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Dorie Josma Date

Development and implementation of a sexually transmitted infections (STIs) and HIV education curriculum for at-risk young people and adults in rural communities in Haiti:
A Special Studies Project

By:

Dorie Josma, B.S.

Master of Public Health

Hubert Department of Global Health

_____

Roger Rochat, MD
Committee Chair

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By:

Dorie Josma, B.S.

Bachelor of Science in Nutritional Sciences
University of Florida
2017

Thesis Chair: Roger Rochat, MD

An abstract of
A thesis submitted to the Faculty of the
Rollins School of Public Health of Emory University
in partial fulfillment of the requirements for the degree of Master of Public Health in Global Health
2019

Abstract

Development and implementation of a sexually transmitted infections (STIs) and HIV education curriculum for at-risk young people and adults in rural communities in Haiti:
A Special Studies Project

By: Dorie Josma

Background: In Haiti, sexually transmitted infections (STIs) and HIV education and services are less accessible in rural areas than in urban areas. Often, local clinics and grassroots organizations that play a significant role in supplying healthcare services to rural communities lack the resources to provide STIs and HIV-centered education and services. A plethora of research data has revealed an increase in prevalence and incidence rates of STIs and HIV infections among people living in rural communities. Additional research has also recommended increasing STIs and HIV education to improve people's knowledge of sexual health and prevention methods against STIs and HIV.

Purpose: The purpose of this thesis was to develop a culturally appropriate STIs and HIV education curriculum that can be implemented in health and local community organizations in rural areas in Haiti. The five-module STIs and HIV education curriculum was designed to provide health educators with a tool that they can use to increase STIs and HIV knowledge among people living in rural communities.

Methods: The STIs and HIV education curriculum was developed with inputs from clinic staff from NOVA Hope for Haiti, Inc (NOVA) and community members in Cavaillon, Haiti. The project team utilized qualitative research, the Health Belief Model (HBM), and Community Based Participatory Action Research (CBPAR) to enhance curriculum development and implementation. The STIs and HIV education curriculum, consisting of five modules, was implemented at a community health organization (NOVA) and was evaluated using pre-and-post-tests and a course evaluation survey.

Results: An average of 25 community members between the ages of 18-35 years old participated in the sexual and reproductive health (SRH) education project. The SRH project lasted two hours for five days, followed by an optional four-hour Training-of-Trainers session on a separate day. Pre-and-post-test evaluations showed a statistically significant improvement in knowledge among participants. The curriculum was revised, and a final curriculum was created based on inputs from the participants, clinic staff, and classroom observations.

Discussion: The STIs and HIV education curriculum provides a tool that can be used to educate community members in rural parts of Haiti about STIs and HIV. It can also serve as a foundation to develop a more comprehensive sexual health education curriculum. Additionally, educational interventions are not enough to change health behaviors. Implementation of behavioral-change interventions may be necessary to improve adoption of healthy sexual health practices.

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Acknowledgments

I must publicly acknowledge my life companion, God, who, since I started my Master of Public Health journey at the Rollins School of Public Health (RSPH), Emory University, responded to my request to create this exact thesis. Forever will You be praised. I would like to thank myself for my dedication to the vision and for pushing forward through this testing phase of my academic career. I'd like to thank Dr. Joanne McGriff, my practicum advisor, for your support, assistance, and affirmation; you believed in the project in its entirety when most people doubted it. To my thesis committee chair, Dr. Roger Rochat, thank you for advising me and allowing me to create what I had envisioned for this thesis. I would like to thank my co-researcher and friend, Cassandra Savino. Your passion, dedication, and motivation to our project inspired me and kept me motivated all the way through. A special thank you to the NOVA Hope for Haiti, Inc. (NOVA) board, Dr. Nixon Altenord, and the clinic staff for your support. My most profound appreciation goes to the community of Cavaillon for having welcomed me, encouraged me, and participated in all aspects of the health education project. Lastly, I would like to thank my friends and family for supporting me throughout this journey.

"[5] Trust in the Lord with all your heart and lean not on your own understanding; [6] in all your ways submit to him, and he will make your paths straight." (*New International Version, Proverbs 3:5-6*)

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Chapter 1: Introduction and Background

Problem Statement

In Haiti, sexually transmitted infections (STIs) and HIV education and services are less accessible in rural areas than in urban areas. Often, local clinics and grassroots organizations that play a significant role in supplying sexual health services to rural communities lack the funding to do so. Additionally, these organizations lack consistent resources such as condoms, testing kits, education handouts and tools, and community events that focus on sexual health information delivery. Moreover, lack of internet access, information in Haitian Creole, and low literacy rates pose barriers to increased sexual health education. Firstly, in rural areas, 17% of the population has access to electricity compared to 65% of the population in urban areas. Also, while 32% of the population is covered with mobile cellular networks, only 12% of individuals have consistent access to the internet (Haiti-Rural population, 2016). Therefore, simple google searches are not possible for most people living in rural areas. Secondly, if individuals have access to the internet and charged electronics, they may experience language barriers as most of the searchable online STIs and HIV health information is in French or in English. Thirdly, 40% of the population is illiterate, with illiteracy rate being higher in rural areas compared to urban areas. Lack of literacy, specifically in rural areas, influence people's inability to access written information available at their nearest health organizations (Haiti Population 2018, 2018).

A STIs and HIV education curriculum that considers those barriers and applies proper delivery methods would serve as a tool to increase STIs and HIV knowledge among people living in rural areas. Those delivery methods include using written and verbal information infographics, videos, and diverse community-based activities to engage people regardless of their learning styles, education level, and literacy status.

Purpose Statement

The purpose of this thesis is to develop a STIs and HIV education curriculum that rural health organizations and community members can use to increase STIs and HIV knowledge within their communities. This curriculum is developed as an effort to respond to the increasing need for STIs and HIV education and to provide an educational tool that can be used to educate at-risk young adults and adults living in rural parts of Haiti.

- Objectives:
    - *Objective 1:* Identify common STIs in the community
    - *Objective 2:* Identify barriers and facilitators of STIs and HIV education
    - *Objective 3:* Identify current organizational and community efforts for STIs and HIV education and services
    - *Objective 4:* Develop a culturally appropriate and community-specific STIs and HIV education curriculum for at-risk young people and adults in rural communities in Haiti

Introduction

The Burden of STIs and HIV in Haiti

Though patterns of disease such as STIs are generally higher in urban areas of Haiti, a shift in disease epidemiology has occurred (Carmen et al., 2014). Several studies have discovered increasing rates of STIs including HIV among young people within rural communities in rural areas. Women and young girls are particularly at a high risk (Carver et al., 2014; Cayemittes et al., 2013; Flaviehalais, 2015; Haiti-EMMUS-VI, 2017; Women and girls, HIV and AIDS 2017). Studies have recommended increased STIs education and services in those areas to improve health outcomes (Fitzgerald et al., 2000; Logie et al., 2014). Haiti's long

history of weak infrastructure, political and economic instability have affected the health of the population, especially in the area of sexual health. The Haitian government struggles to meet the health needs of the people. Non-governmental organizations (NGOs) and international organizations are increasingly becoming the leading health care providers in Haiti. These organizations also play a significant role in preventative care such as STIs and HIV prevention education and services (Redmond, 2010; Young, 2018).

Though NGOs' presence in the healthcare system is extensive, healthcare services are less accessible in rural areas. Rural communities lack sexual and reproductive health resources that focus on STIs and HIV education. This catalyzes the increasing rates of STIs and HIV. In the 1980s, Haiti experienced an HIV epidemic. The Haitian government, NGOs, and international organizations worked together to reduce HIV rates in the country. At that time HIV rates were as high as 10% in urban cities and 5% in rural areas (Marcias-Chapula, 2000). Currently, the prevalence rate of HIV is 1.9% countrywide which speaks loudly about the success of HIV interventions in the country (Haiti, 2017). As a result, sexual health research and services in Haiti have become synonymous with HIV research and care; thus, other STIs are generally ignored.

Such an attitude is evident in the literature. Most sexual health information about Haiti is HIV-centered. Different data collection efforts such as population surveys, regional studies, and other forms of research address the HIV status of Haiti. On the other hand, the sparse information on STIs, especially information that emerged from different rural communities, comes from small-scale studies. Nevertheless, much of what is known about HIV combined with limited details on STIs can be used to understand the sexual health needs of the population. Recent Demographic Health Survey (DHS) data from Haiti indicated that 36.2% and 40.8% of

females from age group 15-19 years and 20-24 years, respectively, and 33.5% and 39.8% of males from those same age groups knew STIs and HIV prevention methods. STIs and HIV knowledge of prevention methods was also one-fourth lower in rural areas compared to urban centers (33% vs. 44%) (Haiti-EMMUS-VI, 2017). Haitian youth utilized condoms less consistently during sex and condom usage was lower among youth living in rural areas compared to those living in urban communities by nearly 20% (Cayemittes et al., 2013).

Moreover, the research identified lack of STIs education and services, inconsistent condom use, and multiple sexual partners were risk factors for the increasing rates of STIs and HIV within rural communities (Carmen et al., 2014; Carver et al., 2014). People living in urban areas have more access to sexual health education, treatment and care compared to rural areas. Currently, urban areas benefit from NGOs such as the Haitian Study Group on Kaposi's Sarcoma and Opportunistic Infections (GHESKIO), Fondation pour la Santé Réproductive l'Education Familiale (FOSREF), United Nations International Children's Emergency Fund (UNICEF), among many others. While those organizations attempt to increase sexual health access throughout the country, their current services are mainly centralized in urban areas. Rural areas depend on local clinics and grassroots organizations to meet their sexual health needs. However, these organizations lack the funding necessary to sustain the sexual health needs of the community. Additionally, distance and cost-of-care pose as barriers to access to sexual health services. Some people seeking sexual health care must travel many miles to their nearest health organizations and have to pay out-of-pocket for care (Haiti-Social, 2017).

STIs and HIV Education Curriculum Development

Sexual health educators use STIs and HIV education curriculums to facilitate education that helps community members learn more about STIs, HIV, and prevention methods. STIs and

HIV education curriculums also include activities that engage communities in ways to reduce risky sexual behaviors. A systematic review of effective curriculum-based sex and STI/HIV education found that effective curriculums had several characteristics. The process of curriculum development involved assessing the community to identify needs and assets of target groups, using a logic model to develop curriculum, and designing activities that are consistent with community values. The content of the curriculum involved focusing on clear health goals, addressing multiple risks and protective factors affecting sexual health, and teaching methodologies and activities that are appropriate for the target group. The implementation part of the curriculum involved securing the support of authorities, recruiting participants from the target group, selecting qualified educators to facilitate the education program, and implementing the curriculum with fidelity (Kirby et al., 2007). The STIs and HIV curriculum proposed in this thesis integrates methods from evidence-based interventions, research recommendations, and community-specific approaches in its development. Additionally, this curriculum utilized behavioral theories and research approaches such as the health belief model (HBM) and community-based participatory and action research (CBPAR), respectively, to strengthen its development.

STIs and HIV Education Curriculum Implementation

The STIs and HIV curriculum proposed in this thesis stemmed from the sexual and reproductive health (SRH) education project that my team and I developed and implemented in a rural community in Cavaillon, Haiti in collaboration with a health clinic called NOVA Hope for Haiti, Inc. (NOVA). NOVA is a US-based non-profit organization with a mission to provide sustainable medical care to people living in southwest Haiti. NOVA runs two permanent clinics in Cavaillon, Haiti that are staffed with doctors and nurses who work together to provide health

care to the surrounding communities. While the population of Cavaillon is about 47,000 people, less than 3,000 people live in Cavaillon proper; the majority of the population lives in the surrounding rural communities (IHSI, 2015).

In Cavaillon, the clinic staff at NOVA observed and documented high rates of recurring STIs and assessed that lack of education played a role in high STIs incidence rates in the community. To address sexual health needs and other conditions such as malnutrition and enteric diseases, NOVA wanted to create a permanent health education program for its patients and the community. Therefore, this SRH education project was the first of its type at NOVA. This curriculum employed the health belief model (HBM) and community-based participatory action research (CBPAR) to understand the barriers and facilitators of SRH education in the community. The team combined clinic data with research data and created a STIs and HIV education curriculum that they used as a tool to educate community members who participated in the SRH project.

Definition of Terms and Abbreviations

CBPAR-Community-Based Participatory Action Research: CBPAR is a form of research that involves communities in all parts of the research and places a strong emphasis on researcher-stakeholder collaboration. CBPAR focuses on identifying the needs of the community, including assets and barriers, engaging communities in research and its outcomes, enhancing community action that leads to community transformation and social change.

FOSREF- Fondation pour la Santé Réproductive l'Education Familiale: FOSREF is a Haitian NGO that was founded in 1988 with a mission to promote sexual and reproductive health education and services, HIV/AIDS prevention, and familial education throughout Haiti.

GHESKIO- Haitian Study Group on Kaposi's Sarcoma and Opportunistic Infections: GHESKIO is a Haitian organization that was founded to respond to Haiti's HIV epidemic in the 1980s. Currently, GHESKIO conducts a plethora of research on HIV and also provides many services such as voluntary HIV counseling and testing, HIV treatment, nutrition, clean water, and services and diagnosis to treat STIs within the population.

HBM- Health belief model: HBM is a psychological model that explains and predicts health behaviors. This model takes an individualistic approach to health behaviors and recognizes that individuals are the primary source of behaviors with a focus on four factors that serve as motivators for health behaviors. The four factors are individuals' perceived susceptibility, perceived severity, perceived benefits, and perceived barriers. Additionally, cues to action and self-efficacy serve as external and internal drivers of health behaviors.

MSPP-Ministère de la Santé Publique et de la Population: MSPP is the Haitian government's principal health agency that is responsible for population health, service delivery, policy-making, and health budget management.

NGOs-Non-governmental organizations: Specifically, in Haiti, these organizations operate at the local and national level. They are not funded by the Haitian government; however, they work with various parts of the Haitian government to assist people living in Haiti. In the areas of healthcare, NGOs play a significant role in healthcare service delivery throughout the country.

