Southern California CSU DNP Consortium

California State University, Fullerton
California State University, Long Beach
California State University, Los Angeles

INCREASING AWARENESS AND KNOWLEDGE AMONG ADULT LATINOS
REGARDING SEXUALLY TRANSMITTED INFECTIONS

A DOCTORAL PROJECT

Submitted in Partial Fulfillment of the Requirements

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DOCTOR OF NURSING PRACTICE

By

Ijeoma Eze, MSN, FNP-BC

Doctoral Project Committee Approval

Beth Keely PhD, RN, Committee Chair
Margaret Brady PhD, RN, CPNP, Committee Member

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ABSTRACT

BACKGROUND: Latinos in the United States are disproportionately affected by Human Immunodeficiency Virus and sexually transmitted infections (STIs). They account for about 24% of newly diagnosed AIDS cases each year and are two to three times more likely to develop STIs when compared with non-Latino whites. Limited knowledge of STIs has remained one of the contributing factors to the disparity.

PURPOSE: To implement an educational bundle and evaluate its effectiveness in increasing STI knowledge and consistent condom use among adult Latinos seen in an outpatient clinic.

METHOD: A pre- and post-test design was used to evaluate changes in STI knowledge and consistency of condom use. An educational bundle consisted of YouTube STI-related videos, a pre-designed one to one educational session, and provision of condoms and STI-related educational materials. Self-administered questionnaires were used to collect data at baseline and one week post implementation of the educational bundle.

RESULTS: Ranging in ages 19 to 60 years, 46 Latinos participated. The total mean STI knowledge and condom use frequency improved from pre-test ($M = 1.67$, $M = 3.09$) to post-test ($M = 3.80$, $M = 5.33$). Results of paired samples t-tests demonstrated statistical significant differences between total mean STI knowledge

($t(45) = -15.48, p < .001$) and condom use frequency ($t(45) = -7.09, p < .001$) at pre-test and post-testing.

CONCLUSION: The educational bundle was effective in increasing STI knowledge and consistent condom use among adult Latinos in an outpatient clinic. Further study needs to be done to determine the long-term effect of this mode of education for this population.

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BACKGROUND

The World Health Organization (WHO, 2016) describes Sexually Transmitted Infections (STIs) as a hidden global epidemic. In light of the WHO report, more than one million STIs are diagnosed worldwide each day, accounting for 357 million new cases annually. In a 2015 report the Center for Disease Control and Prevention (CDC) stipulated that over 110 million individuals in the United States had STIs. Approximately 20 million new cases of STIs are diagnosed annually in the United States (CDC, 2016). The use of terminology in relation to STIs includes sexually transmitted diseases (STDs) and venereal diseases (VDs). For the purpose of this project, STIs and STDs are used interchangeably. The term VD was not used in this project.

There are eight common STIs contracted by individuals across the nation which include chlamydia, gonorrhea, hepatitis B virus (HBV), herpes simplex virus type 2 (HSV-2), human immunodeficiency virus (HIV), human papillomavirus (HPV), syphilis, and trichomoniasis (CDC). Of these, HIV, chlamydia, gonorrhea, and syphilis are routinely reported to the health department across all 50 States. Based on the United States CDC report (2015), the incidence rate of the three most common STIs (chlamydia, gonorrhea, and syphilis) was higher in California when compared to the national level. In 2015, the incidence rate of chlamydia at the national level was 479 per 100,000 people. In California, the incidence rate per 100,000 was 486 and 560 in Los Angeles (LA) County. The LA County showed the highest number of cases of chlamydia, gonorrhea, and syphilis when compared to the nation in 2015.

The treatment of STIs is most successful when caught early. Untreated STIs can result in multiple health complications, such as psychosocial disorders, genitourinary

disorders, pelvic inflammatory disease (PID), chronic pelvic pain, cancers, hepatic disorders, ectopic pregnancy, infertility, miscarriages, fetal anomaly, still births, neonatal morbidity, and mortality (McCance & Huether, 2010). The CDC (2016) estimates that over 20,000 women become infertile each year as a result of untreated (or undiagnosed) STIs. Additionally, STIs have been shown to facilitate the risk for HIV infections. The CDC report reveals that individuals infected with STDs are two to five times more likely than uninfected individuals to acquire HIV infection. The treatment of STI-related complications can be costly to the STI sufferer, their family, community, state, nation, and the world. In the U.S, the annual cost of STIs (direct medical cost) is approximately \$16 billion (CDC, 2015). In light of the potential health and economic burdens, STIs are considered to be a significant public health issue.

When compared with other racial or ethnic groups, Latinos in the United States are disproportionately affected by STIs most specifically HIV (CDC, 2014). Of all the racial and ethnic groups, Latinos account for about 24% of newly diagnosed AIDS cases each year in the U.S (CDC, 2015). The CDC (2014) stipulates that Latinos are two to three times more likely to develop STIs (gonorrhea, chlamydia, and syphilis) as compared to non-Latino whites. In 2014, the rate of chlamydia cases per 100,000 people was 380.6 among Hispanics, which was 2.1 times the rate among whites (CDC 2014). Given that the Latino population in the U.S is rapidly growing and is projected to represent one third of the U.S population by 2060 (U.S Census Bureau, 2012), addressing the high prevalence of STIs among Latinos is critically important.

Multiple factors including culture and socioeconomic status contribute to the disparity (Gindi, Erbeling, & Page, 2010 Lee, Dancy, Florez, & Holm, 2013).

Promoting the cultural concept of gender inequality (“machismo and marianismo”) has shown to enhance sexual risky behaviors (Lee et al., 2013; Martinez et al., 2014). For example, “Machismo” empowers men to prove manhood through risky behaviors such as having multiple sexual partners, low condom use, and substance abuse (Rhodes et al., 2011). “Marianismo” on the other hand relegates women to the position of maid, negating their rights including negotiation for safe sex (Martinez et al., 2014). Other contributing factors may include, but not limited to, knowledge deficit, beliefs, attitudes, misconceptions, values, financial constraints, language, health insurance, and immigration problems (Gindi et al. 2010; Martinez et al., 2014; Trans et al., 2013).

Problem Statement

Several studies (Crosby, Charnigo, Wheathers, Caliendo, & Shrier, 2012; Frieden, Kellerman, Das-Doughlas, & Henning, 2015; Harawa, Sweat, George, & Sylla, 2010; Smith, Herbst, Zhang, & Charlse, 2015) have shown that HIV and STIs can be prevented in most cases by using a latex condom. Yet, there is low condom use among Latinos (Green, Andrew, Kuper, & Mustanski, 2014; Munoz-Laboy, Severson, & Bannan, 2014; Sastre, Sanchez, & De la Rosa, 2015). In the project clinic, which consists of 95% Latino patients, only 10% report consistent condom use when asked as part of intake information collected on all adult patients. Engaging in unprotected sex has resulted in an increased rate of positive STI screening tests among Latinos in the clinic. Of 200 patients tested for STIs each month, approximately 25% are positive for STIs. Anecdotal evidence indicates that the majority of patients diagnosed with these STIs have low general knowledge of STIs.

There have been attempts to educate the public regarding STIs, which has resulted in limited behavior changes (Clifton, Penrose, Prien, & Farooq, 2015; Folasayo et al., 2017; Matovu & Ssebadduka, 2013; Samkange-Zeeb et al., 2011). Although knowledge has shown to have a limited effect on behavioral change, education remains the vital component of sexual health (Samkange-zeeb, Spallet, & Zeeb, 2011). Improving one's knowledge of STIs has been found to enhance healthy sex behaviors such as increasing condom use (Colon-Lopez et al., 2012; Lee et al., 2013; Trans et al., 2013). Educational interventions available in the literature mostly focus on educating the adolescent population about STIs with limited tools available to educate adult Latinos on this topic. Providing a culturally appropriate education bundle may increase awareness and knowledge of STIs and thus, decrease the vulnerability of this population (Sahay et al., 2015; Trans et al., 2013). Therefore, the purpose of this quality improvement (QI) project is to implement an educational bundle and evaluate its effectiveness in increasing STI knowledge and consistent condom use among adult Latinos seen in an outpatient clinic.

Supporting Framework

The theoretical framework selected for this project is Theory of Planned Behavior (TPB). The TPB was first proposed in 1985 by Ajzen (1991) as a psycho-social framework, which stipulates that a behavioral change can occur only when the person believes they have a positive personal attitude, social support and inner strength. The TPB further postulates that, for every human behavior, there is an intention to engage in it (Ajzen, 1991). Asare (2015) describes intention as the motivational factor that influences behavior. Personal attitudes, subjective norms, and perceived behavioral control (PBC) are determinants of intention to engage in a behavior (Ajzen, 1991). The

PBC is a component of the TPB because Ajzen believed that not all behaviors are under a person's control as many behaviors are controlled by multiple influences (Protogerou et al., 2012).

The Health Communication Capacity Collaborative [HC3] uses Ajzen's model and notes that the TPB is grounded in three vital beliefs that guide human behaviors which are behavioral, normative, and control (HC3, 2014). The behavioral beliefs include personal views, perspective, values, and orientation which result in attitudes. The normative beliefs are social values, culture, tradition, and religion which results in social perceptions or subjective norms. Control beliefs include self-control, self-efficacy, and self-capacity, which lead to behavioral control. For better understanding and easier applicability, Ajzen gave specific descriptions to the associated constructs inherent to the TPB. Attitudes can be favorable or unfavorable. They include personal beliefs, views, perceptions, or values that can be held about a specific behavior. The subjective norms, on the other hand, are the beliefs, perceptions, or views of others regarding the behavior in question. The PBC is the subjective perception of the ease or constraints in engaging in the behavior of interest. Although there is no consensus regarding the ideal components of the PBC, the concepts of self-efficacy, self-confidence, and self-control can be used to describe it (Protogerou et al., 2012). Overall, Ajzen predicted that the more favorable the attitude, the more subjective the norms are, the greater the perceived control, and the stronger the intention to engage in the specific behavior.

Given that the TPB constitutes the vital cognitive variables (attitudes, intentions, norms, and PBC) that explained health and risks activities, it has been extensively used for behavioral-related studies (Protogerou et al., 2012). A considerable number of

Western researchers have used it in their studies of sexual risk behaviors (Abamecha, Godesso, & Girma, 2013; Booth, Norman, Goyder, Harris, & Campell, 2014; Jemmott III et al., 2007; Protogerou et al., 2012). It is worthy to note that the TPB has been effectively used across these aforementioned studies. Figure 1 below, is the diagrammatic illustration of the TPB.

Figure 1. Theory of planned behavior (TPB). From “Prediction of goal-directed behavior: Attitudes, intentions and perceived behavioral control”, by Ajzen and Madden, 1986. *Journal of Experimental Social Psychology*, 22, 453-474. See Appendix A for copyright permission.

Application of the TPB

In this project, the behaviors of interest or outcome were patient's STI knowledge and condom use consistency. The expected behaviors included, but not limited to, identifying the common STIs, source of transmission, sexual risky behaviors, safer sex practices, prevention strategies, available treatments, possible health complications, and available resources in the community.

Attitude including personal beliefs, perceptions, values, views or misconceptions about STIs need are considered. The patient who has low self-risk perception for STI may lack interest in learning effective STI prevention strategies. On the other hand, the patient with a high self-risk perception for STI will strive to protect self, by learning more about STIs. Conducting a baseline assessment of a patient's attitudes through brief interviews, surveys or questionnaires is critical. Having prior knowledge of an attitude can help the healthcare provider in presenting the appropriate educational materials.

The subjective norms that were considered in this project included the beliefs of others within the patient's environment. The beliefs, values or views of patient can be influenced by the beliefs of significant others, sex partners, family, friends, peers, colleagues, culture, religion, and health care providers (Ajzen, 1991). For example, patients with sex partners who have a positive perception about condom use may be more likely to use condoms than those whose sex partners have negative perception about condom use. Having a healthcare provider who promotes safe sexual practices can assist in developing a positive attitude about STIs prevention. Providing culturally appropriate educational activities can clear misconceptions and facilitate positive sexual behavioral change.

For this project, the concepts of self-efficacy, self-control, and self-confidence are used interchangeably in describing the construct of PBC. To improve patients' level of confidence, there is need to provide adequate information on STIs. Patients need adequate knowledge of STIs to make an informed decision. Assisting patients in developing STI prevention skills, such as how to negotiate for condom use, can increase patient self-efficacy level. In light of the PBC construct, the educational materials constituted information on the available resources in the community. This author postulated that clinic patients who received information, including where to obtain free condoms, would demonstrate an increased self-efficacy on condom use compared to those who had not. Figure 2 below summarizes how the TPB was applied in this project.

Figure 2. Illustration of the TPB application.

REVIEW OF LITERATURE

Overview

A literature review was conducted using Google Scholar, PubMed, Cochrane library, and Cumulative Index of Nursing and Allied Health Literature (CINAHL). The literature search was performed using various combinations of search terms; *Sexually Transmitted Infections, Sexually Transmitted Diseases, Hispanics, Latinos, sociocultural influences, risk perception, knowledge, Sexual health education strategies, and STI/STD prevention*. The entire search was limited to full text, peer reviewed articles published between 2009 and 2017, in English. Overall, 909 articles were retrieved and screened. Approximately 859 studies were excluded based on duplication, title, and relevance to the project topic. The reference lists were perused to search for potential relevant articles. To support this project, 50 studies were selected and reviewed. These articles were further synthesized under the following topics: (a) knowledge and perceived risk of STIs; (b) strategies for sexual health education; and (c) sociocultural influence on STIs/STDs Prevention. The full details of the literature synthesis conducted, is provided in the later section, and limitations in the evidence is also addressed. For clarity, an overview of STI is presented first.

STIs

According to the National Institute of Health (NIH, 2012), STDs are diseases or infections that are primarily acquired through sexual intercourse. Sexual activity involving the mouth, penis, vagina, or anus increases the risk for STI. They can be classified based on the causal organism (NIH, 2012). Bacterial STIs including gonorrhea, chlamydia, syphilis, and bacterial vaginosis (BV) are caused by bacteria. Viral STIs are

caused by viruses. Examples include HIV, HPV, herpes simplex, viral hepatitis, and cytomegalovirus. Fungal STIs are caused by fungi and are linked to tinea cruris, vulvovaginitis, and balanitis. Protozoal STDs are caused by protozoas. Trichomonal vaginitis is the most common example. Ectoparasitic STIs, as the name implies, are caused by the parasites which include, but not limited to, pubic lice and scabies.

The majority of STIs can be asymptomatic (McCance & Huether, 2010). The affected individual in most cases passes on the disease, unknowingly (NIH, 2012). The basic clinical features of STIs may include oral blisters, abnormal penile/vaginal discharge, dysuria, foul smelling vaginal discharge, genital itching, redness, genital sores/warts, lower abdominal pain, fever, chills, anal itching, fissures or bleeding (NIH, 2012).

