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Let's Talk about HIV:
Designing an HIV Curriculum for Migrant Farmworkers in South Georgia

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May 2013

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Abstract

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Background: Farmworkers are a drastically underserved population in health care. This study is a part of a larger body of work that aims to provide farmworkers with appropriate access to health information and care. The goal of this feasibility study was to create and evaluate a culturally tailored HIV prevention curriculum for migrant and seasonal farmworkers who receive care through the South Georgia Farmworker Health Project (SGFWHP) clinic. The study had three aims: (1) Evaluate the educational needs and preferences of farmworkers (2) Evaluate the process of delivering the HIV curriculum, and (3) Evaluate the structure and content of the HIV curriculum.

Methods: This feasibility study was conducted in three stages between May 2015 and October 2015. The design stage consisted of a preliminary needs assessment survey of farmworkers, which identified the components necessary for an effective and culturally acceptable HIV curriculum. The curriculum was piloted through an iterative process evaluation conducted during the Fall 2015 clinic. Observations of education sessions and feedback from clinic staff and patients informed improvements to the curriculum protocol. The refinement stage consisted of a HIV Perceptions Survey of farmworkers and Feedback Survey of the Physician Assistant students who volunteered at the clinic. Data from the surveys were used to identify if any changes were needed to curriculum content and structure. Analysis was conducted by calculating descriptive statistics for all survey items. Significant differences in survey scores between farmworker demographic categories of age, sex, primary language, and marital status were determined by one-way ANOVAs and independent t-tests.

Results: The results of preliminary needs assessment guided the design of an HIV brochure utilizing the Teach Back Method (TBM) of patient communication. The brochure focused on HIV definitions, transmission, myths, and methods of self-protection from HIV and was available in English, Spanish, and Creole. The pilot study demonstrated that the TBM was useful in reducing and addressing miscommunication between patients and educators during the education session. No significant differences were found between demographic groups indicating similar perceptions of HIV across groups. Subsequent refinement stage evaluations identified opportunities for improvement of the content and education process.

Conclusions: The goal of this study, which was to create a culturally tailored HIV curriculum for the SGFWHP, was achieved by creating an HIV brochure in three languages and a Teach Back form to facilitate better health communication between patients and providers.

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Chapter I. Introduction

According to the National Center for Farmworker Health, there were more than 700,000 migrant farm workers (MFW) in the United States as of 2010 (NCFH, 2010). Migrant and seasonal farm workers are one of the most underserved populations in health care. Due to the unique combination of primary and secondary risk factors farmworkers experience, they are at increased susceptibility to HIV infection. While several studies have attempted to estimate the drastic health disparities they face, there is a dearth of accurate information regarding the needs of MFW (Painter, 2008; Villarejo, 2003).

Moreover, there is an alarming lack of resources that are suited to meet the complex needs specific to this population (Arcury & Quandt, 2007). MFWs are faced with unique health challenges due to the nature of their work. Occupational hazards such as pesticide exposure, overuse injuries, and equipment related injuries are further exacerbated by structural barriers that limit their ability to access health care services (Hoerster et al., 2011). Ultimately, the combined effect of these factors contribute to increased susceptibility to morbidity and poor health outcomes for migrant farm workers.

Occupational Health and Challenges

As a result of the nature of their work, migrant and seasonal farmworkers are subject to extreme occupational and environmental hazards. Agricultural work is physically demanding, often requiring long hours and use of repetitive actions with heavy equipment or produce. Farmworkers often experience orthopedic injuries relating to overuse and repetitive movements. In addition, farmworkers are also at risk for diseases and injuries caused by prolonged exposure to pesticides and other chemicals (Arcury & Quandt, 2007).

These health risks are exacerbated by structural factors which contribute to the inequitable treatment of farmworkers. Seasonal and migrant farmworkers are often paid low wages and are not provided health care services or coverage by their employers (Carroll, Samardick, Bernard, Gabbard, & Hernandez, 2005). Moreover, due to the instability of crop production, job security is not promised. Depending on conditions such as weather, demand for workers, and other factors, farmworkers lack secure employment. As a result of these factors, farmworkers often avoid seeking medical care until they are no longer able to function (Rosenbaum & Shin, 2005; Villarejo, 2003). This eventually contributes to their economic instability and propagates cycles of poverty and ill health (Arcury & Quandt, 2007; Carroll et al., 2005; Villarejo, 2003).

HIV/AIDS

Due to the challenging social and economic environments they face, migrant farmworkers are also considered one of the most at-risk groups for HIV and other Sexually Transmitted Diseases (STDs) (Painter, 2008; Rosenbaum & Shin, 2005; Villarejo, 2003). The transitory nature of the population and logistic difficulties in tracking undocumented workers hinders the accurate assessment of HIV prevalence. Data from the National Agricultural Workers' Survey (NAWS) reported that 72% of all farmworkers are foreign born, with 68% of those individuals originating from Mexico. As such, estimates of HIV prevalence in the US Latino population are often used as a proxy measurement (Painter, 2008). Black and Latino Americans are disproportionally affected by HIV (Painter, 2008; Rosenbaum & Shin, 2005).

Not only are farmworkers exposed to typical HIV risk factors such as unprotected sex and IV drug use, but these factors are further exacerbated by alcohol abuse, prostitution, social isolation, and inadequate knowledge of HIV (Painter, 2008; Villarejo, 2003). The combination of

these factors, as well social factors such as poverty, lack of education, limited access to care, and a lack of knowledge about HIV, significantly increase the risk of HIV infection for this population.

Access to Care

Migrant and seasonal farmworkers' are often undocumented or contracted workers. Current systems of care deny government-based coverage to undocumented workers. This lack of legal recognition in the United States prevents workers from seeking healthcare services due to high costs. Even those who are documented often fear deportation and resultantly avoid interactions with healthcare institutions. Language barriers and cultural differences also fuel mistrust and fear of medical services.

The lack of documentation and mistrust of institutions worsens existing health issues and makes migrant and seasonal farm workers prone to new illnesses by hindering access to health resources. Moreover, fear of medical institutions prevents many workers from being tested for STIs. The structural barriers faced by MFWs make disease management extremely difficult. Limitations they face as immigrants, particularly those who are undocumented, compound the physical, emotional, and psychological demands of being a migratory worker. As such, common methods of HIV prevention and education may not suit the needs of farm workers (Sánchez, Serna, & de La Rosa, 2012).

Study Justification

Ultimately, addressing the needs of farmworkers is an issue of health equity. Community based health centers, clinics, and public hospitals comprise the United States health care "Safety

Net". These institutions are vital to addressing the needs of vulnerable populations such as migrant and seasonal farmworkers.

Historically, programs have attempted to address the gap in care for farmworkers. One such program, the Migrant Health Program (MHP) was started in 1962 to fund clinics for MFWs in response to increasing awareness of the needs of migrant workers (*Public Law 87-692*, 1962). The program was geared towards "[U.S.] American" farm workers, excluding the majority of the farmworker population who are undocumented or contracted laborers (Villarejo, 2003). In addition, the lack of culturally, linguistically, and practically appropriate interventions further asserts the necessity to develop more effective programs to better meet the needs of migrant farm workers (McCoy, Hlaing, Ergon-Rowe, Samuels, & Malow, 2009).

In 1996, the South Georgia Farm Worker Health Project (SGFHP) was started at Emory University in conjunction with Southwest Georgia Area Health Education Center (SOWEGA AHEC) and the Georgia Farmworker Health Program State Office of Primary Care. The mission of the SGFHP is to provide free, basic medical and dental health care to seasonal and migrant farmworkers in rural Georgia. The clinic provides primary care services and diagnostic screenings for a variety of diseases. The clinics are operated using donated supplies including medications, clothing, condoms, toiletries, and other essential supplies. The clinic does not collect citizenship information and emphasizes that citizenship status is not a barrier to care. As such, the project has become a welcomed and trusted source of care for farmworkers.

Every year, teams consisting of Physician Assistant (PA) students, School of Medicine faculty, interpreters, and other volunteers provide medical care for migrant workers at mobile clinics. The clinics are usually conducted outdoors near farm worker housing units using tents and camping chairs in lieu of examination rooms. PA students act as the primary care providers

and provide their own examination equipment. The summer clinic, which happens during the first two weeks of June and October, is a two-week clinic that typically serves over 1,500 clients every year. The fall clinic is a weekend session that typically serves 300-400 patients.

According to patient data collected by SGFHP between 1996 and 2015, patients are typically male, with an average age of 22 years. While a majority of clients are of Mexican origin, they also treat Guatemalan and Haitian patients who have come from Immokalee, Florida. Based on data collected by the SGFWHP, patients have an average education level of 5th grade and most do not speak English. The most commonly identified and treated diseases include occupational injuries such as shoulder pain, rotator cuff tendonitis, and lower back pain as well as dermatological conditions due to pesticide exposure and fungal infections. These issues are most commonly due to overuse from repetitive movements and long term exposure to pesticides. The clinic also treats hypertension, diabetes, gastrointestinal esophageal reflux disease (GERD), asthma, STIs, urinary tract infections, upper respiratory infections, and bronchitis.

Conducting field education can be challenging. Tailoring such interventions to the specific population can increase the efficiency and efficacy of the training. In order to provide effective HIV education in this population, researchers at Emory University's School of Medicine and Rollins School of Public Health began an integrative project titled "Designing an HIV Prevention Curriculum for Migrant Farmworkers in Georgia: A Health Professions Student Collaborative". This feasibility study is nested within this larger project as a way of developing and pilot testing the curriculum.

Statement of Problem

This study investigated the feasibility of creating an HIV curriculum to be used during the clinics held by the South Georgia Farm Worker Health Project (SGFWHP). Nested in the larger project of comprehensive HIV counselling and education, this study aims to:

1. Evaluate the educational needs and preferences of farmworkers

2. Evaluate the process of conducting the HIV curriculum

3. Evaluate the structure and content of the HIV curriculum

Understanding and acknowledging that the structural challenges faced by farmworkers will not change quickly, this project aims to create an HIV counselling curriculum which can address the personal and interpersonal contributors to HIV risk.

Theoretical framework

Providing quality care to migrant farm workers is a challenging issue replete with logistical barriers. Successfully creating a training program to educate farm workers requires attention to several important factors, as follows. A successful program will (1) anticipate and address the cultural, social, and health implications of HIV prevention efforts and (2) disseminate information in a way that is conducive to the learning style of the patient and the feasibility of the provider. Theoretical frameworks assist in addressing these two stipulations in a systematic way. The Health Belief Model is one way to conceptualize how farmworkers' perceptions affect their participation in protective behaviors. The Teach Back Method is widely used in clinical settings to improve communication between patients and providers.

This study utilizes the Health Belief Model to capture the perceptions of HIV/AIDS within the migrant farmworker population. The Health Belief Model (HBM) is one of the most commonly used frameworks in health promotion. Originally developed in the 1950s as a way of understanding the underutilization of preventive services, the HBM focuses on the individual's perception of factors surrounding health behaviors. The model is based on two variables: (1) the desire to avoid illness or to achieve health and (2) the belief that a specific behavior will lead to the amelioration or avoidance of illness. The constructs of perceived susceptibility, perceived severity, perceived barriers, perceived benefits, and self-efficacy will be used to assess the common beliefs and perceptions of HIV among farmworkers as identified through a literature review. The goal of this is to assess if the generalizations identified in the literature regarding the perceptions of HIV among farmworkers apply to this population in order to better inform future HIV education in this population.

The model of health communication utilized in this study is the Teach Back Method (TBM), which has gained popularity in clinical settings within recent years as a quick method of conducting health education. A typical clinic visit lasts about 20-25 minutes, during which the care provider must address any issues raised by the farmworker or identified by the care team. The time restraints of a typical clinic visit, coupled with the necessity to limit the amount of time a client must spend in the clinic, limits the time available for an education session to no more than 10 minutes per session.

The Teach Back Method is intended to improve health communication between clinicians and patients in order to improve health outcomes. Piloted as a way to improve the discharge processes, TBM operates on the premise that a patient who understands health information will be able to report that information back in their own words. The aim of the

technique is to assess how well the clinician relays the information rather than how well the patient understands it. The process of Teach Back provides an opportunity to assess the quality of communication and customize the curriculum to the needs of the participant as the education is being conducted.

Combining behavior theory with advances in health communication techniques may serve to improve health education in clinic settings. In this study, TBM will be used as a framework to conduct education. (Figure 1) First, the educator will provide basic training on essential information about HIV. Then, the educator will execute Teach Back using open ended questions which review the main concepts covered. In doing so, the Teach Back process will provide the educator with an opportunity to identify areas of misunderstanding. As a result, the educator can provide immediate feedback and address concerns specific to their client's needs.
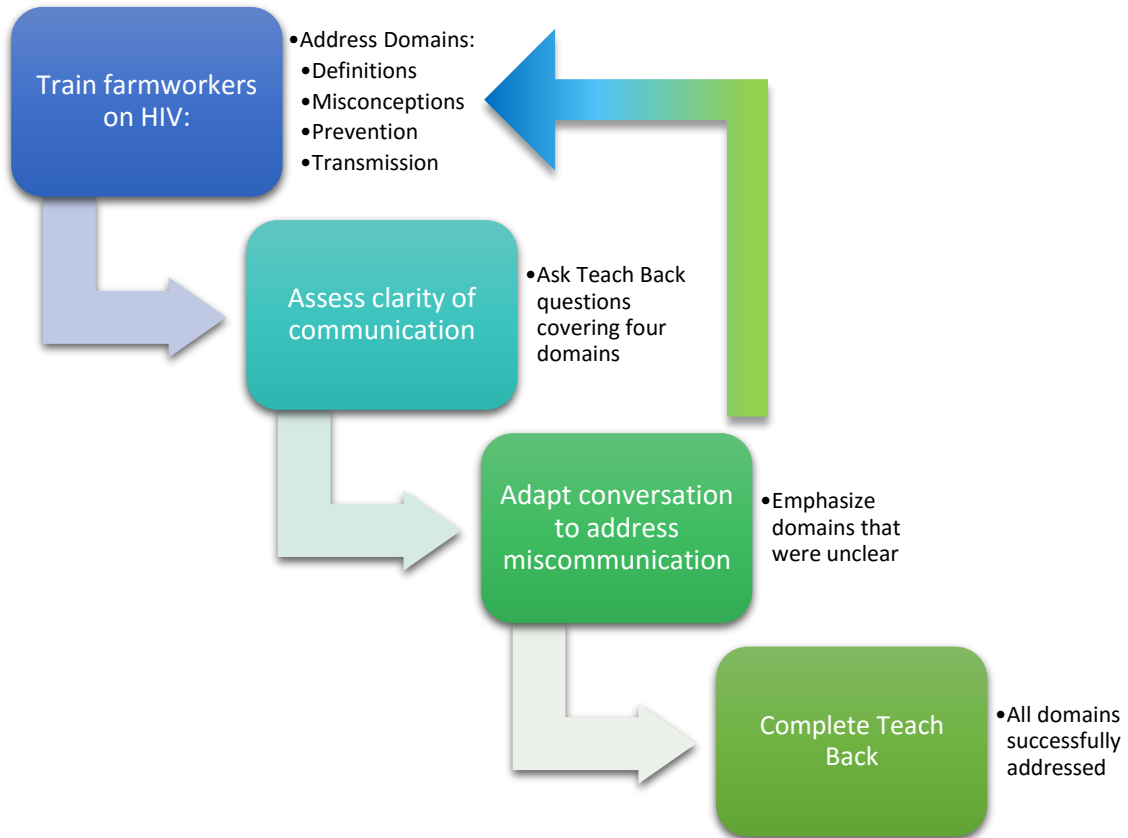
Figure 1: Topic map illustrating use of Teach Back Method of Patient Provider Communication

Then, this study will utilize Health Belief Model constructs to understand how farmworkers conceptualize HIV and preventive behaviors on an individual level (Figure 2). Secondly, the study will utilize HBM constructs to assess how future educational efforts can improve knowledge and awareness of HIV for each individual and within the farmworker population in general.