PIH-Partners in Health: Known in Haiti as Zanmi Lasante, PIH provides comprehensive health care to the Haitian population, especially to people in the most remote regions of the country.

Rural areas/communities: Areas of Haiti characterized by lower population density, less development land, and increased poverty.

STIs-Sexually transmitted infections: Bacterial, viral, and parasitic infections that are transmitted through sex and/or direct contact with bodily fluid with an infected individual. Common STIs: chlamydia, gonorrhea, syphilis, Herpes simplex 2, human papillomavirus (HPV), human immune-deficiency virus (HIV), trichomoniasis, pubic lice, among many others.

UNICEF-United Nations International Children's Emergency Fund: UNICEF is a United Nations (UN) program that provides development assistance to children, young people, and mothers who are vulnerable to HIV in developing countries.

Urban areas/cities: Areas in Haiti characterized by higher population density and higher levels of development.

Chapter 2: Literature Review

Pearl of the Antilles

Geography

The Republic of Haiti, also known as Haiti, is the second largest Caribbean island, and it is located between the Caribbean Sea and the Atlantic Ocean. Haiti shares the island of Hispaniola with the Dominican Republic, located to the east of Haiti (Where is Haiti? 2018). The geographical nature of the island can be described as mountainous because most of the terrains in Haiti contain mountains. The name "Haiti" is derived from the language of the indigenous Taino Indians meaning "land of high mountains" (Ferguson et al., 2018).

Structure

Haiti is divided into ten administrative departments. Each region has a department assembly and a council who regulate the financial resources for its respective department (Revolvy, n.d). Like other countries, Haiti has urban cities and rural areas. The differences between the urban and rural parts of the country are apparent. The urban areas of Haiti are more densely populated, more developed, and many of the inhabitants have non-agricultural occupations such as merchants, business entrepreneurs, and educators. The rural areas have a lower population density, the land is less developed, and most people perform subsistence agriculture. Urban cities such as Port-au-Prince, Cap-Haitian, and Saint-Marc play a significant role in the economic and cultural functions of the country because of the increased development and consistent urban population growth. Despite growing political and economic instabilities in urban areas, people move in large masses to urban areas seeking more economic opportunities (Living Conditions in Haiti, 2014).

Culture

The official languages in Haiti are Haitian Creole (Kreyòl) and French. 95% of the population is fluent in Haitian Creole compared to only 40% of the population being fluent in French. Fluency in both languages depends on educational levels, family dynamic, and employment status. While Haitian Creole is used in daily conversations, French is mainly used in government offices, businesses, and school settings (Chepkemoi, 2017). The Haitian culture has its roots in West African culture; therefore, the inhabitants adopt African culture and traditions compared to other Caribbean countries. The Haitian culture is rich and dynamic, and Haitians' sense of pride in their culture has been preserved over the years. Haitians display cultural pride in the cultural and religious practices of the Haitian Voodoo. Large-scale activities such as Kanaval, a yearly festival marked by beautiful wardrobes, dance, music, and adorned floats, and ordinary activities such as Haitian's beautifully decorated vehicles "tap-tap," cuisines, and way of life (Timothy et al., 2019).

Demographics of Haiti

Haiti, to date, has a population of about 11 million people. The capital of Haiti, Port-au-Prince is the largest city with nearly a million Haitians living in the capital. The population spreads throughout the land into urban and rural areas. 61.4% of the population lives in urban cities, and still many people continue to live in rural areas (Haiti Population (Live), 2018). 95% of the population is predominantly of African descent; mulattoes, Europeans, Arabs, and Asians make up the remaining 5% (Haiti Population 2018, 2018). The age distribution is slightly skewed to younger ages, with over 54% of the population being under the age of 25 (Haiti Population (Live), 2018). About 80% of people living in Haiti are Catholics, and 16% of the population are Protestants. However, many also believe and practices Haitian voodoo. Literacy

rate, the percentage of people over the age of 15 who can read and write, is 60%, a large portion of the population remains illiterate (Haiti Population 2018, 2018).

Government

Haiti is a semi-presidential republic with the president, elected by popular vote, is the head of the State. The president appoints the prime minister who serves as the head of government to enforce laws and protect national defense (Haiti: Government, 2018). Haiti has universal suffrage, and citizens have the right to vote. Despite this right to vote, some Haitians experience intimidation and selection voting during different political coups throughout Haitian history (Beeton, 2011).

History of Haiti

The Haitian revolution was a huge milestone in Haitian and international history. The Haitian revolution that lasted 12 years resulted in Haiti gaining its independence from France in 1804. As a result, Haiti become the first black independent country from a successful slave revolt. Following this independence, Haiti helped other countries like Columbia, Bolivia, Peru, Ecuador, and Venezuela in their quest for independence (Charles, 2017). The successful slave revolt created political and economic uneasiness in the United States (US) and Europe. Politically, the US government suppressed the news of the rebellion in efforts to deter US's slaves from revolting. On the economic front, France lost a major economic avenue because a majority of France's wealth came from the sugar industry in Haiti (Poverty & Health in Haiti, n.d).

The Haitian revolution also affected the people living in Haiti. Following the revolution, Haiti was financially burdened. The base of wealth from agriculture of sugar, spices, and coffee was ruined. Additionally, the social structure was in disarray. A small group of individuals

owned most of the country's wealth; thus, exacerbated economic disparities within the population (Munroe, 2007). The earliest Haitian leaders, Jean-Jacques Dessalines, Henri Christophe, and Alexandre Petion worked in different ways to salvage the economy in Haiti. Dessalines initiated a "fermage" system where the government owned the land and managers leased out properties, and the workers could keep 25% of the production for themselves. This system was further improved by Christophe who imposed stricter regulations and enforcement on production. During this period, production of sugar was as high as 75% of what it was during French governance before the Haitian revolution. Petion, however, did the least to improve the economy. To remunerate soldiers and officials, he distributed land amongst them and left everyone to work on their own with little to no involvement of the government. This represented the beginning of the culture of subsistence agriculture in Haiti (Munroe, 2007).

Following the Haitian revolution, the international community rejected Haiti; this affected Haiti's development both politically and economically. Haiti and its leaders did not have the support of international countries in building its new political structure. In the 1820s, the French government forced Haiti to pay enormous reparation fees in exchange for diplomatic recognition which worsened Haiti's economy and left Haiti in debt (Corbett, n.d; Henley, 2010). The economic status of Haiti was so weak that it did not experience the industrial revolution of 1854. The effects of lack of industrialization stunted Haiti's economic development. Currently, the Haitian economy relies heavily on agriculture mainly subsistence farming. Haiti imports more than 80% of the food its population consumes (Haiti Population 2018, 2018; Henley, 2010). Nevertheless, in the final decades of the 19th century, Haiti prospered. Haiti's sugar and rum industry grew, and the international community once again gained interest in Haiti (Corbett, n.d; Henley, 2010).

In 1915, the United States (US) invaded and occupied the country for 19 years in efforts to steer Haiti's government and economy in a direction that mirrors that of the US. Though the US's occupation brought clear economic benefits, the US took complete control of Haiti's militia and finances. Even after the US occupation ended in 1934, it left a blueprint of oppression and years of dictatorial ruling soon followed (Henley, 2010; Thompson, 2015; US Library of Congress, n.d). Most notably was the dictatorial ruling of the physician Francois Duvalier, also known as "Papa Doc." In mid-1960, Papa Doc seized power in a military coup. His militia, Tonton Makout, terrorized and violently attacked anyone who opposed Francois Duvalier.

In 1964, the national assembly established Duvalier as president for Life. During Francois Duvalier's presidency, large groups of Haitians especially educated people and professionals fled the country because of repression and poverty which resulted in a brain drain. After Papa doc passed, his son, Jean-Claude Duvalier "Baby Doc" succeeded his father and continued his father's dictatorial ruling. Eventually, Henri Namphy organized a coup that forced Baby Doc into exile. Before Baby Doc was exiled, he embezzled up to 80% of Haiti's international aid which had a huge effect on the Haitian economy (COHA, 2010; Henley, 2010; US Library of Congress, n.d).

Poverty in Haiti

Haiti's long-standing political and economic instability put Haiti in a state of chronic poverty. According to the World Bank, Haiti remains the most impoverished country in the western hemisphere and the most disadvantaged country in the Latin American and the Caribbean region. The wealthiest 20% own more than 64% of the country's total wealth, and the richest 1% possesses more than half of the country's wealth. Over 59% (6 million) of the population lives below the national poverty line of USD 2.41 per day, and more than 25% of the

population lives below the national extreme poverty line of USD 1.23 per day. 70% of rural communities are considered chronically poor compared to only 20% in urban cities when over 40% of the population lives in rural (Living Conditions in Haiti, 2014; Overview, 2018; Poverty Reduction, 2016).

Moreover, poor governance and corruption negatively affect the health sector in Haiti. The Haitian government underinvests in human capital, especially in the health sector, and unevenly distributes funding between urban and rural areas (Young, 2018). Only 20% of resources go to rural areas (Poverty Reduction, 2016). There is no universal health care in Haiti. Most people pay out-of-pocket for health care, and most of the population cannot afford care. Doctors Without Borders (MSF) and Partners in Health (PIH) provide health care to people, especially those living in the rural areas, however, long distance, wait-time, and cost-of-care make it difficult for people in remote areas to access care (Haiti: Access to healthcare, 2016; Poverty & Health in Haiti, n.d). International organizations also play a huge role in meeting the health needs of the population living in Haiti.

Following the earthquake in 2010 and other natural disasters, foundations distributed grants to different organizations, mainly non-governmental organizations (NGOs) to increase health care services. In term of sexual health, most of the grants went to HIV/AIDS research and care, but little to no funding was restricted to STIs services (Prina, 2010). Currently, the Haitian government is working with the USAID to improve access to quality healthcare and strengthen the health care system in Haiti. USAID and other donors are supporting reconstruction and training to improve access to primary care, HIV/AIDS, tuberculosis, and nutrition. However, the majority of this work is taking place in urban areas and thus increasing the gap in health care services between the urban and rural parts of the country (Rossi, 2017).

Overview of Sexually Transmitted Infections (STIs)

Specific bacteria, parasites, and viruses cause STIs. Unprotected anal, oral, and/or vaginal sexual activities including skin-to-skin contact with an infected individual are the main ways to transmit STIs. Common bacterial STIs include chlamydia, gonorrhea, and syphilis. Common parasitic STIs include trichomoniasis, pubic lice, and scabies (Venereal Diseases, 2018). Common viral STIs include Hepatitis B virus, herpes simplex virus 2 (HSV-2), human papillomavirus (HPV) and human immunodeficiency virus (HIV). People can know that they are infected with an STI if they experience common symptoms such as burning sensation when urinating, genital discharge, genital pain, itching. However, the majority of STIs such as chlamydia and gonorrhea are asymptomatic meaning that they show no symptoms. This is particularly dangerous because infected people may not know that they are infected, and they can spread the infections to others. For the STIs that do show symptoms, many of them share similar symptoms; therefore, proper diagnosis of the infection is salient for appropriate treatment (STD symptoms, 2018).

Antibiotics cure bacterial and parasitic STIs like chlamydia and trichomoniasis. However, anti-viral medications treat more severe viral STIs like HSV2 and HIV (Sexually Transmitted Diseases (STDs), 2017). For viral STIs like Hepatitis B and HPV, people can take vaccines to prevent the disease altogether. If infected with HPV, people can maintain a healthy lifestyle such as proper nutrition, adequate sleep, no smoking, and safe sex practices to allow the body to fight off the virus over time. When left untreated, STIs can cause serious health complications and chronic diseases such as pelvic inflammatory diseases (PID), complications during pregnancy, poor pregnancy outcomes, infertility in women, cancers and death (Venereal Disease, 2018).

STIs affect people all over the world. The World Health Organization (WHO), an essential agency in international public health, estimated that over a million STIs are acquired worldwide. Over 290 million women have at least one type of HPV (Sexually Transmitted Infections (STIs), 2016). Certain types of HPV like type 16 and 18 are associated with cervical cancer, and these types result in 266,000 deaths each year. Every year, 357 million people acquire one of the four main STIs: gonorrhea, syphilis, chlamydia, and trichomoniasis. Over 500 million people are estimated to become infected with HS2 (Sexually Transmitted Infections (STIs), 2016). Specifically, HIV affects people of any gender, stages of life, and parts of the world. Most recent statistics revealed that 36.9 million people are living with HIV and 1.8 million people acquired HIV in 2017 alone (Global HIV & AIDS Statistics, 2018). Moreover, 52% of people living with HIV are women (Women: HIV and AIDS, 2018). 3.9 million young people ages 15-24 and 1.8 million children less than 15 years old are living with HIV (Global HIV & AIDS Statistics, 2018). The burden of HIV is unusually high in parts of the world such as East and Southern Africa (19.4 million), Asia (5.1 million), Caribbean and Latin America (2.1 million) (HIV and AIDS Statistics, 2018).

The burden of STIs, especially HIV, have severe effects on individual and population health, especially in developing countries where access to STIs and HIV prevention education and services are sparse (Boonstra, 2016). Throughout the world, HIV has taken the spotlight as an STI of concern. Countries all around the world, including major organizations in HIV interventions such as the World Health Organization (WHO), the Joint United Nations Programme on HIV/AIDS (UNAIDS), the President's Emergency Plan for AIDS Relief (PEPFAR), among many others have developed and implemented interventions to prevent, treat, and eradicate the disease. Though HIV affects all countries around the world, Eastern and

Southern Africa, Asia, Caribbean, and Latin America have the highest prevalence of HIV (Global HIV and AIDS statistics, 2018).

Sexually Transmitted Infections (STIs) in Haiti

In the Caribbean and Latin America, it is impossible to talk about HIV without mentioning Haiti which bears the highest prevalence of HIV of any country in that region (Logie et al., 2012). The first cases of HIV in Haiti were discovered in the 1980s. Different researchers, including the Haitians research group, The Haitian Study Group on Kaposi's Sarcoma and Opportunistic Infections (GHESKIO), noticed that Kaposi's Sarcoma and other opportunistic infections coincided with the earliest discoveries of HIV/AIDS among the Haitian population.