The conventional treatments for STIs include antibiotics, antifungals, and antivirals (NIH, 2012). Depending on the nature of the disease, medications can be given in oral, topical or injectable form. With an effective treatment, the bacterial, fungal, protozoal, and ectoparasitic STIs can be completely resolved. In contrast, viral STIs are often not curable. They have remained persistent infections despite advances in medical technology (NIH, 2012). Antivirals or antiretroviral are often given to alleviate the symptoms as well to reduce the pathogenicity of the disease (NIH, 2012).

The American College of Obstetricians and Gynecologists (ACOG, 2015) suggests treatment and behavioral change as the mainstay for STI prevention. An STI can be effectively prevented by abstinence, latex condom use, vaccination (if available), and avoidance of risky sexual behaviors (such as having unprotected sex and multiple sexual partners). In light of the asymptomatic nature of STIs, the CDC (2014) recommended

annual screening for all sexually active individuals. Individuals who are at most risk include sex workers and homosexuals. It is recommended that high risk individuals should have frequent screening tests (CDC, 2014). To protect the fetus, screening for STIs is recommended during pregnancy (ACOG, 2015).

Expediting partner treatment can help to decrease the spread of the diseases in society (NIH, 2012). Research has shown a strong association between male circumcision and a reduced risk for HIV infection (Gebremehin, 2010). Although circumcision can be considered a good strategy for STI prevention, it has continued to be a global controversial issue (ACOG, 2015). As the proponents emphasize that the benefit of male circumcision including STIs/HIV prevention outweighs its risks, the opponents insist that the procedure is invasive and can result in certain complications, including bleeding and infection (ACOG).

Knowledge and Perceived Risk of STIs

Several studies demonstrated that most sexually active individuals have limited knowledge of STIs (Colon-Lopez et al., 2012; Drago et al., 2016; Folasayo et al., 2017; Lee et al., 2013; Martinez et al., 2014; Negin et al., 2014; Rhodes et al., 2014; Samkange-Zeeb et al., 2011; Samkange-Zeeb, Mikolajczyk, & Zeeb, 2012; Trans et al., 2013). A considerable number of participants demonstrated little or no knowledge about the most common STIs, the source of transmission, prevention strategies, available treatments, and helpful resources in the community. Of these studies, a systematic review conducted by Samkange-Zeeb et al. (2011) and three quantitative studies (Drago et al., 2016; Folasayo et al., 2017; Samkange-Zeeb et al., 2012) additionally pointed out that there was a higher level of knowledge about HIV/AIDs when compared to other STIs in the subjects

interviewed in these studies. It should be noted that the participants in the Folasayo et al study were university students. The participants in the other three studies were adolescents who were receiving sex education at various school settings. The researchers indicated that the school-based sex education focused mainly on HIV prevention and, therefore, could have contributed to the increased HIV/AIDs knowledge level. Of note, limited knowledge of STIs tends to be associated with misconceptions and decreased perceived self-risk (Brown, Blas, Heideri, Carcamo, & Halsely, 2013; Cianelli et al., 2013; Rios-Ellis et al., 2010; Roye, Tolman, & Snowden, 2013; Seal, Garces-Palacio, Halanych, & Scarinc, 2012; Rhodes et al., 2014). To emphasize this concept, “Fill Knowledge Gaps and Correct Misconceptions” was the first theme that emerged in the Rhodes et al. (2014) study that involved a content analysis. Because of knowledge deficits, several individuals tended to underestimate their own vulnerability to STI (p. 350). However, certain studies (Clifton, Penrose, Prien, & Farooq, 2015; Matovu & Ssebadduka, 2013; Samkange-Zeeb et al., 2011) demonstrated that increased knowledge does not necessarily predict a positive behavioral change. Despite an increased awareness of the protective effect of condoms, consistent condom use remained low among the participants (Samkange-Zeeb et al., 2011). Refer to the Appendix B for full details of these studies.

Findings from the aforementioned research studies corroborate the negative impact that limited knowledge of STIs has in the spread of diseases and the need for educational intervention. Having evidence to support the knowledge gap about STIs confirms the significance of this project. To increase awareness, educational interventions need to incorporate all the common STIs. Emphasizing the source of an STI's

transmission, its prevention as well as control measures can correct certain misconceptions. Given that education does not necessarily translate into behavioral change, patient teaching should not be limited to only providing information about prevention of STIs. Rather, the education should include information on the available resources such as free condom clinics and teaching of skills, such as negotiating safe sex with a sexual partner, to improve consistency in condom use.

Strategies for Sexual Health Education

Health education is the basis for STI prevention. An effective communication of health information can increase the level of patient knowledge on that particular topic. Several studies have highlighted a variety of strategies to improve patient education (Abamecha et al., 2013; Althoff et al., 2015; Cooper, Toskin, Kulier, Allen, & Hawkes, 2014; Fletcher et al., 2014; Garcia-Retamero & Cokely, 2011; Haberland, 2015; Harvey, Branch, Hudson, & Torres, 2012; Horvat, Hory, Romios, & Kis-Rigo, 2014; McLellan-Lemal et al., 2013; Perez, 2015; Rhodes et al., 2011; Sahay et al., 2015; Villa, Concha, & Zamith, 2012). Culturally appropriate patient education demonstrated effectiveness in several studies (Haberland, 2015; Harvey et al., 2012; Horvat et al., 2014; McLellan-Lemal et al., 2013; Rhodes et al., 2011; Villa et al., 2012). Language barrier and the belief system were consistently addressed across these studies. To improve positive patient outcomes, Horvat and colleagues suggested the use of culturally competent education for health professionals. Visual aids and a well-constructed “gain/loss-framed health messages” demonstrated effectiveness in a longitudinal experimental study by Garcia-Retamero & Cokely. As the authors stated, the “Gain-frame message” emphasizes the benefits of adherence to the specific health topic. Following reading the brochure that

highlighted the benefits of condom use in preventing STI and its complications, the intervention group in the Garcia-Retamero & Cokely's study demonstrated a positive attitude toward condom use. Given that the control group received only general information about STI, the participants in contrast, demonstrated less than positive attitudes toward condom use. The "Loss-framed message" on the other hand, points out the risks of nonadherence to the topic in question. By emphasizing the complications of STIs, including infertility, fetal demise, pelvic pain, ectopic pregnancy, financial cost, cancer, and even death, a considerable number of individuals have realized the need for condom use (Garcia-Retamero & Cokely).

Prior assessment of health literacy can help to inform an appropriate relevant educational activity (Perez, 2014). Based on the systematic review by Cooper et al., providing a brief counselling on sexual health at the primary care setting can improve STI/HIV prevention. Having a good provider-patient relationship is a sound strategy in improving the acceptability of health information (Fletcher et al., 2014; Harvey et al., 2012). Haberland's comprehensive review suggested using the "empowerment approach" in designing sex education. To have an increased level of self-efficacy, educational interventions should be interactive, nonjudgmental, friendly, respectful, and motivating. The use of a brief sexuality communication demonstrated effectiveness in reducing the prevalence of STI among patients who were attending a primary care setting (Cooper et al.). Refer to Appendix B for full details of some of these studies.

Evidence from the aforementioned studies suggests effective strategies to improve sexual health education. Because adult Latinos/Hispanics were the population of interest for this project, providing culturally appropriate education was the priority. Educational

materials including brochures, hand-outs, pamphlets or videos in English and Spanish languages were carefully reviewed and appropriate handouts and a culturally sensitive video were selected for the clinic patients. Furthermore, in delivering the educational intervention to clinic patients, both the author and her assistant were cognizant of the need to avoid paternalistic form of health teaching and to pay attention to the views, opinions, values, preferences, and autonomy of the patients. With these caveats in place based on evidence from previously addressed research studies, the author postulated that providing a 10-minute one to one message on STI prevention during patient visits would help in improving patient knowledge.

Sociocultural Influence on STI Prevention

Given that the prevalence of STI is high among the Latino population, it is important to explore factors that may be associated with this group. Socio-cultural factors including gender inequality, religion, family, values, attitude, language barrier, stigma, homophobia, intimate partner violence (IPV), poverty, racism, discrimination, illiteracy, immigration problems, alcohol/substance abuse, transportation difficulty, acculturation, and lack of health insurance have negatively impacted the Hispanics' sexual health (Burke et al., 2011; Gindi et al., 2010; Harvey et al., 2012; Lutfi, Trepka, Fennie, Ibanez, & Gladwin, 2015; Ma & Malcom, 2015; Martinez et al., 2015; Martinez et al., 2014; Nahmias & Nahimias, 2011; Rountree, Granillo, & Bagwell-Gray, 2015; Villa et al., 2012). The Hispanic traditional values such as *machismo*, *marianismo*, and *familism* were consistently listed as risk factors for STI, across studies (Martinez et al., 2016, Martinez et al., 2014; Ma & Malcom, 2016; Nahmias & Nahimias, 2011; Rountree et al., 2015). *Machismo* and *marianismo* were described previously in the background section of this

paper. Ma and Malcolm defined *familism*, as a Hispanic tradition that emphasizes obedience, commitment, adherence, or engagement in social behaviors that promote the functionality and stability of a family. As the concept of *familism* was further highlighted in the Ma and Malcolm's study, a considerable number of the participants' families did not endorse HIV testing, hence the number of refusals for the test was high. Harvey et al., reported *sexual silence* as one of the cultural barriers affecting the Latinos' sexual health status. The concept of *sexual silence* is described as a traditional deliberate avoidance of sexuality-related discussions in an open place (Harvey et al., p. 150). Most Latino men, in the Harvey et al. study, were uncomfortable in seeking or utilizing Sexual and Reproductive Health Services (SRHS), as a result of cultural sexual silence. Some of these studies are further analyzed in the Appendix B.

There is discrepancy in findings across the literature about the effect of acculturation. Findings from the Gindi et al. (2010) retrospective study, the Ma & Malcom (2015) cross sectional study, and the Rountree et al. mixed methodology study demonstrated a positive relationship between acculturation and healthy sexual behaviors. The findings indicated that Latinos with high level of acculturation were more likely to engage in consistent condom use and STIs/HIV screening tests. In contrast, a qualitative study by Martinez et al. (2016) showed that acculturation promoted sexual risky behaviors. They found that acculturated gay Hispanics had more HIV cases when compared to their non-acculturated counterparts. Although the difference in HIV prevalence was based on acculturation, caution should be taken in exploring the role of sexual identity which was not addressed in this study.

Villar et al. espoused a different view in terms of measuring acculturation. These authors argued that in studying acculturation demographic variables, such as English language proficiency and years of stay in the United States of America (USA), should not be used as sole measures of acculturation. Villa and colleagues reported that individuals who were younger, more educated, and had lived in the USA for over 10 years were more conservative (also known as “less acculturated”) toward *machismo*, *marianismo*, and gender roles, compared to their counterparts who had not. Rather than measuring acculturation based on English language proficiency as well as number of years lived in the USA, they suggested that acculturation should be assessed in relation to the health topic. For example, a patient who is less acculturated in STI prevention can be more acculturated in diabetic self-management. However, it is noted in numerous studies (Gindi et al., 2010; Martinez et al., 2016; Rhodes et al., 2011; Rountree et al., 2015), acculturation was measured using English language proficiency and number of years in the United States. These researchers held the view that acculturation has a linear relationship with demographic variables, hence the rationale for the selected measurement tool. Appendix B shows more details of these studies.

In summary, findings from these studies reflect that the social cultural variables, including values, belief, attitudes, perceptions, intentions, self-identity, sexual orientation, and communication skills, are vital factors to consider in sexual health education of Latinos. Educational intervention for the Latino population can be ineffective if it fails to consider the existing traditional beliefs. The concept of sexual silence tends to hinder some Latinos from accessing SRHS, which suggests that individual educational intervention may be more effective than group-based educational

activities. Furthermore, an assessment of the individual's belief system is a critically important issue that must be addressed before providing any education related to sexual health. Finally, the literature suggests that providing an empowering education can decrease the effect of *marianismo*, and increase safe sex negotiating skills among Latino women.

Limitations in the Reviewed Evidence

Although the selected studies provide evidence and guidance to support this project, some limitations were noted in the body of literature that was reviewed. Self-reports were used for data collection across most studies; therefore, the risk of social desirability bias should be considered. In addition, self-reporting is associated with recall and over-reporting or underreporting of data, all of which can pose a threat to studies' internal validity. Furthermore, convenience sampling was consistently used across the reviewed studies; the population of interest is more likely to be unrepresented when convenience sampling is used to recruit participants. Failure to have a true representation of the population of interest limits the generalizability of the findings. The generalizability concern is further complicated by small sample sizes that were noted in these studies. Lastly, several of the studies involving educational interventions were designed for Latino adolescents and may not necessarily be effective for adult Latinos.

METHODS

The focus of this QI project was to increase STI knowledge and consistent condom use among adult Latinos receiving services within an outpatient clinic. The method section of this paper describes the project design, setting, sample, ethical considerations, measures, procedures, data analysis, and a timeline for this project.

Design

This QI project used a pre- and post-test design. It involved assessment of adult Latinos' STI knowledge and consistent condom before and after implementation of an educational bundle during a family planning visit. The educational bundle focused mainly on common STIs and high risk sexual behaviors.

Setting

The project was conducted at a privately-owned clinic located in Los Angeles, California. The clinic provides medical care to a large population of patients, which includes pediatric, adolescent, adult, and geriatric patients. The majority of the services provided at the clinic involve STI screenings and family planning. Each year, over 2,400 patients enrolled in the clinic's Family Planning, Access, Care, and Treatment (Family PACT) program are screened for STIs. In addition, other health services are provided including annual physical exams, treatment of chronic diseases, common minor ailments, women's health, and obstetric care as well as treatment of minor gynecological issues. There are 10 medical assistants working in this clinic. The healthcare providers include one physician, one nurse practitioner (NP), and one physician assistant (PA). The clinic is open from Monday through Friday between 9-am and 6-pm. It opens from 9-am to 2-pm on Saturday.

Sample

The clinic serves patients who are low income and on Medicaid. The patients have limited formal education and live in downtown, Los Angeles. Approximately 95% of the patient population consists of Latinos with limited English proficiency. The remaining 5% of the population consists of African-Americans and Asians. For the purposes of achieving the project's goals, patients were recruited using a convenience sample. Patients who self-identified as Latinos were informed about the project during regular intake procedures conducted in the clinic prior to seeing their healthcare provider. A flyer about the project was placed in a conspicuous spot on the wall in the waiting room and was included in the patient's registration package. Refer to Appendix C for the project flyer. Volunteers were recruited from September 19, 2017 to October 13, 2017. Because attrition is anticipated in every project, this project targeted a minimum sample size of 40 participants. Participants had to be 18 years or older, male or female, and self-reported as being sexually active. Non-Latinos were excluded from this project.