Figure 2: Application of Health Belief Model to HIV Prevention Behavior

Chapter II: Literature Review

Introduction to Literature Review

Previous research has shown that migrant and seasonal farmworkers face a unique combination of factors that put them at an increased risk for HIV infection. Traditional health care services and methods of prevention education do not adequately meet the needs of this population. The goal of this study is to design an HIV curriculum for farmworkers who attend the South Georgia Farmworker Health Project clinic. The aims of this feasibility study are to:

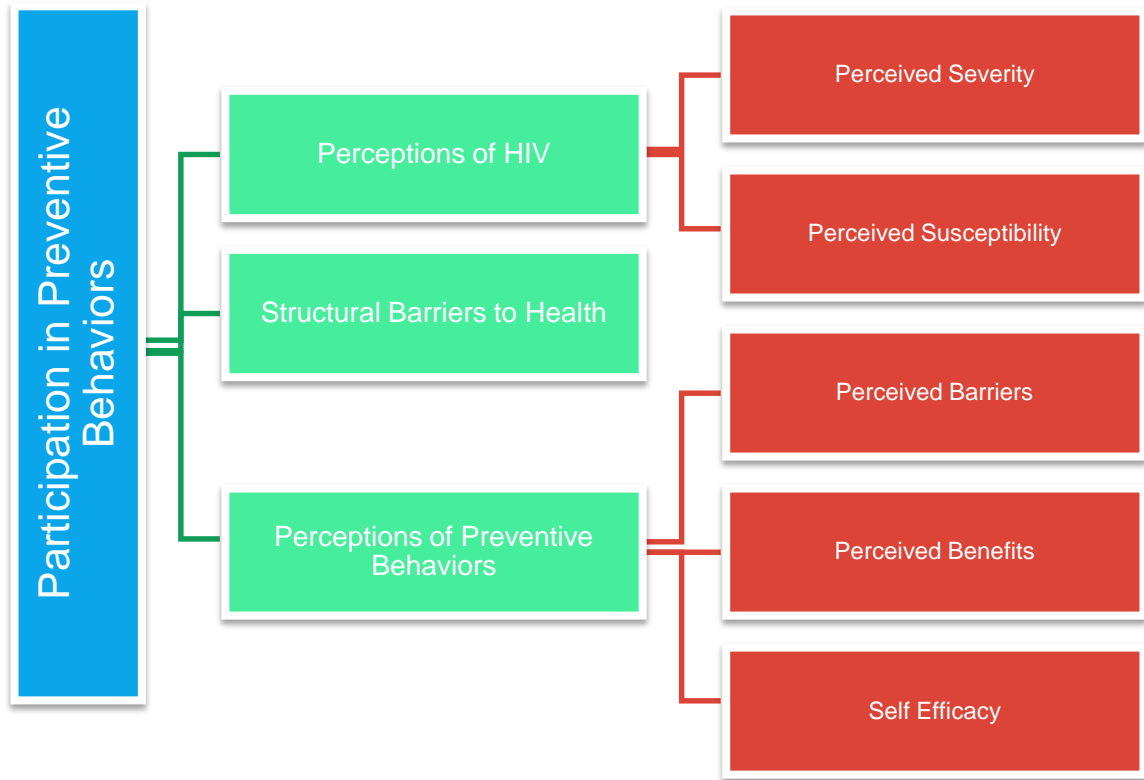1. Evaluate the educational needs and preferences of farmworkers
2. Evaluate the process of conducting the HIV curriculum
3. Evaluate the structure and content of the HIV curriculum

This chapter will outline relevant research in relation to seasonal and migrant farmworkers and HIV to inform the design of the curriculum. The review will address farmworker demographics, HIV epidemiology among farmworkers, and structural barriers to care. It will also review research on effective education techniques in this population with a focus on the usage of the Health Belief Model and Teach Back Method in health education interventions.

US Farmworker Demographics

Due to the transitory nature of migrant workers, there is no comprehensive national level data on their demographics or general health status. (Villarejo, 2003) As such, studies typically estimate population data based on limited national surveys. Based on data from 2007-2009 versions of the National Agricultural Workers' Survey (NAWS), the National Center for Farmworker Health reports that 72% of all farmworkers are foreign born, with 68 % of those individuals originating from Mexico. However, this apparent homogeneity misrepresents the diversity within the migrant farmworker population. For example, while a majority of Mexican

farmworkers come from west and central Mexico, as many as 20% of farmworkers are from southern Mexico. (NCFH, 2012) As such, there is a danger of assuming cultural homogeneity when creating culturally competent health interventions. (Castaneda, 2015; Sanchez et al, 2012).

A 2005 report by the Kaiser Commission on Medicaid and the Uninsured reported that migrant farmworkers are predominantly male and married (Rosenbaum and Shin, 2005). Given the unstable nature of work-based migration, Latino males are more likely to have traveled to the United States without their partners and settle into communities where men outnumber women (Painter, 2008). In the 2009 NAWS, 59% of farmworkers surveyed were married, 35% were single and 6% were divorced, separated or widowed. 52% of all agricultural workers were parents. (NCFH, 2012) While a large proportion of farmworkers enter the country as single males, many have families, leading to additional health considerations for each member of the household.

Farmworkers & HIV

Epidemiology

There is a dearth of research regarding the prevalence of STDs and HIV infection among the migrant farmworker population. Yet the existing literature places farmworkers at a high risk of infection. Previous studies estimate the rates of HIV infection in this population to be in the range of 2.6% to 13% (NYSDOH, 2007). Given that the majority of the population tends to be of Latino origin, many studies employ the seroprevalence of HIV among the Latino population in the United States as an estimate of infection among farmworkers. Even still, HIV disproportionately affects African Americans and Latinos in the United States. (Painter, 2008). As of 2009, Latinos accounted for 20% of all new HIV infections, while they represented only 16% of the total United States population. (CDC, 2009)

Risk Factors for HIV infection

There is a large volume of research which examines the risk factors that contribute to HIV infection. The two risk factors which contribute the most to high rates of infection are unprotected sex and intravenous drug use. Secondary factors include alcohol abuse and drug abuse. Vulnerability to HIV infection is exacerbated by poverty, low social status, lack of education, and lack of access to care (Villarejo, 2003). Farmworkers are subject to a combination of these risk factors, putting them at greater risk of infection. Each factor is discussed below.

Alcohol and Drug Abuse

Alcohol and substance abuse are closely linked to risky sexual behaviors. Especially in situations of high stress, alcohol and substance abuse has been used as a means of coping. There is a strong relationship between alcohol use, isolation, acculturation, and employment difficulties in migrant groups(Alaniz, 2002; Finch, Catalano, Novaco, & Vega, n.d.). In a study conducted with 181 male Latino migrant workers in New Orleans, 75.5% reported drinking alcohol in the past week, with 68.7% of those engaging in binge drinking. In terms of drug use, 16.6% reported marijuana use and 5.5% reported cocaine use in the prior week. No participants reported injection drug use.

Sexual Partners and Risk Behaviors

Kissinger et al. define men in the bridge position as those who sexually engage with high risk partners but also had a steady partner or wife. In their study, 30% of respondents were in the bridge position. Half of the participants used condoms inconsistently and 30.6% did not use a condom the last time they had sex. About 21% were abstinent. (Kissinger et al., 2008) Similarly, in a study conducted in North Carolina with 100 male workers, 40% of participants who reported

having sex in the last three months reported that they were under the influence of alcohol while having sex. Moreover, one out of six participants reported paying a woman for sex (Rhodes et al., 2010).

In a formative study conducted in Immokalee, Florida, results showed that prostitution is often accepted as a form of entertainment within the farmworker community. McCoy et al. found that farmworkers perceived that "women of the house", or women who come to migrants' homes, are less likely to transmit disease than "streetwalkers". The authors suggest that this perception of risk may influence condom utilization during intercourse with sex workers (McCoy et al., 2009).

A study conducted in North Carolina with migrant Latino women showed that 46% of women reported having unprotected vaginal sex in the past 12 months. In addition, 23% reported having sex with more than one sexual partner, 11% reported having sex while under the influence of drugs or alcohol, and 4% reported having sex in exchange for money or goods (Valverde et al., 2014). Valverde et al reported that self-reported unprotected anal and vaginal intercourse were associated with mobility, having spent less time in the United States, IDU-related sex, and prior refusal of HIV testing.

<u>**Structural Barriers to Health**</u>

Migration

According to the National Agricultural Workers Survey, 17% of respondents traveled more than 75 miles to follow a crop through seasonal shifts. Additionally 44% worked from a home base, and 39% commuted to work within 75 miles of a home base (Carroll et al., 2005). Migrants living in the southeast are more likely than farmworkers in other regions to live away

from their families while working (Roka & Cook, 1998). Moreover, male farmworkers are more likely to migrate than female farmworkers. As a result, female farmworkers may have less agency in negotiating their exposure to HIV/STIs as they may be unaware of the sexual practices of their partners while they are away (Valverde et al., 2014).

Frequent migration is linked to low socioeconomic status, lack of education, and poor access to health care, which are all correlated with HIV infection (Kissinger et al., 2008; Soskolne & Shtarkshall, 2002). Social isolation further exacerbates this effect as individuals are more likely to partake in risk behavior when they are isolated from their usual support networks (Apostolopoulos et al., n.d.; McCoy et al., 2009; Painter, 2008).

Immigration

Immigration status confers a unique set of challenges for individuals in the pursuit of health. While many farmworkers arrive as Temporary Agricultural Workers through the H2A program, a majority of the workers are still undocumented (Rosenbaum and Shin, 2005). In particular, lack of legal status not only limits access to care, but also compromises interactions with state institutions that may be beneficial for the individual. Fears of deportation, mistrust of authority, and lack of appropriate communication are some of the major obstacles faced by migrant and seasonal farmworkers in seeking health services (Castaneda, 2015; NYSDOH, 2007).

For example, many migrant and seasonal farmworkers face issues in receiving coverage through Medicaid. Moreover, their migratory nature leads them to work in different states, which prevents them from achieving the state residency requirements for Medicaid coverage. (Rosenbaum and Shin, 2005) While some are not eligible for Medicaid due to immigration

status, others may have difficulty enrolling due to language barriers and fear of government institutions.

Due to the lack of insurance coverage, migrant workers are heavily dependent upon the "Safety Net" of public hospitals, community health centers, and health clinics which provide care at low or no cost (Rosenbaum and Shin, 2005; NYSDOH, 2007). The National Center for Farmworker Health examined data from 142 migrant health centers. They found that these clinics were mainly utilized by adult Hispanic women (Boggess, Bethany C. Bogue, 2014). An estimated 70% of individuals in the study were uninsured. These patterns of utilization indicate underutilization by male farmworkers. While the reason for this may require more research, this may indicate structural and personal barriers to receiving care.

Social Barriers

There is a great deal that we do not yet understand about the downstream effects of immigration on health status. In addition, structural barriers to care are also prevalent in the form of social, cultural, and political barriers (Rao et al, 2008; Painter 2008; NYSDOH, 2007, Villarejo, 2003). As Castaneda et al (2015) state, the effects of race, ethnicity, gender and social positioning are modified by immigration and legal status. Even for those who do have legal status, still face challenges similar to other low income communities (Castañeda et al., 2015). While such factors have often been reduced to ancillary factors in health behavior research, it is difficult to isolate behavior and health outcomes from these factors. Thus, providing care to migrant farmworkers has a great deal of logistic and political considerations.

Health Literacy

An estimated 80 million U.S. adults have limited health literacy. Several studies have shown the contribution of low literacy to poor health outcomes (Berkman, Sheridan, Donahue, Halpern, & Crotty, 2011; DarrenA. DeWalt, Berkman, Sheridan, Lohr, & Pignone, 2004). A systematic review showed that lower health literacy was associated with increased hospitalizations and emergency care use, decreased participation in preventive service usage, lower adherence to medication and treatment regiments. (Berkman et al., 2011). The authors note that knowledge, self-efficacy, norms, and stigma were found to mediate the association between health literacy and some outcomes. Social support and structural components of the health care system can moderate the effects of health literacy as well. General literacy and language barriers further hinder a person's ability to understand and act on health information. An estimated 90% of farmworkers report that they read and speak little or no English (Rosenbaum & Shin, 2005). Moreover, the average level of completed education was 8th grade (Carroll et al., 2005).

