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An Educational Activity for Primary Care Providers Treating Older Veterans with Sexually Transmitted Infections

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
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Walden University
2020

Abstract

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MSN, University of Maryland School of Nursing, 2011

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Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

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Abstract

Comprehensive sex education is an effective method of promoting sexual health. Because primary care providers conduct the initial health need assessment of veterans, it is important that providers understand how to approach the subject of sexual health and the prevention of sexually transmitted infections. The purpose of this evidence-based project was to implement and evaluate an educational activity for primary care providers. The health belief model was used as theoretical framework. This project was introduced to a federal primary care clinic in the Mid-Atlantic United States. Twenty-five participants completed a pretest prior to the start of the educational activity that measured provider knowledge of sexual health education. Twenty-two participants were given a posttest after the delivery of the educational activity to measure the activity effectiveness. *Yes* responses on the pretest ranged from 57.14 % to 85.71 %. *Yes* responses on the posttest ranged from 92% to 100%, indicating providers potential for implementing conversation with veterans about safe sex practices. Program evaluation results ranged from 4.5 to 5.0 with 5 being strongly agree. This project is being considered as part of the ongoing educational clinical reminders for providers at the primary care clinic in the Mid-Atlantic United States. Increasing sexual health education for older veterans supports a positive social change through increased safe sex practices in this population.

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Dedication

I dedicate this project and the achievement of my doctoral degree in loving memory of my husband John Fred Grant, Jr. and to my family. To my sons, William Strong Wright III and Dr. Andrew Jonathan Wright, I thank you both for your love, support, prayers, motivation, and pushing me forward toward my endeavor to complete this doctoral degree. To my brother James B. Scott, Sr., I thank you for your support and prayers. To my sister-in-law, Gwendolyn O. Scott, I sincerely thank you for your support, love, and listening to me vent and lending your shoulder to shed my tears. To my brother Clifton A. Scott, Sr., thank you for always saying, "handle your business my favorite sister you can do this." To my two cousins Maybelle T. Bennett and Rebeccah Bennett Kenyatta, thank you so very much for all your prayers and encouraging me to continue to drive on and complete this journey in my life. To my cousins Arnold R. Mills and Jeannette B. Mills, thank you both so very much for providing a constant source of love, support, prayers, and encouragement when you offered your kind words to me to continue to push forward. To my Pastor Rev. Twanda Prioleau, thank you for your spiritual support and prayers as well as reminding me of my vision to continue to pursue this journey. Family, you have always supported my educational endeavors. You all have encouraged and supported me to further my education when I did not think I had the strength to continue. So, with, peace and blessings and may God continue to bless you all. My heartfelt thanks go out to you all.

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Section 1: Nature of the Project

Introduction

In the United States, sexually transmitted infections (STIs) are a serious health issue creating a public health challenge (Workowski, 2015). The Centers for Disease Control and Prevention (CDC) reported that the most common STIs for all age groups are bacterial vaginitis, chlamydia, gonorrhea, hepatitis, herpes, human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS), human papillomavirus (HPV), syphilis, and trichomoniasis (Jennings, 2015). The CDC estimates that there are approximately 20 million new STI infections diagnosed each year (CDC, 2016). Many STIs are unreported and untreated, which can cause increased sexual and reproductive health concerns. High-risk sexual behavior and lack of knowledge about transmission and prevention contributes to the growing epidemic of STI transmission.

As the human lifespan continues to increase and individuals continue to be sexually active later in life, the incidence of STIs continues to increase (Workowski, 2015). This rising incidence of STIs is also occurring in the older veteran population, especially those veterans over the age of 60 (Jennings, 2015). Offering an education session to primary care providers addressed the issue of both delivery of new knowledge and unlearning of old habits to fill a gap in practice and support a practice change. This education program highlighted the importance of educating and empowering their patients to practice safe sex, which constitutes a practice change.

Problem Statement

STIs remain a significant public health problem, as there are numerous harmful complications including reproductive health problems, cancer, and sexual transmission of HIV (Office of Disease Prevention and Health Promotion, n.d.). The effectiveness of sexual health education could increase the frequency of the use of safe sex practices (Cramer, 2015). Additional information was needed for providers to be able to effectively educate older veterans about how to change risky behavior to decrease the incidence of STIs.

According to a database at a Mid-Atlantic veteran facility, the number of cases of STIs experienced by veterans age 60 and older had increased by an average of 17% from 2016 to 2019 (Veteran Pyramid Analytics, 2019). This increase in infections established the need to educate and empower individuals to make healthier choices regarding their sexual health. The older veteran population, 60 and over, often do not seek medical treatment for STIs because of personal beliefs or misinformation about STIs (Jennings, 2015). Jennings (2015) also reported that health care providers and older adults may overlook the risk factors in STIs. Many older adults are uncomfortable discussing sexual concerns with their health care providers. Conversely, according to Malta et al. (2018), older patients are interested in talking about their sexual health; however, health care providers are often reluctant to initiate the discussion. Understanding STIs and sexual health behaviors may help educate those who take part in these types of risky activities and possibly help prevent and contain the continued spreading of such diseases. Additionally, older adults may not be knowledgeable of how STIs are transmitted,

treated, or prevented (Cramer, 2015). Risky behavior such as unprotected sex, having multiple partners, inconsistent condom use, and substance use are frequently determinants of increased risk for HIV and other STIs (Bakhoum, Bachmann, Kharrat & Talaat, 2014). Health care providers play a critical role in closing the knowledge gap among their patients to help reduce the incidence of risky behavior, support patients' quality of life; and decrease the prevalence of STIs. Additionally, taken together, these outcomes are drivers of positive social change (Harley, 2018).