Ethical Considerations

The project was submitted for review by the Institutional Review Board (IRB) at California State University, Long Beach. This was done to ensure that the project met the ethical standards of the university. The administrator of the clinic granted written consent for implementation of the project. The approval letter is in Appendix D. Upon IRB approval, informed consent was obtained from each patient willing to participate in the project. Informed consent clearly indicated the patient's freedom to stop their participation in the project at any time without penalty. To maximize confidentiality, the teaching sessions as well as assessment questions were individually delivered to

participants during their routine office visit. Patient-related demographic data were de-identified and results were reported in aggregate form to ensure confidentiality.

Key Stakeholders

The project stakeholders included the clinic administrator, physician, the DNP author, a physician assistant (PA), patients, and medical assistants. The clinic PA is bilingual and assisted in data collection and implementation of the educational activities with those patients who preferred Spanish. The PA provided written consent of her involvement in this project. Refer to Appendix E for the consent. After having several meetings with the PA, she fully understood the project procedures as well as her role in the project. For consistency among participants, the PA received training about the educational bundle as well as the self-administered questionnaires for pre-test and post-test. The DNP author, who is the clinic NP, conducted the educational bundle and ensured that the self-administered questionnaires were given to the participants who were English speaking. The medical assistants were involved in recruiting participants for this project and were oriented about their recruitment role.

Measures

Because social-cultural influences are known to be associated with STIs among Latinos and lack of strategies (e.g., condom use) to prevent these infections, certain social demographic information was assessed in this project. The participant's race, age, gender, and language preference are part of the usual data collected at the clinic during the intake procedure and were retrieved from the medical record. The Theory of Planned Behavior (TPB) is the guiding framework for this project. Therefore, the two primary outcomes that were assessed included STI knowledge and consistent condom use (behavioral

change).

The study instrument was a self-administered questionnaire which was comprised of two parts: part A and part B. Part A comprised a 4-item STI knowledge questionnaire modified from the Folasayo et al. (2017) 14-item questionnaire. Participants were assessed on knowledge of the following: 1) common STIs, 2) clinical features of STIs, 3) sources of STI transmission, and 4) prevention of STIs. Participants were asked to respond “yes” or “no” or “I’m not sure” to the questions. Each correct “yes” answer was assigned a score of 1. The wrong “no” or “I’m not sure” answer was assigned a score of 0.

Part B comprised a one-item consistent condom use question modified from the work of Manning, Giordano, and Longmore (2009). The consistent condom use was assessed by the question: “In the last 6 months, how often did you or your partner use a condom when you had sex?” The participants were provided with six options: “every time we had sex”, “almost every time we had sex”, “most of the time”, “half of the time”, “some of the time”, and “a few times”. Similar to the Manning, Giordano, and Longmore study, participants’ responses were coded as “every time we had sex” = 100%, “almost every time we had sex” = 90%, “most of the time” = 60-80%, “half of the time” = 50%, “some of the time” = 20-40%, and “a few times” = 1-10%. Coding in percentages was used to increase the objectivity of this study. See Appendix F for pre-test question items.

This self-administered 5-item questionnaire was the same one used during pre-test and post-test. However, the Part B was modified in the post-test to capture the actual variable (consistent condom use). It was comprised of an additional “yes” or “no” question making it a 6-item questionnaire. Each participant was asked: “have you had sex

since the last visit?” Participants who responded “yes” moved on to the next question as in pre-test. Those who responded “no” to this additional question were not required to respond to the next question. Refer to Appendix G for Post-test question items.

Educational Bundle

In order to address Latino patient’s knowledge deficit regarding STIs and low condom use that was reported in the clinic population, an educational bundle was implemented. The educational bundle consisted of the following. First, two YouTube STI-related videos, including 4 minutes and 53 seconds long (Spanish version) and 4 minutes and 3 seconds (English) renditions, were played alternately in the waiting room on a repeated loop during the project implementation. Overall, the YouTube videos focused mostly on STI and its prevention.

Second, the DNP author and the PA provided a 10 to 15-minute pre-designed educational session to participants on a one to one basis during the clinic visit. The brief education was based on the *STDs and HIV–CDC Fact Sheet*. It covered six main sections, highlighted as: 1) common STIs, 2) important facts about STIs, 3) source of transmission, 4) clinical features, treatments, complications, STI tests, and prevention strategies, 5) protection of the sex partners, and 6) available resources. The education took place in a private location in the clinic to accommodate the cultural *sexual silence*. With respect and a non-judgmental attitude, the clinic PA or the DNP author reviewed the aforementioned CDC Fact sheet with all participants. After the education, participants were given an opportunity to ask questions to dispel any misconceptions or myths they may have held regarding STI.

Other CDC STI-related educational materials in the form of handouts, pamphlets and brochures were handed to the participants after the one to one education. The CDC educational materials that were provided included “The Lowdown Infographic on how to prevent STDs” brochure, *Condom use Fact Sheets In Brief*, STDs Facts brochures, specifically on chlamydia, bacterial vaginosis, gonorrhea, genital herpes, genital HPV, trichomoniasis, syphilis, and pelvic inflammatory disease. Because the literacy level of the majority of the clinic patients was low, the readability level for these educational materials was at a fifth-grade level. Again, to enhance cultural appropriateness, both Spanish and English versions of the CDC educational materials were provided. (See Appendix H for educational tools and materials).

Procedure

The project flyers were displayed in a prominent place in a clinic waiting room. During the regular office visit, the medical assistant included the project flyer as part of the registration package provided to patients. As the patient returned the completed registration package, the medical assistant inquired if the patient had read the flyer and wished to participate in this project. The medical assistant obtained written consent from individuals who voluntarily demonstrated interest to participate (Refer to Appendix I for the consent). Prior to the implementation of the brief one to one education, the DNP author or the PA distributed the 5-item self-administered questionnaire to assess the participants’ baseline knowledge about STIs and consistent condom use (pre-test). The participants were seen again by the DNP author or the PA in one week upon their return for lab results, which is a routine part of Family Planning visits and STI screening paid for by the Medicaid under Family PACT program. During the second office visit, the

participants were given the same 5-item self-administered questionnaire as in the pre-test to assess whether there were changes in their STI knowledge and consistent condom use (post-test). As earlier stated, the part B of the post-test questionnaire comprised an additional “yes” or “no” question (“have you had sex since the last visit?”), and that made it a 6-item questionnaire. Participants who responded “yes” to this question went to the next question, while those who responded “no” were not required to answer the next question. The questionnaire was designed this way in order to capture the actual variable (consistent condom use). All forms were provided in both English and Spanish. The Spanish translation was performed by a certified Language specialist (See Appendix J for the Spanish translated documents).

Data Analysis

Data were analyzed using the Intellectus Statistics™ software. Descriptive statistics were used to describe participants’ socio-demographic data as well as their scores on STI Knowledge and Consistent Condom Use questionnaire. A paired t- test was used to evaluate whether there was a significant change between pre-test and post-test mean scores. For this project, a p -value <0.05 was considered to be statistically significant at the 95% confidence interval. Other statistical tests conducted included Independent sample t-tests and Chi-Square tests.

Timeline

The project took place over a nine-month timeframe. Table 1 depicts the timeline for completion of key project tasks.

Table 1

Timeline

Time	Tasks
November 2016 to present	Identification of clinical problem, selection of target population, literature review, chart reviews, completed problem statement, construction of a Table of Evidence (TOE, several meetings with key stakeholders
April 2017 to June 2017	Proposal of the DNP project, IRB application
August 2017 to October 2017	Upon IRB approval, recruitment of participants, data collection, implementation of the educational activities
November 2017 to January 2018	Analyze data and evaluate outcomes
February 2018 to April 2018	Documentation, Dissemination of findings, Project defense, Poster presentation

RESULTS

Demographic Data

Forty-six adult Latino patients participated in this QI project. The majority were males ($n = 28$, 61%), while the remaining were females ($n = 18$, 39%). Most of the participants indicated their language preference as Spanish ($n = 40$, 87%), only a few participants ($n = 6$, 13%) indicated English language as their preference. The age group of the participants ranged from 19 to 60 years old with the mean age of 36.30 ($sd = 10.24$). The socio-demographic characteristics of the participants are presented in Table 2 (race, gender, and language preference) and Table 3 (age).

Table 2

Socio-Demographic Variables (Race, Gender, and Language Preference)

Variable	<i>n</i>	%
Race		
Latino	46	100.00
Gender		
Male	28	60.87
Female	18	39.13
Language Preference		
Hispanic	40	86.96
English	6	13.04

Table 3

Socio-Demographic Variable (Age)

Variable	<i>M</i>	<i>SD</i>	<i>n</i>	<i>SE_M</i>	Skewness	Kurtosis
Age	36.30	10.24	46	1.51	0.03	-0.68

An independent samples *t*-test was conducted to examine whether the mean of age was significantly different between the male and female categories of gender.

Interestingly, the result was statistically significant, ($t(44) = -2.06, p = .045$). The mean age of the male participants was significantly lower than the mean age of the females. This implies that the female participants were older than the males. Table 4 presents the results of the independent samples *t*-test.

Table 4

Independent Samples t-Test for the Difference between Mean Age of Males and Females

Variable	Male		Female		<i>t</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Age	33.89	9.00	40.06	11.14	-2.06	.045	0.61

Note. Degrees of Freedom for the *t*-statistic = 44. *d* represents Cohen's *d*

STI Knowledge

The participants' total mean STI knowledge score significantly improved from 1.67 (sd = 0.87) at pre-test to 3.80 (sd = 0.54) at post-test (see Table 5). The result of the paired samples *t*-test was significant, ($t(45) = -15.48, p < .001$), suggesting that the difference between the means of total pre-test and total post-test knowledge scores was true and statistically significant. The improvement was also observed in the individual STI knowledge items. The mean scores of question one (knowledge of chlamydia as one of the STIs) increased from 0.54 to 0.98; question two (knowledge of not all STIs give warning signs) increased from 0.20 to 0.91; question three (knowledge of acquiring gonorrhea through oral sex) increased from 0.11 to 0.91, and question four (knowledge of condom use in reducing the risk of STIs) increased slightly from 0.98 to 1.

The item analysis revealed that most participants did not know the sources of STI transmission prior to the educational session. At baseline, the majority did not know that gonorrhea could be acquired through oral sex (pre-test mean = 0.11). Surprisingly, a good

number of the participants knew that use of a condom could reduce the risk of STIs (pre-test mean score = 0.98, post-test mean score = 1). Table 5 depicts the paired samples *t*-test for the difference between the means of total pre-test and post-test knowledge scores. Figure 3 presents the means of total pre-test (A) and post-test (B) STI knowledge scores. Table 6 summarizes the individual mean pre-test and post-test knowledge scores.

Table 5

Paired Samples t-Test for the Difference between the Means of Total Pre-Test and Total Post-Test Knowledge Scores

Total-Pre-Test		Total-Post-Test		<i>t</i>	<i>p</i>	<i>d</i>
<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
1.67	0.87	3.80	0.54	-15.48	< .001	2.94

Note. Degrees of Freedom for the *t*-statistic = 45. *d* represents Cohen's *d*.

Figure 3. The means of total pre-test (A) and total post-test (B) STI knowledge scores.

Table 6

Summary of the Individual Mean Pre-Test and Post-Test Knowledge Scores

Variable	<i>M</i>	<i>SD</i>	<i>n</i>	<i>SE_M</i>	Skewness	Kurtosis
Pre-Test Q1	0.54	0.50	46	0.07	-0.17	-1.97
Pre-Test Q2	0.20	0.40	46	0.06	1.53	0.35
Pre-Test Q3	0.11	0.31	46	0.05	2.51	4.32
Pre-Test Q4	0.83	0.38	46	0.06	-1.72	0.96
Post-Test Q1	0.98	0.15	46	0.02	-6.56	41.02
Post-Test Q2	0.91	0.28	46	0.04	-2.93	6.60
Post-Test Q3	0.91	0.28	46	0.04	-2.93	6.60
Post-Test Q4	1	0	46	0	—	—

Q1 = chlamydia; Q2 = warning signs; Q3 = gonorrhea; Q4 = condom use.

An independent samples *t*-test was conducted to examine whether the mean of total pre-test and post-test knowledge scores were significantly different between male and female genders, respectively. The results of the independent samples *t*-test were not significant in both pre-test knowledge scores $t(44) = -1.36, p = .182$, and post-test knowledge scores $t(44) = 0.26, p = .793$, suggesting that gender was not associated with the number of correctly answered STI knowledge questions.

Condom Use Frequency

Forty-two out of 46 participants completed both pre-test and post-test condom use frequency questions. During the one week follow up visit, four participants, who responded “no” to the question “Have you had sex since the last visit?” were not required to participate in the post-test condom use frequency question. Over all, the participants’ total mean condom use frequency remarkably improved from pre-test ($M = 3.09$) to post-test ($M = 5.33$). The result of the paired samples *t*-test was significant, $(t(45) = -7.09, p < .001)$, suggesting that the difference in the means of pre-test condom use frequency

and post-test condom use frequency was statistically significant. Table 7 presents the paired samples t-test for the difference between the means of pre-test and post-test condom use frequency. Figure 4 depicts the means of pre-test condom use frequency (A) and post-test condom use frequency (B).

Table 7

Paired Samples t-Test for the Difference between the Means of Pre-test Condom Use Frequency and Post-test Condom Use Frequency

Pre-Test Condom Use Frequency		Post-Test Condom Use Frequency		<i>t</i>	<i>p</i>	<i>d</i>
<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
3.09	1.74	5.33	1.74	-7.09	< .001	1.29

Note. Degrees of Freedom for the *t*-statistic = 45. *d* represents Cohen's *d*.

Figure 4. The means of pre-test (A) condom use frequency and post-test (B) condom use frequency.

There were two levels of condom use frequency. The level 1 included non-frequent condom users who had scores of 1 to 3 in the one-item consistent condom use

question. The level 2 constituted the frequent condom users, who scored between 4 and 6 in the one-item consistent condom use question. An independent samples *t*-test was conducted to examine whether the mean of total pre-test STI knowledge scores was significantly different between the 1 and 2 categories of pre-test condom use frequency. The result of the independent samples *t*-test was significant ($t(44) = -2.18, p = .035$), indicating that the difference in the means of total pre-test STI knowledge scores was statistically significant between the 1 and 2 categories of pre-test condom use frequency. The mean of total pre-test STI knowledge scores in the category 1 of pre-test condom use frequency was significantly lower than the mean of total pre-test STI knowledge scores in the category 2. Table 8 presents the results of the independent samples *t*-test for the difference between the total-Pre-Test STI Knowledge Scores in the two categories of condom use frequency.