Following the discovery of HIV in the country, the virus quickly spread and led to an epidemic. A study in the 1990s revealed that HIV prevalence in Haiti was high as 10% in urban areas and as high as 5% in rural areas (Marcias-Chapula, 2000). GHESKIO with a mission to prevent and reduce the impact of HIV in Haiti provided HIV care to infected people and conducted research that identified the risk factors of HIV among Haitians. Some of these risk factors included blood transfusion, sex work, and same-sex sexual activities. Since that discovery, infections through blood transfusion has declined due to regulations of blood transfusions. In the early 1980s, a high prevalence of HIV was discovered primarily among homosexuals and bisexuals. However, the proportions of HIV cases between these two groups decreased from 50% in 1983 to 1% in 1985 as heterosexual intercourse became the dominant mode of HIV transmission (Koenig et al., 2010).

Since the HIV epidemic in the 1980s, the research and financial contributions of GHESKIO, the Global Health Fund to fight AIDS, Tuberculosis, and Malaria, and the U.S President's Emergency Plan for AIDS Relief (PEPFAR) made an impact on the reduction of HIV

prevalence in Haiti. Haiti's HIV/AIDS program has been successful in treatment outcomes and the decline of HIV, and different HIV-related organizations have replicated in many other countries around the world. Despite HIV prevention efforts, Haiti still bears the highest burden of HIV in the western hemisphere with a prevalence of 1.9 (Haiti, 2017). Poor social, economic, and healthcare infrastructure compounded with the further collapse in these infrastructures because of the 7.0 magnitude earthquake in 2010 have pushed the country into further socio-economic despair affecting health and sexual health of people living in Haiti (Haiti Earthquake 2010, 2013).

The fight against HIV in Haiti has become a popular subject and has resulted in increased funding towards HIV programs and treatments. The plethora of information on Haiti's HIV status reflects this system of thinking. The HIV data come from different sources of epidemiologic studies and population surveys such as the Demographic Health Survey (DHS) and Enquete Mortalite, Morbidite et Utilisation des Services (EMMUS). The singular focus on HIV has resulted in the grave discounting of other STIs. Health organizations place less emphasis on sexual health education that focuses on STIs education and prevention even though STIs play a role in HIV infections and transmissions in the country. Research indicated that STIs increase people's risk of HIV infection. STIs cause inflammation and lesions on the skin and/or genital areas making it easier for HIV to enter the body (HIV/AIDS & STDs, 2017).

In Haiti, urban areas house the majority of SRH resources. Additionally, services such as STIs and HIV prevention education, condom distribution, and access to STIs screenings are more available in urban areas than in rural areas. However, rising STIs and HIV prevalence in rural areas demands increased interventions (Fitzgerald et al., 2000). Endemic prevalence of STIs and HIV are typical among the older population, but recent reports have shown high

incidence rates among the youth with females being the group most at-risk (Cayemittes et al., 2013). These new findings suggest that interventions that target at-risk groups like young people, women and girls are salient. A study that looked at the prevalence and risk factors for STIs in rural Haiti found rates of STIs like chlamydia, gonorrhea, and HIV are more elevated in rural areas. Barriers such as economic problems and lack of education were risk factors for high infection rates especially among women (Logie et al., 2014).

Limited access to sexual and reproductive health (SRH) education and services have severe implications for sexual health. Women and girls are particularly at risk. A research study found that 43% of the women in the study had a least one STI which put them more at risk of HIV (Fitzgerald et al., 2000). A recently published paper that looked at the effects of STIs and HIV education among displaced women in a rural town in Leogane valley found that these women were at higher risk of STIs and HIV because of limited access to sexual health services. After successful peer-led STIs and HIV education interventions, the researchers discovered that participants had increased knowledge of STIs and HIV. Subsequently, incidences of STIs and HIV among these women decreased. The success of the education intervention demonstrated that STIs and HIV prevention education could improve knowledge and decrease unsafe sexual practices (Logie et al., 2014).

STIs and HIV Education Efforts in Rural Communities

Efforts outside of Haiti

Looking at various education efforts in rural communities outside of Haiti is an excellent way to understand the impact of STIs and HIV education in communities' sexual health.

While STIs and HIV prevention education programs exist in the United States (US), challenges such as distance, lack of access to health care, and low household income in rural

areas make it difficult to integrate STIs and HIV education programs in rural parts of the US. The Center for Disease Control and Prevention (CDC) recommended strategies to reduce STIs in these areas, but many rural states do not have policies in place to support those policies. Health organizations have identified ways to change policies to reduce STIs and HIV rates among people in rural parts of the country. These policies include improved STIs screening, health insurance coverage for STIs testing, and increased health education programs. These efforts have primarily improved access to STIs and HIV education programs in rural parts of the US (Kelly, 2011).

A systematic review that looked at the effectiveness of school-based sexual health education programs in Sub-Saharan African found that STIs and HIV education programs promoted healthy sexual health practices (ex. condoms use) among young people. These interventions took many forms such as prevention education in schools, service delivery at youth centers, condom distribution, community-based interventions, and cash transfers to encourage young people to stay in school and avoid risky sexual behaviors. The study found that school-integrated sexual health education was the most inclusive because it provided comprehensive sexual health education and educated adolescents and young people sometimes before sexual debut (Sani et al., 2016).

Another group of researchers implemented an STD/HIV intervention and research program in Mwanza Region, NW Tanzania. The motivation behind this intervention was the high prevalence of STIs and HIV observed in rural communities in Mwanza Region. The researchers integrated this intervention at many levels. Department hospitals integrated STIs clinic, and the staff provided services and training. Regional health organizations coordinated STIs and HIV control activities. Different districts in Mwanza and health management teams

organized educational activities on STIs and HIV. Rural health centers, dispensaries, and national health facilities provided treatment, services, and education on STIs and HIV. This STD/HIV intervention improved STIs and HIV rates in that region (Changalucha et al., 2002).

The success of the Mwanza Region STD/HIV intervention and research program came from its design and emphasis on coalition building. The interventions targeted high-risk groups and equipped people with tools and skills to reduce their risky sexual health behaviors. Additionally, the program received the support of different organizations such as the government of Tanzania, Tanzanians National Institute for Medical Research, and the London School of Hygiene and Tropical Medicine. The program helped improve STIs services and education tools that made an impact on HIV incidence rate. The program applied a cost-effective method to enhance STIs services and treatment by mobilizing local communities and community members. Also, the program included truck stops that made STIs education and services more accessible to people living in remote areas of NW Tanzania (Changalucha et al., 2002).

Efforts in Haiti

As mentioned before, details about STIs in Haiti comes from smaller-scale studies. A community-based participatory action research (CBPAR) intervention focused on improving STIs and HIV knowledge among displaced women in Leogane, Haiti. The organizers engaged community members and trained women to deliver education. Following the intervention, the investigators discovered that peer health workers were effective in delivering individual and group-based STI/HIV prevention education. The investigators also found that knowledge of STIs and HIV increased, condom use also increased among women (Logie et al., 2014).

Sexual health disparities are apparent in Haiti. Sexual health resources are also unevenly distributed. There are fewer hospitals, clinics, and dispensaries that offer sexual health services

to rural areas compared to urban areas (Louis & Moloney, 2018). Organizations such as GHESKIO, FOSREF, and UNICEF provide STIs and HIV services, but their resources are unevenly distributed between urban and rural areas. Partners in Health (PIH) and Doctors Without Borders (MSF) have been more successful in increasing access to STIs and HIV services in rural areas. However, barriers such as distance and cost of health services remain a challenge.

Haiti's STIs and HIV education efforts are disparate from those seen in the US, Sub-Saharan Africa, and Tanzania. Firstly, the Haitian government and other health organizations are not actively requesting policy changes to address the sexual health needs of the population, especially for those living in rural areas. Matter of fact, the Haitian Ministry of Health (MSPP) that is responsible for country-wide health does not have available information on sexual health initiatives that target at-risk groups. Secondly, school-based interventions as was initiated in Sub-Saharan Africa and Tanzania are difficult in Haiti because NGOs, for-profit and religious organizations manage over 80% of the primary and secondary schools in Haiti (Education Fact Sheet, 2016). The Haitian government including MSPP lacks oversight and financial power to amend school curriculums to include sexual health. Lastly, coalition building is not heavily practiced in the sexual health sector in Haiti. From the Tanzania example, the intervention succeeded mainly because of coalition building and efforts that mobilized different organizations in improving STIs and HIV education programs within rural communities of Tanzania (Changalucha et al., 2002).

Knowledge Gaps in Sexually Transmitted Infections (STIs) and HIV in Haiti

Education is a fundamental part of any health intervention. Sexual and reproductive health education (SRH) is particularly salient for STIs prevention. Haiti's long-standing poverty,

political and economic instability, low education, and weak infrastructure have played a part in the sexual health of individuals and communities. With limited governmental support for the fundamental need of the people, sexual health unfailingly comes last to other areas of health. Haiti does not have a robust sexual health education foundation. As a result, most people do not have basic knowledge of the different STIs besides HIV. A report revealed that 60% of women surveyed claimed that they had heard of STIs other than HIV/AIDS (Georges, 2011). The overwhelming attention that is placed on HIV/AIDS in Haiti in comparison to other STIs explained such alarming discovery (Georges, 2011). Lack of sexual health education has a tremendous impact on STIs and HIV infections, especially among young Haitians. Young people in Haiti lack knowledge about STIs, and their sense of invulnerability to STIs often cause them to participate in unsafe sexual practices like multiple sexual partners, inconsistent and improper use of condoms.

Information from population surveys such as DHS and EMMUS were salient in understanding STIs and HIV knowledge, behaviors, and practices of different genders and age groups in Haiti. Most recent DHS data indicated that 36.2% (2126) and 40.8% (1878) of females and 33.5% (2080) and 39.8% (1553) of males from age group 15-19 years and 20-24 years respectively, knew STIs and HIV prevention methods. Among females, STIs and HIV knowledge on prevention methods were also lower in rural areas compared to urban centers (33% (2135) vs. 44% (1869)). Similarly, only 31.6% (2030) of males in rural areas had STIs and HIV knowledge on prevention methods compared to 42.0% (1603) of males in urban areas (Haiti-EMMUS-VI, 2017).

Knowledge of condom use as a means to prevent HIV was high among females and males. 87.6% (4004) and 90.4% (1537) of females and 88.4% (3633) and 90.3% (1206) of

males age group 15-24 years and 25-29 years, respectively, responded that condoms could reduce one's risk of contracting HIV. People in urban and rural areas also showed similar patterns, 89.2% (4489) of females in urban areas and 88.3% (5135) of females in rural areas compared to 88.4% (3655) of males in urban areas and 90.5% (4528) of males in rural areas believed that using condoms reduce people's risk of contradicting HIV. Similar trends among different sociodemographic groups were seen when asked if limiting sexual parents as well as using condoms and limiting sexual partners were appropriate methods to reduce the risk of HIV (Haiti-EMMUS-VI, 2017).

Though the percentage of knowledge for each different types of preventative measures against HIV were high, young people displayed a different pattern when asked about their knowledge of a method to prevent against HIV. Only 36.2% (2126) and 40.8% (1878) of females ages 15-19 and 20-24, respectively, and 33.5% (2080) and 39.8% (1553) of males of the same respective age group said they knew of a method to prevent HIV. Additionally, knowledge decreased with lower educational levels, 25.5% (130) among females with no education compared to 41.7% (2569) among those with a secondary education and 22.2% (73) among males with no education compared to 40.6% (2337) among those with a secondary education (Haiti-EMMUS-VI, 2017).

Knowledge gap on STIs and HIV influenced condom use and STI/HIV screening among Haitians. A study revealed that only 8.7 % and 24.7% of Haitian youth ages 15-19 years and 20-24 years, respectively, utilized a condom when engaged in sexual activities and condom usage was lower among those who lived in rural than urban areas (Cayemittes et al., 2013). STIs and HIV screening were also low among sexually active males and females. A report from a population health survey found that in 2012 only 21% of females and 13% of males ages 15-49

knew their HIV status. Though this was a huge increase in HIV testing when compared to the trend in HIV testing in 2006 (female: 8%, male: 5%), STIs testing was still low (Haiti 2012, 2012).

More recent data showed that though over 90% of women and men believed that HIV testing was necessary, less than 60% of males and females who were sexually active had ever gotten tested (Haiti-EMMUS-VI, 2017). The lack of STIs screening among sexually active people in Haiti poses a public health concern because this can lead to an increase in STIs and HIV transmission in the population. The data collected from surveys and epidemiologic studies showed an increased need for sexual health education, especially interventions that emphasize STIs prevention. Though collected data on STIs are sparse, HIV data may reflect similar patterns for STIs since the sexual health knowledge, attitudes and behaviors are similar.

Existing Sexually Transmitted Infections (STIs) and HIV Education/Services in Haiti

Since the discovery of HIV among the Haitian population in the 1980s, organizations such as GHESKIO, the Global Fund to Fight AIDS, TB, and Malaria, and PEPFAR, among others have provided funding, research, and programs to reduce the prevalence rate of HIV in Haiti. The results have been staggering. Haiti's HIV/AIDS program is one of the most successful in reducing HIV prevalence and closing the gaps in treatment outcomes. Haiti's HIV/AIDS program was fundamental in reducing the prevalence rate of HIV from 8% in the 1980s to the current 1.9%, and the program has been recognized and replicated for use in many countries around the world (Haiti, 2017; Koenig et al., 2010; Marcias-Chapula, 2000). Additionally, the partnership between the Haitian Ministry of Health (MSPP) and non-governmental organizations (NGOs) have been instrumental to national HIV/AIDS prevention

programs. These programs focused on improving knowledge of HIV risk factors, promoting safe sexual practices, and increasing access to condoms.