Because primary care providers conduct the initial health need assessment of veterans, it is important that providers understand how to initiate and feel comfortable about approaching the subject of sexual health and the prevention of STIs (Malta et al., 2018). Primary care providers may not admit they do not have the communication skills to discuss sexually transmitted infection prevention with their patients and may divert from this topic in hopes that it will be discussed in another clinic. Sexual health is an important component or patient well-being that influences their healthcare outcomes (Evans, Borrero, Yabes & Rosenfeld, 2017). Providers must incorporate strategies that will improve patients' knowledge of STIs. Health care providers must actively engage in conversations about safe sex practices to decrease the knowledge gap among older veterans (Jennings, 2015).

According to Cramer's 2015 Long Beach VA reports, health care providers should ask veterans about their sexual practice. Additionally, Cramer reported that sexual health is a personal subject and providers often have difficulty talking about it. Providing

comprehensive patient-centered care involves treating the whole veteran, which involves addressing sexual health (Cramer, 2015).

Health care providers and local government such as health departments share responsibility for cultivating sexual health awareness through education and for disseminating information on sexual health. This information is necessary for individuals to make informed choices regarding their sexual health (Fonner, Armstrong, Kennedy, O'Reilly, & Sweat, 2014). Irresponsible, risky sexual behavior among older veterans can become a major public health concern, increasing the prevalence of STIs such as syphilis, gonorrhea, chlamydial infections, genital herpes, hepatitis, genital warts, and trichomoniasis. Preventing and containing STIs is a considerable public health challenge (Workowski, 2015). The CDC has shown that adults age 50 and older have an increased rate of HIV diagnosis in the United States, 17% from 2014 to 2018. (CDC, 2018). Additionally, root cause issues like poverty and their resulting isolation can make it difficult for this population to stay sexually healthy (CDC, 2016). The CDC has reported evidence of a racial/ethnic pattern of STIs showing that poorer persons are at higher risk (CDC, 2016). Lower income and less access to health care, including prevention and information, are associated with higher rates of STIs (Harling, Subramanian, Barnighausen, & Kawachi, 2013). Based on guidelines from the CDC and the U.S. Prevention Services Task Force, routine screenings of adults regardless of age is important to decrease the prevalence of STIs (CDC, 2015).

According to Cramer's 2015 report from the Long beach VA, providers should ask veterans about their sexual practices. Additionally, Cramer reported that sexual health

is a personal subject and providers often have difficulty taking about it. Comprehensive patient centered care involves treating the whole person, which involves addressing sexual health. Providers' silence and lack of engagement on this issue can place older veterans and, by extension, the community at risk, exacerbating public health concerns. In the Mid-Atlantic veteran facility, there was no formalized intervention to encourage the use of safe sex practices with older veterans.

The goal of this staff educational project was to develop an evidence-based educational activity for primary care providers in the primary care clinic for addressing safe sex practices with the older veteran population. An educational activity for primary care providers furnishes them with the information necessary to communicate with older veterans regarding engaging in safe sex practices.

Purpose

The purpose of this evidence-based educational practice project was to bring education to primary care providers at a veteran's medical center in a mid-Atlantic city on educating their patients about safe sex practices to reduce the prevalence of STIs in older veterans. Because of the growing public health concern about risky behavior among older veterans, and because of the rise in the incidence of STIs, there was a need to develop a project that educated providers that serve this population about the importance of teaching patients about unsafe practices that aid in the transmission of STIs (Evans, Borrero, Yabes & Rosenfeld, 2017).

The practice-focus question for this project study was:

PFQ: Will providing an educational activity to primary care providers in a veteran's hospital increase their knowledge about the importance of educating their patients on safe sex practices?

As part of this educational project, providers were instructed about the importance of focusing on safe sex awareness, preventions of STIs via the use of condoms and other protective barriers, intervention and treatment options, and existing support services for follow-up care. The goal of this staff educational project was to develop an evidence-based educational program to inform health care providers in primary care of the importance of addressing safe sex practices in older veterans.

Nature of the Doctoral Project

This project was a staff educational program for primary care providers focusing on educating their older veteran population about safe sex practices. I collected evidence supporting this project using an electronic literature search of articles regarding safe sex practices. I used the following databases: CINAHL, Plus with Full Text, MEDLINE with Full Text, Google Scholar, Worldwide Sciences, Veteran Administration Library, publications websites and documents (i.e. fact sheets, reports, and briefs) and the Walden University Library. Evidence used in the development of this project was restricted to publication in the last 5 years to ensure that this project included the most recent information available. To assist in selecting the best evidence available for this staff educational project, I used Melnyk & Fineout-Overholt's (2011) hierarchy of evidence to appraise the level of evidence.

Key words related to safe sex practices that I used for this project were: *safe sex, condom use, sexual health, sexually transmitted infections (STIs), sexual activity, patient-physician communication, older adults, veterans, nurses, health belief model,* and *primary care providers*

The health belief model (HBM) is a behavioral change model that focuses on health motivation and supports the likelihood that a person will change thinking and behavior. I used the HBM as the framework to support this educational program. The HBM is a psychological health behavioral change model that aids in understanding patients' response to disease, their compliance to treatment, and lifestyle behavior such as risky sexual behaviors. Providing educational information is pertinent for motivating individuals to make behavioral changes to practice safe sex.

Significance

Stakeholders

The aim of this project was to develop a safe sex staff educational project for primary care providers to bring awareness of the importance of addressing safe sex practices among veterans. Education is a key factor in understanding the importance of decreasing the spread of STIs by reducing the instances of unsafe sex practices (Jennings, 2015). Increasing knowledge of STI prevention methods can reduce the rate of infection transmission. Stakeholders included primary care providers, nurse educators, pharmacy staff, nurse administrators, direct care nurses, and veterans. Because primary care providers conduct the initial health needs assessment of veterans, it is important that providers know how to initiate a conversation about sexual health including STI

prevention (Malta et al., 2018). The provider-patient encounter is an opportunity for providers to counsel their patients about sexual health and safe sex practices (Ports et al., 2014).

Contribution to Nursing Practice

This teaching project supports implementation of sexual health education, decreasing risky sexual behavior among veterans and empowering primary care provider's to address risky sexual behavior among their veteran patients. It is important that primary care providers understand how to address and communicate about the importance of encouraging veterans to practice safe sex.