Table 8

Independent Samples t-Test for the Difference between Total-Pre-Test STI Knowledge Scores in two Categories of Condom Users

Variable	Non-Frequent Condom Users		Frequent Condom Users		<i>t</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Total-Pre-Test-STI Knowledge Scores	1.42	0.93	1.95	0.72	2.18	.035	0.65

Note. Degrees of Freedom for the *t*-statistic = 44. *d* represents Cohen's *d*.

In regard to gender differences, findings suggested that gender was not associated with the frequency of condom use. The results of the independent samples *t*-tests that were conducted to examine whether the means of both pre-test and post-test condom use frequency differed between males and females were not statistically significant. A Chi-Square Test of Independence was conducted to examine whether gender and “Have you

had sex since the last visit” had a significant relationship. The result was not statistically significant, suggesting that the two variables were not dependent on each other.

For the purpose of data analysis, age was categorized into two groups. The group 1 constituted participants who were within the age of 36 and younger. The group 2 included participants who were 37 and older. A Chi-Square Test of Independence was conducted to examine whether there was a relationship between age and pre-test condom use frequency. The results of the Chi-Square test were not significant, $\chi^2(1) = 0.23$, $p = .632$, suggesting that the two age groups and two categories of pre-test condom use frequency could be independent of one another. This implies that the observed frequencies were not significantly different than the expected frequencies.

Sexually Transmitted Infections in the Study Population

Of the total number of subjects in this project, 13 out of 46 (28.3%) were found to have STIs. Ten (21.7%) individuals tested positive for chlamydia and three (6.5%) were diagnosed with gonorrhea. Eight (28.6%) of the 28 males and 5 (27.8%) of the 18 women tested positive for either chlamydia or gonorrhea. Of interest, both genders have similar percentages of STIs. This information was reported in the aggregate and not linked to any specific subject.

DISCUSSION

The findings related to lack of knowledge and the need for education noted in this project were consistent with those noted in other studies (Colon-Lopez et al., 2012; Drago et al., 2016; Folasayo et al., 2017; Lee et al., 2013; Martinez et al., 2014; Negin et al., 2014; Rhodes et al., 2014; Samkange-Zeeb et al., 2012; Samkange-Zeeb, Mikolajczyk, & Zeeb (2011); Trans et al., 2013) and suggest the need to educate sexually active individuals about STIs. The pretest results reflected the low knowledge of STIs among the participants. At baseline, only a few responded correctly that not all STIs do give warning signs (M item score = 0.20). The majority did not know they could be infected with a STI without symptoms being present. Most participants did not know that oral sex was a route for STI transmission. A small number of participants knew they could acquire gonorrhea through oral sex (M item score = 0.11). Of note, in this sample, there is a high percentage of individuals presently engaging in oral sex who do not realize this behavior is linked to transmission of disease. This finding is supported by the CDC (2017) report that over 85% of sexually active adults, ranging from 18 to 44 years old had engaged in oral sex at least once with a partner of the opposite sex.

Findings from this project suggest that education had a positive impact on STI knowledge and consistent condom use. These results corroborate with the previous studies (Colon-Lopez et al., 2012; Tran et al., 2013). The total mean scores for both STI knowledge (from 1.67 at pre-test to 3.80 at post-test) and condom use frequency (from 3.08 at pre-test to 5.33 at post-test) significantly ($p < .001$) improved in one-week post implementation of the education bundle. In contrast to the pre-test result (M = 0.20), a higher number of participants responded correctly in post-test (M = 0.91) that STIs could

be asymptomatic. The number of participants who identified oral sex as a possible route for the transmission of STIs also increased in post-test ($M = 0.91$).

Similar to other studies (Clifton et al., 2015; Matovu & Ssebadduka; Samkange-Zeeb et al., 2011), the knowledge of the protective role of condom use was consistently high in both pre-test and post-test ($M = 0.98$ and 1.0 , respectively). A good number of participants responded correctly that condom use could decrease their risk for acquiring STIs. This can be linked to the continued extensive global awareness campaign on condom use since the discovery of HIV disease in the mid 1980's.

Consistent with other studies (Colon-Lopez et al., 2012; Lee et al., 2013; Tran et al., 2013) higher levels of STI knowledge were found to be associated with more frequent condom use. At baseline, the mean of total STI knowledge scores for category 1 of pre-test condom use frequency (non-frequent condom users) was significantly lower than the mean of total STI knowledge scores for category 2 (frequent condom users). However, this is contrary to the findings in some studies (Clifton et al., 2015; Folasayo et al., 2016; Matovu & Ssebadduka (2013); Samkange-Zeeb et al., 2012) where knowledge did not have impact on the frequency of condom use.

Gender did not have influence on STI knowledge score. As earlier stated, the independent samples *t*-tests conducted in both pre-test and post-test did not show statistically significant results. This finding is in contrast to other studies (Folasayo et al., 2017; Samkange-Zeeb, Mikolajczyk, & Zeeb (2011) where gender differences were observed in STI knowledge. There was no age-related differences in condom use. Unlike in Sahay et al, where older participants showed more inconsistent condom use than the

younger ones, age did not show statistical difference in condom use frequency among the participants.

Limitations

The participants in this QI were homogeneously Latinos, limiting the generalizability of the findings to other races. Convenience sampling was used in this project. The dependence on self-reporting is another limitation to be considered. Using self-reporting for data collection often triggers the risk of social desirability bias. There is a tendency that the participants may have over-reported or under-reported the frequency of condom use. In addition, the post-testing took place only one week after the education bundle; therefore, the results may not represent future long-term use of condoms. Repeating this with a longer time frame between education and collecting post test data could change the results.

Conclusion

The findings reflected the positive impacts of education on STI knowledge and condom use frequency. The education bundle is promising. It was found efficacious in increasing STI knowledge and consistent condom use among adult Latinos in an out-patient setting. This QI project presents an example of how to access this vulnerable population in a culturally appropriate manner. Further study needs to be done to determine the long-term effect of this mode of education for this population that comprised primarily of Latinos of low income.

Implications for Practice

The elevated total mean scores of both STI knowledge and condom use frequency (post-test results) may be an indication that the education bundle was effective. The

findings reinforced the need for health education about STIs, particularly for this clinic population. Healthcare providers need to use a variety of educational tools including handouts and videos to educate their patients on STIs as well as consistent condom use. Although knowledge does not always predict behavior change, patient education on STI remains a necessity for the prevention of STIs. Incorporating brief one to one health teaching about STIs during routine clinical visits as well as using population specific video resources in the patient waiting area may help to sustain the knowledge.

Dissemination of quality improvement project results is essential for the advancement of nursing practice and is a hallmark of the DNP role. The findings of this project were shared with the healthcare staff at the project site and generated discussion about how best to sustain the educational strategies used in this project. The DNP author disseminated the findings through poster presentation at two conferences sponsored by local Sigma Theta chapters. The manuscript will be submitted in one of the peer reviewed journals for a tentative publication.

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APPENDIX A

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APPENDIX B
TABLE OF EVIDENCE

Knowledge and Perceived Risk of STIs

Purpose(s) Authors(s) (year)	Design & Key Variables	Sample & Setting	Measurements, Operational Definitions, Data Collection Method	Results or Findings	Conclusions & Study Limitations
<p>To investigate factors that increase the risk of HIV in OHW.</p> <p>(Cianelli et al., 2013)</p>	<p>Qualitative descriptive approach KV = Demographic data (age, language, education, religion, Job status, source of income), IPV, PPRBC, Cultural factors, E/PC, HRK, HRP, HRSB, HT,</p>	<p>50 self-identified Hispanic women, 50 years and above, sexually active, resident in Miami Dade County, able to read English or Spanish, and willing to participate for the study. Recruited using convenience sampling</p> <p>Setting: Conducted in Miami, Florida</p>	<p>Data collection conducted using Five focus groups at 10 participants per group</p>	<p>HRK & HRP in OHW = ↑HRSB Biological changes in OHW including ↑vaginal dryness = ↑ risk for contracting HIV IPV = Most participants were reluctant to discuss IPV Hispanic culture (<i>Machismo</i> & <i>Marianismo</i>) = ↓HIV prevention <i>Machismo</i> = ↑male partner infidelity with younger partners & use of erectile dysfunctional drugs or penis pumps <i>Marianismo</i> = ↓OHW self-efficacy in negotiating for healthy sex (condom use)</p>	<p>Findings indicate that lack of HIV knowledge and low risk perception among OHW increase the risk for contracting HIV. Certain Hispanic cultures have shown negative impacts on sexual health. Sexual health education remains a vital strategy in decreasing the risk of HIV or other STIs.</p> <p>Limitation: Because participants might be over or under reporting data, self-report often threatens the validity of data collected.</p>

Purpose(s) Authors(s) (year)	Design & Key Variables	Sample & Setting	Measurements, Operational Definitions, Data Collection Method	Results or Findings	Conclusions & Study Limitations
<p>To examine the awareness of HPV infections among men in Puerto Rico</p> <p>(Colon-Lopez et al., 2012)</p>	<p>A cross sectional study design. Established baseline data using an Online structured behavioral interview</p> <p>KVs = HPV awareness, HPV knowledge H/O STIs, Sexual behaviors & practice (including sexual partner condom use), Demographic data (age, literacy level, employment, sexual orientation)</p>	<p>Convenience sampling of 206 Puerto Rican men (within the age of 16 and above)</p> <p>Study was conducted in one of the STI clinics in San Juan, Puerto Rico</p>	<p>HPV knowledge = was measured using a 21-item scale</p> <p>HPV awareness = was based on self-report</p> <p>H/O STI = self-report</p> <p>Demographics = self-report</p> <p>Adequate HPV knowledge = was operationalized as having a minimum score of 70%</p>	<p>↑Feeling of depression, sadness or loneliness in OHW = ↑ HRSB</p> <p>HPV awareness vs HPV knowledge = although 52.5% (n = 106) reported HPV awareness, only 29.3% of these men showed an adequate level of HPV knowledge</p> <p>HPV knowledge = significantly ↑ in MSM & ↓ in non-MSM ($p = 0.028$)</p> <p>HPV Knowledge = significantly ↑ in those with self-reported H/O HPV ($p = 0.001$) & that of genital warts ($p = 0.009$)</p>	<p>Based on the evidence, a considerable number of individuals have limited knowledge of HPV and therefore, education on STI is critically important.</p> <p>Limitations: Self-report is subjective, thus using it to collect most data can skew the validity of the study findings.</p>

Purpose(s) Authors(s) (year)	Design & Key Variables	Sample & Setting	Measurements, Operational Definitions, Data Collection Method	Results or Findings	Conclusions & Study Limitations
<p>To explore the knowledge, attitudes, risky behaviors, and preventive practices related to STDs among health and non-health sciences university students as future health care providers in Malaysia</p> <p>(Folasayo et al., 2017)</p>	<p>A Cross Sectional Study design.</p> <p>KVs = Sociodemographic characteristics (including gender, age, ethnicity, educational level, religion, and faculty type)</p> <p>Students' Knowledge on STDs, Attitudes related to STDs and the preventive practices related to STDs</p>	<p>A total of 700 health and non-health sciences university student (255 male, 445 female) within the age range of 17 and 30 years were recruited using a simple random sampling.</p> <p>The study was conducted in the two higher-learning institutions (public and private universities) located in the central zone of Malaysia.</p>	<p>Sociodemographic data = self-report</p> <p>Students' Knowledge on STDs = using a 14-item questionnaire with "yes" or "no" answer</p> <p>Attitudes related to STDs = using a 20-item questionnaire with a 4-point Likert scale</p> <p>The preventive practices related to STDs = using a 6-item questions with "yes" or "no" answer</p> <p>"yes" = a score of 1</p> <p>"no" = a score of 0</p>	<p>A large number of the participants have heard at least one STD (86.6%)</p> <p>HIV/AIDs is the most common known type of STD (83.6% of the participants)</p> <p>Knowledge of other common STDs was low among the participants (syphilis = 63.9% & gonorrhea = 45.4%, Trichomoniasis = 22.6%)</p> <p>Other diseases were wrongly listed as STDs (Tuberculosis = 61.9%, Mosquito as the causative factor = 37.4%)</p> <p>Despite that the majority of the participants (88.1%) knew that having multiple sexual partners was unsafe, 66.7% had sexual intercourse with multiple partners. Females were significantly knowledgeable and had</p>	<p>Based on the evidence, there is a continued gap of knowledge about STDs, which calls for an effective educational intervention. However, having knowledge does not necessarily translate into behavioral change.</p> <p>Limitations: A longitudinal study design could have provided a more valid result. Self-report often associates with "social desirability", which threatens the validity of the study findings.</p>

Purpose(s) Authors(s) (year)	Design & Key Variables	Sample & Setting	Measurements, Operational Definitions, Data Collection Method	Results or Findings	Conclusions & Study Limitations
<p>To review the available published evidence on behavioral HIV interventions specifically targeted to older adults.</p> <p>(Negin et al., 2014)</p>	<p>Systematic Review</p> <p>KVs = Treatment adherence, HIV testing uptake, increased HIV knowledge, reduced risk behavior, social, and physical support.</p> <p>Intervention styles used include: age-specific AIDS education program, ROADMAP project in, a group educational sessions to reduce HRSB, TBI, Weekly exercise resistance training</p>	<p>12 studies selected. 2 retrieved from the reference list and 10 were retrieved from MEDLINE, Embase and ERIC from February 2012 to June 2012 that evaluated non-pharmacologic, non-biological, behavioral and cognitive interventions. Included articles reported specifically on participants 50 years & older or that reported age groups in which most respondents were in the age group (i.e. 45+)</p>	<p>HIV knowledge = measured using a variety of Questionnaires Perception of susceptibility = measured using Likert scale</p> <p>Reduced sexual risk behavior</p> <p>Mental health& coping assessment = Geriatric Depression scale</p> <p>Physical status & strength = measured using Anthropometric indices, Strength & Function test</p>	<p>positive attitudes compared to the males.</p> <p>Age-specific AIDS education program was significantly effective in improving HIV knowledge ($p = 0.001$) & perception of susceptibility ($p = 0.01$) among older HIV-negative Americans compared to control group not receiving education program.</p> <p>Education sessions = $\uparrow$ HRK among older adults. However, one of the workshops did not show a significant impact on HRK in older adults. ROADMAP = IG reported $\downarrow$ inconsistent condom use compared to CG. TBI = IG reported $\downarrow$ EUS and CG reported on average 3.24 times $\uparrow$ EUS</p>	<p>Most of the studies demonstrated effectiveness of education on HIV prevention, among older adult. Providing a holistic age-appropriate behavioral intervention is a necessity for HIV/STI prevention.</p> <p>Limitations: The evidence is considered weak as a result of certain methodological issues across the studies. Of the 12 studies, 4 were RCTs and of the 8 interventional studies, only 5 had control groups. The sample size was small, the intervention styles and outcome measured also varied across the studies</p>

