies created to address sexual health expression and rights should also include older adults in their target population in order to increase access to services and normalize older adult sexuality. Including older adults in policies on sexual health has the potential to decrease financial burden on both health care and social support systems.

The majority of research on older adult sexuality focuses on the effects of dementia on consent and how to prevent sexual abuse within long-term care facilities. Future research should include older adults with and without cognitive impairments in order to assess systems of sexual abuse within long-term care facilities. Future research should also focus on the inclusion of older adults who identify as LGBT in their target population. Current younger generations are more comfortable coming out than past generations due to the reduction of stigma and the legalization of gay marriage in the United States. The need for research on LGBT older adults will increase as more people begin expressing themselves sexually in a non-heteronormative way. Aging-

related sexual health care can become more comprehensive by addressing the need for sexual health care for all older adults instead of excluding certain demographics.

In the United States, there is a resurgence of abstinence-only sex education programming. This teaching method will lead current and future generations to be increasingly susceptible to STDs, reflecting the present predicament of the older adult population. Education for medical professionals on how to approach sexual health with patients of all ages will be paramount in combatting future epidemics of STDs. By understanding all barriers to sexual health care, medical professionals will be better prepared in responding to generations who have been taught sex education based on values and not scientifically accurate information.

BIBLIOGRAPHY

- Aboderin, I. (2014). Sexual and reproductive health and rights of older men and women: addressing a policy blind spot. Reproductive Health Matters, 22(44), 185-190.
- Addis, S., Davies, M., Greene, G., MacBride-Stewart, S., & Shepherd, M. (2009). The health, social care and housing needs of lesbian, gay, bisexual and transgender older people: a review of the literature. Health & Social Care in the Community, 17(6), 647-658. doi:10.1111/j.1365-2524.2009.00866.x
- AIDS Community Research Initiative of America (ACRIA). (2017). Older Adults and Sexual Health: A Guide for Aging Services Providers
- American Association of Retired Persons (AARP). (1999). AARP/Modern Maturity Sexuality Survey. AARP.
- American Association of Retired Persons (AARP). (2007). Nursing Homes: Fast Facts.
- Angus, J., & Reeve, P. (2006). Ageism: A Threat to "Aging Well" in the 21st Century. Journal of Applied Gerontology, 25(2), 137-152. doi:10.1177/0733464805285745
- Bashford, A., & Strange, C. (2004). Public Pedagogy: Sex Education and Mass Communication in the Mid-Twentieth Century. Journal of the History of Sexuality, 13(1), 71-99.
- Bullough, V. L. (1998). Alfred Kinsey and the Kinsey Report: Historical Overview and Lasting Contributions. The Journal of Sex Research, 35(2), 127-131.
- Cocks, C. (2006). Rethinking Sexuality in the Progressive Era. The Journal of the Gilded Age and Progressive Era, 5(2), 93-118.
- Davila, V. (2009). For Today's Seniors, It's Never Too Late for Sex Education. Retrieved from http://www.chicagotribune.com/lifestyles/sns-health-seniors-sex-education-story.html
- Dessel, R. (1995). Policies and Procedures Concerning Sexual Expression at the Hebrew Home at Riverdale.
- Egri, C. P., & Ralston, D. A. (2004). Generation Cohorts and Personal Values: A Comparison of China and the United States. Organization Science, 15(2), 210-220.
- Family and Youth Services Bureau (FYSB). (2016). State Personal Responsibility Education Program Fact Sheet. Retrieved from https://www.acf.hhs.gov/fysb/resource/prep-fact-sheet
- Federal Criminal Code, Congress, CCLVII Stat. (1873 March 3, 1873).