Historically, NGOs have been the primary way of funneling aid towards development in Haiti, especially in the areas of education and healthcare. NGOs' presence is ubiquitous on the island, and they supplement many areas where government assistance and provisions are inadequate. Organizations such as GHESKIO, Fondation pour la Santé Réproductive l'Education Familiale (FOSREF), Partners in Health (PIH), United Nations International Children's Emergency Fund (UNICEF) contribute to STI/HIV prevention and treatment programs in the country. These organizations provide services that alleviate the HIV conditions among the population.

The Haitian Global Health Alliance (GHESKIO): The main center of GHESKIO is in the capital of Haiti, Port-au-Prince, with a network of clinics throughout the country. The organization has a three-part mission which are clinical service, research, and training in HIV/AIDS and other related diseases. GHESKIO is the world's first institution that was founded to respond to the widespread HIV/AIDS epidemic. The Haitian government recognized GHESKIO as a critical organization for the welfare of the Haitian people. Though initially founded to fight HIV/AIDS, GHESKIO now provides a plethora of services to the Haitian population. These programs include voluntary HIV counseling and testing, HIV treatment, nutrition, clean water, and services and diagnosis to treat STIs within the population (Haitian Global Health Alliance, n.d).

Fondation pour la Santé Réproductive l'Education Familiale (FOSREF): FOSREF is a Haitian NGO that was founded in 1988. The organization's mission is to promote sexual and reproductive health education and services, HIV/AIDS prevention, and familial education

throughout the country. FOSREF is particularly committed to providing SRH services to high-risk targets such as young people, commercial sex workers (CSWs), and people living with HIV/AIDS (PLWHA). The organization tailors its education to target groups such as youths, women, and girls and engage them in making safer sexual decisions. The organization provides a plethora of services such as STIs diagnosis and treatment, family planning HIV/AIDS prevention programs, voluntary counseling, and testing for HIV, and prevention of HIV transmission of Mother to Child, among many other comprehensive SRH services. Additionally, FOSREF takes an interest in conducting knowledge, attitude, and practice (KAP) studies on SRH and HIV prevention to enhance their SRH/HIV/AIDS programs for youth and adults (FOSREF, n.d).

Partners in Health (PIH): PIH, working with the sister organization in Haiti as Zanmi Lasante, provides comprehensive health care to the Haitian population, especially to people in the most remote regions of the country. In the 1990s, PIH opened an ambulatory clinic to provide health care to community members. The clinic staff noticed cases of advanced AIDS which led them to introduce voluntary counseling and testing for HIV free of charge. Thereafter, PIH was able to supply HIV/AIDS patients with antiretroviral (ART) medication. PIH treatment and outcomes were significant and showed that HIV treatment was feasible in resource-poor settings in rural Haiti which led to the expansion of ART treatment in resource-poor settings (Haiti, n.d).

United Nations International Children's Emergency Fund (UNICEF): UNICEF is a United Nations (UN) program that provides development assistance to children and mothers in developing countries. UNICEF is active in the areas of HIV/AIDS among children and young people living in Haiti. The organization provides educational opportunity to vulnerable children

and young people about HIV prevention and treatment. UNICEF also supports programs like orphanages and the Right to Know program with the aim to promote HIV/ AIDS prevention among vulnerable children and young people (CHILD ALERT-HAITI, n.d).

The significance of these organizations as it pertains to HIV is lucid. Though for most of them the primary goal was HIV prevention, they have integrated some form of STIs prevention and treatment with HIV services. Studies indicated that STIs increase people's risk of contracting HIV. This knowledge was fundamental in reshaping the way HIV-centered organization went about sexual health. This knowledge also led NGOs to collaborate with the Haitian government to develop national plans to treat and prevent STIs as well as provide training to health care professionals to more accurately diagnose and treat STIs. Even though the success of STIs education in reducing HIV prevalence among people is apparent, most health organizations continued to focus their efforts on HIV instead of STIs as a whole. Additionally, the headquarters of many HIV-centered organizations in Haiti, except PIH, are all located in the urban areas of Haiti and access to services in rural and remote places continues to be a challenge. The limited educational projects on sexual and reproductive health for young people and adults in rural towns in Haiti limits their ability to reduce their risk of STIs and HIV infections.

Program Development Theory

Research approaches and behavioral models are essential elements to consider when developing a community-specific STIs and HIV education curriculum. Sexual health education focusses primarily on providing people with complete and accurate information to improve their knowledge of sexual health and well-being (Bridges & Hausser, 2014). Though, educational interventions are not enough to change health behaviors, sexual health curriculums that consider psychological models and frameworks to understand individual health behaviors can create more

effective educational tools. Additionally, research that involves individuals in the creation of these tools can build a stronger foundation onto which future behavioral change interventions can develop (Green, 2000). The health belief model (HBM) and community-based participatory action research (CBPAR) were the two main frameworks that guided the creation of this STIs and HIV education curriculum.

The HBM is one of the oldest and widely known psychological models that explains and predicts health behaviors. HBM engendered from the works of Godfrey Hochbaum, Irwin Rosenstock, and Stephen Kegels in the 1950s. This model takes an individualistic approach to health behaviors and recognizes that individuals are the primary source of behaviors with a focus on four factors that serve as motivators for health behaviors. The four factors are individuals' perceived susceptibility, perceived severity, perceived benefits, and perceived barriers. Additionally, cues to action and self-efficacy serve as external and internal drivers of health behaviors (Edberg, 2015).

Perceived susceptibility refers to an individual's perception of the chances of contracting a health disease. A study found that most behavioral change messages were ineffective because Haitian youths do not accurately perceive their risk for HIV (Devieux et al., 2013). This idea was further corroborated by another scientific research that discovered that the majority of Haitian adolescents believed that HIV could affect other people but not themsleves (Marcelin et al., 2006). Furthermore, perceptions of invulnerability among youths affect condom use. Only 18% of youths reported that they always or sometimes use a condom and 27% of the respondents reported that they used a condom at last sex (Holschneider & Alexander, 2003). One of the explanations was that Haitians youths did not feel motivated to use condoms because they did not feel at risk for HIV (Devieux et al., 2013). A study found that uninfected Haitians youths

perceived they were at little to no risk for HIV infection compared to infected youths (Dorjgochoo et al., 2009). People who believed that they could contract HIV were more likely to use condoms than those who believed that they were at little to no risk for infection (Emilien, 2008; Devieux et al., 2013).

Perceived severity refers to an individual's perception of the seriousness of the illness. A study that compared sexual risk behaviors among people in rural parts of Haiti versus those in urban parts found that perceived severity of HIV was lower in rural areas (7.7% vs. 15.5%). Additionally, people who knew someone who had AIDS or died from the disease were more likely to use condoms (Emilien, 2008). Lack of knowledge on STIs can also explain low levels of perceived severity of STIs. An STD awareness study found that 60% of women reported that they had not heard of other STIs besides HIV which may affect their perceptions on the severity of STIs in general (Cayemitte et al., 2001).

Perceived benefits are the positive effects that individuals perceive will occur for taking action. More than 80% of the population (rural and urban areas) believe that using a condom or abstaining from sex can prevent someone from being infected with HIV. Similarly, they believe that having multiple sexual partners increases one's risk for HIV (Haiti-EMMUS-VI, 2017). However, the perceived barriers for practicing healthy sexual behaviors involved perceived condom availability, brand appeal, and social norms. Those who believe that condoms are available were more likely to use condoms than those who perceived condoms to be unavailable (Astatke et al., 2009).

Other drivers of health behaviors include cues to action and self-efficacy. The majority of the population, both urban and rural, receive their education from the radio, billboards, and televisions. Campaigns that promote condom use are not unusual. People who listened to the

radio were 60% more likely to use condoms than those who did not (Emilien, 2008). Despite cue to action from different media outlets, only those who believed that they could take preventative measures against STIs were more likely to use condoms and adopt safer sexual behaviors (Georges, 2011).

Moreover, community-based participatory action research (CBPAR) is a form of research that involves communities in all parts of the research and places a strong emphasis on researcher-stakeholder collaboration. CBPAR focuses on identifying the needs of the community, including assets and barriers, engaging communities in research and its outcomes, enhancing community action that leads to community transformation and social change (CBPAR, 2011). Organizations such as UNICEF and FOSREF successfully adopted this form of research in promoting HIV/AIDS prevention among youth to drive social change. The UNICEF-Right to Know program focuses on education, information, and communication programs that provide youths with the skills to protect themselves against HIV.

Additionally, the program supports young people in developing their own HIV/AIDS programs to share their knowledge with their peers (UNICEF in action, 2018). Moreover, FOSREF facilitates reproductive health education and training with a focus on peer-workers as a method to increase knowledge of STIs among youths. FOSREF also provides resource such as counseling and STIs testing to enhance STIs prevention capacity of young people in Haiti (Devieux et al., 2013). Evidently, utilizing psychological and research models such as the HBM and CBPAR can strengthen educational tools and enhance the sustainability of health education programs.

Challenges in Implementing Health Education Projects

Many challenges emerge when implementing health education projects in rural communities. Rural communities are often less developed than urban cities. As a result, infrastructure for health care, including access to health education, are less available in rural areas. In developed countries such as the US, people who live in rural communities face challenges such as lack of access to transportation, program resources, and even low income (Kelly, 2011). These challenges are not unique to rural communities in developed countries. Rural communities in developing countries often face multiple-fold challenges. These challenges include a heightened level of poverty, lack of health resources, lack of access to transportation, low literacy, lack of culturally appropriate health service materials, among many others (Living Conditions in Haiti, 2014; Poverty & Health in Haiti, n.d; World Report 2018, 2018).

Haiti's long-standing poverty influence the country's poor health outcomes. 70% of rural communities are considered chronically poor compared to only 20% or urban cities (living Conditions in Haiti, 2014). The Haitian government continues to make budget cuts in the health sector. Investment in healthcare decreased from 16.6% in 2004 to 4.4% in 2017 (Young, 2018). Rural communities are affected by budget cuts more harshly than urban areas because already-struggling public health clinics can hardly sustain the health care needs of communities. While urban communities are also affected, NGOs and international organizations usually supplement health needs in urban areas (Prina, 2010). With increasing budget cuts, local health organizations do not have enough financial support to cover the cost of care; thus, patients must pay out-of-pocket for care, which increases financial burden (Poverty & Health in Haiti, n.d).

Only a small percentage of people living in Haiti own a personal vehicle. With the lack of necessary public transportations such as subways, trains, and buses, most people rely on walking, motorcycling, and catching a ride on a "tap-tap." Tap-tap is one of the most preferred modes of transportation by Haitians. Tap-taps are buses and pick-up trucks that are brightly decorated with Haitian art. In rural cities, poorer road conditions make traveling by tap-tap more difficult; therefore, walking is often the best mode of transportation for those living in rural areas. Lack of transportation and long-distance to the nearest health organizations make it difficult to access care (Tap-Tap, 2017). Moreover, the literacy rate in Haiti is 60%, and a large portion of the population remains uneducated, especially in rural parts of Haiti (Haiti Population 2018, 2018). Therefore, written-based STIs and HIV education materials are sometimes ineffective in improving knowledge of STIs and HIV.

While in most developed countries access to health-related information are accessible through the internet, the same cannot be said for Haiti. 65% of people living in urban areas of Haiti have access to electricity, and only 17% of the rural population have access to electricity. Mobile cellular network coverage is 32%, and 12% of individuals in the population have access to the internet (Haiti-Rural population, 2016). For those who have access to electricity, a mobile cellular, and internet there is not much STIs and HIV information available in Haitian Creole. Unaffordable sexual health services, lack of transportation to health clinics, and low literacy rates influence community uptake and absentee-ism during program implementation

Numerous studies and interventions have employed different methods to mitigate the challenges faced by people living in rural communities. These methods include implementing health education programs within communities in need. A school-based sexual health education intervention in Sub-Saharan provided cash transfers to students to encourage them to stay in

school and avoid risky sexual behaviors. This intervention along with other community-based interventions found that cash transfers effectively promoted sexual health among adolescents and young-adults not only in schools but also in rural communities (Mayedzenge et al., 2014, Sani et al., 2016). Also, a study in Haiti used innovative approaches and involved games to increase sexual health education among adolescents. This community-based intervention involved nurses and community members in implementing the program. The researchers discovered that mobilizing the community and engaging youths in sports, activities, and education increased uptake and reduced absenteeism (Kaplan et al., 2015).

Furthermore, researchers increased community engagement in implementing health education by employing a CBPAR approach. By design, CBPAR involves community members in all part of the research and places a strong emphasis on community collaboration. A study that looked at challenges in implementing a program in rural communities found that people in rural communities form long-term interpersonal relationships that influence community participation in program implementation. Additionally, the researchers observed that community members supported program implementation when they felt a sense of ownership and connection to the program (Bierman, 1997).

Because of the sensitivity that is inherent in sexual health, researchers often utilize qualitative research to identify barriers and facilitators of SRH education in specific communities. A study that aimed to understand knowledge, attitudes, beliefs and practices in HIV/AIDS in Haiti utilized focus groups and individual in-depth interviews to collect sexual health data. The study identified specific misconceptions about HIV that were not captured in surveys. Additionally, the researchers were able to use the data collected to understand the specific needs of the community before implementing sexual health education projects (Adrien et

al., 1993). Qualitative studies are also used as a research method to enhance sexual health program development and implementation in Haiti. A study on determinants of condom use among Haitian youths conducted focus groups and discovered that availability, brand appeal, and social norms were specific determinants of condom use for that community. The researchers used this information to create community-specific sexual health education (Astatke et a., 2009). Overall, identifying community-specific sexual health needs, mobilizing community members in program implementation, and creating various education tools are successful in reducing challenged in uptake and absenteeism. Additionally, communities' engagement and sense of ownership facilitate increased knowledge of sexual among people in rural communities.