Purpose(s) Authors(s) (year)	Design & Key Variables	Sample & Setting	Measurements, Operational Definitions, Data Collection Method	Results or Findings	Conclusions & Study Limitations
<p>To identify characteristics of potentially successful programs to prevent HIV and promote sexual health among Guatemalan sexual minorities.</p> <p>(Rhodes et al., 2014)</p>	<p>Qualitative design using Focus group and Individual In-depth interview.</p> <p>KVs = demographic data, sexual health among Guatemalan sexual minorities, sexual health perception</p>	<p>87 focus group participants & 10- In-depth interviews. Inclusion criteria: Spanish speaking, 18years & older, MSM since age 18 & above, or transgender, & residing in the city of Guatemala.</p> <p>Participants were recruited using a purposive snowball sampling</p> <p>Setting: conducted in Gay-owned restaurants, located in the city of Guatemala</p>	<p>Demographic data = were collected using a brief low-literacy assessment</p> <p>sexual health among Guatemalan sexual minorities = collected using 8 focus groups</p> <p>Sexual health perception = collected using 10 in-depth interviews of the gay leaders in Guatemalan</p>	<p>Following constant comparison analysis, 20 characteristics of potentially successful programs to reduce HIV emerged as themes.</p> <p>Participants lacked sexual health knowledge, which generated certain misconceptions about HIV and STIs</p> <p>75% of the participants reported multiple sexual partners for the past 3 months and the mean number of male partners = 7.9</p>	<p>The findings reveal limited HIV/STI knowledge among vulnerable population. Collaborating with patients to develop a sound sexual health education program is seriously important.</p> <p>Limitations: The population of interest might have been under represented as a result of using convenience sampling. In light of that, the generalizability of the study findings is limited.</p>

Purpose(s) Authors(s) (year)	Design & Key Variables	Sample & Setting	Measurements, Operational Definitions, Data Collection Method	Results or Findings	Conclusions & Study Limitations
<p>To determine awareness and knowledge of HIV and other STDs among school-going adolescents in Europe.</p> <p>(Samkange-Zeeb et al, 2011)</p>	<p>A Systematic Review</p> <p>KVs = include the following: Awareness and knowledge of HIV/AIDs, HPV, chlamydia, gonorrhea Awareness of syphilis and herpes Awareness of STDs in general Reported use of condom</p>	<p>15 cross sectional studies from January 1990 to December 2010 that reported on awareness and or knowledge of one or more STDs among school attending adolescents, aged 13 to 20years</p> <p>Studies were retrieved from PubMed data base using various combinations of search terms as search strategy</p>	<p>Survey tools were used for data collection across the studies</p>	<p>Awareness and knowledge = ↑ HIV/AIDs and ↓ HPV</p> <p>Gender Influence = Females demonstrated better HPV awareness and knowledge than the males</p> <p>Condom use = despite ↑awareness of the protective effect of condoms, consistent condom use was ↓ among adolescents</p>	<p>Findings show a need for educational intervention due to a significant gap in knowledge and awareness of the major STDs. The decreased consistent condom use despite high awareness of its protective effects suggests that knowledge does not necessarily translate into behavioral change.</p> <p>Limitation: The 15 studies did not focus on the same STDs and survey questions varied across the studies.</p>

Purpose(s) Authors(s) (year)	Design & Key Variables	Sample & Setting	Measurements, Operational Definitions, Data Collection Method	Results or Findings	Conclusions & Study Limitations
To describe condom use behaviors & examines correlates of use in BDF personnel (Tran et al., 2013)	A cross- sectional study design KVs = include Demographics, HIV risk perception, Condom use perception, HIV knowledge scores, trusting a partner, Circumcision status, Alcohol use, and Condom use frequency	211 male BDF personnel who have had sex (aged 18-30, stationed at one of the four selected military sites) Setting: four selected military sites in Botswana	Condom use frequency = self- report, HIV risk perception = self-report Condom use perception = self- report HIV knowledge = measured using 8- item questions Alcohol use = measured using AUDIT instrument Circumcision status = self-report Demographics = self- report	Condom use = relatively ↓ in the BDF (only 51% participant reported consistent use) Alcohol use = significantly associated with ↓ condom use (OR = 2.27%) HIV Knowledge score = 1 unit ↑ was equivalent to odds of decreased condom use by 3% (OR = 0.97%, 95% CI = 0.95- 0.99) Condom use perception = negative perception significantly correlates with ↓ condom use (OR = 4.06, 95% CI = 1.83- 9.03)	Because consistent correct condom use remains the cornerstone for HIV/STI prevention, effort is needed to enhance it, Limitation: Using a longitudinal study design could have provided a better credible data than that of cross sectional Using a sample size of 211 instead of the initial target of 280 limits the generalizability of the findings

Note : AIDS = Acquired Immunodeficiency Syndrome, AUDIT = Alcohol Use Disorders Identification Test, BDF = Botswana Defence Force, CG = Control Group, CL = Confidence Interval, E/PC = Emotional/ Psychological Changes, ERIC = Education Resources Information Center, EUS = Episodes of Unprotected Sex, HIV = Human Immuno Deficiency Virus, H/O = History of, HPV = Human Papillomavirus, HRK = HIV Related Knowledge, HRP = HIV Risk Perception, HRSB = High Risk Sexual Behaviors, HT = HIV Testing, IG = Intervention Group, IPV = Intimate Partner Violence, KVs = Key Variables, MSM = Men who have Sex with Men, OHW = Old Hispanic Women, OR = Odd Ratio, PPRBC = Premenopausal-Postmenopausal Related Biological Changes, RCT = Randomized Controlled Trial, ROADMAP = Reeducating Older Adult in Maintaining AIDS Prevention, STD = Sexually Transmitted Disease, STIs = Sexually Transmitted Infections, TBI = Telephone-Based Intervention, ↑ = Increase, ↓ = Decrease, > = Greater than, < = Less than

Strategies for Sexual Health Education

Purpose(s) Authors(s) (year)	Design & Key Variables	Sample & Setting	Measurements, Operational Definitions, Data Collection Method	Results or Findings	Conclusions & Study Limitations
<p>To explore the impact of opportunistic sexual and reproductive health services delivered at the primary health care level</p> <p>Facilitate the development of BSC guidelines for health care providers.</p> <p>(Cooper et al., 2014)</p>	<p>Systematic Review</p> <p>IVs = intervention styles : brief (10-60mins) counselling, audio/visual risk assessment, didactic message, skill building, motivational interview,</p> <p>DVs = decrease negative sexual health outcomes Improve positive sexual health outcomes</p>	<p>31 studies conducted between 1980 and 2010. Inclusion criteria: RCTs, Observational studies, age of participants = adolescents and older</p> <p>observational studies without control, children in school, or individuals outside primary care setting were excluded</p>	<p>STI/HIV Incidence STI prevalence HPK,</p> <p>STI/HIV Knowledge</p> <p>Condom Knowledge</p> <p>Birth control sabotage</p> <p>Condom use</p> <p>Unprotected sex</p> <p>Self-efficacy</p> <p>Attitude to condoms</p> <p>Attitude toward sexual health</p>	<p>STIs and HIV were less often reported in IG compared to CG.</p> <p>Condom use was higher in most studies in the IG than CG</p> <p>Number of sexual partners and unprotected sexual contact were lower in the IG compared to CG.</p>	<p>Brief sexuality communication can be one of the effective STI prevention strategies for individuals attending primary care setting.</p> <p>Limitations: Studies used varied in sample size, intervention styles and outcome measurement</p>

Purpose(s) Authors(s) (year)	Design & Key Variables	Sample & Setting	Measurements, Operational Definitions, Data Collection Method	Results or Findings	Conclusions & Study Limitations
<p>To explore whether addressing gender and power in sexuality education curricula is associated with better outcomes.</p> <p>(Haberland, 2015)</p>	<p>A comprehensive Review approach</p> <p>KVs = gender, power, program efficacy, pregnancy, child bearing,</p>	<p>Studies retrieved from PubMed, ProQuest, CINAHL, EBSCO, Cochrane library, PsychoInfo & Web of Knowledge. 22 studies retrieved from PubMed, ERIC, Cochrane library, & reference lists. Included studies evaluated behavior-change interventions to prevent HIV, STIs or unintended pregnancy.</p> <p>15 studies = RCTs 7 = longitudinal cohort studies Female only enrolled study = 7 Male-only enrolled group = 0</p> <p>Settings: School = 10 Clinic setting = 5</p>	<p>EUS in the last 3 months = self-report</p> <p>Program efficacy measured by the rates pregnancy. Child bearing and STIs</p>	<p>Of 10 programs that clearly addressed gender and power, 8 (80%) had a significant ↓ in pregnancy and ↓ in STIs.</p> <p>Of 12 programs that did not address gender and power, only 2 (17%) demonstrated a significant ↓ pregnancy and ↓ STIs</p>	<p>Findings from this review reflect strong evidence, that including gender and power content in the intimate relationship is a vital component of effective sexuality education.</p> <p>Limitation: There is possibility of publication bias. Using only peer reviewed articles often increase the chance of missing important studies.</p>

Purpose(s) Authors(s) (year)	Design & Key Variables	Sample & Setting	Measurements, Operational Definitions, Data Collection Method	Results or Findings	Conclusions & Study Limitations
<p>To test the efficacy of HIV prevention intervention (known as “HoMBRes-2”) in increasing consistent condom use and HIV testing.</p> <p>(Rhodes et al., 2011)</p>	<p>RCT with no blinding. Data collection at baseline and follow up assessment at 3months post-intervention</p> <p>IVs = intervention styles IG = received “HoMBRes-2”(HIV prevention intervention designed to be culturally congruent and gender specific for immigrant Latino men)</p> <p>CG = received CEI</p> <p>DVs include: Consistent condom use for the past 3months.</p> <p>HIV testing within the past 12months</p>	<p>Community setting = 4</p> <p>142 immigrant heterosexually active Latino men (within the age of 18years and older, native Spanish-speaking).</p> <p>Individuals who had previously participated in any HIV prevention interventions were excluded.</p> <p>IG = 72 CG = 70</p> <p>Setting = conducted in North Carolina at the offices of CBPR partners and participants’ home</p>	<p>Socio-demographic data = self-report</p> <p>Acculturation = using SASH, a 12-item scale</p> <p>HIV knowledge = Using 18 true-false items</p> <p>STD Knowledge using 10 true-false items HIV testing = self-report Condom use frequency = using ordinal scale of “always”, “most of the time”, “about half the time”, “once in a while”, and “never”.</p> <p>CCU = was operationalized as “always”.</p>	<p>Participation rate = 98%. A total of 3 attrition (IG = 2 participants and CG = 1 participant</p> <p>Retention rate = 98% post intervention after 3months</p> <p>CCU = ↑significantly in IG and ↓in CG</p> <p>HIV testing rate = ↑significantly in IG and ↓ in CG</p>	<p>As IG showed a significant ↑in CCU as well as HIV testing, HoMBRes-2 was concluded as an effective culturally appropriate intervention needed in preventing or controlling STIs among the Latinos</p> <p>Limitations: Although self-reported behaviors have demonstrated reliability among Latinos, using biological outcomes can enhance the credibility of the study Data collection was not blinded and that could pose threat to the internal validity</p>

Purpose(s) Authors(s) (year)	Design & Key Variables	Sample & Setting	Measurements, Operational Definitions, Data Collection Method	Results or Findings	Conclusions & Study Limitations
<p>To identify factors associated with failure of CCU among men attending STI clinics</p> <p>(Sahay et al., 2015)</p>	<p>A prospective, clinic-based cohort study with measurement at baseline and quarterly for 2years.</p> <p>KVs = Primary Prevention counseling, HIV testing at baseline, Condom use behavior, demographic (age, education, employment, & religion) sexual behavior, biological, & clinical factors</p>	<p>8360 men (aged 18 years and older) with HIV seronegative results, who attend STI clinics</p> <p>Setting = It was conducted in three STI clinics located in Pune, India</p>	<p>CCU = operationalized as using condoms “always” within 3 months $\pm$15days from the initial f/up visit</p> <p>ICU = operationalized as using condoms “Never or Sometimes” within 3 months $\pm$15days from the initial f/up visit</p> <p>NCUB = a change in condom use behavior from consistent to Inconsistent condom use.</p> <p>PCUB = Changing from ICU to CCU</p> <p>SCU = CCU with any partner from baseline study period for two years.</p>	<p>PCUB = significantly $\downarrow$ in Men (aged 30yrs $\geq$) and who were in a monogamous marital relationship ($p = 0.002$) and ($p = 0.01$), respectively</p> <p>CCU = Significantly $\uparrow$ in men living away from family ($P = 0.001$)</p> <p>CCU = $\uparrow$ significantly in men who had recent sexual contact with FSW ($p = 0.008$)</p>	<p>Given that consistent condom use has remained a challenge, the need for periodic reinforcing STI risk reduction counseling can help in promoting condom use</p> <p>Limitations: Self-reporting of condom use could be a bias as participants might have over or under-reported condom use.</p> <p>Study sample was only obtained from men attending STD clinics & that may not have been a true representation of male population in India</p>

Note Brief Sexuality-related Communication, CBPR = Community-based Participatory Research, CCU = Consistent Condom Use, CEI = Cancer Educational Intervention, CG = Control Group, DVs = Dependent Variables, HIV = Human Immuno Deficiency Virus, HPK = HIV Prevention Knowledge, IG = Intervention, Group, ICU = Inconsistent Condom Use, IVs = Independent Variables, NCUB = Negative Condom Use Behavior, PCUB = Positive Condom Use Behavior, RCT = Randomized Controlled Trial, SASH = Short Acculturation Scale for Hispanics, SCU = Sustained Condom Use, STDs = Sexually Transmitted Diseases, STIs = Sexually Transmitted Infections, $\uparrow$ = Increase, $\downarrow$ = Decrease, $>$ = Greater than, $<$ = Less than