Generalizability

Upon completion of this safe sex educational activity, primary care providers will understand that this program might be used at other VA facilities. This program could be added to existing standard of practice protocol to improve a practice change that will improve delivery of holistic care.

Implications for Social Change

It is essential to understand the importance of sensitive subjects that are essential to healthcare and wellness, which improves holistic health. A sexual health history is an important part of holistic health. As primary care providers conduct their initial health care assessment, providers must address their patients' sexual health history. Many older adults continue to be sexually active and there are concerns among the older population with limited knowledge about STIs continue to increase (Ports et al., 2014). Providers who engage in dialogue with their patients about their sexual history can help them

become more aware of STIs and the importance of safe sex. This physician-patient discussion may decrease risky sexual behavior and the spread of STIs through effective interventions and communication to increase screenings and testing and promote behavioral change (Ports et al., 2014).

Summary

STIs can have a significant impact on the health of older individuals who are often diagnosed late in the disease course due to lack of screening and safe sex education. As lifespans increase, older individuals who are dating and may not have used condoms in the past may not think about using them. Sexually active older individuals should be provided with current information concerning safe sex practices and STI prevention to remain healthy and decrease the spread of STIs. Education and intervention are vital steps for promoting behavior change. This project aligns with implementation of clinical prevention practice to improve the health status of older veterans who are high risk for STIs. Section 1 introduced the gap in practice, the practice question, the stakeholders, and the social change implications for this project. In Section 2 I describe the evidence supporting this project, the model framing the project, and the nature of the project.

Section 2: Background and Context

Introduction

The human lifespan continues to increase, and individuals may continue to be sexually active into later stages of life. Sexual health is an important component of holistic health. While older literature indicated that many older adults are uncomfortable addressing sexual health topics with their providers, current literature has suggested that older adults are interested in discussing their sexual health (Malta et al., 2018). Providing an educational activity for providers on promoting the sexual health of their patients is crucial in bridging the current gap in practice. Incorporating strategies for primary care providers to communicate with and educate their patients about safe sex practices can be critical to improve patients' knowledge and decreasing the spread of STIs. The purpose of this safe sex staff educational activity was to educate primary care providers about safe sex practices for older veterans.

Concepts, Models, and Theories

Several models guided this project. The HBM is a psychological health behavior change model that was developed by social psychologists, Rosenstock, Hochbaum, Kegeles, and Leventhal in the 1950s at the U.S. Public Health Service and redesigned in the 1980s (Jones et al., 2015). The HBM was developed to provide a basis for disease prevention strategies and guide health promotion through understanding the factors behind a person's willingness to change risky health behaviors. In addition to the HBM, I used Melnyk & Fineout-Overholt's (2011) level of evidence rating system for the hierarchy of evidence to rate the evidence selected for inclusion in the literature review.

Health Belief Model

The HBM has been used in nursing that focuses on patients' health care compliance and preventive health measures. This model also has been used to predict a wide range of health related behaviors that involve lifestyle changes that involve compliance with health promotion regimens and preventive practices such as for mitigating sexual risk behaviors (Bishop, Baker, Boyle, & Mackinnon, 2015). Individuals tend not to change their health behaviors unless they think that the change in behavior will make a difference in their well-being. If a person is convinced a behavioral change will help avoid serious negative health consequences, the behavior may change (Jones et al., 2015).

The HBM has six constructs that predict health behaviors: risk susceptibility, risk severity, benefits to action, barriers to action, self-efficacy, and cues to action (Jones, et al, 2015). The HBM constructs are used to evaluate, assess, educate, motivate, and formulate preventive health measures to help patients take action to change behaviors to prevent illness (Laranjo, 2016). If individuals believe they are at risk for serious health consequences from contracting an STI, they may moderate risky behavior. The HBM can provide guidance for clinicians looking to improve patients' quality of life and save money as part of incorporating evidence-based practices that can improve patient health outcomes. This model is widely used and publicly available; therefore, permission to use the model was not required. Components of the HBM are described in Table 1.

Table 1

Health Belief Model Components

Concepts	*Definition*	*Potential Change*
Perceived susceptibility	What the older veteran perceives about the chances of contracting a Sexually STI	Defines behavioral risk of the older veteran
Perceived severity	What the older veteran perceives as the probability of contracting an STI	Defines behavioral change to avoid consequences
Perceived benefits	What the older veteran perceives to take action in changing their risky behavior to reduce risk of contracting an STI	Defines the positive outcome of behavioral change
Perceived barriers	What the older veteran perceives as risky unsafe sex practices and the possible negative outcomes and costs of taking action	Defines the change in behavior if barriers are not used
Cues to action	What the veteran understands, and the importance of behavior change, and the veteran is motivated to make the positive change from risky behavior to the use of protective barriers to avoid the risk of contracting and transmission of STIs	Defines the veteran moving from wanting to make a change to making a change
Self-efficacy	What the older veteran believes and understand to practice safe sex	Defines behavior change to be consistent in using protective barriers

Melnyk & Fineout-Overholt's Levels of Evidence

Melnyk & Fineout-Overholt's (2011) levels of evidence are based on the methodological quality, validity, and applicability that leads to positive patient care outcomes. Melnyk & Fineout-Overholt levels of evidence model consists of seven levels of evidence ranging from Level I through Level VII, with Level I identified as the highest level of evidence. Using high levels of evidence in a project can validate the methodological quality of the design used, the validity of the project for patient care, and how the project relates to patient outcomes. I selected Melnyk & Fineout-Overholt's levels of evidence to grade the literature because of its validity and reliability to ensure that the highest level of available evidence was incorporated into the project. Melnyk Fineout-Overholt's model is depicted in Table 2.

Table 2.