HIV Knowledge

Inadequate and incorrect knowledge of HIV transmission and inadequate access to risk reduction resources contributes to an increased risk of infection and prevents the adoption of safer behaviors (Kissinger et al., 2008). In a study conducted across community health centers in seven states, focus groups revealed that participants had low to moderate levels of knowledge about asymptomatic HIV and HIV transmission. This was especially true for "hombres solos" or lone male workers who arrive without family or other social support. (Bletzer et al, 2012)

Moderate to low levels of HIV testing among farmworkers also indicates some awareness of HIV prevention and perceived risk of infection. In one study, more than half of the male

farmworkers in their sample had taken an HIV test at least once (Bletzer, Gonzalez, Saavedra, Partida, & Ryder, 2012). In another study, 26% of female participants had refused an HIV test in the past (Valverde et al., 2014).

Providing opportunities to discuss and learn about HIV can help reduce rates of infection. McBride et al (1999) conducted a study with 846 drug using migrant farmworkers and partners in the Eastern Migrant Stream. They concluded that perception of aids risk correlated with level of risk taking behaviors. Moreover their data suggested that changing perceptions of HIV susceptibility may aid in the reduction of high-risk behaviors (McBride, Weatherby, Inciardi, & Gillespie, 1999).

<div align="center"><u>**Designing an Effective Intervention**</u></div>

Cultural Appropriateness

Bletzer et al. identify four areas of concern when working with farmworkers. First, the concept of *machismo* reflects a glorification of stoic and aggressive masculinity which reinforces perceptions of strength and invulnerability. This concept is rooted in responsibility towards community and family and a necessity to be strong in order to fulfil one's responsibilities. An example of this is when, because of the notions of invulnerability, some men may not use a condom. In addition, they may be less likely to seek treatment if infected. Second, the concept of *localism* highlights the preference to seek conservative or traditional treatment of disease before usage of biomedical intervention. Third, religious beliefs about contraception strongly influenced behavioral outcomes. Fourth, trust was vital to ensuring that farmworkers were receptive to information. Farmworkers were more likely to accept sensitive information in confidential settings from someone who could maintain *confianza* (trust). Finally Bletzer et al. found that

camp-based approaches that were culturally appropriate and visually engaging were the most effective in reaching out to farmworkers (Bletzer et al., 2012).

These observations echo those of McCoy et al (2009) who raise the following points about working with migrant and seasonal farmworkers. They state that it is important to (1) cultivate trust between workers and educators, (2) maintain cultural awareness of practices and beliefs, and (3) understand how culture and trust influence social factors throughout the research and intervention process (McCoy et al., 2009).

They assert that the greatest difficulty in engaging farmworkers is that their ill health status usually stems from inadequately addressed basic needs such as food, adequate shelter, and reliable employment. While there may be a public health impetus to address specific health needs of this population, programs cannot be isolated from the reality that such needs may be of lower priority to farmworkers themselves. These conclusions point to the necessity to create pragmatic and flexible interventions that understand the issues faced by the farmworker community.

Theoretical Framework

Health Belief Model

Designing interventions that are culturally relevant means more than matching assumptions about nationality to culture. It is vital to appeal to the values and motivations of the individual. The Health Belief Model (HBM) is one of the most commonly used frameworks in individual-level health promotion. Originally developed in the 1950s as a means to understand the underutilization use of preventive services, the HBM focuses on the individual's perception of factors surrounding health behaviors. The model is based on two variables: (1) the desire to

avoid illness or to achieve health and (2) the belief that a specific behavior will lead to the amelioration or avoidance of illness.

There are five components of the model, which are used to assess what factors contribute to a person's participation in a health behavior: perceived severity, perceived susceptibility, perceived benefits, perceived barriers, and self-efficacy. *Perceived susceptibility* is the individual's perception of risk of getting the disease. *Perceived severity* refers to the perceived seriousness of the illness. *Perceived benefit* refers to a behavior believed to be useful in alleviating or avoiding illness. Similarly, *perceived barriers* are the assumed negative outcomes of or obstacles to participating in the behavior, such as pain, inconvenience, or cost. *Self-efficacy* was incorporated into the model in 1988 in an attempt to better account for health behavior (Rosenstock et al, 1988). This construct focuses on the individual's perceived capacity to carry out a specific behavior.

In a review of studies utilizing the Health Belief Model conducted in 1984, Jans and Becker examined the use of HBM in understanding risk factor behaviors, screening behaviors, clinic usage, and other factors. They concluded that across 29 studies prospective and retrospective studies, perceived barriers were more likely to predict participation in the behavior than any other HBM construct. Conversely, perceived severity was the least likely to predict behavior. Jans and Becker (1984) stated that this may be due to the fact that individuals who do not have a personal experience with a disease or are considering a disease which plays out over the long term may not be able to comprehend the seriousness of the illness. Alternatively, certain diseases may be considered serious by most or all participants, which reduces the variability and predictive ability of the responses. While the studies included in this review are dated, the

breadth of topics covered under the review show the ubiquitous nature of the model and its applicability in prevention interventions.

Newer reviews cite similar conclusions about the predictive ability of each construct. In a review of 18 studies, Carpenter (2010) concluded that perceived benefits and barriers were the strongest predictors of behavior. These outcomes were mediated by time between measurement and behavior, temporality of behavior (treatment vs preventive), and type of behavior (drug adherence vs other). The predictive relationship between perceived barriers and benefits and action holds true for prevention behavior (Carpenter, 2010).

There have been several studies which apply the Health Belief Model to HIV prevention. A majority of these programs focus on appropriate and consistent condom utilization and safer sex practices. One such study found that clients' perceptions of severity, susceptibility, benefits, barriers, and self-efficacy of practicing safer sex behaviors, and self-efficacy were correlated with self-reported safer sex practices (Mattson, 1999). However, there are very few studies utilizing this theoretical framework in the farmworker population. One study sought to evaluate a pilot HIV prevention program among Mexican and Latino migrant workers using HBM. Despite significant attrition, the study concluded that the proportion of workers who regularly carried condoms rose from 43% to 83% (Organista, Alvarado, Balblutin-Burnham, Worby, & Martinez, 2006).

While the model has been broadly used in health education and promotion campaigns, there are several critiques regarding its applicability. Other criticisms of the model cite that it only accounts for individual variables, without regard to broader social, cultural, and political factors which may influence behavior. By placing the emphasis on individual behavior, it negates the effect of larger social structures upon health outcomes. (Castaneda et al, 2015)

Carpenter (2010) concluded that the traditional four construct model may be too simplistic for comprehensive analysis of health behavior and suggested the adoption of mediation and moderation variables in future analyses. In addition, one study compared the effectiveness of HBM and Theory of Planned Behavior in increasing preparatory condom behavior (Montanaro & Bryan, 2014). The study found that perceptions did not influence intentions and behavioral outcomes. This indicates that affecting only constructs that explain perceptions of behavior, as those in HBM, may not produce behavioral change unless other considerations are addressed.

Teach Back Method

The Teach-Back method is one technique that has been utilized in clinical settings to improve health communication between patients and providers. Simply stated, an educator conducts Teach Back by asking a patient to repeat the information given to them in their own words. This method is used primarily for education regarding disease management techniques and treatment adherence. Rooted in learning theories and case studies in health literacy, the Teach Back method aims to reduce miscommunication and prevent errors before they occur. This communication methodology has been vetted by the Agency for Healthcare Research and Quality (AHRQ) and is included in their health literacy toolkit as a way to improve health communications between health care providers and their patients (Darren DeWalt, Callahan, Hawk, Broucksou, & Hink, 2010).

As opposed to other measures of health communication, the Teach Back Method does not aim to measure the level of understanding of the patient. Rather, it is a measure of how well a health care provider explained the information to the patient. In relating the information back to the provider, the patient reveals any lapses in communication and gives the provider a chance to

clarify misconceptions. This method aims to move away from simple "yes/no" affirmations of understanding to gain a better understanding of how a patient perceives and relates information.

To conduct Teach Back, the clinician begins by identifying the learning objectives for the interaction. The number of concepts is typically capped at three, so as not to overwhelm the patient. These concepts are then explained using plain language in a culturally and linguistically appropriate manner. After explaining the concepts, the clinician asks the patient to relay the information back, emphasizing that it is not a test of their understanding but a means of assessing if the clinician has explained the topic appropriately. Finally, the clinician addresses any lapses in the explanation given by the patient. If the patient has difficulty understanding a concept, it must be broken down further and explained in simpler terms. Teach Back is often aided by visual or demonstrational aides to allow the patient to visualize complex instructions (Tamura-Lis, 2013).

In working with populations with limited health literacy, the Teach Back Method is particularly used to confirm a patient's understanding of learning goals and reinforce information at any points of miscommunication (Sudore & Schillinger, 2009). While literature highlighting the use of the Teach Back Method with farmworkers or HIV education is scarce, clinical evidence has shown its utility in improving health communications for patients with congestive heart failure and diabetes (Tamura-Lis, 2013; White, Garbez, Carroll, Brinker, & Howie-Esquivel, 2013).

<u>**Summary**</u>

The existing research indicates that farmworkers are more likely to engage in behaviors that put individuals at risk for HIV infection. These behaviors include: alcohol abuse, substance

abuse, interactions with sex workers, and inconsistent condom use, among others (Bletzer et al., 2012). Migrant and seasonal farmworkers are also prone to structural factors that increase exposure to HIV risk factors and reduce access to health care services. HIV knowledge is an important factor in reducing the risk of infection. Health education rests on the educator's ability to effectively address specific client perceptions and communicate information in a comprehensible way. The Health Belief Model is one way to conceptualize the individual factors that influence farmworker perceptions of HIV and protective behaviors. The Teach Back Method is a communication technique that improves reinforcement and assessment of communication efficacy when educating low health literacy populations.

Previous research has shown the necessity of understanding the specific context of farmworker health. Keeping in mind the subtle differences in cultural identity and personal health beliefs, as well as broader structural factors affecting health, this study aimed to assess the feasibility of conducting HIV education within the farmworker population in Bainbridge, GA. The ultimate goal of this project was to identify the most conducive method of information dissemination based on the factors identified in this literature review.

Chapter III. Methods

Introduction to Methods

This goal of this feasibility study was to create an HIV prevention curriculum for migrant farmworkers who receive care through the South Georgia Farmworker Health Project (SGFWHP) clinic. The study pursued this goal through three aims:

1. Evaluate the educational needs and preferences of farmworkers (Design stage)
2. Evaluate the process of conducting the HIV curriculum (Implementation phase)
3. Evaluate the structure and content of the HIV curriculum (Refinement phase)

Each aim was pursued through separate phases as outline below (Figure 3).
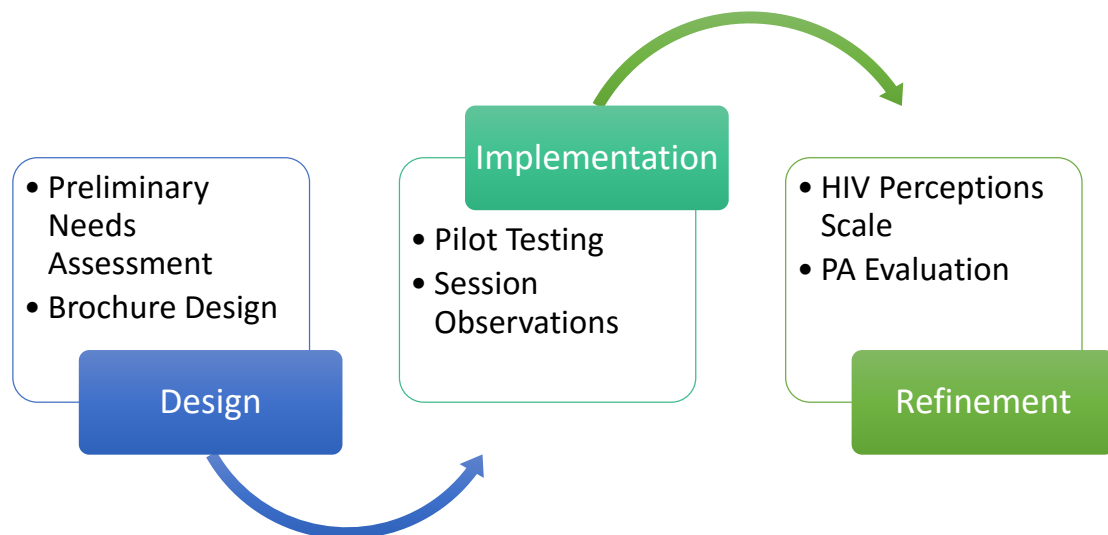
Figure 3: Study phases and associated methodologies

The design stage consisted of a preliminary needs assessment survey of farmworkers. This stage identified the components necessary for an effective and acceptable curriculum for the population of farmworkers in Bainbridge, GA. Results from this assessment were used in combination with feedback from clinic staff to create an educational brochure about HIV. The implementation stage involved a pilot study conducted during the June 2015 clinic. The pilot

study was conducted as an iterative process evaluation, utilizing observations of training sessions and feedback from clinic staff and patients to make improvements to the curriculum protocol. The evaluation stage consisted of a HIV Perceptions Survey of farmworkers and feedback survey for the Physician Assistant students who volunteered at the farmworker clinic. These surveys identified opportunities for improvement of the content and education process. Each of these stages are described in further detail in this section.

Sample

The sample population for the design and implementation stages of this study consist of migrant and seasonal farmworkers at three housing camps in Bainbridge, Georgia, in Decatur County. Given the transitory nature of the population, a sampling frame was not available. The design and implementation phases used convenience sampling to recruit participants. Any adult client of the clinic was eligible to participate in both stages of the study. Children under the age of 18 were not eligible to participate. Demographic data of each sample is presented in the results section.

The sample population for the evaluation stage of this study consists of farmworkers who attended the clinic, as described above, and Physician Assistant (PA) students who volunteered at the farmworker clinics during the pilot testing. The sampling frame of the PA survey consisted of 26 first year PA students. Demographic data were not collected from the students to maintain anonymity of responses given the small sampling frame.