Sociocultural Influence on STI Prevention

Purpose(s) Authors(s) (year)	Design & Key Variables	Sample & Setting	Measurements, Operational Definitions, Data Collection Method	Results or Findings	Conclusions & Study Limitations
<p>To compare SRBs between Latino patients and non-Latino patients.</p> <p>Identify risk factors associated with STD/HIV among the Latino patients.</p> <p>(Gindi et al., 2010)</p>	<p>A retrospective study design</p> <p>KVs = Acculturation status BRFs STD/HIV prevalence Demographics (race, language spoken, sex, and age)</p>	<p>39,728 electronic medical records of patients during their initial visit to BCHD STD clinics between 2004 and 2007 (male = 57%, black = 91%, white = 5%, Latino = 2%, Other race category = 2%)</p> <p>Setting: The BCHD STD clinics</p>	<p>Race/Ethnicity = self-report Acculturation(among Latinos) = English Language use BFs = (sexual preference, condom use, contraceptive use, substance use and partner risk factors) = self-report STD contact = operationalized sexual contact with a partner diagnosed with HIV or any of the STDs STD/HIV diagnoses = Point of care or laboratory testing</p>	<p>BRFs = ↓in Latino patients and ↑ in white and black patients.</p> <p>No difference in ESLM and SSLM. Condom use = ↑in ESL, but equivalent to NLP in other BRFs</p> <p>STD contact = ↑in ESL & ↓in SSL (11% vs 5%, $p = 0.07$)</p> <p>STD/HIV prevalence = ↑syphilis in Latino patients, ↑Gonorrhea in NLP</p> <p>HIV & Chlamydia = No change across the racial/ethnicity</p>	<p>Knowing the risk factors for HIV/STD prevalence among Latinos is critically important.</p> <p>Limitations: Given that the study sample was drawn from public STD clinic, the findings are not a true representation of the entire U.S population. Using language proficiency in measuring Acculturation level can be a limitation.</p>

Purpose(s) Authors(s) (year)	Design & Key Variables	Sample & Setting	Measurements, Operational Definitions, Data Collection Method	Results or Findings	Conclusions & Study Limitations
<p>To explore factors that affect utilization of SRHS among immigrant Latino men in four rural Oregon communities</p> <p>(Harvey et al., 2012)</p>	<p>Exploratory qualitative design using an In-depth interview</p> <p>KVs = demographic data, acculturation, Experiences using health care services including SRHS, factors that affect the use of SRHS, including family planning.</p>	<p>49 sexually active Latino men, within the age range of 18 and 30years, immigrated to USA in the past 10 years, fluent in English or Spanish, engaged in vaginal intercourse with the past 3months, with no intention of getting the sex partner pregnant. Participants were recruited by convenience sampling</p> <p>Setting: the four rural counties in Northwest, Oregon</p>	<p>Acculturation = measured using SASH</p> <p>Demographic data = Self-report</p> <p>Data collection = semi structured interview</p>	<p>The emerged themes were grounded in cultural context</p> <p>Most participants have limited knowledge about reproductive health topics</p> <p>Cultural barriers including social stigma, language barrier, sexual silence and machismo hindered access to reproductive health services.</p>	<p>Based on the findings, addressing the sociocultural barriers is an effective strategy for STI prevention.</p> <p>Limitations: convenience sampling could be a threat to the generalizability of the study findings. Collecting data by self-report can be a threat to the validity of the study.</p>

Purpose(s) Authors(s) (year)	Design & Key Variables	Sample & Setting	Measurements, Operational Definitions, Data Collection Method	Results or Findings	Conclusions & Study Limitations
<p>To examine the influence of acculturation and cultural values (<i>familism, respeto, simpatia</i>, ethnic pride) on HIV testing among Latino youth.</p> <p>(Ma & Malcom, 2015)</p>	<p>Cross sectional design using survey data KVs = Demographic data, sexual behaviors, HIV testing, Acculturation, Latino cultural values including <i>familism, respeto, simpatia</i> and ethnic pride</p>	<p>51 self-identified sexually active young Latinos, aged = 13 -16years, living in a major city in the Southeastern USA. Participants were recruited using convenience sampling technique. Male = 67%, Female = 33% Setting = Conducted in a major city in the Southeast region of USA. Survey administered at library, office, the park or local fast food restaurants major city in the Southeast region of USA</p>	<p>Acceptance of sexuality Behavioral intension HIV testing attitudes, interest, and practices = measured using 6-item questionnaire Acculturation = was measured using BIQ-S <i>Familism</i> = measured using a 7-item survey anchored with 5-point Likert scale <i>Respeto</i> = measured using a 7-item scale anchored with 5-point Likert scale <i>Sympatia</i> = measured using a 4-item scale anchored with 5-point Likert scale Cultural pride = measured using a 3-item scale anchored with 4-point Likert scale</p>	<p>Approximately 49% of the participant reported inconsistent condom use during sexual intercourse.</p> <p>Acculturation = High acculturation score was significantly associated with ↑HIV testing ($p < .01$)</p> <p><i>Familism</i> = Strong familism orientation was significantly associated with ↓HIV testing ($p < .01$)</p>	<p>Based on study findings, certain sociocultural factors remain the barrier to STI/HIV prevention. Implementing culturally sensitive education may help to correct misconceptions.</p> <p>Limitation: Using convenience sampling as well as small sample size can be a threat to a true population representation. Most data were self-reported and that can bias the study findings.</p>

Purpose(s) Authors(s) (year)	Design & Key Variables	Sample & Setting	Measurements, Operational Definitions, Data Collection Method	Results or Findings	Conclusions & Study Limitations
<p>To investigate the following:</p> <ol style="list-style-type: none"> 1. levels of exposure to HPM 2. factors associated with message exposure 3. the association between exposure to HPM and HIV testing behaviors <p>(Martinez-Donate et al., 2015)</p>	<p>A cross sectional design using data from the <i>Migrante</i> HIV Risk Survey that was conducted from June 2009 to August 2010. This survey focused on HIV infection and behavioral risk factors.</p> <p>KVs = include: sociodemographic data, HPM, HT, Health insurance, sources of HPM, length of stay in US (acculturation)</p>	<p>3,149 Individuals who were 18 and older, born in Mexico or other Latin American countries, fluent in Spanish, not Tijuana residents (except for deported immigrants), traveling for labor reasons, change of residence or did not intend to return to their community of origin and never participated in the survey.</p> <p>Setting: The border city of Tijuana, Mexico</p>	<p>Last 12-month exposure to HPM = measured using a Questionnaire</p> <p>Message Sources, Media, & Setting = measured using three additional survey questions</p> <p>HT = self-report Migration Phase and context = obtained using migration history questions</p> <p>Health insurance = measured using a survey question.</p> <p>Time Living in US = Survey questions. This measure was also used as a marker of acculturation to US mainstream culture</p>	<p>A considerable percentage of immigrants (within the range of 25-43%) has not been exposed to any HPM in their latest migration context.</p> <p>Exposure to HPM significantly increases the odds of HT.</p> <p>Health Insurance significantly increases the odds of exposure to HPM</p>	<p>As a result of language barrier, cultural shock, lack of immigration papers, as well as health insurance, Mexican immigrants have continued to have limited exposure to HPM.</p> <p>Limitation: Using a longitudinal study design could have provided a better credible data than that of cross sectional.</p> <p>Most data were collected by self-report and that might have increased the risk for social desirability bias.</p>

Purpose(s) Authors(s) (year)	Design & Key Variables	Sample & Setting	Measurements, Operational Definitions, Data Collection Method	Results or Findings	Conclusions & Study Limitations
<p>To assess relationships between more or less acculturated attitudes and demographic variables.</p> <p>(Villar et al., 2012)</p>	<p>Exploratory qualitative design, Multi-site studie</p> <p>KVs = acculturation, attitudes, beliefs, demographic variables, gender roles, sex education, and seeking professional help</p>	<p>64 Latino immigrant adults recruited using purposive sampling.</p> <p>Study #1 = 24 participants between ages 21-64</p> <p>Study #2 = 30 participants, aged 21 -59</p> <p>Study #3 = 10 participants, age not documented</p> <p>Setting: three studies conducted in Miami, Florida</p>	<p>Data collected using focus groups and In-depth interview</p> <p>Very conservative = operationalized as less acculturated</p> <p>More Liberal = operationalized as more acculturated</p>	<p>Attitude & belief toward Gender roles = younger participants with ↑education & ↑ number of years in the USA were very conservative toward <i>machismo, marianismo</i></p> <p>Attitude & belief toward sex education = younger participants with ↑education & ↑ years in the USA were conservative</p> <p>Attitude & belief towards professional services = participants who have lived for >10 years in USA were more conservative</p>	<p>Based on the evidence, acculturation and demographic variables are not directly related. Other factors including individual beliefs, values, , experience, community values, and environmental factors can influence level of acculturation.</p> <p>Limitation: Self-reported data can bias the study validity.</p>

Note: BCHD = Baltimore City Health Department, BDF = Botswana Defence Force, BFs = Behavioral Factors, BRFs = Behavioral Risk Factors, ESL = English-Speaking Latinas, ESLM = English-Speaking Latino Males, HIV = Human Immuno Deficiency Virus, HPM = HIV Prevention Messages, HT = HIV Testing, KVs = Key Variables, NLP = Non-Latino Patient, SASH = Short Acculturation Scale for Hispanics, SRBs = Sexual Risk Behaviors, SRHS = Sexual and Reproductive Health Services, SSL = Spanish Speaking Latinas, SSLM = Spanish Speaking Latino Males, SRBs = Sexual Risk Behaviors, STD = Sexually Transmitted Disease, ↑ = Increase, ↓ = Decrease, > = Greater than, < = Less than

APPENDIX C
PROJECT FLYER

Need Volunteers for a Doctoral Project

Would you like to participate in a short 10 to 15minute education session as part of today's visit? Your provider will talk about sexually transmitted disease and how to prevent them. There will be a short quiz before the education and in one week after the education.

Yes-----, No-----

Please sign below to let your provider know you are interested.

Patient's signature-----

APPENDIX D
APPROVAL LETTER

RE: PERMISSION FOR USE OF DATA

This memo confirms that I grant you permission to access and use patient data from our facility for your DNP project, "Increasing Awareness and Knowledge among Adult Latinos regarding Sexually Transmitted Infections (STIs)". The purpose of this project is to implement education bundle and evaluate its effectiveness in increasing STI knowledge and condom use consistency among adult Latinos in the clinic.

It is understood that the project will not be performed during your paid-hours, but rather you will volunteer four hours every Wednesday during the implementation phase of this project.

It is also understood that the clinical data will be used only for the purpose of your project. Forms used during data collection will be housed in a locked file cabinet at your residence during the study, and when data has been entered into database, will be destroyed. The data will be de-identified and result will be reported in an aggregate form. Additionally, it is understood that this facility will be referred to only as "out-patient clinic located in Los Angeles County". It will remain an anonymous institution in your project.

I am happy to support your project and wish you the best.

APPENDIX E
PA CONSENT LETTER

RE: Consent to Participate in DNP Project

I have reviewed Ijeoma Eze's DNP project, "Increasing Awareness and Knowledge among Adult Latinos regarding Sexually Transmitted Infections (STIs)". I understand my role in educating volunteers during additional STI education session. I agree to administer the 4-item questionnaire as identified in the project (during pre and post-educational intervention).

APPENDIX F**PRE-TEST QUESTIONNAIRE****The 5-item Self-Administered Questionnaire****Part A**

For each of the following items: please respond “yes” or “no”, or “I’m not sure”

- 1) Chlamydia is one of the sexually transmitted infections
- 2) All sexually transmitted infections give warning signs
- 3) You cannot get gonorrhea from oral sex
- 4) Condom use can decrease your chance of getting sexually transmitted infections

Part B

Please circle one of the options below in answer to the question:

In the last six months, how often did you or your partner use condom during sex?

1. every time we had sex
2. almost every time we had sex
3. most of the time
4. half of the time
5. some of the time
6. a few times

APPENDIX G**POST-TEST QUESTIONNAIRE****The 6-item Self-Administered Questionnaire****Part A**

For each of the following items: please respond “yes” or “no”, or “I’m not sure”

- 1) Chlamydia is one of the sexually transmitted infections
- 2) All sexually transmitted infections give warning signs
- 3) You cannot get gonorrhea from oral sex
- 4) Condom use can decrease your chance of getting sexually transmitted infections

Part B

Please respond: “yes” or “no” to the question

Have you had sex since the last visit?

If “no”, stop here.

If “yes”, go to the next question

Please circle one of the options below in answer to the question:

How often did you or your partner use condom during sex?

1. every time we had sex
2. almost every time we had sex
3. most of the time
4. half of the time
5. some of the time
6. a few time

APPENDIX H

EDUCATIONAL TOOLS AND MATERIALS

STDs and HIV – CDC Fact Sheet

People who have STDs are more likely to get HIV, when compared to people who do not have STDs.

Are some STDs associated with HIV?

Yes. In the United States, people who get syphilis, gonorrhea, and herpes often also have HIV, or are more likely to get HIV in the future.

Why does having an STD put me more at risk for getting HIV?

If you get an STD you are more likely to get HIV than someone who is STD-free. This is because the same behaviors and circumstances that may put you at risk for getting an STD can also put you at greater risk for getting HIV. In addition, having a sore or break in the skin from an STD may allow HIV to more easily enter your body.

What activities can put me at risk for both STDs and HIV?

- Having anal, vaginal, or oral sex without a condom;
- Having multiple sex partners;
- Having anonymous sex partners;
- Having sex while under the influence of drugs or alcohol can lower inhibitions and result in greater sexual risk-taking.

What can I do to prevent getting STDs and HIV?

The only way to avoid STDs is to not have vaginal, anal, or oral sex. If you are sexually active, you can do the following things to lower your chances of getting STDs and HIV:

- Choose less risky sexual behaviors.
- Use condoms consistently and correctly.
- Reduce the number of people with whom you have sex.
- Limit or eliminate drug and alcohol use before and during sex.
- Have an honest and open talk with your healthcare provider and ask whether you should be tested for STDs and HIV.
- Talk to your healthcare provider and find out if pre-exposure prophylaxis, or PrEP, is a good option for you to prevent HIV infection.

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Division of STD Prevention

1057A

Are you already having sex? If so, are you using a condom every time you have sex? If not, you are at an increased risk for getting HIV.

can. If you already have HIV, and then get another STD, it can put your HIV-negative partners at greater risk of getting HIV from you.

your sex partners are less likely to get HIV from you if you

Rectangular Strip

- Use antiretroviral therapy (ART). ART reduces the amount of virus (viral load) in your blood and body fluids. ART can keep you healthy for many years, and greatly reduce your chance of transmitting HIV to sex partners, if taken consistently.

- Choose less risky sexual behaviors.
- Use condoms consistently and correctly.

The risk of getting HIV may also be reduced if your partner takes pre-exposure prophylaxis, or PrEP, after discussing this option with his or her healthcare provider and determining whether it is appropriate.

Will treating STDs prevent me from getting HIV?

No. It's not enough.

If you get treated for an STD, this will help to prevent its complications, and prevent spreading STDs to your sex partners. Treatment for an STD other than HIV does not prevent the spread of HIV.

If you are diagnosed with an STD, talk to your doctor about ways to protect yourself and your partner(s) from getting reinfected with the same STD, or getting HIV.