Level of Evidence

Level I	Evidence from a systematic review of relevant randomized controlled trials (RCTSs) or evidence-based clinical practice guidelines based on systematic reviews of RCTs
Level II	Evidence from at least one well-designed RCT
Level III	Evidence from well-designed controlled trials without randomization
Level IV	Evidence from well-designed case-control and cohort studies
Level V	Evidence from systematic reviews of descriptive or qualitative studies
Level VI	Evidence from a single descriptive or qualitative study
Level VII	Evidence from authority opinions and reports from experts

Definition of Key Terms

Condom: A barrier when used during sexual activity decreases the chance of a sexually transmitted infection (Addoh, Sng, & Loprinzi, 2017).

Older veteran: Men and women veterans 65 years and older (VA U.S Department of Veterans Affairs, n.d.)

Patient-physician relationship: The relationship between patient and clinician that is based on trust that the patient's welfare is paramount, sound medical judgment will be used, and the physician will advocate for and serve the patient's medical needs (Johnson, 2019).

Physician: A person qualified to practice medicine: A medical practitioner, medical doctor, or a professional who practices medicines and is concerned with promoting, maintaining, or restoring health through the study, diagnosis, prognosis, and treatment of physical and mental impairments (Watson, 2019).

Sexual health: The state of being sexual, which includes sexual needs, sexual drives, and behavioral sexual expressions that contribute to a sense of vitality and self-esteem in a person's life (World Health Organization, 2020).

Sexual activity: The act that occurs between two individuals that involves sexual penetration or oral sex (Gebhard, n.d).

Safe Sex: Sexual activity that involves the use of barriers such as male or female condoms, dental dams, and monogamy to avoid STIs Safe sex practices (Addoh, 2017).

Sexually transmitted infections: Infections spread by sexual activity via vaginal or anal intercourse or oral sex. (Shiel, n.d.)

Relevance to Nursing Practice

A thorough review of the literature was conducted for full text articles through CINAHL, MEDLINE, Google Scholar, Worldwide Sciences, Veteran Administration

Library, publication websites, online documents, and the Walden University Library. Searching through quality literature, I selected 72 articles published from 2014 to 2019 that supported the goal of this project. Ten articles were excluded due to out-of-date information listed in the studies.

According to a *New England Journal of Medicine* survey, 3,005 men and women, between the ages of 65 and 85 living in the United States were surveyed about their sexual health. Researchers found that many of these older adults remained sexually active well into their 80s (Lifetime Daily Contributor, 2018). It is recommended that older adults practice safe sex as they explore the dating scene. All sexually active people regardless of age are at risk for STIs; therefore, it is important to communicate that STIs do not discriminate and safe sex practices are important. (Wada, Mortenson & Clark, 2016). It is important that health care providers address a patient's sexual history as part of the general health screening to decrease the risk of STIs.

Older veterans do think about sex and are engaging in it. As an older person becomes more technologically capable, the likelihood of that person participating in online dating and enjoying meeting new partners is increased (Tsai, Sussman, Pickering, & Rohrback, 2019). Online dating also increases the risks of unsafe sex practices (USA Today, 2019). Primary care providers may avoid discussing safe sex practices because of the sensitivity of the topic and a mistaken belief that an older person is not sexually active (Ryan, Arbuckel-Bernstein, Smith, and Phillips, 2018).

Sexual health is an important component of holistic health and well-being and many older adults continue to be sexually active as they age (Malta et al., 2018). Sexual

health, for all stages of life, is significant to quality of life and should be discussed with the health care provider. Studies show there is a gap in understanding the attitudes toward sexuality and sexual health among veterans 60 and older (Bauer, & Haesler, 2015). Providing education to older veterans will promote habit formation and increase positive decision-making toward healthy safe sex practices. When there is a lack of knowledge about sexual health, this gap in education can lead to an increase in STIs. Some primary care providers find it difficult to conduct sexual discussions with older veterans because of their perceived perceptions and barriers that the older veteran is not having sex or not interested in addressing it (Malta et al., 2018). Although some primary care providers may perceive this, they are aware that the discussion is important and should be discussed (Malta et al., 2018). Other barriers primary care providers may encounter are age, gender, and lack of time given to care management with their patients (Malta et al., 2018). These barriers also increase the challenge of providing holistic health care, which increases the chances of risky sexual behaviors for the older veteran and highlights the veteran's lack of awareness of the full impact the knowledge gap about sexual health can create (Malta et al., 2018).

Local Background and Context

Abstinence is the only sure way to avoid risks of transmitting STIs. Because abstinence is not the case, education is key for prevention. Sexual health education will involve the collective efforts of state and local government, health care providers, nurses, and stakeholders. This project required the attention of all entities and stakeholders to support the development of a safe sex program. Sexual health education influences sexual

risk behaviors that will have an impact on social change. This educational project took place at a Mid-Atlantic United States Veteran hospital. Because these individuals are veterans, they have health insurance provided by the Veteran Administration that will assist with program management and allow them to receive the care and education, delivered through providers, that they need.

This program was designed to educate primary care providers and supporting clinic staff of the importance of educating older veterans to practice safe sex to decrease the spread of STIs. Other stakeholders that were impacted are those employees that also have direct contact with patients in the clinic.

Institutional Context

This doctoral staff educational program took place at a veterans' medical center located in a mid-Atlantic city, with the goal of bringing awareness to primary care providers about educating their patients about safe sex practices to reduce the prevalence of STIs in older veterans. The primary care clinic consisted of primary care physicians, residents, nurse practitioners, registered nurses, health care assistants, and an attending physician. All primary care providers were invited to attend this staff educational in-service program to receive information on the importance of addressing the discussion of safe sex practices with their patients. Providers are expected to see veterans during a thirty-minute allotted time frame. With the increase in STIs, this minimal time frame often does not give the provider the needed time to address sexual health issues. STIs are a serious health issue creating a public health challenge and should be addressed (Workowski, 2015). Addressing the concern of risky behavior through education is a

mission and strategic vision for this doctoral staff educational project that will empower older veterans to make healthy behavior changes.