Materials and Measures

DESIGN STAGE

Preliminary Needs Assessment Survey

The goal of the preliminary needs assessment survey was to identify the components necessary for an effective and acceptable HIV training for migrant farmworkers in Bainbridge, GA. The needs assessment identified farmworker attitudes towards HIV, learning format preferences, and cultural and linguistic requirements to guide the development of effective education materials. The needs assessment consisted of 12 questions which addressed demographics, knowledge of HIV, perceptions of susceptibility to HIV, recent history of unprotected sex, history of HIV testing in past three months, and willingness to learn more about HIV. (Appendix 1)

Demographics

Four questions were used to record participants' demographic data. Participants were first asked to self-report demographic characteristics of age, sex, ethnicity, and primary language. Questions included "What is your age?", "What is your sex", "What is your ethnicity?", and "What is your primary language?" Demographic characteristics influenced the development of culturally and linguistically relevant training materials.

HIV Risk and Awareness

Four questions were used to assess participants' perceptions of HIV risk and awareness of HIV transmission. Of the four questions, two addressed the respondent's perception of personal risk (i.e. are you worried about getting HIV, have you ever been tested for HIV). The response options were "Yes" or "No", in order to keep the survey simple to administer and ensure responses accurately reflect farmworker perceptions. Respondents were asked to elaborate on the reasons for participating in HIV testing and for not worrying about HIV. The

open-ended questions aimed to reveal any assumptions or patterns that would be missed by dichotomous answers.

Two questions assessed respondents' awareness of HIV risk behaviors. One open ended question asked "What do you think puts someone at risk for HIV?" in order to ascertain any variety in describing risk behaviors. Responses were then categorized by common themes. Another open ended question asked, "When was the last time you had sex without a condom?" to assess frequency of condom usage.

Preferred Method of Education

Two questions assessed respondents' willingness to participate in HIV education. Respondents were asked "Would like to learn more about HIV?" to which participants replied with a "Yes" or "No" response. Those who responded yes elaborated on what method of education they would like to receive. Format options included lecture, conversation with the doctor, video, or "other", which required participants to specify their alternative method.

"Let's Talk About HIV" Brochure Development

The analysis of the preliminary needs assessment data yielded concepts which informed the creation of the educational brochure. The brochure materials addressed four main domains: the definitions of HIV and AIDs, common myths, methods of HIV transmission, and methods of self-protection from HIV. (Appendix 2-4) Clinic coordinators strongly advised providing clients with information that they could take with them. This feedback informed the creation of a trifold brochure which addressed the four domains. The brochure, titled "Let's Talk about HIV", was crafted as a conversational tool to facilitate conversations between patients and providers (Appendix 5). Additionally, the topics were presented in a question and answer format to allow for the application of the Teach Back Method in patient education.

The brochure was first drafted in English at a 3rd grade reading level. Then, the brochure was translated into Spanish and Haitian Creole by medical interpreters. The phrasing and messaging of the brochure was designed to be culturally appropriate for farmworkers and immigrant populations from Haiti and Mexico as indicated by the literature review. This influenced the explanations and justifications for using protection. For example, the literature review indicated that farmworkers value productivity as a means for subsistence. As such, protection from HIV was framed as a way to stay healthy so that they can continue to work and stay productive.

IMPLEMENTATION STAGE
Teach Back Form

In order to incorporate the Teach Back Method into the patient education protocol, a short form of questions was included with the educational brochure. In order to reduce the time allocated to the education during the clinic visit, the number of questions was limited to four open-ended questions which reviewed the four key domains addressed in the brochure. Domains were assessed by marking "Y" for each question that the participant answered accurately, and "N" for each question answered inaccurately, either in part or completely (Appendix 6). The form included review prompts to help educators identify which information to review for each concept.

Awareness of HIV myths was primarily assessed by asking "Can you get HIV by working with someone?" Awareness of transmission methods was assessed by asking "How can someone get HIV". Awareness of protection methods was assessed by asking "What are two ways you can protect yourself from HIV". Awareness of HIV definitions HIV was assessed by asking "What is the only sure way to tell if someone has HIV?" Some questions addressed

multiple domains. For example, while the HIV definitions question sought to assess understanding of the definitions of HIV and the process of diagnosis, it also addressed common myths about the physical manifestation of HIV.

Pilot Test and Observations of Education Sessions

Throughout the implementation phase, observations were conducted of individual education sessions between patients and care providers to gain greater insight into the interactions between educators and clients. While no formal tool was used for observations, data was collected on client demographics, estimated length of the education session, who conducted the education session, variations in education administration, and feedback from participants and PA students. In addition, one-on-one semi-structured discussions with PA students were also conducted to understand their perceptions of the training process. These discussions focused on understanding PA perceptions of process of administering the education, ease of use, and suggestions for improving the training. Pilot test adjustments were made based on feedback gathered from observations and discussions over the three-day fall clinic.

REFINEMENT STAGE

HIV Perceptions Scale

An HIV perceptions scale was created to better understand how the farmworkers conceptualized HIV. The information from this scale is intended to inform future versions of the educational materials so that the clinic can provide targeted information that is pertinent to the farmworkers. The scale was designed as a five point Likert scale with 1 indicating "Definitely Not" and 5 indicating "Definitely Yes". The scale has a total of 15 questions, producing a total score of 75. These questions were developed for the study based on the constructs of the Health

Belief Model (HBM), with three questions linked to each HBM construct. The questions focused on perceptions of condom usage and availability, alcohol consumption, and perceptions of HIV as was indicated by the needs assessment and literature review.

Self-Efficacy Subscale

Three questions assessed participants' perceptions of their self-efficacy for participating in protective behaviors. Two protective behaviors addressed by this construct are consistent and correct condom usage and reduction of alcohol consumption prior to intercourse. Participants rated their agreement with the following statements on a scale of 1 to 5 as indicated: "I can use a condom every time I have sex", "I can talk to my partner about wearing a condom before we have sex", and "I can reduce my alcohol use before I have sex."

Perceived Susceptibility Subscale

Three questions assessed participants' perceptions of susceptibility to HIV. Susceptibility was operationalized as worry of getting HIV and perception of risk through different exposures. Participants rated their agreement with the following statements on a scale of 1 to 5 as indicated above: "I am worried about getting HIV", "only people who sleep around get HIV", and "I am worried about getting HIV from other workers".

Perceived Benefits Subscale

Three questions assessed participants' perceptions of the benefit of utilizing protective behaviors. Protective behaviors included consistent and correct condom usage and HIV testing. Participants rated their agreement with the following statements on a scale of 1 to 5: "I think condoms will help protect me from HIV", "I do not think it's important to use condoms every time I have sex", and "I would feel better if my partner got tested for HIV".

Perceived Barriers Subscale

Three questions assessed participants' perceived barriers to engaging in protective behaviors, like condom usage and partner communication. Participants rated their agreement with the following statements on a scale of 1 to 5: "Condoms are hard to get", "HIV tests are not easily available", and "My partner/friend would make fun of me for using condoms."

Perceived Severity Subscale

Three questions assessed participants' perceptions of the severity of HIV for themselves and generally among farmworkers. Participants rated their agreement with the following statements on a scale of 1 to 5: "If I get HIV, I will get very sick", "HIV is a big health problem for farmworkers", and "If I got HIV, it would be more serious than other diseases".

Perceptions of Training Subscale

Two questions assessed participants' perceptions of the efficacy of their HIV education session. Participants rated their agreement with the following statements on a scale of 1 to 5: "This talk was useful for me" and "I learned more about HIV from this talk than I knew before".

Physician Assistant Student Feedback Survey

A feedback survey was created and disseminated to PA students 10 days after their return from Bainbridge, GA to assess their experiences in utilizing the materials. The questions aimed to assess their experiences by focusing on the necessity of training, utility of the training materials, variations in training administration, and utilization of the Teach Back Method. (Appendix 6) These results were used to ensure that the training is conducted in a manner which meets the needs of care providers.

Training Necessity and Topics

One question assessed participants' perception of the necessity for the training by asking "Do you feel this educational HIV training is needed in the farmworker population that you served?" Participants responded with either "Yes", "No", or "Unsure." Participants reflected on the topics covered by the training by responding to "Which HIV related topics do you believe are most relevant for the population." Participants chose topics from a list of responses and had the option to fill in any topics not provided in the answer selection under "Other".

Training Materials

Participants were rated the utility of the educational brochure using three questions. All three questions utilized a 5-point Likert scale. The first question assessed the usefulness of the content, with a rating of 5 indicating very useful. The second question rated the appropriateness of length, with a rating of 5 indicating very appropriate. The third question rated the difficulty of utilizing the material, with a rating of 5 indicating very easy.

Training Administration

Participants identified how they administered the training through the course of the clinic. Response options were "translator mediated", "self-conducted", or "translator conducted". Translator mediated trainings were those in which PA student reviewed the education information while translators interpreted the messages to the patients in the appropriate language. Participants then rated the difficulty of conducting the training through each administration method they utilized on a scale of 1-5, with 5 indicating very easy.

Teach Back Utilization

Participants assessed the utilization of the Teach Back Method through three questions. The first question assessed how frequently participants used Teach Back during client encounters. Response options ranged from "Never" to "All the time". Participants were asked to further elaborate if they felt that the Teach Back questions were helpful in reviewing the information in the brochure. Finally, participants who did not utilize teach back were asked to explain why they did not.

Additional Feedback

Two additional open ended questions provided an opportunity for participants to provide any additional comments about the training or suggestions for additional facilitation tools.

Data Collection Procedures

This study was submitted to the Emory Institutional Review Board for review. A preliminary review concluded that the study was exempt from IRB approval, as it was not considered human subjects research during initial review (Appendix 7). Nonetheless, full precautions were taken to ensure the confidentiality and anonymity of all participants. Participants were informed of the study purpose and told that they were able to rescind their participation at any point. Those who chose not to participate still received the *Let's Talk about HIV* brochure. No identifying information was collected from the participants and all survey responses were de-identified using respondent codes.

DESIGN STAGE

Preliminary Needs Assessment

The needs assessment was conducted over the course of one week during the summer South Georgia Farmworker Project (SGFWP) clinic in June 2015. Clinic coordinators disseminated the surveys to Physician Assistant (PA) students prior to the start of the clinic. PA students conducted the surveys by themselves or through an interpreter after their patient encounters. Clinic coordinators collected the completed surveys by the end of the week.

IMPLEMENTATION STAGE

The education materials were pilot tested during the Fall SGFWP clinic in October 2015 over a period of three days. During this time, PA students educated their patients one-on-one about the basics of HIV using the "Let's Talk about HIV" brochure. When needed, PA students also worked with translators. After reviewing the brochure, educators administered the Teach Back Form and HIV Perceptions Scale.

Teach Back Form

After reviewing the brochure, educators were instructed to tell the participant that they will now review the information through a series of questions intended to assess if the educator communicated effectively. The educators emphasized that this was not a test of the patient's knowledge, but a way to assess if there were any gaps in communication. Once the participant consented to taking the survey, the educator administered each of the four questions. If the participant provided a correct and complete response, the educator would record that the participant answered correctly using "Y" and proceed to the next question. If not, the educator would record that the participant answered incorrectly using "N". The educator would then review the information for that topic as indicated by the prompts on the form. After reviewing the information, the educator proceeded to the next question.

Observations of Education Sessions

Observations consisted of audits of randomly selected patient encounters and semi structured interviews with PA students. Audits were conducted by observing education sessions and tracking client demographics, who conducted the session, how long the session lasted, how the brochure was utilized, any variations from the education process, and feedback from participants and PA students. One on one interviews were conducted by asking randomly selected PA students about their experiences using the materials and the process of administering the education. Students were approached as they returned to submit their completed surveys.

Pilot Testing

The pilot test was an opportunity to receive immediate feedback regarding implementation procedures to identify the most feasible education process. Based on feedback obtained during observations, the education process was modified to reflect the needs raised by the clinic staff, students, patients, and translators. The following is a brief description of the changes in procedure that occurred over the course of the pilot test.

1. The training was administered at the end of the patient encounter when participants were given their care packages. The training was conducted directly by the PA student or through a translator.

2. The HIV Perceptions Scale was collapsed into a 3 point Likert scale, with 1 indicating "No", 2 indicating "Maybe", and 3 indicating "Yes".

3. Students who conducted education sessions with the assistance of a translator were given a copy of the English pamphlet to follow along with as the translator reviewed the information on the alternative language pamphlets.

4. Students were given the option to let the translators conduct the training while they reported their examination results to their preceptors. Translators were educated on the purpose of the study, use of study forms, and basic constructs of the Health Belief Model were before the start of the second day of the clinic. The translators were also

instructed on teach back methodology and how to use the materials as educational and evaluation tools.

Additional details regarding these changes are presented in the results section.

REFINEMENT STAGE

HIV Perceptions Scale

After completing teach back using the Teach Back Form, educators administered the HIV Perceptions Scale to the patient. Participants were instructed to rate their agreement with each statement on a scale of 1-5. Upon completion of the HIV Perceptions Scale, participants were asked if they had any additional questions. They were subsequently given a care package consisting of toiletries, condoms, and other essential items before being taken to complete their discharge process. PA students then submitted the completed surveys to the study coordinator.

Physician Assistant Student Feedback

The PA student feedback was conducted one week after their return from the summer clinic. The surveys were created using Google Forms. A link was provided to the clinic coordinator disseminated to the PA students who provided care during the fall farmworker clinic. Participants were allowed to complete the survey online. The survey was open for one week allowing students to complete it at their convenience.

<u>**Treatment of Data**</u>

Data entry was completed using Microsoft Excel 2013. After data collection, survey responses were transferred to the Statistical Package for Social Science (SPSS) for data cleaning, verification, and analysis. Analysis was completed using SPSS. Initial data analyses were conducted in the following steps:

1. Any questions left blank, either intentionally or unintentionally, were coded as missing.

2. Descriptive statistics were calculated for all data. Basic univariate statistics were conducted for preliminary needs assessment, teach back form, HIV scale, and physician assistant feedback form. Presence of outliners was assessed among the univariate statistics for all participants.

3. Cronbach's alphas were calculated for each subscale within the HIV scale.

4. Open ended responses were codified and made into categorical variables using inductive coding based on common themes found in the responses.