For more information:

Sexually Transmitted Diseases
www.cdc.gov/std/

HIV/AIDS and STDs
www.cdc.gov/std/hiv/

PrEP
(pre-exposure prophylaxis)
www.cdc.gov/hiv/basics/prep.html

CDC-INFO Contact Center
1-800-CDC-INFO
(1-800-232-4636)
TTY: (888) 232-6348
<https://www.cdc.gov/dcs/ContactUs/Form>

CDC National Prevention
Information Network (NPIN)
npin.cdc.gov/disease/stds
P.O. Box 6003
Rockville, MD 20849-6003
E-mail: npin-info@cdc.gov

American Sexual Health
Association (ASHA)
www.ashasexualhealth.org/stdsstis/
P.O. Box 13827
Research Triangle Park, NC
27709-3827
1-800-783-9877

Las ETS y el VIH; hoja informativa de los CDC

Las personas que tienen enfermedades de transmisión sexual (ETS) tienen más probabilidades de contraer el VIH, en comparación con aquellas que no tienen ETS.

¿Algunas ETS se asocian al VIH?

Sí. En los Estados Unidos, las personas que contraen sífilis, gonorrea y herpes a menudo también tienen el VIH, o tienen más probabilidades de contraer este virus en el futuro.

¿Por qué tener una ETS me pone en mayor riesgo de contraer el VIH?

Si usted tiene una ETS, tiene más probabilidades de contraer el VIH que una persona que no tiene una enfermedad de transmisión sexual. Esto se debe a que las mismas conductas y circunstancias que lo pueden poner en riesgo de contraer una ETS también lo pueden poner en mayor riesgo de contraer el VIH. Además, si tiene una llaga o herida en la piel causada por una ETS, el VIH podría entrar con más facilidad al cuerpo.

¿Qué actividades me pueden poner en riesgo de contraer tanto enfermedades de transmisión sexual como el VIH?

- Tener relaciones sexuales anales, vaginales u orales sin condón.
- Tener múltiples parejas sexuales.
- Tener parejas sexuales anónimas.
- Tener relaciones sexuales bajo la influencia del alcohol o de drogas puede disminuir las inhibiciones y hacer que corra mayores riesgos sexuales.

¿Qué puedo hacer para evitar contraer las ETS y el VIH?

La única manera de evitar las ETS es no tener relaciones sexuales vaginales, anales ni orales. Si usted es sexualmente activo, puede hacer las siguientes cosas para disminuir las probabilidades de contraer una ETS y el VIH:

- Elija conductas sexuales de menor riesgo.
- Use condones de manera constante y correcta.
- Reduzca la cantidad de personas con las que tiene relaciones sexuales.
- Limite o elimine el consumo de drogas y alcohol antes de tener relaciones sexuales y durante estas.
- Tenga una conversación honesta y abierta con su proveedor de atención médica y pregúntele si debe hacerse pruebas de detección de ETS y del VIH.
- Hable con su proveedor de atención médica y averigüe si la profilaxis preexposición (o PrEP) es una buena opción para usted para prevenir la infección por el VIH.

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Si ya tengo el VIH y luego contraigo una ETS, ¿eso pone a mi pareja sexual (o parejas sexuales) en mayor riesgo de contraer el VIH?
Puede que sí. Si usted ya tiene el VIH y luego contrae otra ETS, esto puede poner a sus parejas sexuales VIH negativas en mayor riesgo de contraer el VIH de usted.

Sus parejas sexuales tienen menos probabilidades de contraer el VIH si usted hace lo siguiente:

- Recibe terapia antirretroviral (TARV). La TARV reduce la cantidad de virus (carga viral) en la sangre y en los líquidos del cuerpo. Si toma los medicamentos de manera constante, la TARV lo puede mantener sano por muchos años y reducir significativamente las probabilidades de que usted les transmita el VIH a sus parejas sexuales.
- Elige conductas sexuales de menor riesgo.
- Usa condones de manera constante y correcta.

El riesgo de contraer el VIH también puede reducirse si su pareja recibe profilaxis preexposición (o PrEP) después de hablar de esta alternativa con su proveedor de atención médica y determinar si es adecuada.

¿El tratamiento contra las ETS evitará que contraiga el VIH?

No. Eso no es suficiente.

Si recibe tratamiento contra una ETS, esto ayudará a prevenir las complicaciones de esa afección y evitará que se la transmita a sus parejas sexuales. El tratamiento contra una ETS que no sea el VIH no previene la propagación del VIH.

Si le diagnostican una ETS, hable con su médico acerca de cómo puede protegerse y proteger a su pareja (o parejas) para evitar que se vuelvan a contagiar la misma ETS o que contraigan el VIH.

¿Dónde puedo obtener más información?

Página principal de Enfermedades de transmisión sexual

www.cdc.gov/std/spanish/

VIH/sida y ETS

www.cdc.gov/std/spanish/vih/

Información básica sobre la profilaxis preexposición (PrEP)

www.cdc.gov/hiv/spanish/basics/prep.html

Centro de Información de los CDC 1-800-CDC-INFO

(1-800-232-4636)

Comuníquese con CDC-INFO

<https://www.cdc.gov/dcs/>

español

Quiero saber

www.quierosaber.org/ets.html

Asociación Estadounidense de Salud Sexual (ASHA) (en inglés)

www.ashasexualhealth.org/stdstda/

P. O. Box 13827

Research Triangle Park, NC

27709-1827

1-800-783-9877

Condom Fact Sheet In Brief

Consistent and correct use of the male latex condom reduces the risk of sexually transmitted disease (STD) and human immunodeficiency virus (HIV) transmission. However, condom use cannot provide absolute protection against any STD. The most reliable ways to avoid transmission of STDs are to abstain from sexual activity, or to be in a long-term mutually monogamous relationship with an uninfected partner. However, many infected persons may be unaware of their infection because STDs often are asymptomatic and unrecognized.

Condom effectiveness for STD and HIV prevention has been demonstrated by both laboratory and epidemiologic studies. Evidence of condom effectiveness is also based on theoretical and empirical data regarding the transmission of different STDs, the physical properties of condoms, and the anatomic coverage or protection provided by condoms.

Laboratory studies have shown that latex condoms provide an effective barrier against even the smallest STD pathogens.

Epidemiologic studies that compare rates of HIV infection between condom users and nonusers who have HIV-infected sex partners demonstrate that consistent condom use is highly effective in preventing transmission of HIV. Similarly, epidemiologic studies have shown that condom use reduces the risk of many other STDs. However, the exact magnitude of protection has been difficult to quantify because of numerous methodological challenges inherent in studying private behaviors that cannot be directly observed or measured.

Theoretical and empirical basis for protection: Condoms can be expected to provide different levels of protection for various STDs, depending on differences in how the diseases or infections are transmitted. Male condoms may not cover all infected areas or areas that could become infected. Thus, they are likely to provide greater protection against STDs that are transmitted only by genital fluids (STDs such as gonorrhea, chlamydia, trichomoniasis, and HIV infection) than against infections that are transmitted primarily by skin-to-skin contact, which may or may not infect areas covered by a condom (STDs such as genital herpes, human papillomavirus [HPV] infection, syphilis, and chancroid).

HIV Infection

Consistent and correct use of latex condoms is highly effective in preventing sexual transmission of HIV, the virus that causes AIDS.

Other STDs and Associated Conditions

Consistent and correct use of latex condoms reduces the risk for many STDs that are transmitted by genital fluids (STDs such as chlamydia, gonorrhea, and trichomoniasis).

Consistent and correct use of latex condoms reduces the risk for genital ulcer diseases, such as genital herpes, syphilis, and chancroid, only when the infected area or site of potential exposure is protected.

Consistent and correct use of latex condoms may reduce the risk for genital human papillomavirus (HPV) infection and HPV-associated diseases (e.g., genital warts and cervical cancer).

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Consistent and Correct Condom Use

To achieve maximum protection by using condoms, they must be used consistently and correctly.

The failure of condoms to protect against STD/HIV transmission usually results from inconsistent or incorrect use, rather than product failure.

- **Inconsistent or nonuse** can lead to STD acquisition because transmission can occur with a single sex act with an infected partner.
- **Incorrect use** diminishes the protective effect of condoms by leading to condom breakage, slippage, or leakage. Incorrect use more commonly entails a failure to use condoms throughout the entire sex act, from start (of sexual contact) to finish (after ejaculation).

How to Use a Condom Consistently and Correctly:

- Use a new condom for every act of vaginal, anal and oral sex—throughout the entire sex act (from start to finish). Before any genital contact, put the condom on the tip of the erect penis with the rolled side out.
- If the condom does not have a reservoir tip, pinch the tip enough to leave a half-inch space for semen to collect. Holding the tip, unroll the condom all the way to the base of the erect penis.
- After ejaculation and before the penis gets soft, grip the rim of the condom and carefully withdraw. Then gently pull the condom off the penis, making sure that semen doesn't spill out.
- Wrap the condom in a tissue and throw it in the trash where others won't handle it.
- If you feel the condom break at any point during sexual activity, stop immediately, withdraw, remove the broken condom, and put on a new condom.
- Ensure that adequate lubrication is used during vaginal and anal sex, which might require water-based lubricants. Oil-based lubricants (e.g., petroleum jelly, shortening, mineral oil, massage oils, body lotions, and cooking oil) should not be used because they can weaken latex, causing breakage.

Sources are available at: www.cdc.gov/condomeffectiveness/brief.html

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Resumen de la hoja informativa sobre los condones

El uso correcto y constante de los condones de látex para hombres reduce el riesgo de las enfermedades de transmisión sexual (ETS) y del virus de la inmunodeficiencia humana (VIH). Sin embargo, los condones no proporcionan una protección absoluta contra las ETS. La manera más confiable de evitar la transmisión de las ETS es abstenerse del contacto sexual o de estar en una relación mutuamente monógama a largo plazo con una pareja que no esté infectada. Sin embargo, es posible que muchas personas infectadas desconozcan estarlo debido a que muchas veces las ETS no se reconocen o no presentan síntomas.

La eficacia de los condones en la prevención de las ETS y del VIH ha sido demostrada tanto por estudios epidemiológicos como los de laboratorio. La eficacia de los condones se comprueba con base a datos teóricos y empíricos sobre la transmisión de las diferentes ETS, las propiedades físicas de los condones y la protección o cobertura anatómica que proporcionan los condones.

Los **estudios de laboratorio** han demostrado que los condones de látex actúan como una barrera eficaz aun contra los microorganismos más pequeños de las ETS.

Los **estudios epidemiológicos** que comparan las tasas de infección por el VIH entre las personas que usan condones y las que no los usan durante las relaciones sexuales y que tienen una pareja sexual infectada por el VIH demuestran que el uso constante de los condones es altamente eficaz en la prevención del VIH. De igual manera, los estudios epidemiológicos han demostrado que el uso del condón reduce el riesgo de adquirir otras ETS. No obstante, el grado de protección exacto ha sido difícil de determinar debido a los numerosos retos en la metodología característicos del estudio de conductas privadas que no se pueden observar ni medir directamente.

Fundamentos empíricos y teóricos para la protección: Como es de preverse, los condones proporcionan diferentes niveles de protección según el tipo de ETS, esto dependerá de cómo se transmita la enfermedad o infección. Es posible que los condones para hombres no cubran todas las áreas infectadas o las áreas que se pueden infectar; por lo tanto, los condones proporcionarán una mayor protección contra las ETS que se transmiten solamente por las secreciones genitales (ETS como la gonorrea, la clamidia, la tricomoniasis y la infección por el VIH) que contra las

infecciones que se transmiten principalmente mediante el contacto con la piel, las cuales podrían o no infectar las áreas cubiertas por el condón (ETS como el herpes genital, la infección por el virus del papiloma humano [VPH], la sífilis y el chancroide).

Enfermedades de transmisión sexual incluida la infección por el VIH

Infección por el VIH

- Los condones de látex, cuando se usan de manera habitual y correcta, son muy eficaces para prevenir la transmisión del VIH, el virus que causa el sida.

Otras ETS y afecciones asociadas

- El uso constante y correcto de los condones de látex reduce el riesgo de muchas ETS que se transmiten por las secreciones genitales (ETS como la clamidia, la gonorrea y la tricomoniasis).
- El uso correcto y constante de los condones de látex reduce el riesgo de contraer enfermedades que producen úlceras genitales, como herpes genital, sífilis y chancroide, solamente si el área infectada o el área de posible exposición está protegida.
- A su vez, el uso correcto y constante de los condones de látex puede reducir el riesgo de contraer el virus del papiloma humano (VPH) y las enfermedades asociadas al VPH (como las verrugas genitales y el cáncer del cuello uterino).

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Página 1

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Uso correcto y constante de los condones

Para obtener la máxima protección de los condones, éstos se deben utilizar de manera correcta y constante.

La ineficacia de los condones en la protección contra la transmisión de las ETS o el VIH se debe más al uso inconstante e incorrecto de los condones que a la falla del producto.

- El uso inconstante o la falta de uso de los condones puede conllevar a la transmisión de las ETS debido a que el contagio puede ocurrir en un solo acto de relación sexual con una pareja infectada.
- El uso incorrecto reduce el efecto protector de los condones ya que puede contribuir a que el condón se rompa, se salga o que se derrame el semen. El error más común que se comete al usar los condones es no usarlos durante todo el acto sexual, es decir desde el principio (comienzo del contacto sexual) hasta el final (después de la eyaculación).

Cómo usar un condón de manera correcta y constante:

- Use un condón para cada acto sexual vaginal, anal u oral y durante todo el acto sexual (de principio a fin).
- Antes de cualquier contacto genital, póngase el condón sobre la punta del pene erecto con la parte enrollada hacia afuera.
- Si el condón no tiene una punta con cavidad, estire un poco la punta para dejar media pulgada de espacio de tal manera que se acumule allí el semen. Sostenga la punta y desenrolle todo el condón hasta la base del pene erecto.
- Después de la eyaculación y antes de que el pene se relaje, agarre el borde del condón y deslícelo hacia afuera con cuidado. Luego, con precaución retire el condón del pene, asegurándose de que el semen no se derrame.
- Envuelva el condón en un pañuelo desechable o papel higiénico y tírelo a la basura donde otras personas no puedan tocarlo.
- Si cree que el condón se rompió durante cualquier momento de la actividad sexual, pare inmediatamente, saque el pene, quítese el condón roto y póngase uno nuevo.
- Asegúrese de que esté lubricado durante las relaciones sexuales vaginales y anales, y para esto puede necesitar de un lubricante como K-Y Jelly™, Astroglide™, AquaLube™ y glicerina. No se deben utilizar lubricantes a base de aceite (como por ejemplo, vaselina, margarina, aceite mineral, aceites para masajes, lociones corporales o aceites de cocina) debido a que pueden debilitar el látex y romper el condón.