Focusing on education and prevention is key for this doctoral project. Primary care providers addressing safe sex practices has the potential to reduce the prevalence of STIs and will reduce the cost of treatment on the health care facility. Health care facilities seek to reduce cost and are focusing on improving health outcomes by education and prevention to reach behavior changes and optimize quality health care. This staff education program will encourage primary care providers to discuss their patients' sexual history.

Role of the Doctor of Nursing Practice Student

During my practicum experience at a mid-Atlantic veteran facility, I had the opportunity to work with a primary care provider in a primary care clinic. I found during the primary care provider's time frame addressing the veterans' concerns was limited. Primary care providers were expected to assess the health care facilities health maintenance concerns such as up to date vaccines, diabetes management, medication management, hypertension, vision, hearing, memory, accessing for safety rather the veteran has fallen since last visit, however there is no formalized interventions to address sexual health history. There was not enough time to address sexual health history when there are multiple comorbidities to address and sexual health history is a part of holistic health. The literature indicates that patients over the age of 60 have an increase rate of herpes simplex, gonorrhea, syphilis, hepatitis B, trichomoniasis and chlamydia between 2014 and 2017 (Howley, 2018). This information clearly supports the need for provider-

veteran education to decrease the prevalence of STIs. I found this to be very interesting and important for patient education. This staff educational primary care activity is key in addressing the concerns of risky behavior through education and will empower older veterans to make healthy behavior changes.

My role as a DNP student for this project encouraged me to use the American Association of Colleges of Nursing (AACN) Doctor of Nursing Practice Essential V:Interprofessional collaboration for improving patient and population health outcomes (AACN, 2006). Working with multidisciplinary teams and using best evidence-based practice to gain best patient outcomes is vital to improve and increase patients' quality of life. Being involved in a practice improvement project and taking on the role of leadership to improve care is essential to behavioral change.

Because there are no formalized interventions to increase safe sex practices within this facility, I decided to focus on developing an in-service staff educational activity that would focus on, encourage and empower primary care providers to ask their patients if they are practicing safe sex. Not only will this safe sex activity empower primary care providers to address safe sex practices, leading to positive outcomes and a positive social change toward veterans' making healthy choices as well as decreasing this risk of spreading STIs. Stakeholders in this project involved primary care providers, nurses, nurse educator, and veterans.

Motivation for Project

As I contemplated on several topics, I narrowed my focus down to the veteran population and then further down to the older veteran population, 60 years and older.

Veterans are a unique population, I believe they are the forefront of this nations' backbone, meaning, they protect this nation. Because the human lifespan continues to increase and individuals continue to be sexually active, the prevalence of STIs is increasing among this population (Workowski, 2015). The concern of individual safety and public safety is a public health concern. My passion for holistic health care for veterans, especially older veterans, sparked my interests to address the gap in practice of risky sexual behavior in veterans. As primary care providers are the initial assessment provider, the limits of addressing sexual health are overwhelming. I selected this population for that reason, to bring awareness, and to address the prevalence and educate providers about educating their veterans to be knowledgeable about safe sex practices and healthy living. By implementing this primary care provider safe sex in-service, I hope to bring awareness to these providers that sexual health is a part of holistic health and about the importance of educating patients to protect themselves and their partner or partners from STIs.

Role of the Project Team

A project team was established, which included some key stakeholders at the mid-Atlantic Veteran facility. The project team served as an expert panel to assist with this safe sex project. The project team included the chief medical officer (CMO), who monitors the organization's levels of care and is responsible for the operational costs. The CMO worked closely with the executive management team to implement strategies that enhances patient care and improves medical practice. The CMO provided approval to conduct the project and assisted with reviewing and approving the staff educational

program content once it was developed. The chief nurse monitors the skills and knowledge, responsibilities, and competencies of nursing staff. The chief nurse assisted with monitoring the program process to ensure that the educational program was developed correctly. The nurse educator incorporates organizational in-services to train and educate nursing staff. The nurse educator assisted in validating the educational content related to safe sex practices. The chief primary care provider identified occupational and environmental conditions and makes appropriate referrals for follow-up. The chief primary care provider assisted with care coordination by managing the primary care physicians and assisted with encouraging all providers to attend this staff educational in-service. As the project advocate and leader, I steered the project to achieve its goal.

The proposed educational project was presented to the project team. The team met face to face and via email to assess the status of the project and to provide feedback as needed. Final approval from the project team was obtained prior to scheduling the presentation of the program. Following approval by Walden's Institutional Review Board (IRB; approval no. 06-02-20-0575918), the educational activity was scheduled.

Summary

As lifespan increases and older adults continue to be sexually active, education is key in closing the gap-in-practice related to safe sex practices. As health care providers become knowledgeable and sensitive in communicating with their patients, this can empower older adults to decrease risky behaviors and have safe sexual health experiences. Incorporating the HBM as a theoretical framework to adopt preventive health behaviors and achieve optimal behavioral change was an ideal theory for

communicating and delivering the message for this educational activity. This educational project team had the awareness and expertise about the importance of safe sex practices in decreasing the prevalence of the spread of STIs and the resulting confidence to approve the educational program. Section 2 describes the models supporting this project, the evidence relevant to the project, and the stakeholder involvement. Section 3 introduces the plan for developing, implementing, and evaluating the project.

Section 3: Collection and Analysis of Evidence

Introduction

As older adults remain sexually active, it is important to continue to educate them about safe sex practices. The CDC reported that in 2017 greater than 20 million cases of chlamydia, gonorrhea, and syphilis were reported in the United States (Howley, 2018). It is important that health care providers address the issue of safe sex practices to decrease risky behavior and the spread of STIs. With the many new medications that mitigate erectile dysfunction and increase libido among older adults, education about safe sex practices is needed (Ports et al., 2014).

Practice-Focused Question

A staff educational intervention with primary care providers may increase their knowledge of the importance of addressing safe sex practices among older veteran patients. Because there is no formalized intervention at the Mid-Atlantic veteran facility to address safe sex practices, there was a gap in practice concerning older veterans being informed about safe sex practices. Increasing primary care providers' confidence to address sexual health concerns with their patients is essential in helping to reduce risky sexual behavior. The practice-focus question for this project was:

> PFQ: Will providing an educational activity to primary care providers in a veteran's hospital increase their knowledge about the importance of educating their patients on safe sex practices?