Chapter 3: Methods

Community Needs Assessment

Study design

The project team used qualitative methods to perform individual in-depth interviews and collect data from five key informants. The team developed and utilized a semi-structured interview guide to gather information on the barriers and facilitators of sexual and reproductive health (SRH) education in Cavaillon (**Appendix A**). The data collection portion of the curriculum development applied community-based participatory research to identify community-specific sexual health needs. The project team worked closely with the clinic staff at NOVA and interviewed the clinic staff who worked directly with the community members. Data collection from these participants were enough to identify the specific sexual health needs of the community members in Cavaillon.

Project Team

The project team was comprised of myself and another colleague from the Rollins School of Public Health (RSPH), Emory University. A faculty advisor from RSPH provided mentorship and expertise during the project development. In Haiti, an in-country advisor at NOVA supervised the project development and implementation. The staff at NOVA also provided support in data collection and project development and implementation.

Sampling and Recruiting

The project team used selection criteria to screen and approve participants for the study. The selection criteria were as follows: Male and/or female, ages 18 and over, clinic staff at NOVA who directly assist patients/community members in receiving health care. The project team used both active and passive methods to recruit participants. Active recruitment included

talking directly to clinic staff to tell them about the study and what it involved. Passive recruitment included speaking with the head doctors and nurses and asking them to speak to other clinic staff who met the selection criteria to participate in this study. The project team interviewed five participants, and they were all clinic staff who worked at NOVA.

Participants Description

Five of the clinic staff at NOVA agreed to participate in the research portion of this project. The participants all worked in the community through NOVA for over five years. Some of the participants also lived in the community for many years and had served the community in other ways other than through NOVA. Although the team collected data from a convenience sample of five, the participants had extensive knowledge about the culture within the community, and they also have a relationship with the community members. As a result, these selected individuals served as key informants on the SRH education condition of the community.

Data Collection

The project team developed and utilized a nineteen question semi-structured interview guide to collect data on the barriers and facilitators of SRH education among community members. Information from the literature review and clinic data influenced the research questions of the semi-structured guide. Before data collection, the project team conducted a pilot testing of the interview guide with each other. Additionally, the research advisor reviewed the interview questions for proper language and made sure that the questions were appropriate to address the objectives of this study. The semi-structured interview guide was then translated from English to Haitian Creole. The research advisor and the project team who speak and write Haitian Creole reviewed the translation and made sure it was correct. The feedback from the

project team and research advisor resulted in revisions to the semi-structured interview guide to include more specific and appropriate questions and language fluency.

The research questions included the following themes: work duties at the clinic; years working in the community; common STIs, including HIV, seen among males and females in the community; rare STIs; including HIV, seen among community members; reasons for incidences of STIs and recurrent infections among community members; community members inquiry about STIs testing; barriers and facilitators of STIs testing; perceptions of community members' SRH knowledge; current SRH education performed clinic; perception of community members' need for SRH education; available SRH education materials and SRH resources at clinic; and clinic staff's comfortability in delivering SRH education and services to community members. Throughout the interviews, no new questions were added to the interview guide. However, probing techniques such as exploratory probes, silent probes, and mirroring were effective in getting in-depth information about specific topics.

The interviews took place in a private dining room, located right upstairs from the clinic. The project team used an iterative process to collect data and assess variations in the contents of the interviews. Through this process, the project team identified that they had reached saturation after three interviews, with no unfamiliar information generated beyond the three interviews. As a result, the project team conducted two more interviews to be sure. A total of five interviews were conducted. All five participants consented, and the project team received permission to record before each interview. Two members of the project team conducted the interviews. One member of the project team led the conversations during the interview, and the other team member took notes on non-verbal communication and other gestures that would not typically be captured in audio. Before each interview, participants were asked if they felt comfortable having

two team members in the room. Participants were assured that all interviews were confidential and that only the project team had access to any of the information they provided. The project team also informed the participants that they could choose not to answer any questions and they could also stop the interview at any point without any repercussion.

The project team recorded the interviews using an I-Phone 6 Audio Recorder. Another I-Phone 6 Audio Recorder was also used to make sure that they had two copies of the interview, as a precaution. After each interview, the project team made sure that all recordings were stored in password-protected Audio recorders on two I-Phones, then a copy of the interviews was uploaded in a password-protected quick-time player applications MacBook Pro and deleted from the I-Phones. Each interviewee received a new code name to make sure that specific information could not be traced back to a specific participant. Two team members transcribed the interviews verbatim and de-identified any personal information. Interview recordings and study-related documents remained in the possession of the project team until the end of the study period.

The project team collected the data for this study from five clinic staff (three nurses and two doctors). All five participants had been working with NOVA for over five years. Some of the participants were also residents of Cavaillon and considered themselves to be community members of the town.

Data Coding and Analysis

To analyze the data sets, a team member used an iterative process to code the completed transcripts while the other interviews were still being conducted. The iterative process helped the researchers identify that they had reached saturation after just three interviews. The project team conducted two more interviews before completing data collection. Additionally, the iterative process allowed the researcher to recognize patterns and common themes across the

transcripts. The team member used two of the transcripts from the study and developed a preliminary codebook. The researcher organized the codebook by listing codes, definitions, and key/phrases from the transcripts. The researcher, then, used that codebook to code the remaining three transcripts. All the codes were inductive, meaning that they came directly from the transcripts (**Appendix B**).

The team member used MAXQDA Analytics Pro (VERBI Software, 2018) to perform line-by-line coding of the transcripts. Throughout the coding and analysis stage, important themes and concepts emerged. For example, condom use, negligence among community members, (re) infection, lack of SRH/STIs knowledge and education were apparent across all five transcripts. Additionally, to ensure consistency in coding, another trained team member re-coded the same five transcripts and located similarities and differences. The two coders agreed on most of the codes, one coder revised a few code names and made them more succinct. The second coder was able to use the preliminary codebook to code the transcripts with fidelity which increased the inter-coder reliability. The analysis stage relied heavily on the emerged codes and sub-codes. To analyze the data, the project team grouped the codes and sub-codes to understand the barriers and facilitators to SRH education and the intrinsic effects they had on community members sexual health.

Ethical consideration

Before conducting this study, the project team requested a determination form from the Emory University Institutional Review Board (IRB). The project team submitted a summary of the study along with the pre-approved semi-structured interview guide. Emory's IRB approved the request and provided the project team with an official approval notice on the basis that the study "[did] not meet the definition of "research" or "clinical investigation" as set forth in Emory

policies and procedures and federal rules…" [RE: Determination: No IRB Review Requires, Dorie Josma, April 16, 2018]. Although the project team did not have to complete a full IRB, the project team followed proper ethical guidelines such as providing participants with both verbal and written consent forms before participating in the study, a full disclosure of their rights as participants, participants' ability to withdraw from the study and/or refuse to answer any questions. The project team also informed participants about the guidelines set in place to protect their privacy and ensure confidentiality. Participants were also asked for their permission to use data from the transcripts only to support curriculum development, reports, and publication. Additionally, the determination form received from Emory's IRB also permits publication of the results if no changes were made to the study design, subject population, or identification of data.

Curriculum Development

Before the study, I conducted an extensive literature review and identified common STIs and HIV health needs for people living in Haiti, especially those living in rural communities. I used that information along with NOVA's STIs and HIV data to develop a preliminary STIs and HIV education curriculum. The preliminary curriculum gave the team some context and knowledge of the SRH conditions within rural communities in Haiti, and specifically that of Cavaillon. Following data collection, coding, and analysis, the project team used all relevant study materials to modify the preliminary SRH education curriculum and make it more specific to the community's SRH needs. Because the team worked closely with the clinic staff to understand specific SRH needs of the community, the project team was able to make minute changes to the preliminary curriculum. Additionally, from the interviews, it was evident that the project team would need to clarify some common misconceptions about sexually transmitted infections (STIs). For example, it appeared that both clinic staff and community members

considered all urinary tract infections (UTIs) to be STIs. The team spent a considerable amount of time helping community members understand the difference between UTIs and STIs, diverse types of STIs, STIs symptoms, prevention and treatment options, among many other STIs/SRH related topics.

Moreover, I utilized the health belief model (HBM) and community-based participatory action research (CBPAR) to develop the curriculum. The team members organized written information, lectures, individual and group activities that enforced the susceptibility and severity of STIs, the benefits of practicing safe sexual behaviors and addressed the barriers to safer sexual behaviors (ex. access to condoms). CBPAR enhanced the curriculum development phase in many ways. Firstly, the team conducted interviews and gathered data from clinic staff who served as key informants because of their relationship with the community both clinically and interpersonally. Secondly, the team involved the clinic staff and community members in modifying the curriculum materials such as the pre-and-post-test and other written information. Thirdly, the team incorporated individual and group activities such as group discussions that demystified common misconceptions about STIs, HIV, sex, condom use, and application, among many other activities; the team involved community members in their education and learning.

Curriculum Implementation: Adult SRH Education

The age group for the SRH adult education was 18 to 35. The SRH education project took place at NOVA from Monday to Friday for two hours each day. The curriculum was organized into five educational modules, one module for every day of the project.

Module 1: Welcome & Introduction

The male and female reproductive systems

The team signed everyone in on a laptop. The team began with a welcome followed by an introduction. The team introduced themselves and stated the purpose of the SRH education project. The participants introduced themselves and stated what they expected from the SRH education. The team and participants came up with group expectations. Understanding the sensitive nature of SRH education, the team made sure to reiterate the importance of respect and confidentiality. Participants were instructed that while they could share with others the education they received from the class, they could not share anyone's personal experiences with people outside the class. Additionally, the team made available an anonymous bin that participants used to ask any questions they felt uncomfortable asking in class. The team distributed to everyone a notebook and pencil, and a pretest to assess participants' knowledge of STIs/HIV. Then, the participants learned about male and female reproductive systems. The team also used visuals to show them the systematic differences between the two genders.

Activity 1: Myths about STIs?

Myths about condom use?

Different types of STIs?

The team randomly passed out pre-written sticky notes to each participant, and the participants were asked to answer the question on their sticky note anonymously. The team collected the sticky notes and the participants engaged in group discussions regarding the answers and demystified any current myths on STIs, condom use, and the different types of STIs. Though the team facilitated the group discussion, they allowed the participants to discuss the myths among themselves which enhanced group participation and learning.

Module 2: Urinary tract infections (UTIs)

Common Bacterial STIs (Gonorrhea, Chlamydia, Syphilis)

The team also went over urinary tract infections (UTIs) and the difference and similarities between UTIs and STIs. It was important that the participants understood that UTIs are not STIs because many of the participants considered all STIs to be UTIs. The team provided education on common bacterial STIs. The team emphasized bacterial STIs such as gonorrhea, chlamydia, and syphilis because those were common infections seen among community members. The team provided information on the name of the infections, how someone can get infected, signs and symptoms, including information on how they manifest among females and males, images of infections on body parts, effects of infections on reproduction/pregnancy, and prevention and treatment options.

Activity 2: STIs handshake activity

According to the literature, many people tend to feel invulnerable to STIs. This activity aimed to show participants how STIs can quickly spread among people if they engage in unprotected sex with infected individuals. The team assigned each participant to one of the three groups.

[Group 1: People with a least one STI]

[Group 2: People without an STI but are not using condoms during sex]

[Group 3: People who are sexually active, do not have an STI, and use condoms during sex]

The participants were instructed to shake hands with no more than three people. However, before they shook hands with anyone else, everyone needed to receive consent from the other persons. After everyone shook hands, the team asked everyone who was assigned to Group 1 to raise their hands. Then, the team asked every participant who shook hands with anyone from Group 1 to raise their hands, and anyone who was assigned to Group 3 who shook

hands with anyone from Group 1 put their hands down since they were considered to be at reduced risk for contracting an STI. After the activity, the team asked the participants to reflect on the STIs handshake activity.

Module 3: Common Viral STIs (Herpes Simplex 2 (HSV-2), HPV, HIV/AIDS)

The team conducted lectures and discussions on Herpes, HPV, and HIV/AIDS. The team provided information on the name of the infections, how someone can get infected, signs and symptoms, including information on how they manifest among females and males, images of infections on body parts, effects of infections on reproduction/pregnancy, and prevention and treatment options. The participants also engaged in lectures and discussions about the importance of taking preventative measures (ex. condom use, abstinence, reducing the number of sexual partners, etc.). Additionally, the team introduced the topic of STIs testing and the importance of knowing one's sexual health status. The participants discussed barriers to condom use and watched videos on condom use and HIV/AIDS from YouTube. The videos were all in Haitian Creole. The class was split into two separate groups by gender for a group discussion on STIs, condom use, and testing. Then, the class came back together and reflected as a group. The team separated the class into separate groups by gender because they wanted males and females to feel comfortable asking any gender-specific questions.

Activity 3: Condom demonstration

The team used a skit to demonstrate how to put on male and female condoms properly. Then, they separated the class by gender, then paired the participants. Each participant took a turn going over the steps to correctly putting on a male condom on a banana and a female condom using their hands to form a circle with their thumb and index finger. The team provided the participants with male and female latex condoms, lubricants, dental dams, and banana to

facilitate the demonstration. Apart from condom use, the participants were informed about other preventative measures such as abstinence, reduced numbers of sexual partners, sex with non-infected individuals. The team also used this exercise to emphasize the importance of getting tested for STIs, especially if sexually active. Also, the team instructed the participants that proper condom use during sex was the best method for sexually active individuals to prevent themselves from STIs. Following the demonstration, the team provided male latex condoms of different sizes, female condoms, lubricants, and dental dams to anyone who wanted them. The team also informed the participants that they could also get condoms in the future, including condoms free of charge from NOVA at any time.

Module 4: Family planning

Healthy sexual relationships

As mainly suggested by the clinic staff, the team facilitated a brief discussion on family planning. The team and the participants discussed what family planning is, the importance of family planning, and different forms of family planning available at the clinic. Due to the illegality of abortion in Haiti, the team focused mainly on male and female forms of birth control and condom use. The team also facilitated discussions on healthy sexual relationships. The team and participants discussed the importance of consent before sex, conversations between sexual partners about sex.