CDC Brochures on STIs **YouTube Videos:**

- 1) Prevención y tratamiento de enfermedades de transmisión sexual (Preventing STDs - Spanish). Retrieved from <https://www.youtube.com/watch?v=Iz4MRNYndtI>
- 2) What is an STI? (English Version). Retrieved from <https://youtu.be/IlnXtPZOazM>

THE LOWDOWN ON HOW TO PREVENT SEXUALLY TRANSMITTED DISEASES

Practice Abstinence

The surest way to avoid it is to not have sex.

Maximum condom effectiveness is 98%.

Have Fewer Partners

Agree with your sex partner(s) that you will only have sex with one person who agrees to only have sex with you.

Make sure you both get tested before sex to make sure you're both safe from STDs.

Talk With Your Partner

Talk with your sex partner(s) about STDs and sharing info before having sex.

It's better to have a conversation than to have a surprise STD test.

It's right to communicate when you're planning sex. It's important for protecting your health & your relationship.

Every year, there are an estimated **20 MILLION** new STD infections in the United States.

Someone is sexually active can get an STD.

Sexual activity is often misunderstood as only sex.

Sexual activity includes:

- vaginal sex
- anal sex
- oral sex
- sex with a sex toy
- sex with a partner who has an STD
- sex with a partner who has an STD

Use Condoms

Using a condom correctly every time you have sex can help you avoid STDs.

Condoms reduce the risk of infection but they do not protect you 100% from STDs. They also don't protect you from pregnancy.

But make sure you use a condom the right way. Read the instructions. It's not enough to just have sex with a condom. You also need to use it right.

Get Vaccinated

The most common STD can be prevented by a vaccine.

Get the vaccine every 6 months, and you may be able to avoid getting the virus.

Who should get the HPV vaccine?

Boys and girls ages 11-26.

Getting vaccinated for HPV can help you avoid getting the virus.

Get vaccinated for HPV. It's the best way to protect yourself from the virus.

Get Tested

Many STDs don't have symptoms, but they can still cause health problems.

Get tested for STDs. It's the best way to protect yourself from the virus.

The only way to know for sure if you have an STD is to get tested.

The Good News

With the right information, there are steps you can take to keep yourself and your partner(s) healthy.

Here's how you can avoid getting an STD:

View Infographic Online at: www.cdc.gov/std/prevention/lowdown/

If You Test Positive...

Get help. An STD is not the end.

Many STDs are curable and all are treatable.

It's important to get tested regularly to make sure you're healthy and your partner(s) is too.

APPENDIX I

PARTICIPANTS' WRITEN CONSENT

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Title of Study: Increasing Awareness and Knowledge among Adult Latinos Regarding Sexually Transmitted Infections (STIs)

My name is Ijeoma Eze. I am a Certified Family Nurse Practitioner and a Doctor of Nursing Practice (DNP) student from the California State University Consortium program associated with the School of Nursing at California State University, Long Beach. You are being asked to participate in a project conducted by myself under the direction of Dr. Beth Keely, Professor in the School of Nursing at California State University, Long Beach. This project has been approved by XXXX, the clinic administrator.

You have been asked to participate in this study because you (1) are a patient in the clinic, receiving Family Pact services, (2) indicated your interest in receiving additional education on STIs, (3) You are 18 years or older, (4) Self-identified as Latino and sexually active

Purpose of the Study

The purpose of this Quality Improvement (QI) is to implement an educational bundle and evaluate its effectiveness in increasing STI's knowledge and consistent condom use among adult Latinos seen in an outpatient clinic. The educational bundle will consist of the following. First, two YouTube STI-related videos, including 4 minutes and 53seconds long (Spanish version) and 4 minutes and 3 seconds (English) will be played alternately in the waiting room on a repeated loop during the project implementation. The YouTube videos focused mostly on STI and its prevention.

This study is voluntary. If you choose to participate, your provider will provide a brief educational session talking with you about sexually transmitted infections. The provider will request that you complete a short, multiple choice tests before the educational session. The test consists of four questions about sexually transmitted infections and one question about condom use. You will also be asked to complete the same short multiple choice questions at your follow up visit to the clinic (in one week time) when you are scheduled to receive the results of your laboratory studies. To decrease study bias, you will be additionally asked if you have had sex since the last visit. It is important that you answer each of the questions. You can also ask your healthcare provider any questions you have that come up during the short educational session or ask for clarification about any of the information presented. The test should take about four to five minutes to complete and the educational session 10 to 15 minutes to complete. To provide more information, other CDC STI-related educational

materials in the form of handouts, pamphlets and brochures will be handed to the participants after the one to one educational session.

Potential Risks

Risk to the study participant include the potential that you may feel you have to participate in the educational session and complete the tests to please the healthcare provider or to receive care at the clinic. You may have concerns that there will be additional costs to you or added laboratory testing required to be part of this project but are afraid to ask.

The following steps will be taken to protect the study participants from these risks: 1) No additional laboratory testing or costs to the participant are part of this study; 2) You may refuse to participate in the study without negative consequences and continue to receive care at the clinic; 3) The multiple choice tests will not have your name on them; and 4) The tests will not be placed in your medical record but stored in a locked file in the clinic.

Potential Benefits to Participants or Professionals

There will be no specific immediate benefits to individual participants expected from the project. The participant will receive more education about sexually transmitted infections than is currently provided to patients receiving Family Pact services. This study is important in that it contributes to the scientific knowledge base in the field of nursing and medicine to improve the quality and efficiency of health education for patients coming to a Family Pact clinic. Results of this project may help the clinic providers identify areas needed to improve upon in caring for patients they see.

Payment for Participation

There is no financial benefit for participation in this study.

Confidentiality

No personal individual identifier(s) will be recorded on the test sheets or the separate Patient Intake Form as part of this project. Any past medical information that is obtained from your medical record in connection with this study will not have a patient identifier linked with it.

Rights of Research Subjects, Participation and Withdrawal

Your participation in this study is voluntary. You may withdraw from participation at any time without consequence. Participation/non-participation does not affect your health care provisions or other personal rights.

Participant Signature

Date

If you have questions regarding your rights as a research participant please contact:

The Office of University Research, CSULB
1250 Bellflower Blvd.
Long Beach, CA 90840
University Phone: (562) 985-5314
University E-mail: ORSP-Compliance@csulb.edu
Advisor/Faculty Supervisor of Student Research Project

If you have questions regarding this study please contact:
Ijeoma Eze, MSN, FNP-C, Principal Researcher at (310)7077231-----; or Beth Keely Ed.D., Professor, CSULB University Phone: (562) 985-4478; Faculty E-mail: Beth.Keely@csulb

APPENDIX J

SPANISH TRANSLATED DOCUMENTS

Informed Consent (Spanish Version)

CONSENTIMIENTO PARA PARTICIPAR EN UN ESTUDIO DE INVESTIGACIÓN

Título del Estudio: Aumento de la Conciencia y el Conocimiento entre los Latinos

Adultos con respecto a las Infecciones de Transmisión Sexual (ITS)

Mi nombre es Ijeoma Eze. Soy Profesional de Enfermería Familiar Certificada y Doctor en Práctica de Enfermería (DNP) del programa del Consorcio de la Universidad Estatal de California asociado con la Escuela de Enfermería de la Universidad Estatal de California, Long Beach. Se le pide que participe en un proyecto realizado por mi misma bajo la dirección de la Dra. Beth Keely, profesora de la Escuela de Enfermería de la Universidad Estatal de California, en Long Beach. Este proyecto ha sido aprobado por XXX, la administradora de la clínica.

Se le ha pedido participar en este estudio porque usted (1) es paciente en la clínica recibiendo servicios Pacto Familiar (Family Pact) (2) indicó su interés en recibir educación adicional sobre las ITS, (3) usted tiene 18 años o más, (4) se autoidentificó como latino y sexualmente activo.

Propósito del estudio

El propósito de este Mejoramiento de Calidad (QI) es implementar un paquete educativo y evaluar su efectividad en aumentar el conocimiento de las ITS y el uso consistente del condón entre latinos adultos vistos en una clínica de consulta externa.

El paquete educativo consistirá en lo siguiente. En primer lugar, dos vídeos relacionados con ITS de YouTube, incluyendo 4 minutos y 53 segundos de duración (versión en español) y 4 minutos y 3 segundos (inglés) se tocarán alternativamente en la sala de espera en un bucle repetido durante la implementación del proyecto. Los videos de YouTube se enfocarán principalmente en las ITS y su prevención.

Este estudio es voluntario. Si decide participar, su proveedor le proporcionará una breve sesión educativa hablando con usted sobre las infecciones de transmisión sexual. El proveedor le solicitará que complete una prueba corta de respuestas múltiples antes de la sesión educativa. La prueba consiste de cuatro preguntas sobre infecciones transmitidas sexualmente y una pregunta sobre el uso de condones. También se le pedirá que complete las mismas preguntas cortas de opción múltiple en su visita de seguimiento a la clínica (en una semana) cuando esté programado para recibir los resultados de sus estudios de laboratorio. Para disminuir el sesgo del estudio, se le preguntará adicionalmente si ha tenido relaciones sexuales desde la última visita. Es importante que responda a cada una de las preguntas. También puede preguntar a su proveedor de atención médica cualquier pregunta que tenga durante la sesión educativa corta o pedir aclaraciones sobre cualquier información presentada. La prueba debe tomar cerca de cuatro a cinco minutos para completar y la sesión educativa de 10 a 15 minutos para completar. Para proporcionar más información, se entregará a los participantes otros materiales educativos relacionados con las CTI en forma de folletos, panfletos y octavillas después de la sesión educativa individual

- 2 -Riesgos potenciales

El riesgo para el participante del estudio incluye el potencial que usted puede sentir que

tiene que participar en la sesión educativa y completar las pruebas para complacer al proveedor de atención médica o para recibir atención en la clínica. Usted puede tener preocupaciones de que habrá costos adicionales para usted o pruebas de laboratorio adicionales que se requieren para ser parte de este proyecto, pero tienen miedo de preguntar.

Se tomarán las siguientes medidas para proteger a los participantes del estudio de estos riesgos: 1) Ninguna prueba adicional de laboratorio o costos para el participante son parte de este estudio; 2) Usted puede negarse a participar en el estudio sin consecuencias negativas y seguir recibiendo atención en la clínica; 3) Las pruebas de opción múltiple no tendrán su nombre en ellas; Y 4) Las pruebas no serán puestas en su expediente médico pero almacenadas en un archivo cerrado en la clínica.

Beneficios potenciales para los participantes o profesionales

No habrá beneficios inmediatos específicos para los participantes individuales esperados del proyecto. El participante recibirá más educación sobre las infecciones de transmisión sexual que la que actualmente se le proporciona a los pacientes que reciben servicios del Pacto Familiar. Este estudio es importante ya que contribuye a la base de conocimientos científicos en el campo de la enfermería y la medicina para mejorar la calidad y eficiencia de la educación sanitaria de los pacientes que acuden a una clínica del Pacto Familiar.

Los resultados de este proyecto pueden ayudar a los proveedores de la clínica a identificar las áreas necesarias para mejorar el cuidado de los pacientes que ven.

Pago por Participación

No hay beneficio financiero por la participación en este estudio.

Confidencialidad

No se registrará ningún identificador personal individual en las hojas de prueba o el Formulario de Ingreso de Paciente separado como parte de este proyecto. Cualquier información médica anterior que se obtenga de su historial médico en relación con este estudio no tendrá un identificador de paciente vinculado con el.

Derechos de los sujetos de investigación, participación y retirada

Su participación en este estudio es voluntaria. Usted puede retirarse de la participación en cualquier momento sin consecuencias. La participación/no participación no afecta sus provisiones de cuidado de salud u otros derechos personales.

Firma del participante Fecha

Si tiene preguntas acerca de sus derechos como participante por favor contacte a:

The Office of University Research, CSULB

1250 Bellflower Blvd.

Long Beach, CA 90840

Número de teléfono de la Universidad: (562) 985-5314

Correo electrónico de la Universidad: ORSP-Compliance@csulb.edu

Asesor/Supervisor de Facultad del Proyecto de Investigación Estudiantil

Si tiene preguntas referentes a este estudio por favor contacte a:

Ijeoma Eze, MSN, FNP-C, Investigadora Principal at (310)707-7231-----; o Beth Keely Ed.D., Profesora CSULB University teléfono: (562) 985-4478; Correo electrónico de facultad: Beth.Keely@csulb

5-Item Self-Administered Questionnaire For Pretest (Spanish Version)

El cuestionario auto-administrado de 5 artículos (Pre-prueba)

Parte A

Para cada uno de los siguientes elementos: responda "sí" o "no", o "no estoy seguro"

La clamidia es una de las infecciones de transmisión sexual.

Todas las infecciones de transmisión sexual dan señales de advertencia.

No puede contraer gonorrea por el sexo oral.

El uso de preservativos puede disminuir su probabilidad de contraer infecciones de transmisión sexual.

Parte B

Por favor marque una de las siguientes opciones en respuesta a la pregunta:

En los últimos seis meses, ¿con qué frecuencia usted o su pareja usaron condón durante el sexo?

Cada vez que tuvimos sexo.

Casi cada vez que teníamos sexo.

La mayoría del tiempo.

La mitad del tiempo.

Algunas veces.

Unas pocas veces.

6-Item Self-Administered Questionnaire for Post-test (Spanish Version)

El cuestionario auto-administrado de 6 artículos (post-prueba)

Parte A

Para cada uno de los siguientes elementos responda: "sí" o "no", o "no estoy seguro"

La clamidia es una de las infecciones de transmisión sexual

Todas las infecciones de transmisión sexual dan señales de advertencia

No puede contraer gonorrea por el sexo oral

El uso de preservativos puede disminuir su probabilidad de contraer infecciones de transmisión sexual.

Parte B

Por favor responda "sí" o "no" a la pregunta:

¿Ha tenido relaciones sexuales desde la última visita?

Si no, pare aquí.

Si la respuesta es "sí", vaya a la siguiente pregunta.

Por favor marque una de las siguientes opciones en respuesta a la pregunta:

¿Con qué frecuencia usó usted o su pareja el condón durante las relaciones sexuales?

Cada vez que tuvimos sexo

Casi cada vez que teníamos sexo

La mayoría del tiempo

La mitad del tiempo

Algo de tiempo

Unas pocas veces

Project Flyer (Spanish Version)

Se necesitan voluntarios para un proyecto de doctorado

¿Le gustaría participar en una corta sesión de educación de 10 a 15 minutos como parte de la visita de hoy? Su proveedor hablará sobre las enfermedades de transmisión sexual y cómo prevenirlas. Habrá un breve cuestionario antes de la educación y en una semana después de la educación.

Sí_____ No_____

Por favor firme debajo para dejarle saber a su proveedor que esta interesado.

Firma del paciente_____