Aligning Practice with Purpose

Aligning practice to the purpose of this project was recommended and endorsed by several organizations that give encouragement to providers to deliver sound quality health care. Some of those organizations that support this practice were Gerontology and Geriatric Research, (Jennings, 2015), Centers for Disease Control and Prevention (CDC, 2016), the VA National Hepatitis Clinical Program Office and Hepatitis Resource Center, (n.d) and the World Health Organization, (2020). According to Jennings (2015), providers must understand that it is important they engage with older patients in conversation about STIs as well as offer educational material to address the knowledge gap with this population. Strategies and recommendations on how best to communicate with patients on sexual matters are important to improve the STI knowledge gap among older veterans. Dialogue and dissemination of educational material are critical.

As a DNP prepared nurse, I focused on a gap in practice in health care that required enhanced standards of quality care education. This project was focused on provider education and a change in health care delivery to lower the risk of contracting and spreading STIs.

Purpose of the Project

The purpose of this educational initiative was to encourage primary care providers to provide veterans with information and skills to help them make healthy choices and avoid risky behaviors related to sexual activity. There was a need to address the issue of safe sex practices because of the increase in cases of STIs among older adults (Jennings,

2015). Conducting an educational activity for providers who serve this population will bring awareness of risky sexual behavior, a public health concern, to older veterans.

Sources of Evidence

I performed an electronic literature search of full text articles on safe sex practices via the following data bases: CINAHL, MEDLINE, Google Scholar, World Wide Sciences, Veteran Administration Library, publication websites, and online documents (i.e. fact sheets, reports, and briefs) and Walden University Library. Key search terms that I used related to safe sex practice were *veteran, safe sex, condom use, sexual health, STIs, sexual history, patient-physician communication, older adults,* and *health belief model*. In searching the literature, I viewed 198 articles and selected 72 published from 2014 to 2019 that supported the goal of this project. I excluded 25 articles due to out-of-date information listed in the studies. The articles that I selected for inclusion were appraised using Melnyk & Fineout-Overholt's level of evidence model. The 72 articles that were selected were graded as follows: 20 Level I, 1 Level II, 1 Level III, 9 Level IV, 7 Level V, 9 Level VI, and 25 Level VII.

Purpose of Project

This staff educational activity program was derived from an exploration of the communication relationship between the health care provider and older veterans as it relates to disseminating safe sex practice information. Primary care providers were encouraged to ask, educate, and test their older veteran patients about safe sex practices. Providers completed a five-question pretest and posttest about safe sex practices for older veterans. A follow-up session was conducted with primary care providers to discuss

posttest results. Following the posttest, participants completed a summative evaluation of the overall learning activity. The goal of this educational activity was to promote safe sexual behaviors and prevent STIs in older veterans through provider education by closing the knowledge gap regarding safe sex patient education to.

Evidence Generated for this Doctoral Project

Participants

There are 493 providers at this Mid-Atlantic facility. The target audience for this staff educational in-service program included 30 primary care providers who provide health care services to veterans. The primary care providers included physicians and nurse practitioners. During one of the regularly scheduled monthly primary care provider meetings, this project was introduced to educate these providers to empower and encourage their patients to practice safe sex. Enhancing provider knowledge about the importance of sexual health as part of their routine assessment and health promotion is important to decreasing the spread of STIs.

Procedures

The project team collaborated throughout the development of this educational in-service program. Prior to the scheduling the program, the content was reviewed and approved by the expert panel. Once approved, the program was scheduled. The staff educational program consisted of a 60-minute in-service in the primary care clinic area during the routine primary care providers' morning meeting. The topic of discussion included communication, sexual health, risky behavior, and STIs. Participants were given a pre- and posttest. The pretest was given prior to the delivery of the staff educational

program and the posttest was given after the delivery of the educational program. The pre-/posttest is presented in Appendix A. The program evaluation is included in Appendix B and the program slides in Appendix C.

The Curriculum

I used the HBM in the development of this staff educational project. The HBM influences factors that are related to health promotion behaviors and potentially helps individuals to take action to prevent illness if they feel they are susceptible to a condition that can have serious consequences. According to Jones, et al. (2015), there are several serial mediation models that, if followed, will initiate a behavioral change. For example: the barrier, which is the gap in education; the behavior, which is unsafe sexual behavior; having exposure to STIs; and the threat of contracting an STI. Incorporating the HBM constructs into this staff educational safe sex in-service program for primary care providers was essential to potentially decreasing the prevalence rates among older veterans by increasing their knowledge about STIs so that they could minimize or eliminate high-risk behaviors. The HBM constructs have been aligned with the goals and objectives of the educational program to empower primary care providers to educate their patients about safe sex practices and the critical need for periodic testing. This staff educational curriculum was initially scheduled to be delivered in the primary care conference room. Due to COVID 19, the staff educational in-service was delivered via Skype during a 60-minute in-service. The project included a pre- and posttest, the educational program, and a program evaluation. The integration of the HBM and the educational programs' goals and objectives are reflected in Table 3.