Activity 4: The "Perfect" sexual Partner

Each group was assigned to draw "The "Perfect" sexual Partner" this included adding to a stick-figure any qualities they would like from a partner, including sexual qualities. Following that exercise, the two groups came together and presented their Perfect Partner. The team members facilitated discussions about their views on each other's Perfect Partner. The

participants were asked to reflect on how they can be better sexual partners to their sexual partners (ex. consent, sexual desires, testing, sexual relationships, etc.)

Module 5: 10 things to remember

Post-test

The team went over the "10 things to remember" list. These reminders originated from the lectures and activities throughout the week. Then, the participants took a post-test and immediately received their scores from the pre-test and the post-test. The team answered any questions and addressed any concerns from the participants.

Activity 5: Skit Presentation

Poster making sessions

On Day 4, participants were assigned to five different groups so that each group would create a skit to be performed for the community on Day 5.

[Group 1: Bacterial STIs]

[Group 2: Viral STIs including HIV/AIDS]

[Group 3: Prevention Methods]

[Group 4: Testing]

[Group 5: Healthy Relationships]

On Day 5, each group presented their skits except for group 5. The team used rhetoric, comedy, and demonstrations to educate the community about the topics mentioned earlier. The participants also got the opportunity to make posters that could be hung around the clinic to promote safer sexual behaviors, condom use, testing, and education on STIs and HIV.

Closing: **Course Evaluations**

Certificate

End-of-project celebration

The team organized an evaluation form which the participants used to evaluate the usefulness of the SRH education project. The participants also received certificates. Participants who attended the SRH education project at least once or earned less than an 80% on the post-test received a NOVA-stamped participation certificate and those who attended the education at least four out of five classes earned at least an 80% on the post-test received a NOVA-stamped successful completion certificate. The difference between the two types of certificates is the utility. Those with the NOVA-stamped successful completion certificate were certified by the NOVA staff to complete basic STIs and HIV education in the community and would receive priority in becoming sexual health educators and trainers when the opportunity arises. Finally, the team, clinic staff, and participants celebrated with food and gifts.

The materials for the implementation part of the SRH education project were all in Haitian Creole. The project team who facilitated this part of the project were fluent in Haitian Creole, and one of them had an extensive cultural experience with the Haitian community, especially in the areas of sexual health. The information for the curriculum came from flyers and education materials from the Center for Disease Control and Prevention (CDC), the Guttmacher Institute, Google, Google Scholar, and YouTube, and other reputable websites. Online information was translated from English to Haitian Creole. The project team shared the original curriculum and a final report with the clinic staff to make sure that the materials and the language were culturally appropriate. Group expectations and the anonymous box was added to promote comfortability and respect among team members and participants.

Training-of-Trainers (T-o-T)

Participants who had participated in the adult SRH education were given the opportunity to participate in a training-of-trainers (T-o-T) workshop so that they could become instructors for the Youth Education Camp (YEC). Participants with either form of certificates could participate; however, those who had received a NOVA-stamped successful completion certificate became instructors, and those with a NOVA-stamped participation certificate became assistant instructors.

The T-o-T was a four-hour long training session where the participants created an age-specific educational curriculum and agenda for groups ages 5 to 9, 10 to 13, and 14 to 17. The instructors developed educational activities and lectures that lasted two-weeks; however, the SRH portion of the YEC was two days long for two-hours each day. For the remaining days of the YEC, the younger community members participated in education sessions and activities on hand hygiene and nutrition. The team members provided any materials and supported needed by the YEC instructors and participants. The team members and participants organized meetings to ensure appropriate education delivery before class and feedback after class.

The rationale behind the T-o-T and the YEC was to increase the sustainability of the project by giving participants the opportunity to receive extra training, develop educational curriculums, and independently facilitate SRH education sessions for younger community members. Additionally, the project not only increased STIs and HIV knowledge among community members, but it also increased the number of people in the community who were equipped to train and educate others about STIs and HIV.

Evaluations

Pre-and-Post-Test

To assess the participants' knowledge, the project team developed a sexual health pre-test questionnaire. The pre-test was a sixteen (16) True or False questionnaire in Haitian Creole. The same questionnaire was used for the pre-and-post-test. The questionnaire made statements about the several ways someone can contract and transmit STIs/HIV, STIs/HIV symptoms, ways of reducing risks and STIs/HIV. The pre-and-post-test questionnaire can be found in **Appendix D**. On the first day and the last day of the project, the participants received a one-sided, single-page, sixteen question tests, and they were instructed to answer each statement with "True" or "False."

Pre- and-Post-Test Analysis

The project team analyzed the data from the pre- and post-test with SAS software and performed a paired t-test using a significance at $P \leq 0.05$ to consider the differences in means.

Course Evaluation

The project team also developed a fourteen (14) question course evaluation survey that assessed the acceptability of the program among the community members. At the end of the SRH education project, the participants recorded their answers using a Google Form administration application and evaluated the course, activities, teaching materials, and the instructors. The course evaluation can be found in **Appendix C**.

Course Evaluation Analysis

The project team analyzed course evaluation using RStudio Version 1.1.463 and Microsoft Excel Version 16.19. The data analysis was univariate, and no hypothesis tests were conducted.

Chapter 4: Results

Project Details

Adult SRH Education Project

The project team informed the clinic staff and community members about the SRH education program and that registration for the class would become available a week before class began. Initially, the project team wanted to accept at most twenty (20) participants between the ages of 18 to 35 years old for the adult SRH education project. The team came up with this number because they wanted to ensure that they could accommodate the participants with seating arrangements, material distribution, and access to instructors. However, the team accommodated thirty (30) participants in the project because additional educational resources and the reserved location for the project made it possible. Before each class sessions, the project team met with each other and occasionally with the field supervisor, the head doctor of NOVA, to review the modules before delivery. The class met for five days for two-hours every day.

Attendance and Completion

To recruit participants for the adult SRH education, the project team informed the clinic staff and community members about the project. The project team also posted flyers around the clinic with information about the education project. Additionally, the clinic staff played a huge role in recruiting participants through word-of-mouth. Throughout the project period, the mean number of participants was 25 with a range of 21 to 30 participants. 77% (23/30) of the participants received a NOVA-stamped Successful Completion Certificate which meant that they completed at least four of the five SRH education modules and received at least 80% on the post-test. 23% (7/30) of the participants received a NOVA-stamped Participation Certificate which meant that they completed at least one of the five SRH education modules or earned less than

80% on the post-test. The high percentage (77%) of participants who received a NOVA-stamped Successful Completion Certificate showed that the project had a high retention rate.

Training-of-Trainers

Following the adult SRH education project, the team member extended an invitation to the entire class to participate in the one-day Training-of-Trainers (T-o-T) workshop. The T-o-T was established to give those who had participated in the adult SRH education the opportunity to receive training in and practice on education delivery and curriculum development, especially for different age groups.

Attendance and Completion

To recruit participants for the T-o-T, the project team informed the participants who had participated in the adult SRH education project about the T-o-T and extended them the invitation to receive training and develop as a team their education curriculum to lead the Youth SRH education camp. Ten participants attended the four-hour long T-o-T workshop, and all ten became instructors for the Youth SRH education camp.

Youth SRH Education Camp

The participants who completed the T-o-T workshop became instructors for the Youth SRH Education. To reduce instructor fatigue, the participants chose the days and age group they wanted to teach. The age groups were as followed: 5-9, 10-13, and 14-17 years old. The instructors created education curriculums based on the age groups they chose to teach. While the instructors facilitated the Youth SRH education camp, the project team encouraged them to teach basic concepts such as the male and the female reproductive systems and personal hygiene. The project team assisted the instructors with resources such as notebooks, pens and pencils, posters, construction paper, sticky notes coloring pencils, and condoms and lubricants.

Before every session, the project team and instructors met to set up the classroom and the projector for videos. Then, the instructors reviewed their curriculums and study plans. The project team was available to answer any last-minute questions. The project team also assisted the instructors in signing in the youth participants and directed them to their appropriate classrooms. The instructors facilitated the educational lectures and activities for their specific age groups, and the project team observed and assisted them. The camp lasted two-weeks for two-hours each day. The instructors developed educational activities and lectures that lasted two-weeks; however, the SRH portion of the YEC was two days long for two-hours each day. For the remaining days of the YEC, the younger community members participated in education sessions and activities on hand hygiene and nutrition.

Attendance and Completion

To recruit participants for the youth SRH education camps, the project team created a sign-in sheet that was made available at NOVA a week before the project began. The project team posted flyers around the clinic. Also, the instructors were advised to recruit young people through word-of-mouth. The project team decided on 20 youth participants per age group. They made this decision based on the available resources and the number of instructors. The mean number of participants from each age group was as followed: 18 (5-9 years old), 16 (10-13 years old), and 7 (14-17 years old).

Community Needs Assessment Results

Key Informants Description

Five of the clinic staff at NOVA agreed to participate in the research portion of this project. The participants were three female nurses and two male doctors all of whom were over the ages of 25. The participants all worked in the community through NOVA for over five years.

Some of the participants also lived in the community for many years and had served the community in other ways other than through NOVA. Although the team collected data from a convenience sample of five, the participants had extensive knowledge about the culture within the community. They also have a relationship with the community members. As a result, they served as key informants on the SRH education condition of the community.

Qualitative Data Analysis

Many themes emerged from the data; however, four main themes captured the SRH education conditions of the community members in Cavaillon. These themes were common STIs among community members, testing or STIs (barriers and facilitators of STIs testing), current SRH/STIs education from the clinic, and lack of SRH/STIs education. These themes were crucial in modifying the preliminary SRH education curriculum and the project team's approach during the adult SRH education project and the STIs/HIV education curriculum proposed in this thesis.

Common STIs among Community Members

The interview participants mentioned many STIs that they commonly diagnosed and treated among community members in Cavaillon. However, the project team further inquired about common STIs seen among females and males, separately. The participants stated that the common STIs among female community members were gonorrhea, chlamydia, syphilis, and HIV. The common STIs among males were the same as those seen among female community members. As a result, the project team focused primarily on these common STIs in the curriculum. One of the participants mentioned that males were less likely to come to the clinic for infections; therefore, STIs diagnosis among males was underreported. She mentioned that females tended to go to the clinic more often than males for issues with genital infections. *"**P:***

We don't really see males [come to the clinic]. We mostly see females more than males. ***I:*** *why do you think you see more females than males?* ***P:*** *Well, I think females when they experience simple symptoms, they think about going to the doctor, but often among males [the infection] is asymptomatic"* (Rose, participant). Her statement provided some insights about the importance of females in STIs diagnosis within the community.

Testing for STIs

All five of the participants said that community members hardly came to the clinic to personally ask for STIs testing, although NOVA provides STIs testing. The team further coded data on barriers and facilitators of STIs testing.

Barriers to STIs testing:

One of the participants mentioned that some community members expressed to her that they did not want to know their STIs status. She said the reason for this was because *"****P:*** *They [community members] always assume that they might be positive, they don't want other people to know that they [tested] positive"* (Rose, participant). Two other participants corroborated that statement in their interviews and indicated that people were afraid that other people would know their sexual health statuses. As a result, they refused to get tested. Two participants mentioned that lack of education was another barrier to STIs testing among community members. They mentioned that since most community members did not receive proper SRH education, they do not understand the importance of getting tested. One of the participant's explained that before people do something, they must know the importance of it. Three participants said that lack of education affected community members' overall attitude about getting tested. *"****P:*** *Lack of education, lack of education, normally you should know your health status, you should know how you are living..."* (Marie, participant). Another participant mentioned that one of the barriers to

STIs testing is the cost. At NOVA, patients must pay to get tested for STIs. For most people, the price of getting tested is not something they are willing to pay.

Facilitators of STIs testing:

All five participants indicated that the clinic staff played a key role in facilitating STIs testing within the community. The clinic staff request STIs testing based on a community member's signs and symptoms *"**P:** But, around here we do it for them [testing] based on their signs and symptoms. When we do their medical history and they explain to you how they feel, you use that information and you make them do it"* (Rose, participant). One of the participants mentioned that when community members refused STIs testing, he calmly explained to them the benefits of knowing their status. *"**P:** Sometimes you propose the idea of the test to them and they tell you no no no….but based on how you talk to them, you convince them, they take the test"* (Joseph, participant). Nonetheless, while some community members heeded to his advice, more often they did not. Clinic staff played a key role in increasing STIs testing among community members; however, the participants insisted that more SRH education could increase community members' understanding of STIs and the importance of getting tested; thus, possibly increase STIs testing within the community.

Current SRH/STIs Education from the Clinic

The participants mentioned that their SRH education efforts were on a case-by-case basis. They provided basic SRH education to individual community members during their visits based on their diagnosis. They specified that they focused mainly on infected people. This information highlighted a huge gap in who received SRH education. Two of the participants mentioned that they did not always have time to educate people. Additionally, all five participants identified that lack of SRH materials in the clinic was a barrier to educating community members about

STIs. One of the participants said that *"**P:** We don't have them, we could put up some poster. We could put them up when we are trying to do educate them to show them because there are some people who learn better through images. But we don't have any"* (Rose, participant).

Another participant said that because of the STIs infection rates among community members, she initiated SRH education workshops. She organized education workshops with other clinic staff and carry-out informative discussions with the community members who came to the clinic. However, she explained that she faced some barriers to getting updated education materials. *"**P:** We used to do the education. We have our own notebook, forms, and information that we shared with them, but it's not enough"* (Marie, participant). From the data in the transcripts, the project team noticed that the clinic staff were willing to provide SRH education to the community members, but the clinic staff needed more support regarding educational materials, resources, and organized time to engage community members in SRH discussions.

Lack of SRH/STIs Education

Lack of SRH/STIs education was a recurrent theme across all five transcripts. The participants believed that lack of SRH education also resulted in a lack of knowledge on STIs. They believed that most people in the community did not know basic STIs prevention methods. As a result, re-infection was common among community members. One of the participants expressed that even after he educated people on STIs, many of them would return to their old routines which also affected re-infection rates *"**P:** After two or three months, they go back to the same routine, that's why those infections are repeated in this area"* (Joseph, participant). Two of the participants highlighted that the lack of SRH/STIs education is a systemic issue. They explained that in Haiti SRH education is not prioritize, and that lack of SRH education is more

pervasive in rural communities. They also expressed that Haiti does not have a national plan for sexual health which leaves people vulnerable to STIs.