5. Frequencies were calculated for categorical variables.

6. Comparisons were conducted using independent sample t-tests for total scores by age, sex, and marital status to identify any differences in perceptions among groups. One-way ANOVA tests were conducted to identify differences among primary language groups. Missing variables were excluded from analysis.

Data Analysis

DESIGN STAGE

Preliminary Needs Assessment

First, ethnicity data were re-coded in order to reflect the greatest distinction between responses. For example, "Latino/Mexican" was included in "Mexican" and "Hispanic/Guatemalan" were included in "Guatemalan". Next, dichotomous responses were recoded to reflect "Y" =1 and "N" =0. Then, open ended responses were collapsed into categories which reflected distinct concepts in responses. Responses for HIV risk factors were reduced into five categories and one miscellaneous category. Reasons for not worrying about HIV were reduced to four categories and one miscellaneous category. Responses to time of last intercourse without a condom were reduced to three categories, with one non response category for responses that did not provide a clear time point. Univariate analysis was conducted on age.

Descriptive statistics were calculated for each of the analysis to understand the pattern of responses. Frequencies and percentages were calculated for discrete variables.

IMPLEMENTATION STAGE

Teach Back Form

First, primary language data were re-coded in order to reflect the greatest distinction between responses. "Creole/English" was included within the "Creole" category. Guatemalan dialects such as Mum and K'iche, the Mexican dialect of Zapoteco, and indigenous dialects were combined in the "Other" category. Responses to teach back questions were dichotomous values of "Yes" and "No". First, these values were recoded as "Yes" =1 and "No" = 0.

After data coding, univariate analysis was conducted for the age variable. Next, frequency tables were generated for the variables marriage, language, ethnicity, and sex. Then, frequency tables were generated for teach back questions and total scores were generated by counting the number of positive responses for each question. Possible scores ranged from 0-4, with higher scores indicating better patient-provider communication. Finally, total response scores were compared by age, marital status, and primary language to identify any differences in perceptions. Age was then divided into two groups of ≤ 39 years of age and ≥ 40 years of age for comparison.

Pilot Testing and Education Session Observations Notes

Observation notes were utilized as a clear record of the changes conducted during the pilot testing. Observations were transcribed and assessed for length of the training, who conducted the training, feedback from participants and PA students, and variations from the

given instructions. Results from the site observations were used to make changes during each stage of the pilot test.

REFINEMENT STAGE

HIV Perceptions Scale

First, the scale was collapsed from a 5 point Likert scale into a 3 point Likert scale to reflect changes in survey administration. Values of "Definitely Not (1)" and "Probably Not (2)" were now coded as "No (1)". "Maybe (3)" was coded as "Maybe (2)". "Probably (4)" and "Definitely (5)" were coded as "Yes (3)". All subscales were positively related to engaging in protective behaviors except for barriers. Two questions were reverse coded to ensure the values reflected the constructs being assessed. During the pilot study, it was found that many participants did not drink. Thus the statement "I can reduce my alcohol intake before having sex" was also provided a response of "NA (9)" for these participants. "NA" was then recoded to "Yes (3)" during the analysis stage to indicate the protective effect of not drinking during sex. Missing responses were coded as "System-missing".

A total score for the scale was calculated by adding the response values from each question. The recoded scale had a new score range of 15-45, with higher scores indicating greater agreement with the presented statements. The distributions for the scale questions were determined using descriptive statistics. Reliability was not assessed for the scale or subscales as the questions were answered in a dichotomous pattern, reducing the range of responses. Finally, total response scores were compared by age, marital status, and primary language to identify any differences in perceptions. Age was then divided into two groups of ≤39 years of age and ≥ 40 years of age for comparison.

Two questions that were used to identify the utility of the education for participants were also collapsed from a 5 point Likert scale into a 3 point Likert scale to reflect changes in survey administration. Recoded values reflect those mentioned above. The distributions for both questions were determined using frequency tables.

Physician Assistant Feedback Survey

The PA Feedback survey did not require any values to be recoded. Descriptive analysis was conducted for each question by generating frequency tables of each response. Mean and modal values were obtained for rating scale questions. Additional comments were recorded in a separate table and addressed in the Discussion section.

Chapter IV. Results

Introduction to Results

This formative study examined the feasibility of creating and implementing a culturally-relevant HIV prevention training for migrant farm workers through the South Georgia Farmworker Health Project. The study aimed to:

1. Evaluate the educational needs and preferences of farmworkers
2. Evaluate the process of conducting the HIV curriculum
3. Evaluate the structure and content of the HIV curriculum

The following section contains a summary of results from each of the three data collection stages. The results of each data collection phase are presented below. The application of the findings to each study aim is presented at the end of each section.

Overview of Results

DESIGN STAGE

Preliminary Needs Assessment Survey

The goal of the preliminary needs assessment survey was to understand attitudes and knowledge of HIV and training preferences within the farmworker community in Bainbridge, Georgia. The needs assessment addressed demographics, HIV risk and awareness, and preferred method of education.

Demographics

The initial needs assessment included 31 participants. Respondents self-reported demographic information. 45% of participants identified as "Hispanic". The majority of others identified as Guatemalan (26%) and Mexican (26%). Participants were primarily male (90.3%),

with an average age of 26 years, with ages ranging from 17 to 48 years. All of the participants

spoke Spanish. (Table 1)

Table 1: Demographics of Farm Worker Preliminary Needs Assessment

Data Collection	Preliminary Needs Assessment N (%)	Pilot Testing N (%)
N	31	65*
Sex		
Male	28 (90.3)	49 (75)
Female	4 (9.7)	15 (23)
Ethnicity		
African American	0 (0)	1 (1.5)
Black	0 (0)	4 (6.2)
Guatemalan	8 (25.8)	8 (12.3)
Haitian	0 (0)	16 (24.5)
Hispanic	14 (45.2)	17 (26.2)
Latino	0 (0)	2 (3.1)
Mexican	8 (25.8)	15 (23.1)
Missing	1 (3)	2 (3.1)
Age Mean (SD)	26.1 (8.5)	40.7 (13.2)
Married	Not recorded	38 (58.5)
Primary Language		
Spanish	31 (100)	36 (55.4)
Creole	0 (0)	19 (29.2)
English	0 (0)	1 (1.5)
Other	0 (0)	9 (13.8)

*Note: N Varies based upon missing responses

Four questions were used to assess participants' perceptions of HIV risk and awareness of HIV transmission. 29% (N=9) of participants responded that they were worried about getting HIV and 10% (N=4) answered that they had been previously tested for HIV. One individual did not respond. Respondents were asked to elaborate on the reasons for participating in HIV testing and reasons for not worrying about HIV. Of those who reported that they were not worried about HIV, four categories of responses emerged, as well as one category of miscellaneous responses and 5 non responses. (Table 2). A majority of participants (N=7) had never heard of HIV or were not sure how to contract HIV.

Table 2: Reasons for not being worried about HIV

Theme	N	Sample Responses
Awareness	7	"Not sure how you get it but aware of HIV as a disease" "Never heard of it" "No, because doesn't know what it is" "Don't spend time thinking about it"
Known Partner	6	"Because I know who I am sleeping with" "Never tested and sex only with wife" "Not having sex with a girl" "I'm not sleeping around" "Every year my boyfriend and I get tested"
Uses Protection	2	"Always use protection"
Miscellaneous	3	"Choosing Wisely" "Because it's bad" "Feel safe"
No Response	5	NA

Those who were tested for HIV, reported the following reasons for getting tested: "Offered a pap smear", "I wanted to", "The doctor checked my penis", and "[Received] in a clinic". These

responses implied that some participants may not have been aware of what HIV testing is or what it entails.

Two questions were used to assess the respondent's awareness of HIV transmission. Responses to "What do you think puts someone at risk for HIV?" were categorized into five response categories and one miscellaneous category. (Table 3) Some participants provided responses which fit several categories.

Table 3: "What do you think puts someone at risk for HIV?" Responses

Theme	N	Sample Responses
Multiple Sex Partners	7	"Men who get with a lot of women"
		"Relations with other people"
		"Having sex with a female"
		"Heard women have it and can get it from having sex with them. Women here."
Unprotected Sex	9	"Sex without protection"
		"Not using a condom"
Don't Know	13	"Not Sure what you are asking"
		"Does not know what HIV is"
Shared Needles	2	"Share needles"
		"Hospital setting with unsterilized needles"
Bad	2	"Bad for health"
		"Think it's bad"
Other	2	"Bathrooms….maybe work"

Note: Some participants reported more than one response.

A majority of the respondents reported that they did not know what puts someone at risk for HIV. While, several respondents did reply that having multiple partners is a risk factor, the range of responses indicates that the risk is dependent upon perceptions of promiscuity rather than safe sex practices.

Time of last condom usage was assessed by asking the participants the last time they had sex without a condom. 9 participants had sex without a condom in the past 5 months, one of which had never used a condom. 7 participants had sex without a condom in between 6 and 12 months ago. 12 participants never had sex or always used a condom.

Preferred Method of Education

Two questions were used to assess respondents' willingness to participate in HIV education. 68% of participants responded that they would like to learn more about HIV. Of those who provided a preferred method of education (N=19), 53% stated that they would like to learn through conversations with care provider, 21% preferred a lecture, while 26% preferred a video.

Aim 1: Educational Needs of Migrant Farmworkers

The design stage was intended to gather information to guide the development of training materials and procedures. In relation to study aim 1, the design phase informed the content and format of the *Let's Talk about HIV* brochure.

Content

HIV training materials were created based on concepts identified through the analysis of preliminary needs assessment data. The data showed that many of the participants understood the risk of unprotected sex and sex with multiple partners. However, many participants also

associated risk directly with promiscuity rather than with the level and consistency of protection used with multiple sex partners. In addition, while 71% of participants denied being worried about HIV, further analyzing revealed that a majority of participants were not worried about HIV because they were not aware of HIV. Low awareness of HIV was also illustrated by the lack of risk perception and low levels of knowledge regarding transmission methods. For example, some participants echoed common misconceptions about the risk of transmission from sharing toilets with HIV affected individuals. In addition, only 10% reported that they were previously tested, but when asked to state why they got tested, participants' responses implied that they may not be aware of what HIV testing entails.

The results necessitated the creation of materials that covered the basics of HIV definitions, testing, and transmission. This information, combined with the information gained from the literature review and feedback from clinic coordinators influenced the design of the *Let's Talk about HIV* brochure. Ultimately, the materials were designed to address four main domains: definitions of HIV and AIDs, common myths, methods of HIV transmission, and methods of self-protection from HIV.

Format

68% of respondents were interested in additional training. In order to create a culturally and linguistically appropriate curriculum, demographic data was used to guide development and translation of the content. Data indicated that the farmworker sample primarily spoke Spanish. Participants were also primarily younger males, which indicated the use of terminology and visuals that would appeal to this demographic. The brochure was created to act as a conversational tool between the patient and provider to accommodate farmworker preferences on method of education to ensure that the training was carried out in a manner that is conducive to

their preferences and necessities. More detailed description of materials development is provided in the methods section.

Implementation Stage

Teach Back Form

Demographics of Migrant Farm Worker Sample

The implementation stage of the study was comprised of 65 participants (Table 1). Ethnicity was self-reported by participants. A majority of the participants identified as Hispanic (26.2%), Haitian (24.6%), or Mexican (23.1%). Similar to the preliminary assessment, most of the participants were male (75%). However, this population was almost twice as old with an average age of 41 years. The range of ages was also greater than that of the needs assessment population, with a range from 19 to 75 years. 47.7% of participants were aged 39 or younger, while 52.3% were aged 40 or older.

A majority of this sample also spoke Spanish (55.4%) or Creole (29.2%). 13.8% of responses were combined into an "Other" category which was comprised of Dequiche (or K'iche) (N=1), Guatemalan Dialects (N=3), Zapoteco (N=3), and Indigenous dialects (N=2). One participant preferred English as their primary language.

Teach Back Questions

Four open ended questions included in the materials were used to review the four key domains from the brochure (Table 4). One participant did not respond to teach back questions. Overall, 38.5% required teach back to clarify myths of HIV, 35.4% of participants required teach back for the definitions of HIV, 23.1% required teach back for transmission methods, and 27.7%

required teach back for protection concepts. The mean total teach back score was 2.73 (Standard Deviation (sd)=1.34), indicating that, on average communication was about 68% effective in relating HIV concepts. Scores ranged from 0 to 4.

Table 4: Teach Back Responses

	Yes N (%)	No N (%)	Missing N (%)
Myths	39 (60.0)	25 (38.5)	1 (1.5)
Definitions	41 (63.1)	23 (35.4)	1 (1.5)
Protection	46 (70.8)	18 (27.7)	1 (1.5)
Transmission	49 (75.4)	15 (23.1)	1 (1.5)

Age

A two sample t-test was conducted to see if there was a significant difference in mean Teach Back score between younger and older participants within the sample. No significant difference was observed between participants age 39 and under and participants aged 40 and older for Teach Back scores (t= -0.378, Degrees of Freedom (df) =62, p=0.707).

Sex

A two sample t-test was conducted to see if there was a significant difference in mean Teach Back score between males and females within the sample. The mean Teach Back score of males in this sample (mean=3.47, sd =0.92) was significantly higher than that of the females (mean=2.50, sd =1.38) (t=3.124, df =35.707, p<0.004)

Marital Status

A two sample t-test was conducted to see if there was a significant difference in mean Teach Back score between married and unmarried participants within the sample. No significant difference was observed between married and unmarried participants age 39 and under and participants aged 40 and older for Teach Back scores (t= -1.766, df=42.936, p=0.084).

Primary Language

A one-way ANOVA was conducted to see if there is a significant difference in Teach Back score among the individuals with different primary language preferences. The English speaking participant was excluded from this analysis. Initially, a statistically significant difference was found using ANOVA testing (F (2, 60) =5.119, p=.009). However, Levene's test of variance revealed that the groups had unequal variances. Tamhane's post hoc testing reveled that there were no significant differences in mean Teach Back score among groups.