Table 3

Integration of the Health Belief Model With the Education Program

Objectives	*HBM*	*Goals/evaluation*
STI problem introduction. Pretest: to assess participants' knowledge about STIs in older veterans, pre-education	Perceived susceptibility Perceived severity Perceived benefits	Problem awareness; To determine participant knowledge about STIs in older veterans, Pretest
To identify risky sexual behaviors in older veteran	Perceived benefits Perceived barriers	Participants will be able to identify risky sexual behaviors
To identify ways STIs are transmitted	Perceived severity Perceived benefits Perceived barriers	Participants will be able to verbalize ways STIs are transmitted
To identify the importance of encouraging the use of protective barriers	Perceived benefits Perceived barriers Cues to action	Participants will be able to verbalize the importance of protective barriers
To increase participants awareness and to educate about the importance of screening for STIs	Perceived barriers Cues to action Self-efficacy	Participants will encourage their patients to use protective barriers
Discuss the importance of screening for STIs	Cues to action Self-efficacy	Questions & answers
To increase participant confidence in discussing outcomes with risky sexual practices	Perceived barriers Cues to Action Self-efficacy	Questions & answers
Posttest to assess participants knowledge, effectiveness of program	Cues to action Self-Efficacy	Post-Test

At the start of the program, and upon arrival, participants were asked to sign in, for attendance purposes only. The educational program agenda included the following:

1. Introduction – Brief Overview, Current issues & evidence, practice problem.
2. Educational Activity – Purpose, objectives, goals, and Pre-Test.
3. Gap in Clinical Practice – problem statement & question, relevance to practice.
4. Evidence-based STI Prevention – practice guidelines, impact on social change.
5. Participant Questions and Answers.
6. Posttest.
7. Program Evaluation.

Upon completion of the presentation, participants were able to:

- Identify current practices/problems of STIs in veterans' ages 60 and older.
- Discuss the importance of safe sex practices.
- Identify protective barriers to prevent STIs.
- Identify having an increased awareness, knowledge, and perception about educating their patients on safe sex practices.

Protections

Primary care providers at a Mid-Atlantic veteran facility in a primary care clinic were invited to attend this staff educational in-service. To promote practitioner attendance, recruitment was via email, flyers, and verbal, face-to-face communication. A written consent to participate in the learning activity was not required because this was an

employee educational in-service. Participants were instructed to sign in upon arriving for attendance purposes only. They were also instructed that attending the educational program was voluntary and that they may leave the program at any time, if they do not desire to remain. The pretest and posttest and the program evaluation did require participants' names and therefore confidentiality was maintained. To further ensure confidentiality, there was no disclosure of the institutions' name. This staff educational project did include any form of incentive and there was no patient involvement. This staff educational project was approved by Walden University's IRB and scheduled and delivered as expected.

Analysis and Synthesis

Providing education to primary care providers to increase awareness, knowledge, and perception about educating their patients on safe sex practices was developed to decrease the prevalence of STIs in older veterans. Information about the importance of addressing safe sex practices in older veterans and about how to have those sexual health conversations were goals of this evidence-based staff educational project. The project team worked closely together and analyzed the data collected from the program to assist in formulating recommendations to complete this staff educational project. Descriptive analysis was used to analyze the data.

Summary

The goal of this staff educational project was to increase primary care providers' awareness about sexual health and its importance as a part of holistic health to encourage safe sex practices among older veterans. Section 3 describes the planning,

implementation, and evaluation procedures for this project. Section 4 describes the findings, recommendations, and strengths and limitations of the project.

Section 4: Findings and Recommendations

Introduction

The purpose of this evidence-based staff educational program was to encourage primary care providers to be proactive in educating their patients about safe sex practices. With the human lifespan expanding, older patients being involved with dating, and the increased use of erectile dysfunction medications, older persons practicing safe sex has become a significant public health concern. STIs have increased among older veterans from 2016 to 2019 (VA Pyramid Analysis computer software (2019)- This has prompted the need for educating health care providers on how best to address the possibility of risky sexual behavior among older veterans. The practice-focused question for this project was:

> PFQ: Will providing an educational activity to primary care providers in a veteran's hospital increase their knowledge about the importance of educating their patients on safe sex practices?

Findings and Implications

Following approval from Walden University IRB, this educational project was implemented in compliance with the Walden University's educational manual. The chief primary care provider assisted in scheduling the set-up, time, and the virtual presentation. Prior to the scheduled staff educational activity date, the lead primary care provider invited and encouraged primary care providers via e-mail to participate.

Thirty-three primary care providers were invited. Twenty-five participants completed the pretest and viewed the power point presentation. Upon completion of the power point

presentation, 22 participants completed the posttests and the program evaluation. Participants completed pre- and posttests using SurveyMonkey software. The pre- and posttests were four questions. Questions 1-4 required yes or no responses. Table 4 indicates the yes or no responses for pre- and posttests.

Table 4

Pre- and Posttest Survey Responses

Questions	Pretest responses	Posttest responses
2. Do you believe there is an increase in Sexually Transmitted Infections (STIs)?	85.71% (Y) (*n* = 22) 14.29 (N) (*n* =22)	100% (Y) (*n* = 22) 0% (N) (*n* = 22)
3. Do you believe there is an increase in STIs among veterans 60 years and older?	82.14% (Y) (*n* + 22) 17.86%(Y) (*n* = 22)	92%(Y) (*n* = 22) 8.00%(N) (*n* = 22)
4. During a history and physical do you ask the veteran if they practice safe sex?	71.43% (Y) (*n* = 22 28.57%(N (*n* = 22)	(100% Y) (n = 22) 0% (N) (*n* = 22)
5. Will you ask your veteran if they practice safe sex	84.00%(Y) (*n* = 22) 16.00%(N) (n = 22)	(100% Y) (*n* = 22) 0% (N) (*n* = 22)

Table 5

Program Evaluation Results

Program evaluation criteria 1 = strongly disagree; 2 = disagree, 3 = neither agree nor disagree; 4 = agree, 5 = strongly agree	1	2	3	4	5	Average
1.The content of the training session was relevant to my job	0	0	1	3	18	4.5
2. The training effectively conveyed the subject matter.	0	0	1	1	20	4.7
3. I believe this training will help increase my awareness of sexually transmitted infections in older veterans.	0	0	2	2	18	4.7
4. Overall, I was satisfied with the training	0	0	2	4	16	4.7
5. I will recommend this training to others.	0	0	0	0	22	5.0

Recommendations

As primary care providers discuss safe sex practices with their patients, must understand there are potential communication barriers. Implementing conversations about safe sex practices in an evidence-based manner that allows the primary care providers to feel comfortable in the process will address the current gap in practice. This institution has protocols and guidelines to complete clinical reminders on all veterans that include health maintenance questions. In implementing a practice change that will decrease the prevalence of STIs, I recommended primary care providers address safe sex practices. Incorporating this practice change intervention and addressing the need for safe sex practices will encourage the use of protective measures in sexual activity.