Additionally, one of the participants revealed that SRH education is a taboo subject in Haiti, especially in rural areas. *"**P:** Generally speaking, in Haiti, especially in the rural areas like here in Cavaillon, people see sexual health education as a taboo"* (James, participants). This quote expressed some of the entrenched views that people, especially those in rural communities, hold about sexual health. Therefore, SRH education needs to become a regular topic before people can notice any changes in the SRH conditions of community members in rural communities. Moreover, the participants expressed that community members are not always comfortable to participate in SRH education. One of the participants mentioned that when she held SRH education workshops, those who lived in urban areas were more likely to participate in SRH discussions that those who lived in rural areas. She mentioned some of them would even laugh at her for speaking on this subject. She further explained that the lack of SRH education was the reason they reacted in such a manner.

Furthermore, the lack of SRH education did not only affect infection rates and reactions of community members to SRH education, but it also influenced community members' perception of condom and practice of condom use. One participant said that female community members shared with her that their male partner (s) would curse at them for attempting to use a condom. *"**P:** They would tell me that their husbands won't accept, they say I will not do it, I will not wear a condom. If I do it, he will curse me out"* (Marie, participant). Nevertheless, males were not the only ones who spoke against condom use. The participant said that males also expressed that their female partner(s) would not agree. *"**P:** They say that their husbands won't wear it, or the females say that they won't accept their man to wear it"* (Marie,

participant). Changing the perceptions of condom use would be necessary for both genders. Before concluding the interviews, the project team asked all five participants how they perceived the community members would react to an SRH education project in Cavaillon. They unanimously replied that the community would want an SRH education, and they also provided suggestions on how it could be done to increase interest and participation among community members.

STIs and HIV Education Curriculum

The five-module SRH education curriculum that the team used to facilitate the adult SRH education included education and activities on the male and female reproductive systems, urinary tract infections (UTIs), diverse types of bacterial and viral STIs, condom use, healthy relationships, and a brief discussion on family planning. The full curriculum was implemented in five days, and each class lasted two hours. After implementing the SRH education project at NOVA, I enhanced the STIs and HIV education modules and provided a step-by-step process for implementing this curriculum in any rural communities in Haiti. I also updated the curriculum to be implemented in spaces without projectors, electricity, and other advanced infrastructures that were available to us at NOVA. The five-module STIs and HIV curriculum is intended to be used by trained community health educators in health organizations and community organizations alike to educate their patients and community members on STIs and HIV. This educational tool can be used to engage community members in lectures, community discussions, and hands-on activities to increase information retention on STIs and HIV. The full curriculum is intended to be implemented in five days. Each module should take two hours to complete. A final product of the STIs/HIV education curriculum can be found in **Appendix D**.

Evaluations

A descriptive analysis of the participants is available in **Table 1**. The project team performed a paired t-test and found a significant difference between pretest and posttest scores (p-value: 0.036). The results from the pre-and-post-test evaluation indicates that the STIs and HIV curriculum was effective in increasing STIs and HIV knowledge among the participants.

Table 1
Descriptive characteristics of participants from the SRH Health Education Project (*N*=30) in Cavaillon, Haiti in 2018.

Characteristics	Distribution of characteristics	
	n	%
Total	30	100.0
Socio-demographic		
Age (in years) (mean, SD)	24.9 (5.25)	
Age (in years) (median, IQR)	24.0 (9.0)	
Gender		
Male	19	63.33
Female	11	36.67
Education Level		
Primary School	4	13.79
Secondary School	17	58.62
College/University	8	27.59
Attendance		
Day 1		
Yes	20	66.67
No	10	33.33
Day 2		
Yes	23	76.67
No	7	23.33
Day 3		
Yes	29	96.67
No	1	3.33
Day 4		
Yes	26	86.67
No	4	13.33
Day 5		
Yes	26	86.67
No	4	13.33

Moreover, 28 participants took a course evaluation on the acceptability of the SRH project. From a scale of 1 to 10, ten being the highest, the participants gave the class an average of 9.25. The participants agreed that the project's objectives, the lessons, and the activities were appropriate. All 28 participants agreed the course met their expectations and said that they would recommend the class to other community members. When asked to score the instructors from a scale of 1 to 5, five being the highest, the participants gave the instructors a mean score of 5. The participants left several feedbacks from the open-ended question of the course evaluation. Several of them said that they would want the project to continue. Some of them mentioned that they plan to educate others. The participants unanimously said that the class was important, especially for people living in rural communities.

Final STIs and HIV Education Curriculum

Initially, this project relied on some forms of technology for projecting lectures and videos. However, the curriculum has been updated to include scenarios as a substitute for videos and steps for verbal lecturing to accommodate spaces with no access to technology. Suggestions and step-by-step instructions are provided in the curriculum located in **Appendix D**.

Chapter 5: Discussion

Introduction

In Haiti, sexually transmitted infections (STIs) and HIV education and services are less accessible in rural areas than in urban areas. Local clinics and grassroots organizations that play a significant role in supplying sexual health services to rural communities often lack the resources to do so. This thesis delivers a STIs and HIV education curriculum that can be used by health organizations and community organizations in rural parts of Haiti to increase community members' knowledge of STIs and HIV. The curriculum applies qualitative research methodologies and the health belief model (HBM) behavioral theory for health promotion. In addition to qualitative research, the curriculum incorporates community-based participatory action and research (CBPAR) that further identifies community-specific health needs and gives a voice to the community. This thesis provides a guide that health educators can use to identify sexual health needs of communities and a curriculum that can be replicated or serve as a foundation to increase STIs and HIV education and empower rural community members to be active participants in their sexual health.

Community Needs Assessment

This thesis explores the barriers and facilitators of SRH education in a rural community in Cavaillon. The findings are consistent with previous research that identified a lack of knowledge among community members in rural parts of Haiti and recommended increased SRH education in those communities (Cayemittes et al., 2013; Fitzgerald et al., 2000; Logie et al., 2014). The participants from the interview of this project assert that people in rural communities lack the knowledge of basic STIs prevention methods. They unanimously advocate for increased SRH education in Cavaillon and explain that lack of education may be influencing infection and

re-infection rates in the community. Lack of understanding of the common signs and symptoms of STIs act as a barrier which prevents people from seeking STIs health services at the clinic in the first place. The majority of the community members come to the clinic for other health concerns, then through examination discover that they have an STI. Though there are many effective treatments for STIs, prolonging the time people receive treatment for one or multiple STIs can result in serious health complications. Being informed about the signs and symptoms and various forms for prevention methods can potentially influence health-seeking behaviors among community members.

Moreover, the lack of education affects attitudes towards STIs testing. Clinic staff such as the ones in NOVA are facilitators of STIs testing and influence testing rates among community members. However, the lack of knowledge on the importance of STIs testing makes it difficult for clinic staff to get community members to accept STIs tests. While the cost of testing is a concern, many community members are more concerned about people knowing their sexual health status. Therefore, when clinic staff present the option for testing, many decline. In this case, clinic staff spend additional time confirming to community members that their health statuses are confidential. Nonetheless, many still decline.

Additionally, community members are not only concerned about other people knowing their sexual health status, but they are also afraid of finding out their sexual health status. Clinic staff explains many times that participants would decline getting tested because they are afraid that the result might come back positive. Inadequate understanding of testing perpetuates inaction and fear among community members, even when results from testing can help them receive appropriate treatment. Critically, STIs and HIV education focuses on promoting testing to normalize the idea of STIs testing. If possible, clinics should provide STIs testing at no-cost or

at a low-cost. Reducing the cost of STIs testing will not solve the problem with acceptance of STIs testing, but it may improve testing rates among community members who decline to test because of cost.

The staff at NOVA explained that they provide individual STIs and HIV education to community members. However, they also expressed the barriers they face in doing so. Inputs from the participants suggest that increasing knowledge of STIs and HIV is not as simple as having a curriculum. The clinic faces additional barriers such as lack of access to updated information and visuals that can enhance the educational experience for community members. Also, the clinic relies on the government to provide free generic condoms, and the government does not provide condoms of different in sizes and varieties. Although condoms are available, community members do not use the resource very often because they do not prefer the condoms offered. Community members' disinterest in the free condoms at the clinic may influence how frequent community members are using condoms during sex.

Furthermore, the clinic staff does not always have the time to educate community members on STIs and HIV during their consultations. The information they share with community members are brief and is mainly delivered to infected people. As a result, a large group of people, especially males, do not receive any forms of STIs and HIV education which is a concern since males rarely seek health care at the clinic until their symptoms have exacerbated. Additionally, clinic staff mentions that talking about STIs and HIV is considered taboo in the community. Community members, especially those living in rural areas, hold entrenched views about sex which can prevent people from even accepting STIs and HIV information. The taboo nature of sexual health indicates that sexual health education needs to be normalized in these communities as a mean of increasing acceptance and participation. Continuing to deprive rural

communities of sexual health education will perpetuate the taboo nature of the subject; thus, results in sexual health illiteracy.

In Haiti, the lack of access to SRH education in rural communities is a systemic issue. Frequently, people who have completed secondary school to have never received formal sexual health education. Also, clinics and community organizations who attempt to meet the sexual health education needs of community members receive minimal financial support; thus, they continuously face barriers such as lack of resources, time, and educational materials. The deliverable of this thesis responds to the increased need for STIs and HIV education in rural as recommended in various studies in rural areas in Haiti (Fitzgerald et al., 2000; Logie et al., 2014). The thesis provides an educational tool that can enhance STIs and HIV information delivery in healthcare and community organizations who wish to implement STIs and HIV education for various groups within their communities.

Limitations and Strengths

Limitations

There were some limitations to this curriculum. The project team only interviewed clinic staff on the barriers and facilitators of SRH education in the community. Though the clinic staff members were key informants who provided valuable insight, the project could have been stronger if community members with no clinical backgrounds were interviewed. The dual identity of the clinic staff may have influenced the way they responded to the interview questions. Interviewing other community members may have provided a different perspective on the barriers and facilitators of SRH education from a different point-of-view.

Moreover, the preliminary curriculum was built on a literature review that often generalized all rural areas as having the same SRH needs. Though this project incorporated in-

depth interviews to understand community-specific needs, anyone willing to replicate this curriculum would need to also identify community-specific SRH needs in order to create a relevant education curriculum. This curriculum is based on the common STIs and perceived lack of education on STIs and HIV for the community in which it was implemented.

Furthermore, this curriculum is intended for educational purposes and is not enough to change behaviors. Other evidence-based behavioral change projects would have to be implemented to facilitate behavior changes. Additionally, only a pre-and-post-test was used to evaluate knowledge of STIs and HIV. Though statistical analyses showed that there was a significant increase in STIs and HIV knowledge among participants who completed the project, it is impossible to say that the increase in knowledge is attributable to the project. The results also do not indicate that participants will adopt certain health behaviors following the project.

This project was implemented at an organization that had access to the internet, electricity, and technology. The project team had access to resources such as laptops and projectors which made it easier to show visuals from the lectures and videos from YouTube. An organization that does not have the technologies mentioned before may not be able to engage through videos and other visuals as was implemented in the project.

Strengths

This curriculum has several strengths. This curriculum engaged the community in all parts of the curriculum development. The interview participants were clinic staff and residents of the community; thus, they provided both personal and clinical insights on the barriers and facilitators of SRH education in the community. Clinic staff and community members with non-clinical backgrounds assisted in the modification of the preliminary curriculum and the approach for implementing the curriculum. Also, they served as advocates for the project which

influenced community support and participation during the curriculum implementation. Additionally, some community members volunteered and provided insight on information delivery and language which strengthened health communication and information dissemination to the participants of the SRH project. The involvement of the clinic staff and community members was critical in producing a culturally appropriate and relevant final curriculum.

Moreover, the SRH education curriculum included lectures, community discussions, videos, and activities which engaged community members regardless of their literary status. The participants participated in lectures and discussions about STIs and HIV, and then they engaged in hands-on activities that further solidified their knowledge on STIs and HIV. The structure of the curriculum kept the participants engaged in the project. During lectures, the participants asked thought-provoking questions and challenged their understanding of STIs and HIV. The community discussion portions of the curriculum provided a platform for the exchange of ideas and knowledge from which all participants benefitted. Additionally, this curriculum reduced the issue with the language barrier. The participants had access to SRH education materials and videos in Haitian Creole, which is typically difficult since most information in Haiti is in French. Though this project was implemented at an organization that had access to the internet, electricity, and technology. This curriculum has been modified to be implemented even in spaces with no access to internet, electricity, and technology through the use of scenarios.

Furthermore, during the project, the instructors informed the participants that they would receive certificates at the end of the project. The certificates incentivized the participants to come to class and participate. The certificates were further verified by NOVA which allowed participants to be recognized as sexual health educators for the community, especially during a time of need for their expertise. The NOVA-verified certificates added value to the project and

increased participation among community members. At the end of the project, the participants had the opportunity to participate in an optional Training-of-trainers (T-o-T). The T-o-T further educated the participants on information delivery and allowed them to create their educational tools. Those who had gone through the T-o-T facilitated a Youth Education Camp for the younger community members.

Recommendations

The SRH education project was successful in increasing STIs and HIV knowledge among community members as demonstrated through pre-and-post-test evaluations. The participants of the SRH project recommended that STIs and HIV education project continues not only in their community but also in other rural communities. Therefore, a primary recommendation would be to continue this STIs and HIV education project and develop educational tools that will address community-specific sexual health needs. Population health data, regional studies, and the data from this project revealed the need to increase SRH education in rural communities. There are various areas that this education can be presented to reach more people. The STIs and HIV education curriculum can expand into other spaces such as schools, religious organizations, community, and cultural spaces.