- Federal Policy Action Center. (2018). Evidence-Based Teen Pregnancy Prevention Education Resources. Retrieved from https://powertodecide.org/sites/default/files/resources/supporting-materials/fpacevidence-based-teen-pregnancy-prevention-education.pdf
- Frankowski, A. C., & Clark, L. J. (2009). Sexuality and Intimacy in Assisted Living: Residents' Perspectives and Experiences. Sexuality research & social policy: journal of NSRC: SR & SP, 6(4), 25-37. doi:10.1525/srsp.2009.6.4.25
- Gordon, L. D. (1987). The Gibson Girl Goes to College: Popular Culture and Women's Higher Education in the Progressive Era, 1890-1920. American Quarterly, 39(2), 211-230. doi:10.2307/2712910
- Gott, M., Hinchliff, S., & Galena, E. (2004). General practitioner attitudes to discussing sexual health issues with older people. Social Science & Medicine, 58(11), 2093-2103. doi:https://doi.org/10.1016/j.socscimed.2003.08.025
- Greene, M. G., et al. (1986). Ageism in the Medical Encounter: An Exploratory Study of the Doctor–Elderly Patient Relationship. Language & Communication, 6, 113-124.
- Hajjar, R. R., & Kamel, H. K. (2004). Sexuality in the Nursing Home, Part 1: Attitudes and Barriers to Sexual Expression. Journal of the American Medical Directors Association, 5(2, Supplement), S43-S47. doi:https://doi.org/10.1016/S1525-8610(04)70092-4
- Hartman-Stein, P. E., & Potkanowicz, E. S. (2003). Behavioral determinants of healthy aging: Good news for the baby boomer generation. Online Journal of Issues in Nursing, 8(2), 127-146.
- Hillman, J. (2008). Sexual issues and aging within the context of work with older adult patients. Professional Psychology: Research and Practice, 39(3), 290-297. doi:10.1037/0735-7028.39.3.290
- HIV.gov. (2016). A Timeline of HIV and AIDS. Retrieved from https://www.hiv.gov/hivbasics/overview/history/hiv-and-aids-timeline
- Hughes, A. K., & Wittmann, D. (2015). Aging Sexuality: Knowledge and Perceptions of Preparation Among U.S. Primary Care Providers. Journal of Sex & Marital Therapy, 41(3), 304-313. doi:10.1080/0092623X.2014.889056
- Imber, M. (1982). Toward a Theory of Curriculum Reform: An Analysis of the First Campaign for Sex Education. Curriculum Inquiry, 12(4), 339-362. doi:10.2307/1179488
- Irvine, J. M. (2004). Talk about sex: The battles over sex education in the United States: Univ of California Press.
- Kaiser Family Foundation. (2012). Analysis of the Bureau of Labor Statistics Consumer Expenditure Survey Interview and Expense Files. In: Kaiser Family Foundation.
- Katzive, C. E. (2015). Margaret Sanger: Demonstrating Leadership and Legacy Through Her Crusade For Women's Reproductive Rights. The History Teacher, 49(1), 127-138.