Observations of Educational Sessions

Session observations were used to identify variations in the education process and identify opportunities to improve the efficiency of training. Site observation notes were utilized as a clear record of the changes conducted during the pilot testing. Observations were transcribed and assessed for length of the training, who conducted the training, variations from the given instructions, and feedback from participants and PA students. A total of 10 observations were conducted over the course of the pilot study (Table 5). The details of each observation are summarized below.

Table 5: Education Observation Summary

Observation	Pilot Round	Ethnicity	Sex	Language	Conducted by
1	1	Haitian	M	Creole	PA/Translator
2	1	Hispanic	M	Spanish	PA/Translator
3	2	Guatemalan	M	Dialect	Translator
4	2	Hispanic	F	Spanish	PA
5	3	Haitian	M	English	Investigator
6	3	Haitian	M	English	Investigator
7	3	Haitian	F	Creole	PA/Translator
8	3	Haitian	M	Creole	PA/Translator
9	3	Mexican	M	Spanish	PA
10	3	Mexican	M	Spanish	PA

During the observations, it was observed that trainings typically took between 10 to 15 minutes. Trainings were either conducted by PA students themselves or with the assistance of a translator. One observed training was conducted solely by the translator. In general, trainer followed the outlined protocol of first educating participants with the pamphlet, then conducting teach back, and finally conducting the HIV Perceptions survey. In addition, trainers generally utilized the tools to encourage conversations about HIV and safe sex practices, which was highly encouraged by the Teach Back Method.

Pilot Testing

The following is a summary of the changes that occurred during the course of the pilot study as a result of the observations presented above. Based on preliminary feedback from clinic

staff and Physician Assistant (PA) students, the education session was first administered at the end of the patient encounter when participants were given their care packages. These packages consisted of toiletries, condoms, and other administered the surveys to their patients prior to completing each appointment. The intention of providing the education session at the same time as the condoms was to create a more applicable training. The education session was conducted directly by the PA student or through a translator and typically took 10-15 minutes.

Feedback from the first ten educational sessions revealed that the HIV Perceptions Scale was too difficult for patients to understand as a five point Likert scale. This severely hindered the quality of patient education. The HIV Survey was collapsed into a 3 point Likert scale, with 1 indicating "No", 2 indicating "Maybe", and 3 indicating "Yes". This simplified and expedited the HIV survey and allowed PA students and participants to complete the survey faster. Students were also given a copy of the English pamphlet to follow along with as the translator reviewed the information on the alternative language pamphlets.

PA students reported that conducting the training at the end of the patient encounter was too cumbersome. PA students reported that they felt rushed and that conducting the training slowed the patient flow of the clinic. As such, the students were given the option of allowing their translators to conduct the training while they reported their examination results to their preceptors. Translators were educated on the purpose of the study, use of study forms, and basic constructs of the Health Belief Model were before the start of the second day of the clinic. The translators were also instructed on teach back methodology and how to use the materials as educational and evaluation tools.

Aim 2: Curriculum Administration Process

The implementation stage evaluated the curriculum process to assess how to efficiently and effectively conduct HIV testing during clinic sessions through a process evaluation. The evaluation yielded feedback regarding the Teach Back Method process, patient engagement, and general training administration.

<u>*Teach Back Process*</u>

This stage served as an assessment of the viability of the Teach Back Method in the field setting. The 100% completion rate of teach back questions was a promising indicator of the ability to utilize Teach Back for HIV education in the farmworker clinic setting. Conducting Teach Back allowed trainers to identify areas of education that required additional review. There were no major differences in mean Teach Back score among the demographic categories assessed, implying that the process was equally affective at identifying gaps in communication across groups. The Teach Back responses revealed that myths and basic definitions of HIV were the most commonly reviewed topics. These results are consistent with farmworker perceptions of HIV that were made apparent through the needs assessment and HIV Perceptions Scale, which is discussed below. Ultimately, utilizing the Teach Back Method allowed educators the opportunity to address lapses in communication that would have otherwise gone unnoticed.

<u>*Patient Engagement*</u>

Observations revealed the necessity to contextualize the training to meet participants at their current level of understanding in order to engage them in the education process. Educators often had to provide context or explanation for why the education was being provided. This was especially true for patients who seemed hesitant or reserved in their conversations about safe sex

practices and HIV in general. The pairing of the curriculum with materials like condoms provided educators with tools to converse with patients about appropriate condom usage and other protective behaviors. In addition, some patients had a better understanding of AIDS as opposed to HIV. As such, the training needed to be anchored in the concept of AIDS to help contextualize the importance of HIV.

Method of Administration

The pilot study highlighted several facilitators and barriers to training administration. In general, education sessions lasted between 10-15 minutes. The use of the HIV Perceptions Scale contributed significantly to this time. The scale also proved difficult to administer as created and had to be reduced to a 3-point scale. As the scale served as an evaluation tool for the development of the curriculum, future administrations of the HIV education will not include the scale. Of the administration modalities utilized over the course of the pilot study, translator conducted educations were the most efficient. Allowing the translators to provide training while PA students reported to their preceptors engaged the patient during what would otherwise be idle time.

REFINEMENT STAGE

 HIV Perceptions Scale

A 15 item HIV perceptions scale was created using the Health Belief Model to better understand farmworkers' perceptions of HIV. The scale was analyzed as a three-point Likert scale with 1 indicating "No" and 3 indicating "Yes". A majority of respondents (69%) completed the scale in its entirety and were included in the analysis. The mean total score for this scale was

27.2 (sd=4.10). The total scores ranged from 22 to 39, with higher scores indicating more agreement with protective factors against HIV.

Age

A two sample t-test was conducted to see if there was a significant difference in mean HIV Perceptions Scale score between younger and older participants within the sample. No significant difference was found between younger (39 years and under) and older (40 years and older) participants in HIV perception score. (t=-0.010, df =32, p=0.992)

Sex

A two sample t-test was conducted to see if there was a significant difference in mean HIV Perceptions Scale score between male and female participants within the sample. No significant difference was found between males and females in HIV perception score. (t=-0.222, df=32, p=0.826)

Marital Status

A two sample t-test was conducted to see if there was a significant difference in mean HIV Perceptions Scale score between married and unmarried participants within the sample. No significant difference was found between married and unmarried participants in HIV perception score. (t=1.69, df=28, p=0.102)

Primary Language

A one-way ANOVA was conducted to see if there is a significant difference in HIV Perceptions Scale score among the individuals with different primary language preferences. The English speaking participant was excluded from this analysis. No statistically significant

difference was observed in mean HIV Perceptions scale score among three primary language categories of Creole, Spanish, and Other. (F= (2, 30) 1.788, p=0.185)

Physician Assistant Student Feedback Survey

The evaluation phase also aimed to assess the efficacy and utility of the HIV education from the perspective of the PA students. A feedback survey was created and disseminated to PA students 10 days after their return from Bainbridge. The questions aimed to assess their experiences working with the training materials, their preferred method (translator mediated, self-conducted, or translator conducted), timing of the training, and their perceptions of working with the Teach Back method. The PA student feedback was conducted one week after their return from the summer clinic. 88% (n=23) students who attended the clinic responded to the survey.

Training Necessity and Topics

A majority (87%) of the respondents reported that they felt HIV education was necessary within the farmworker population in Bainbridge, while 13% were unsure. Participants were asked to select up to three topics they felt should be included in future training. The most frequently selected topics were, HIV Transmission (N=19), Basic Introduction to HIV (N=16), and Appropriate condom usage (N=13). These three topics was also the most commonly chosen combination (N=9) among participants.

Training Materials

The "Let's Talk about HIV" brochure, was also assessed in terms of content, length, and ease of use. Participants rated the content of the brochure 3.9 out of 5. The length and difficulty were both rated an average score of 3.7 out of 5. 17 participants provided additional feedback

regarding what other materials should be included. Of those, 53% (N=9) stated they would like to have a flip chart with diagrams for observers and instructions for facilitators, and 35% (N=6) stated they would like a condom for demonstration. The remaining participants (12%, N=3) stated they would like both.

Training Administration

Over the course of the pilot study, PA students were allowed to choose from three methods of training administration, based on level of engagement of the translator. Administration methods are further discussed in the Methods section. Over all three pilot phases, the most commonly chosen methods of administration was translator assisted and translator only training. Translator assisted training occurred when the PA student conducted the training and at some point allowed the translator to conduct the training alone (30.4%, N=7). Of those that utilized this administration method of translator assistance (N=20), the average rating of ease of use was 2.95 out of 5. Of those that utilized the administration method of translator only at any time (N=17), the average rating of ease of use was 3.29 out of 5. Of those that utilized the self-administration method of conducting the training themselves (N=13), the average rating of ease of use was 3.7 out of 5.

Teach Back Utilization

60% (N=14) of participants used the Teach Back Method (TBM) every time or almost every time, while 13% (N=3) of participants never used the TBM. Among those who did not use teach back every time, 36% (N=5) cited patient time constraints as their primary reason for not conducting teach back. 57% (N=12) of those who used the TBM found it helpful.

Additional Feedback

Seven participants provided general feedback regarding the training experience (Table 5). Participants cited concerns about the time taken to complete the training, as well as the relevance of the materials and logistic concerns. Responses discussed the duration of training, citing that the training was too long. A majority of this was attributed to the HIV perceptions scale.

Table 5: PA Survey Feedback

Themes	Response
Relevance of materials, time	A great idea, but it could be improved upon. The 17 questions on the back were a little too much for some patients. Some patients had been there a while and wanted to leave, and some were not sexually active. But the idea of a teach back is great!
Time, relevance of material	I think the conversation is important, but this process may have been a bit lengthy. By the end of the teaching and teach back we were all ready for it to be done (patient, translator, and myself). I was also shocked that the patients I saw were very knowledgeable on the subject already. Maybe there's a way to stratify the information based on some preliminary questions.
Useful	I appreciated it because it taught me how to talk about HIV with my patients and I used the same HIV basic info and teach back when I did free pelvic/PAP/breast exams for CIMA the following week. Great resources for patients and providers in training! Thank you!!
Availability of Materials	Not all goodie bags had condoms. One patient I counseled on condom use didn't receive condoms, yet a patient that decline HIV education had condoms in his goodie bag. Maybe consider keeping condoms separate, or making sure they go in every bag.
Logistic Concerns	Due to the weather it was a bit difficult to have the patients focus their attention to this type of training. Perhaps if it was completed up front while they waited in line that may speed along the process.
Relevance of materials	A few of the questions on the teach back form were worded very strangely. Particularly the questions about substance abuse and HIV.
Time, Logistic Concerns	The training is absolutely necessary, but the process was extremely difficult to navigate. For instance, some of the translators were teenagers and/or did not possess strong enough English skills to translate appropriately. It would help if there were designated translator/HIV educators that could do both skills. The problem is that when the clinic gets bombarded with patients, it's hard to spend the necessary time, often 30+ min, talking about HIV related issues. Overall, I think it is an important service to offer these patients, but we could improve the time management/process.

Aim 3: Education Structure and Content

The refinement stage evaluated the curriculum structure to identify any adjustments to the educational content or components of the curriculum for future versions of the training. The HIV Perceptions Scale assessed the necessity for changes to content, while the PA Feedback Survey identified any changes to program structure deemed necessary by PA students.

<u>*Future Content*</u>

In terms of identifying perceptions of HIV among farmworkers, the HIV Perceptions Scale revealed that there were no major differences in perceptions by demographic variables. However, specific variations in perceptions of protective behaviors occurred for married individual and individuals who did not consume alcohol. Married and monogamous individuals did not find the use of condoms or HIV testing necessary to protect themselves from HIV as they felt that they were protected by the exclusivity of their sexual relations. One participant for example stated that "people need to respect themselves and not sleep around". This participant stated that he would doubt his partner's fidelity if the partner requested him to use condoms. Conversely, two participants expressed interest in learning how to use condoms appropriately. Similarly, those who did not consume alcohol did not perceive any benefit from reducing their alcohol consumption as it was already negligible. In addition, observations revealed that many participants related promiscuity with an increased risk in acquiring HIV.

<u>*PA Perceptions*</u>

PA students felt that the concept of HIV Transmission, Basic Introduction to HIV, and Appropriate condom usage were necessary to include in future trainings. These results echoed the perceptions revealed by farmworkers in previous data collection phases.

In terms of conducting HIV education generally, one of the most common barriers cited by the PA students was the use of the HIV Perceptions Scale, which they believed was too long to administer in a timely fashion. The length and difficulty were both rated an average score of 3.7 out of 5. However, the most commonly cited barriers to conducting training was inadequate time to conduct HIV training along with the regular clinical workflow of the clinic. Another barrier was the lack of translators trained to conduct HIV training. They identified future facilitators in the form of flip charts with diagrams for observers and instructions for facilitators and condoms for demonstration. The ratings of the materials given by PA students suggest that they found the content of the current materials acceptable.

The utility of teach back from the PA student's perspective was supported by the fact that 60% of participants used the Teach Back Method every time or almost every time they conducted the training. Moreover, over half of those who used Teach Back found it to be helpful. Among those who did not use teach back every time, 36% cited patient time constraints as their primary reason for not conducting teach back, proving once again that time was once of the largest barriers to successful HIV education and utilization of the Teach Back Method.

Chapter V: Discussion

Summary and Recommendations

This descriptive study utilized qualitative and quantitative methods to assess the feasibility of creating and implementing a culturally-relevant HIV prevention curriculum for migrant farmworkers through the South Georgia Farmworker Health Project. The study aimed to:

1. Evaluate the educational needs and preferences of farmworkers
2. Evaluate the process of conducting the HIV curriculum
3. Evaluate the structure and content of the HIV curriculum

The results of the study show that ultimately conducting an HIV training for migrant farm workers is feasible, despite the logistical challenges faced during implementation. Each stage was intended to provide feedback on a particular aspect of the curriculum. The following is a summary of findings regarding curriculum content, format, and administration using the Teach Back Method. Recommendations for future implementations of the curriculum at the SGFWHP clinic are included at the end of each section.