Contribution of the Doctoral Project Team

The project team supported this staff educational project. The scheduling of the presentation date was slightly delayed due to COVID-19. The presentation was delivered virtually via Skype. The CMO and the chief nurse provided feedback and final approval for this staff educational project prior to the scheduled presentation date. All team members supported this staff educational project and helped to facilitate its presentation.

Strengths and Limitations of the Project

This staff educational evidence-based project incorporated lecture and discussion for primary care providers on the importance of educating their patients regarding safe sex practices. Using the HBM constructs—perceived susceptibility, perceived severity, perceived benefits, barriers to action, cues to action, and self-efficacy—to support recommendations for effective sexual health education can prove to be of value for encouraging behavioral change. Primary care providers agreed to attend this educational project as well as to participate in the pre- and posttest. Participants reported that they found the information relevant to clinical practice and will incorporate this change of practice in their initial assessment. Pretest and posttest data gave information that helped to measure change in practice and knowledge.

A weakness during this staff educational project was the unexpected computer issue not being able to download the pretest and posttest as well as the unexpected emergencies two primary care providers had with their COVID-19 patients in the emergency room. Another weakness of the project was the performance of the pre-/posttests before and after the presentation of the educational information. While the

posttest reflected a gain in participant knowledge, the sustainability of the knowledge gained could not be determined.

Section 5: Dissemination Plan

Following approval form Walden University, this manuscript will be published in ProQuest. After fulfillment of the DNP program at Walden University, I plan to submit my manuscript to the VA Health Care System Nursing Pulse publication as well as present my findings via a poster presentation at the Nurses Week conference in 2021. The team members for my project provided feedback that my project was helpful in providing education for primary care providers to educate veterans, especially older veterans, to help decrease the prevalence of STIs. This DNP project supported increasing provider knowledge and can ultimately improve quality of care by disseminating the project findings on sexual health in a primary care setting.

Analysis of Self

As I reflect on my journey with this project, I recall the many challenges. I gained a wealth of knowledge about the topic of safe sex practices, especially with older veterans. In searching for the right topic, I wanted one that would impact a population I am passionate about serving, which is veterans, especially older veterans. Over the course of this DNP program my personal and professional skill sets have changed. It has impacted and enhanced my perception of holistic health care.

I felt comfortable in the leadership role as I presented this staff educational project. As I searched for a project that would have an impact on a change in practice, sexual health education stood out for me. With the increase in prescribing erectile dysfunction medications and the increase in sexual activity it allows, I found this to be an ideal topic to address. I have found that as primary care providers assess their patients, it

was important that they assess them from all systems because each system has an impact on an individual's quality of life.

This DNP project was valuable in providing me with an insight into the many levels of a scholarly journey. I learned that the challenges I faced during the project shaped me into the scholar I am today. As the lead person on this safe sex staff educational project, I was able to identify a practice problem, address it, and take the lead to implement it. My project team was in support of the development, implementation, and evaluation of this staff educational project that furthers health promotion and disease prevention.

Currently, I am a nurse case manager in a program for homeless veterans. Many of these veterans are vulnerable, and many are and have been involved in risky sexual behavior. I am passionate about the change in practice that will increase quality health care for veterans, especially older veterans, with a decrease in the prevalence of STIs. Education is key, and providing strategies to improve primary care providers' delivery of this sensitive topic will enhance health promotion. Based on the findings and results, I am confident that primary care providers will address safe sex practices with their patients. The completion of this staff educational DNP project has given me confidence and self-assurance to take on future professional goals.

Summary

The purpose of this evidence-based project was to improve health promotion for the prevention of STIs, especially amongst older veterans. The HBM aligned with this project because it addressed key constructs, which are perceived susceptibility, perceived

severity, perceived benefits, perceived barriers, cues to action, and self-efficacy. Educating primary care providers on how to effectively address safe sex practices is beneficial and important for decreasing the prevalence of STIs.

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Appendix A: Pretest/Posttest

Sexually Transmitted Infections Amongst Older Veterans: An Educational Activity for Primary Care Providers.

Please respond yes or no to the following questions.

1. Are you male_____ or female_____ or gender, non-binary_____
2. Do you believe there is an increase in Sexually Transmitted Infections (STIs)?

   Yes_____ or No_____
3. Do you believe there is an increase in STIs among veterans 60 years and older?

   Yes_____ or No _____
4. During a history and physical do you ask the veteran if they practice safe sex?

   Yes_____ or No_____
5. Will you ask your veteran if they practice safe sex

   Yes_____ or No_____

Appendix B: Program Evaluation

Sexually Transmitted Infections Amongst Older Veterans: An Educational Activity for Primary care Providers.

Please rate each characteristic of the training

1. The content of the training session was relevant to my job.
   1-Strongly Disagree
   2-Disagree
   3-Neither Agree nor Disagree
   4-Agree
   5-Strongly Agree

2. The training effectively conveyed the subject matter.
   1-Strongly Disagree
   2- Disagree
   3-Neither Agree nor Disagree
   4- Agree
   5-Strongly Agree

3. I believe this training will help increase my awareness of STIs in older veteran.
   1-Strongly Disagree
   2-Disagree
   3-Neither Agree nor Disagree
   4-Agree
   5-Strongly Agree

4. Overall I was satisfied with the training.
   1-Strongly Disagree
   2-Disagree
   3-Neither Agree nor Disagree
   4-Agree
   5-Strongly Agree

5. I will recommend this training to others.
   1-Strongly Disagree
   2-Disagree
   3-Neither Agree nor Disagree
   4-Agree
   5-Strongly Agree

Appendix C: Educational Program PowerPoint

1