- Kells, L. (2012). New York Society for the Suppression of Vice Records: A Finding Aid to the Collection in the Library of Congress. In L. o. Congress (Ed.). Manuscript Division.
- King, D. R. (Writer). (2017). Saturday Night Live. In L. Michaels (Producer). NBC.
- Kleinplatz, P. J. (2008). Sexuality and Older People. BMJ: British Medical Journal, 337(7662), 121-122.
- Koop, C. E. (1986). Statement by C. Everett Koop, MD, Surgeon General, U.S. Public Health Service [Press release]. Retrieved from https://profiles.nlm.nih.gov/ps/retrieve/Narrative/QQ/p-nid/87/p-docs/true
- LaMorte, W. W. (2016). The Health Belief Model. Retrieved from http://sphweb.bumc.bu.edu/otlt/MPH-Modules/SB/BehavioralChangeTheories/BehavioralChangeTheories2.html
- Lilleston, R. (2017). STD Rates Keep Rising for Older Adults. Retrieved from https://www.aarp.org/health/conditions-treatments/info-2017/std-exposure-rises-older-adults-fd.html
- Lindau, S. T., Schumm, L. P., Laumann, E. O., Levinson, W., O'Muircheartaigh, C. A., & Waite, L. J. (2007). A Study of Sexuality and Health among Older Adults in the United States. New England Journal of Medicine, 357(8), 762-774. doi:10.1056/NEJMoa067423
- Martin, J. L. (1996). Structuring the Sexual Revolution. Theory and Society, 25(1), 105-151.
- Mazer, D. (Writer). (2016). Dirty Grandpa. In: Lionsgate.
- McAuliffe, L., Bauer, M., & Nay, R. (2007). Barriers to the expression of sexuality in the older person: the role of the health professional. International Journal of Older People Nursing, 2(1), 69-75. doi:10.1111/j.1748-3743.2007.00050.x
- Michael, A. C. (1971). Preparation of a Sex Educator: A Historical Overview. The Family Coordinator, 20(2), 99-108. doi:10.2307/581902
- Moran, J. P. (1996). "Modernism Gone Mad": Sex Education Comes to Chicago, 1913. The Journal of American History, 83(2), 481-513. doi:10.2307/2944944
- Muren, G. M. (1907). The American Society of Sanitary and Moral Prophylaxis, Its Aims and Objects. The American Journal of Nursing, 7(4), 245-253. doi:10.2307/3403346
- Napoli, E. A. D., Breland, G. L., & Allen, R. S. (2013). Staff Knowledge and Perceptions of Sexuality and Dementia of Older Adults in Nursing Homes. Journal of Aging and Health, 25(7), 1087-1105. doi:10.1177/0898264313494802
- Nelson, T. D. (2011). Ageism: The Strange Case of Prejudice Against the Older You. In R. L. Wiener & S. L. Willborn (Eds.), Disability and Aging Discrimination: Perspectives in Law and Psychology (pp. 37-47). New York, NY: Springer New York.
- Ouchida, K. & Lachs, M. (2015). Not for Doctors Only: Ageism in Healthcare. American Society on Aging.

- Pearsall, S. M. S. (2001). The State of the Union: Sexuality in American History. Gender & History, 13(2), 374-379. doi:10.1111/1468-0424.00233
- Perper, M. C. T. (1996). For Sex Education, See Librarian: A Guide to Issues and Resources: Greenwood Publishing Group.
- Perrin, K., & DeJoy, S. B. (2003). Abstinence-Only Education: How We Got Here and Where We're Going. Journal of Public Health Policy, 24(3/4), 445-459. doi:10.2307/3343387
- Planned Parenthood. (2013). STD vs STI. Retrieved from http://plannedparenthood.tumblr.com/post/33600737905/std-vs-sti
- Planned Parenthood. (2015). The Birth Control Pill: A History. Retrieved from https://www.plannedparenthood.org/files/1514/3518/7100/Pill_History_FactSheet.pdf
- Planned Parenthood. (2016, November 2016). History of Sex Education in the U.S. Retrieved from https://www.plannedparenthood.org/uploads/filer_public/3e/de/3edec4e8-3604-44f9-998b-6a7cff9d22ad/20170209_sexed_d04_1.pdf
- Roach, S. M. (2004). Sexual behaviour of nursing home residents: staff perceptions and responses. Journal of Advanced Nursing, 48(4), 371-379. doi:10.1111/j.1365-2648.2004.03206.x
- Rosenstock, I. M., Strecher, V. J., & Becker, M. H. (1988). Social learning theory and the health belief model. Health education quarterly, 15(2), 175-183.
- Rubin, I. (1968). The "Sexless Older Years"-A Socially Harmful Stereotype. The Annals of the American Academy of Political and Social Science, 376, 86-95.
- Sarkadi, A., & Rosenqvist, U. (2001). Contradictions in the medical encounter: female sexual dysfunction in primary care contacts. Family Practice, 18(2), 161-166.
- Schick, V., Herbenick, D., Reece, M., Sanders, S. A., Dodge, B., Middlestadt, S. E., & Fortenberry, J. D. (2010). Sexual Behaviors, Condom Use, and Sexual Health of Americans Over 50: Implications for Sexual Health Promotion for Older Adults. The Journal of Sexual Medicine, 7, 315-329. doi:10.1111/j.1743-6109.2010.02013.x
- School Sex Ed Required in Three States and D.C., but Most States Allow Local Districts to Decide. (1980). Family Planning Perspectives, 12(6), 307-310. doi:10.2307/2134664
- Sexuality Information and Education Council of the United States (SIECUS). (2018). History. Retrieved from http://www.siecus.org/index.cfm?fuseaction=Page.ViewPage&pageId=493
- Shenehon, E. (1950). The Social Hygiene Movement and Family Stability. The Annals of the American Academy of Political and Social Science, 272, 163-170.
- Shornack, L. L., & Shornack, E. M. (1982). The New Sex Education and the Sexual Revolution: A Critical View. Family Relations, 31(4), 531-544. doi:10.2307/583929
- Smith, T. W. (1990). A Report: The Sexual Revolution? The Public Opinion Quarterly, 54(3), 415-435.