Content

HIV training materials were created based on concepts identified through the analysis of preliminary needs assessment data. Overall, participants demonstrated low awareness of HIV as illustrated by the lack of risk perception and low levels of knowledge regarding transmission methods. The data showed that while many of the participants understood the risk of unprotected sex and sex with multiple partners, several associated risk directly with promiscuity rather than with the level and consistency of protection used with multiple partners. Based on the results, the *Let's Talk about HIV* brochure was designed to address the basics of HIV and HIV testing. This

information was used in conjunction with insights gained from the literature review and feedback from clinic coordinators to design the brochure.

The materials addressed four main domains: definitions of HIV and AIDs, common myths, methods of HIV transmission, and methods of self-protection from HIV. The ratings of the materials given by PA students suggest that they found the content of the current materials acceptable. In addition to these topics, feedback from PA students showed that future education sessions should include information on appropriate condom usage. Such conversations may involve educating farmworkers on how to use condoms and where to acquire them. PA students also requested flip charts with diagrams for observers and instructions for educators to assist with the education process.

Variations in perceptions of protective behaviors among farmworkers revealed the necessity for more tailored conversations with married individuals or individuals in long term monogamous relationships. Such discussions may include the importance of partner communication regarding condom use and exclusivity. One way to achieve this is to incorporate the Couples HIV Testing and Counseling (CHTC) program, which has been found to be effective in reducing sexual risk taking behavior and is recommended by the World Health Organization as part of HIV prevention strategies (WHO, 2012).

Finally while alcohol use was identified as a significant risk factor for HIV among migrant farmworkers within the literature review (Painter, 2008; Villarejo, 2003), the refinement phase illustrated that many participants did not consume alcohol. As such, future education sessions may want to assess an individual's alcohol usage before engaging this behavior as a risk factor.

Additional Recommendations:

- **Provide education regarding condom usage**
- **Utilize condom demonstration models or infographic flip charts to engage patient through tactile/visual learning**
- **Utilize demonstration videos to facilitate education on condom use**
- **Incorporate Couples HIV Testing and Counseling (CHTC) into training protocol for individuals in long term relationships**
- **Screen patients regarding risk factors such as alcohol abuse prior to educating**

<u>*Format*</u>

In order to create a culturally and linguistically appropriate curriculum, demographic data was used to guide development and translation of the content. Data indicated that the farmworker sample was relatively young, male, and primarily spoke Spanish. As such, the brochure utilized terminology and visuals that would appeal to this demographic. The brochure was created to act as a conversational tool between the patient and provider to accommodate farmworker preferences. However, pilot testing showed that several participants spoke Guatemalan and Mexican dialects, and were not able to effectively understand the ideas presented in the brochure and Teach Back form.

While the importance of the education session was generally understood by participants, educators oftentimes needed to contextualize the training to meet participants at their current level of understanding of HIV in order to engage them in the education process. This was especially true for patients who seemed hesitant or reserved in their conversations about safe sex practices and HIV in general. The pairing of the curriculum with materials like condoms assisted in beginning this conversation and allowed participants to leave with a concrete understanding of how condoms can be used for protection. Based on observations of education sessions, several Haitian participants stated that they were aware AIDS. They attributed this to pervasive educational campaigns in Haiti. However, participants did not seem to be as familiar with the

concept of HIV or the differences between HIV and AIDS. For such participants, the training

needed to be anchored in the concept of AIDS to help contextualize the importance of HIV.

Additional Recommendations:
- **Translate brochure into additional languages, particularly Guatemalan dialects**
- **Ensure condoms are included in every supply bag given to clinic patients**

Teach Back Method and Curriculum Administration

The pilot study illustrated that Teach Back was a promising method of reducing patient

provider miscommunication in the clinic setting. Conducting Teach Back allowed trainers to

identify areas of education that required additional review and was equally effective at

identifying gaps in communication across demographic groups. Moreover, PA students

supported the usage of Teach Back. More than half of the PA students used the Teach Back

Method every time or almost every time they conducted the training. Moreover, over half of

those who used Teach Back found it to be helpful.

Pilot testing demonstrated that education sessions lasted between 10-15 minutes. The use

of the HIV Perceptions Scale contributed significantly to this time. The most commonly cited

barrier to conducting training was inadequate time to conduct HIV training along with the

regular clinical workflow. Among those who did not use teach back every time, 36% cited

patient time constraints as their primary reason for not conducting teach back. Perceived lack of

time was once of the largest barriers to successful HIV education and utilization of the Teach

Back Method.

Of the administration modalities utilized over the course of the pilot study, translator

conducted educations were the most efficient. Allowing the translators to provide training while

PA students reported to their preceptors engaged the patient during what would otherwise be idle. However, another barrier was the lack of translators trained to conduct HIV training.

Additional Recommendations:

- **Train translators on the Teach Back Method and brochure prior to departure**
- **Recruit additional translators**
- **Remove HIV Perceptions Scale from future education sessions**

<u>**Limitations**</u>

This study was limited by several factors. During the design stage, the needs assessment survey failed to adequately capture the cultural and linguistic variety of the sample. While the sample suggested that the population was entirely Spanish speaking and of Mexican origin, the pilot study revealed a greater diversity within the farmworker population. There are several Needs assessment did not pick up on Guatemalan dialects. As such, it was difficult to provide education for Guatemalan individuals who did not speak Spanish or English. Marital status was not collected during the needs assessment. This data could have provided insight into differences in understanding among married and unmarried individuals earlier in the design process.

Logistical barriers were also present during the implementation phase. The occurrence of excessive rains during pilot testing led to a smaller cohort of clients than the clinic usually receives. Clinic administrator stated that inclement weather causes caused many farm workers to travel south to Florida in order to continue picking. As such, the sample was limited to individuals who did not travel.

The refinement stage involved understanding the structure of the program from the Physician Assistant student and farmworker perspective. While both of these surveys produced vital information regarding the utility of the curriculum, translator feedback would have also been useful in understanding their needs as educators. However, the refinement stage did not

gather feedback from translators to understand their experiences of conducting the training. Future education sessions will benefit from surveying translators regarding their experiences and incorporating changes to improve translator facilitated education sessions.

Admittedly, the education process and material was strongly heteronormative. Participant sexuality was not recorded during the needs assessment or pilot study process. Suggestions for risk reduction were based off of heterosexual relationship norms and focused mainly on male condom usage. Differences among individuals of varying sexual and gender identities may influence the broader applicability of the education material. Future research should consider the role of gender and sexuality in HIV education among farmworkers.

Finally, this study was a post-test only feasibility study. Due to the inherent difficulty in tracking migratory farm worker populations, the study was limited in its ability to conduct a Pre-Post Test design to assess change in understanding of HIV among farm workers. While the intention of the study was not explicitly to assess the efficacy of the content in improving adherence to or understanding of protective behaviors, future efficacy studies should aim to assess the effect of the intervention.

Conclusion

Farmworkers are an underserved population within healthcare. They are faced with unique health challenges due to the nature of their work. These needs are further exacerbated by structural barriers that limit their ability to access health care services (Hoerster et al., 2011). Due to the unique combination of primary and secondary risk factors farmworkers experience, they are at increased susceptibility to HIV infection. The goal of this study was to create a culturally relevant HIV curriculum that can be used by the South Georgia Farmworker Health Project to provide information to their patients during clinic visits. Ultimately, the goal was achieved by

creating an informational brochure and Teach Back form. While the provision of education does not address the underlying structural factors which affect farmworkers, this study is a part of a larger body of work that aims to provide farmworkers with appropriate access to health information and care.

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1. **What do you think puts someone at risk for HIV?**

2. **Have you ever been tested for HIV?**
    Yes   No

    If Yes, why did you get tested?

3. **Are you worried about getting HIV?**
    Yes   No

    If No, why not?

4. **When was the last time you had sex without a condom?**

5. **Would you like to learn more about HIV?**
    Yes   No

    If Yes, how would you like to learn?

    A Lecture   A Short Video   Talking to your doctor

Age_____   **Gender**: M/F   **Ethnicity**_____   **Primary Language**: Spanish/Haitian/English/Other

HIV is preventable!

1. Always wear a condom!
Using condoms protects you **and** your partner. Use them **every time** you have sex. Tell your partner you will not have sex without a condom. If you do not have condoms, ask us where you can get them for free.

2. Talk to your partner about Condoms.
Talking about sex is hard but important. You or your partner can get STDs from other partners. Someone may have an STD and not know it. Use condoms with **every** partner. Talk to your partner about having other partners. If possible, try to **reduce** the number of partners you have.

3. Don't share needles.
Sharing needles can put you at risk for diseases like HIV and Hepatitis C. Do **not** share your needles or use other people's needles. If you have to share needles, **clean** them first using household bleach.

4. Don't abuse alcohol or drugs
When you drink too much or use drugs, you don't make safe choices. Avoid sex while you are using drugs or alcohol. Try to drink **less** than you drink now. Try to quit drugs.

5. Talk to us!
There is no weakness or shame in talking to your doctor about HIV. It may seem hard at first, but we can work with you to find ways to better **protect** yourself and your partner.

Remember!

- **Always** wear a condom.

- You can get HIV from sharing needles **or** having sex without condoms.

- The **only** way to tell if you have HIV is to get an HIV test.

- HIV makes your immune system weak so your body can't fight infections.

- You **cannot** get rid of HIV once you have it.

- You **can't** get HIV by working with someone who has it.

South Georgia Farmworker Health Project

Let's Talk About HIV

Learn what HIV is and how you can protect yourself

Photo courtesy: mhpsalud.org

What is HIV?

HIV stands for **Human Immunodeficiency Virus.** When you have HIV, your body can't fight infections and diseases anymore.

HIV infection can lead to **AIDS**. Your body cannot get rid of HIV.

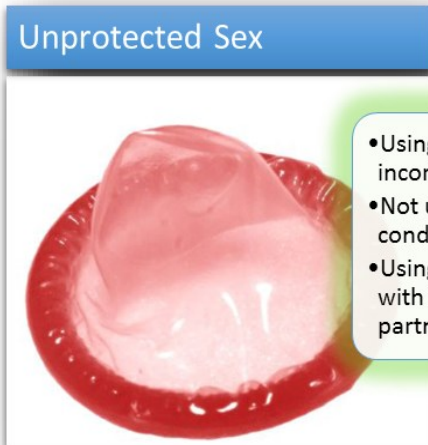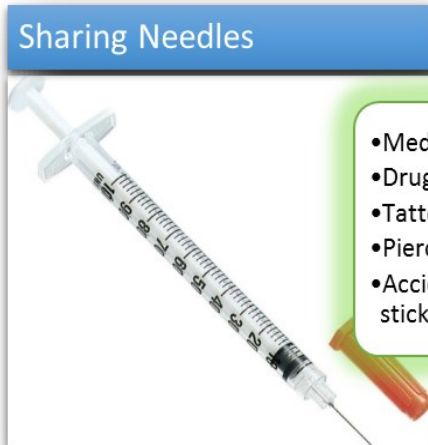**Once you have HIV, you always have it.**

Could I get HIV?

HIV can happen to **anyone,** including married couples, women, men, and children.

Having sex without a condom with an infected person **even once** can put you at risk.

How do I get HIV?

HIV is spread through four body fluids: semen, blood, vaginal fluid, and breast milk.

HIV can pass from person to person by:

Sharing Needles

- Medications
- Drugs
- Tattoos
- Piercings
- Accidental needle stick

Unprotected Sex

- Using condom incorrectly
- Not using a condom
- Using a condom with only some partners

HIV is a Sexually Transmitted Diseases (**STD**) like syphilis, gonorrhea, and hepatitis C.

STDs are spread through sexual contact with another person.

You can **NOT** get HIV from:
- Tears
- Sweat
- Feces/urine.

You also **can't** get HIV from touching things like dishes, toilet seats, or door knobs used by a person with HIV.

You can't get HIV by working with someone who has it.

How do I know if I have HIV?

You can't tell if someone has HIV by looking at them. Most people with HIV infection **don't** look sick. Someone may have HIV and not know it.

The only way to tell if you have HIV is to get an HIV test.

Sometimes, when a person first becomes infected, he or she may fever, headache, sore throat, fatigue, rash, and sores in the mouth. These signs can be different for everyone and some may not show any signs at all.

Protect Yourself. It shows that you care about your health and want to stay strong.

El VIH es prevenible!

1. Siempre use condones!
El uso de condones lo protege a usted y a su pareja. Úselos cada vez que tenga relaciones sexuales. Déjele saber a su pareja que no tendrá relaciones sexuales sin un condón. Si usted no tiene condones, pregúntenos donde los puede conseguir gratuitamente.

2. Hable con su pareja sobre el uso de condones.
Hablar sobre el sexo es difícil pero muy importante. Usted o su pareja pueden contraer una enfermedad venérea de otras parejas sexuales. Es posible que alguien tenga una enfermedad venérea y no lo sepa. Use condones con toda pareja sexual. Si es posible, trate de reducir el número de parejas que usted tiene.

3. No comparta agujas.
Compartir agujas lo pone en riesgo de contraer enfermedades como el VIH y Hepatitis C. No comparta sus agujas o use agujas de otras personas. Si usted tiene que compartir agujas, lávelas usando blanqueador.

4. No abuse del alcohol o drogas.
Cuando usted bebe mucho o usa drogas, no toma buenas decisiones. Evite relaciones sexuales cuando este tomado o endrogado. Trate de beber menos de lo que bebe ahora. Trate de parar de usar drogas.

5. Hable con nosotros !
Hablar con su médico sobre el VIH no es señal de debilidad o debe causar pena. Puede que sea difícil al principio, pero juntos podemos encontrar maneras de protegerlo a usted y su pareja.

Recuerde!

- **Siempre** use condones.

- Usted puede contraer el VIH compartiendo agujas o teniendo relaciones sin usar condones.

- La única manera de saber si usted tiene el VIH es haciéndose la prueba del VIH.

- El VIH debilita su sistema inmunológico y este hace que su cuerpo no pueda combatir infecciones.

- Usted no puede librarse del VIH después de ser infectado.

- El VIH no se puede contraer trabajando al lado de alguien que lo tenga.

South Georgia Farmworker Health Project

Hablemos Sobre el VIH

Edúquese sobre lo que es el VIH y como protegerse

Photo courtesy: mhpsalud.org

¿Qué es el VIH?

Las siglas VIH significan Virus de Inmunodeficiencia Humana. En una persona que tenga el VIH, su cuerpo no puede combatir infecciones o enfermedades.

La infección del VIH puede conducir al SIDA. El cuerpo no se pude liberar del VIH.

Después de contraído, el VIH se tiene por vida.

¿Puedo yo contraer el VIH?

Cualquier persona puede contraer el VIH, incluyendo personas casadas, mujeres, hombres y niños. Tener relaciones sexuales sin condón con una persona infectada **una sola vez** lo pone en riesgo to contraerlo.

¿Cómo se contrae el VIH?

El VIH se propaga por 4 fluidos corporales: semen, sangre, fluido vaginal y leche maternal.

El VIH se puede pasar de persona a persona por:

Compartiendo agujas
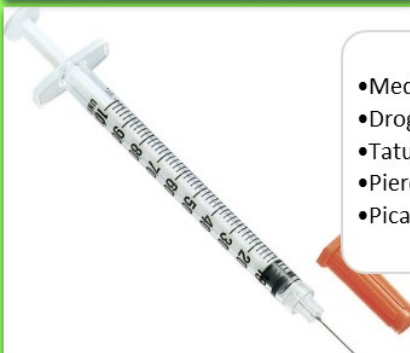
- Medicamentos
- Drogas
- Tatuajes
- Piercing
- Picadas de agujas

Sexo sin proteccion

- Usando condones incorrectamente
- No usando condones
- Usando con solo unas personas

El VIH es una enfermedad venérea, igual que la sífilis, gonorrea y la Hepatitis C.

Enfermedades venéreas se propagan por contacto sexual con otra persona.

Usted no puede contraer el VIH de:
- Lagrimas
- Sudor
- Heces/orina.

Usted tampoco puede contraer el VIH tocando cosas tales como platos, silla del inodoro o maniguetas de puertas usadas por una persona contagiada por el VIH.

EL VIH no se contagia trabajando al lado de una persona contagiada.

¿Cómo yo puedo saber si tengo VIH?

Usted no pude identificar a una persona con el VIH solo mirándola. La mayoría de personas con el VIH **no se ven** enfermas. Algunos puede que lo tengan y no lo saben.

La única manera de saber si tiene el VIH es haciéndose una prueba del VIH.

Hay veces, que después que una persona es infectada, él o ella tengan fiebre, dolor de cabeza, garganta agrietada, fatiga, sarpullido, o llagas en la boca.

Estas señales pueden ser diferente en cada persona, y pude que algunas no tengan ninguna.

Protéjase. Usted ha demostrado que le interesa su salud y quiere mantenerse saludable.

Ou Ka Prevente SIDA!

1. Toujou mete kapot

Le'w mete kapot li proteje'w ak patne'w. sevi avek li chak fwa ou fe sex. Di patne'w ou pap fe sex san kapot. Si w pa gen kapot, mande nou kibo ou ka jwenn yo gratis.

2. Pale avek patne w de kapot

Pale de sex difisil men li impotan. Ou mem ak patne'w ka rive gen STDs de lot patne nou te avek. Gen moun ki gen STD e ki pa konn sa. Sevi ak kapot ak chak patne. Pale avek patne'w de lot patne ou lot patne ou genyen. Sil possib, diminye nimewo patne ou genyen.

3. Pa Pataje zegwi

Patage zegwi ak lot ka mete'w nan dange pou pran malady takou SIDA ak Hepatitis C. Pa jam pataje zegwi'w oubyen sevi ak zegwi lot moun. Si'w oblije pataje zegwi, lave li avan avek klorox.

4. Pa abuse alkol ak drogs

Le'w bwe twop oubyen sevi ak drogs ou pa fe bon chwa. Evite fe sex le'w ap sevi drogs ak alkol. Eseye bwe mwens ke ou bwe kounye a. Eseye pa fe drogs.

5. Pale ak nou!

Pa gen febles ak wonte le'w pale ak dokte'w de SIDA. Li ka paret difisil avan, men nou ka travay avek ou pou jwenn pi bon fason pou proteje tet ou ak patne'w.

Sonje!

- Toujou mete kapot.

- Ou ka pran SIDA le ou pataje zegwi oubyen le ou fe sex san kapot.

- Sel jan ou konen ou gen SIDA se le w fe examen SIDA.

- SIDA fe system immunite w feb epi ko w vinn pa kapab goumen ak infeksyon yo.

- Ou pa ka debarase w de SIDA siw vinn genyen'l

- Ou pa ka gen SIDA si'w travay avek yon moun ki genyen'l.

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Ann Pale de SIDA

Aprann kisa SIDA ye e kijan ou ka proteje tet ou

Photo courtesy: mhpsalud.org

Kisa SIDA Ye?

SIDA se yon maladi kote moun pedi anpil immunite celile nan ko'l. Le'w gen SIDA, ko'w paka goumen infeksyon ak maladi yo anko.

Infeksyon SIDA ka ba'w AIDS. Ko'w pa ka debarase'l de SIDA.

Le'w gen SIDA, wap toujou genyen'l.
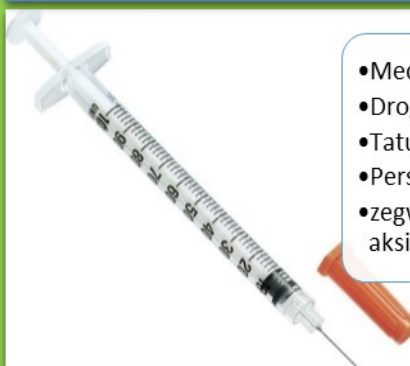
ESKE'm Ka Gen SIDA?

SIDA ka rive nimpot moun, mem moun ki marye, koup, famn, gason, ak timoun. Le'w fe sex avek yon moun san kapot ki infekte yon sel fwa ka mete la vi'w an dange.

Kijan Mka Pran SIDA?

SIDA ka propaje nan dlo nan ko'w kat fason: sperm, sang, vagin sekresyon ak let tete.

SIDA ka pase de yon a moun a yon lot tankou:

Patage zegwi

- Medikasyon
- Drogs
- Tatuai
- Perse ko'w
- zegwi pike 'w pa aksidan

Rapo sexuel san proteksyon

- Le'w pa byen mete kapot
- Ou pa mete kapot
- Sevi ak kapot avek kek patne pa tout

SIDA se yon maladi ki transmet sexuel (STD) tankou syphilis, gonorrhea, e hepatitis C.

STDs propaje pa kontak sexuel avek yon lot moun.

Ou pa ka gen SIDA de:
- Dlo ki sot nan je w
- Pespirasyon
- Poupou/pipi

Ou pa ka gen SIDA tou si'w manyen bagay tankou asyet, chez twalet, pwagne pot ke yon moun ki gen sida sevi avek.

Ou Pa ka Gen SIDA si wap travay ak yon moun ki genyen'l.

Kijan poum konen si'm gen SIDA?

Ou pap ka konen si yonmoun gen SIDA pendan wap gade'l. Laplipa moun ki infekte ak SIDA pa semble yo malad. Gen moun ki gen SIDA ki pap mem konen.

Sel jan ou ka konen ou gen SIDA se si ou pran examen SIDA

Gen de fwa, le yon moun fek gen infeksyon an, li ka gen fyev, maltet, malgoj, fatige, bouton, e maling nan bouch. Sign say o ka diferan pou tout moun e genyen ki ka pa mem montre sign ditou.

Proteje Tet ou. Li montre ke ou renmen sante w e ou vle rete ferm.

LET'S TALK ABOUT HIV TEACH BACK FORM

DIRECTIONS

1. Review the pamphlet with the client. Pay particular attention to the **Blue text** by asking if the client has any questions regarding the information.

2. Perform teach back on the material by asking the questions outlined in section 1. Use YES or NO to indicate if the client had any difficulty answering the questions. If the client does not answer correctly, provide feedback using the correction prompt.

3. Ask the client to rate their agreement with each statement given in section 2.

4. Include any comments or feedback in the Comment Box.

Demographics:

Age_____   Sex (Circle one): M F Other   Married (Circle one)? Y   N

Ethnicity_____   Primary Language_____

SECTION 1: SAY: We've talked many HIV topics. I want to make sure I explained it all clearly. Could you tell me **[ASK]**

Concept	Question	Correct? (Y/N)	Correction Prompt
Definitions	**What is the only sure way to tell if someone has HIV?**		HIV Test
Transmission	**How can someone get HIV?**		Unprotected sex, needle sharing
HIV Myths	**Can you get HIV by working with someone?**		No, HIV is not spread by tears, sweat, feces/urine
Protection	**What are two ways you can protect yourself from HIV?**		Reduce partners, use condoms every time, don't share needles.

SECTION 2: SAY: On a scale of 1 to 5, with 1 meaning "Definitely not" and 5 meaning "Definitely Yes", how much do you agree with the following: **[READ]**

	Definitely Not 1	Probably Not 2	Maybe 3	Probably Yes 4	Definitely Yes 5
I can correctly use a condom every time I have sex.					
I am worried about getting HIV.					
I think condoms will help protect me from HIV.					
Condoms are hard to get.					
If I get HIV, I will get very sick.					
I can talk to my partner about wearing a condom before we have sex.					
Only people who "sleep around" get HIV.					
I DO NOT think it's important to use condoms every time I have sex.					
HIV tests are NOT easily available.					
HIV is a big health problem for farmworkers.					
I can reduce my alcohol use before I have sex.					
I am worried about getting HIV from other workers.					
I would feel better if my partner got tested for HIV.					
My partner/friend would make fun of me for using condoms.					
If I got HIV, it would be more serious than other diseases.					
This talk was useful for me.					
I learned more about HIV from this talk than I knew before.					

Comments Box: Please include any additional client comments below

Farm Worker HIV Education PA Feedback

Thank you for a successful Fall Clinic! We are gathering vital feedback for the HIV education that we piloted this weekend. Your feedback will help us improve the education materials and lay the foundation for an effective HIV prevention program. Based on your experiences using the materials, please answer the following:

1. **Do you feel this educational HIV training is needed in the farm worker population that you served?** *
   Mark only one oval.

   ◯ Yes

   ◯ No

   ◯ Unsure

2. **Which HIV related topics do you believe are most relevant for the population** *
   Please select 3
   Check all that apply.

   ☐ Appropriate condom usage

   ☐ Basic introduction to HIV

   ☐ HIV Transmission

   ☐ HIV Symptoms

   ☐ Hepatitis/HIV coinfections

   ☐ Tuberculosis/HIV coinfections

   ☐ STDs/HIV cofinfection

   ☐ Mental Illness/HIV comorbidity

   ☐ Substance Abuse/HIV comorbidity

   ☐ Other: ....

Brochure Feedback

The following questions assess your experience using the trifold brochure that was given to patients for HIV education.

3. **On a scale of 1-5, with 5 indicating very useful, please rate the usefulness of the content in the "Let's Talk about HIV"** *
   Mark only one oval.

	1	2	3	4	5	
Not useful at all	◯	◯	◯	◯	◯	Very useful

4. **On a scale of 1-5, with 5 indicating very appropriate, please rate the appropriateness of the length of the "Let's Talk about HIV"** *

Mark only one oval.

	1	2	3	4	5	
Very Inappropriate	⬭	⬭	⬭	⬭	⬭	Very Appropriate

5. **On a scale of 1-5, with 5 indicating very easy, please rate the difficulty of using the "Let's Talk about HIV" brochure** *

Mark only one oval.

	1	2	3	4	5	
Very Difficult	⬭	⬭	⬭	⬭	⬭	Very Easy

Logistics

The following questions assess your experience of incorporating the training materials into your patient encounter.

6. **How did you administer the training?** *

Check all that apply
Check all that apply.

☐ My translator conducted the training alone

☐ I conducted the training through a translator

☐ I conducted the training myself

☐ Other: _____

7. **On a scale of 1-5, with 5 indicating very easy, please rate the difficulty of conducting the training through the translator alone** *

Mark only one oval.

◯ 1 Very Difficult

◯ 2 Difficult

◯ 3 Neutral

◯ 4 Easy

◯ 5 Very Easy

◯ My translator did not conduct the training alone

8. **On a scale of 1-5, with 5 indicating very easy, please rate the difficulty of conducting the training with translator assistance** *

   Mark only one oval.

   ◯ 1 Very Difficult

   ◯ 2 Difficult

   ◯ 3 Neutral

   ◯ 4 Easy

   ◯ 5 Very Easy

   ◯ I did not conduct the training with translator assistance

9. **On a scale of 1-5, with 5 indicating very easy, please rate the difficulty of conducting the training yourself** *

   Mark only one oval.

   ◯ 1 Very Difficult

   ◯ 2 Difficult

   ◯ 3 Neutral

   ◯ 4 Easy

   ◯ 5 Very Easy

   ◯ I did not conduct the training alone

HIV Teachback Form

The following questions assess your experience using HIV form that you were asked to complete with the patients. Focus on the front page, which included four questions to review with the patient.

10. **How frequently did you use teach back in your HIV education?**

    Mark only one oval.

    ◯ Every time

    ◯ Almost every time

    ◯ Occasionally

    ◯ Almost never

    ◯ Never

11. **If you did not use teach back, why not?**

Check all that apply

Check all that apply.

- [ ] Patient time constraints
- [ ] Clinic time constraints
- [ ] It was not useful for this population
- [ ] It was not necessary
- [ ] It was difficult to translate
- [ ] Did not understand how to use teach back
- [ ] I always used teach back
- [ ] My translator conducted the trainings
- [ ] Other: ....

12. **If you did use the teach back questions, did you find the questions helpful in reviewing the information in the brochure?**

Mark only one oval.

- ( ) Yes
- ( ) No
- ( ) Unsure
- ( ) My Translator conducted all of my trainings
- ( ) I did not use teach back

13. **What other kinds of materials would help you facilitate HIV training?**

Check all that apply

Check all that apply.

- [ ] Flip chart with diagrams for observers and instructions for facilitators
- [ ] Condom for demonstration
- [ ] Other: ....

14. **Do you have any additional feedback about the training that would help us improve it?**

....

....

....

....

....

Thank you!

Your feedback and support is vital to this project. Thank you for your contribution. For any inquiries, please contact Mitali Thakore at mitali.thakore@emory.edu