- Smolak, A. (2013). White Slavery, Whorehouse Riots, Venereal Disease, and Saving Women: Historical Context of Prostitution Interventions and Harm Reduction in New York City during the Progressive Era. Social work in public health, 28(5), 496-508. doi:10.1080/19371918.2011.592083
- Somerville, R. M. (1971). Family Life and Sex Education in the Turbulent Sixties. Journal of Marriage and Family, 33(1), 11-35. doi:10.2307/350155
- Strong, B. (1972). Ideas of the Early Sex Education Movement in America, 1890-1920. History of Education Quarterly, 12(2), 129-161. doi:10.2307/366974
- Tarzia, L., Fetherstonhaugh, D., & Bauer, M. (2012). Dementia, sexuality and consent in residential aged care facilities. Journal of Medical Ethics, 38(10), 609-613.
- Taylor, A., & Gosney, M. A. (2011). Sexuality in older age: essential considerations for healthcare professionals. Age and Ageing, 40(5), 538-543. doi:10.1093/ageing/afr049
- Taylor, B., & Davis, S. (2006). Using the extended PLISSIT model to address sexual healthcare needs. Nursing Standard (through 2013), 21(11), 35.
- Thomson, R. (1994). Moral Rhetoric and Public Health Pragmatism: The Recent Politics of Sex Education. Feminist Review(48), 40-60. doi:10.2307/1395168
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). (1996). Americans Less Likely to Use Nursing Home Care Today. Retrieved from https://www.cdc.gov/media/pressrel/nursin1.htm
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). (2017). Gonorrhea CDC Fact Sheet. Retrieved from https://www.cdc.gov/std/gonorrhea/stdfact-gonorrhea.htm
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). (2017). Syphilis CDC Fact Sheet. Retrieved from https://www.cdc.gov/std/syphilis/stdfact-syphilis.htm
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). (2014, 2017). Practical Use of Program Evaluation among STD (STD) Programs. Retrieved from https://www.cdc.gov/std/program/pupestd.htm
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). (2016). Hepatitis C: Why People Born from 1945-1965 Should Get Tested [Press release]. Retrieved from https://www.cdc.gov/knowmorehepatitis/media/pdfs/factsheet-boomers.pdf
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). (2017). Tracking Infections in Long-term Care Facilities. Retrieved from https://www.cdc.gov/nhsn/ltc/index.html
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). (2017). Chlamydia CDC Fact Sheet. Retrieved from https://www.cdc.gov/std/chlamydia/stdfact-chlamydia.htm

- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). (2018). Sexually Transmitted Diseases (STDs). Retrieved from https://www.cdc.gov/std/default.htm
- U.S. Department of Health, Education and Welfare (1966) Report on family planning: Activities of the U.S. Department of Health, Education and Welfare.
- Wallace, M. A. (2008). How to Try This: Assessment of Sexual Health in Older Adults. The American Journal of Nursing, 108(7), 52-61.
- Wallace, S. P., Cochran, S. D., Durazo, E. M., & Ford, C. L. (2011). The Health of Aging Lesbian, Gay and Bisexual Adults in California. Policy brief (UCLA Center for Health Policy Research)(0), 1-8.
- Welbourne-Moglia, A., & Moglia, R. J. (1989). Sexuality Education in the United States: What It Is; What It Is Meant to Be. Theory Into Practice, 28(3), 159-164.
- Winkler, K. (2005). Kinsey, Sex Research, and the Body of Knowledge: Let's Talk About Sex. Women's Studies Quarterly, 33(3/4), 285-313.