Furthermore, the process of curriculum development and implementation showed the importance of conducting a literature review and community-specific research. Merging primary and secondary data made developing and implementing the curriculum successful and acceptable in the community. Therefore, in developing a health education curriculum, it is critical to gain insight from all levels to ensure both evidence-based implementation practices and cultural-appropriateness of the tool. Additionally, engaging community members in the development and implementation of educational tools will influence community support and engagement. Having

involved the clinic staff and community members with no clinical background in the creation and implementation of the tool increased support and high levels of participation from community members.

Moreover, the language and methods of information delivery are important things to consider. In Haiti, especially in rural communities, literacy status varies. Haitian Creole and French are the two national languages in Haiti; however, Haitian Creole is generally spoken by everyone in day-to-day conversations. The project team sought to decrease language barriers and increase comfort among participants by presenting the information, videos, and activities in Haitian Creole. Although the project team members were fluent in Haitian Creole, they had community members review the educational tools for appropriate language and cultural context. They, then, used that information and created an inclusive environment conducive of learning for the people in Cavaillon.

Furthermore, the education level of the participants varied from primary education to college-level education. The SRH education curriculum included lectures, visuals, activities, and videos/scenarios that acted together to accommodate many forms of learning and educational backgrounds to engage participants. Additionally, educational interventions are not enough to change health behaviors, further implementation of behavioral-change interventions may be necessary to improve behavior change and adoption of healthy sexual health practices.

Conclusion

The SRH education curriculum provides a tool that can be used to inform community members in rural parts of Haiti about STIs and HIV. It can also serve as a foundation to develop a comprehensive sexual health education curriculum. The process of curriculum development and implementation highlights the importance of merging data from experts with that from

community members in order to create a culturally acceptable and community-specific educational tools. Community partnership and collaboration was a critical component for the health education project's success. As public health experts move into different cultural spaces, they should be aware of their expertise and ignorance. Awareness of what they know and do not know will allow them to learn from the community and use their expertise to deliver a tool that will be acceptable and culturally-appropriate.

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APPENDIX A:

Interview Guide for Sexually Transmitted Infections (STIs) and HIV Education for Community Members in Cavaillon, Haiti.

Interview date: [_] [_]/ [_] [_]/ [_] [_] (DD/MM/YY)

READ THIS CONSENT STATEMENT FOR EVERY PARTICIPANT.

"Hello, thank you for taking this time to meet with me today. My name is __(NAME)__. I am working with NOVA to gather information on what helps or prevent education on STIs and HIV in this community, Cavaillon, Haiti. We will be using this information to inform the organization and the partners for the development of an STIs and HIV education project. Your participation in this interview is completely voluntary. You can choose to not participate. Whether you decide to participate or not, the service you receive here or your employment status at NOVA will not be affected. If you decide to participate, you can stop at any time. You do not have to answer any questions you do not want to answer. This interview will take no more than 30 minutes. Everything you tell me will remain confidential. To prevent loss of information, I will be recording this interview. But everything will be deleted once we've analyzed the information which will end in__ (STATE DATE) __. The team with NOVA and I will be the one people with access to your information. Your name and any personal information will be de-identified before we hare any of this information. "

Do you agree to participate in this interview? YES [_] NO [_]
(Mark an "X" in the box next to the appropriate answer)

IF THE PARTICIPANT DOES NOT AGREE, DO NOT CONTINUE.

INTERVIEW DATE: [_] [_]/ [_] [_]/ [_] [_] (DD/MM/YY)

TIME OF INTERVIEW [_] [_]: [_] [_] AM/PM (CIRCLE ONE)

Section A: Demographic and personal information

1. How long have you been working with NOVA in this community?

2. How long have you been living in Cavaillon?

3. What is your job description at NOVA?

Section B: Cases on STIs/HIV

4. Since you've been working in this clinic, what are the most common STIs that you see among females?
    - Why do you think those STIs are the most common?

5. Since you've been working in this clinic, what are the most common STIs that you see among males?
    - Why do you think those STIs are the most common?

6. Do you find cases of HIV/AIDS?
    - If you do, what resources/support does NOVA provide to them?

7. Please indicate other STIs that you see among community members.

Section C: Barriers/facilitators of STIs/HIV education

8. Based on your experience with community members, what is your perception of their knowledge on sexual and reproductive health?
    - What do you think they know?
    - What do you think they don't know?

9. What could cause people in the community to have education on STIs?

10. What could cause people in the community to not have education on STIs?

11. Generally, do people in the community ask you for information on STIs/HIV?

12. Generally, do people in the community ask you for STIs/HIV testing?
    - What could cause someone to ask you for STIs/HIV testing?

- What could cause someone to not ask you for STIs/VIH testing?

13. How do you think people in the community feel about STI/HIV testing?

Section D: Verification questions

14. How do you think the employees at this clinic would feel about having conversations on sexual and reproductive health with people in this community?
    - What recommendations do you have that would improve how the employees at this clinic feel about having conversations on this topic?

15. Does the clinic have educational materials on sexual and reproductive health that community members can have (for example: brochures, posters, card… etc?)

16. What sources of prevention methods against STIs/HIV can the clinic give to people in the community?

17. How do you think people would feel about a project on sexual and reproductive health and STIs/HIV?

18. What do you think you or NOVA can do to help people in the community keep good long-term practices on sexual and reproductive health?

19. Is there anything else you'd like to add?

FINAL WORDs: Thank you for your time. The team and I appreciate it. In the next step, we will be analyzing the information that you and others have provided to inform the develop of a sexual and reproductive health education project.

APPENDIX B:

Qualitative Data Analysis Codebook

Code	Definition	Key phrases
Lack of community participation in SRH education	CM's participation in SRH education, conversations about STIs, lack of prioritization for sexual health, interest in SRH education	- CM don't want to talk - CM not interested in attending SRH education sessions - CM not willing to participate in SRH conversations - CM not listening
Condom use	Condom use among CM	- CM's use of condoms -Partners against condom use -CM deliberately do not want to use condoms
Contraceptive use	Contraceptive use among CM	-condoms -hormonal birth control -partners against hormonal birth control use -CM deliberately do not want to use condoms/ hormonal birth control
Perceptions of CM's reaction to SRH education	Belief regarding CM's participation in SRH education, if implemented.	-CM will participate or not - CM will be satisfied with an SRH program
Staff perception of SRH education	Staff opinion of SHR education, if implemented	-CM will (not) benefit -SRH program will (not) be effective
Limited SRH resources/education materials	Lack of SRH resources and/or educational materials	-Clinic does (not) have SRH educational materials -Clinic staff have (no) handouts brochures, posters to use or give to CM
Comfort with providing SRH education in clinic	Clinic staff 's belief that they are comfortable providing SRH education to CM	-Willing to motivate and teach CM -Continue more formal and informal SRH education with CM
Clinic confidentiality	Clinic staff's protection of CM medical information, security and privacy	-Protection of health information -Privacy/secrets
Testing for STIs	CM testing for STIs, clinic's role in STIs testing	-CM don't usually ask for STIs testing -CM ask for STIs testing -Difficulty asking for STIs testing -Health examination→testing -importance of testing

CM's perception of STIs testing	CM's perception of STIs testing, whether it's important or not	-CM think it's important or not important -CM education on STIs testing -CM seek medication instead of understanding underlying sexual health issues
Facilitators to STIs testing	What motivates CM to get tested for STIs	-CM's education -Clinic staff performs STIs testing -Free STIs testing within clinics -Mandatory STIs testing by clinic -State and clinic's campaigns and education projects -signs of STIs
Barriers to STIs testing	What prevents CM from getting tested for STIs	-Fear of people knowing their status -Stigma -lack of trust -CM deliberately not wanting to get tested -Lack of education -Cost of testing -factors associated with rural health hare (travel, distance)
Negligence among CM	CM's unhealthy practices despite being informed by clinic staff	-CM are negligent about their health -Lack of interest/priority -ignorance is bliss mentality
Common SRH knowledge among CM	Healthy and protective SRH practices that CM know about	-Use clean water to clean undergarments, genital parts, etc. -Use protection/condoms
Clinic's protocol for HIV	Support for CM infected with HIV, testing, referral	-Clinic does testing, referrals, follow-up -Lack of support for HIV care at clinic -Resources for HIV
Common STIs among CM	Common STIs among CM	-STIs found among CM regardless of gender
Common STIs among females	Common STIs found among females	-any mentions of genital infections -Symptoms of STIs (Clinic staff seem to refer to UTIs as STIs, which is a misconception)

Common STIs among males	Common STIs found among males	-Any mentions of STIs commonly seen among males -Symptoms of STIs
Rare STIs among CM	Any mentions of STIs cases seen at clinic, but defined as being rare cases	-Symptoms of STIs -Rare cases of STIs among females and males
Need for SRH education	Any mentions of the need for (more) consistent SRH education and information	-Need for more awareness -SRH education -STIs education regardless of STIs status
SRH/STIs education from clinic	Clinic staff's personal investment in educating CM about sexual health, including STIs	-Clinic sexual education sessions -Private/personal sexual health education -Attempt to bring more awareness to STIs -Provision of condoms
(Re) infection	Mentions of (re) infection among CM after treatment from clinic	-current and recurrent cases of STIs/infections among CM
Reasons for (re) infection	Reasons mentions as to why CM get infected or re-infected	-lack of hygiene -lack adherence to clinic staff's medical advice -unhealthy routines
Lack of SRH/STIs education	Mentions of lack of SRH and STIs education in communities	-Lack of support for SRH education -Lack of priorities on sexual health by the state/Haitian govt/CM
Lack of SRH/STIs knowledge	Mentions of lack of knowledge of SRH and STIs among CM	-Need for more SRH/STIs education and awareness -Lack of access to education, especially for those living in certain parts of the country -lack of support -lack of knowledge of STIs symptoms
Staff Role	Role in clinic described by clinic staff	-day-to-day work responsibilities -unspecialized work responsibilities -job title
Years working in community	Amount of years spent working and interacting with CM	-service to community

APPENDIX C:

Course Evaluation

Question number	Instructions	Question	Response
1.	Enter value	From a scale of 1-10, 10 being the highest, how would you grade this course.	Score: ____
2.	Circle response	The objectives for this course were clear.	Strongly Agree----------1 Agree----------2 Neither agree nor disagree--3 Disagree----------4 Strongly Disagree----------5 Unknown----------9 Refused----------0
3.	Circle response	The presentation of the education materials was clear.	Strongly Agree----------1 Agree----------2 Neither agree nor disagree--3 Disagree----------4 Strongly Disagree----------5 Unknown----------9 Refused----------0
4.	Circle response	The activities were appropriate for the level of the course.	Strongly Agree----------1 Agree----------2 Neither agree nor disagree--3 Disagree----------4 Strongly Disagree----------5 Unknown----------9 Refused----------0
5.	Circle response	This course kept me interested in this subject.	Strongly Agree----------1 Agree----------2 Neither agree nor disagree--3 Disagree----------4 Strongly Disagree----------5 Unknown----------9 Refused----------0
6.	Circle response	This course met my expectations.	Strongly Agree----------1 Agree----------2 Neither agree nor disagree--3 Disagree----------4 Strongly Disagree----------5 Unknown----------9 Refused----------0
7.	Enter value	From a scale of 1-5, 5 being the highest, how would you grade the instructors.	Score: ____
8.	Circle response	The instructors were knowledgeable of the subject.	Strongly Agree----------1 Agree----------2 Neither agree nor disagree--3 Disagree----------4

			Strongly Disagree----------5 Unknown----------9 Refused----------0
9.	Circle response	The instructors were efficient in teaching the contents of this course.	Strongly Agree----------1 Agree----------2 Neither agree nor disagree--3 Disagree----------4 Strongly Disagree----------5 Unknown----------9 Refused----------0
10.	Circle response	The instructors encouraged feedback during the course.	Strongly Agree----------1 Agree----------2 Neither agree nor disagree--3 Disagree----------4 Strongly Disagree----------5 Unknown----------9 Refused----------0
11.	Circle response	The instructors showed genuine concern for the participants.	Strongly Agree----------1 Agree----------2 Neither agree nor disagree--3 Disagree----------4 Strongly Disagree----------5 Unknown----------9 Refused----------0
12.	Circle response	The instructors showed excitement while teaching the content of this course.	Strongly Agree----------1 Agree----------2 Neither agree nor disagree--3 Disagree----------4 Strongly Disagree----------5 Unknown----------9 Refused----------0
13.	Enter value	From a scale of 1-5, 5 being "Definitely" and 1 being "Not at all," how would you recommend this course to others?	Score: _____
14.	Enter response	Please write any comments or suggestions that could help us improve the course.	Comment:

APPENDIX D:

Sexually Transmitted Infections (STIs) and HIV Education Curriculum for at-risk Young People and Adults in Rural Communities in Haiti

Sexually Transmitted Infections (STIs) and HIV education curriculum for at-risk young people and adults in rural communities in Haiti	
Introduction and Purpose	This curriculum provides an overview of common STIs seen among people living in Cavaillon, a rural community in south Haiti. It includes full details on teaching materials such as lectures, activities, community, discussions, and campaign development. This curriculum only includes the STIs that were most common for the community in which it was implemented. However, instructors can supplement this curriculum with other education tools and information. The purpose of this STIs and HIV health education curriculum is to increase STIs and HIV knowledge among at-risk young people and adults living in Cavaillon and can be used in other rural communities in Haiti.
Modules	There are five modules in this curriculum: 1. The Male and Female Reproductive System 2. Urinary Tract Infection and Common Bacterial STIs 3. Common Viral STIs 4. Healthy sexual relationships 5. STIs and HIV Campaign Development
Target Audience	The intended audiences are males and females ages 18 to 35 years old but can be used to educate people who are below and above the aforementioned age recommendation. The curriculum requires intensive instructor-participant engagement, therefore a class size of 15 participants per instructor is recommended. However, a larger class size may be feasible. Instructor discretion is advised.
Setting	The ideal settings are community clinics and organizations. However, this curriculum can be used in any setting that can accommodate a large group of people. The space must be large enough to facilitate discussions, group and individual activities. A blackboard and the curriculum are sufficient to facilitate this STIs and HIV education.
Time frame	Each module takes approximately 120 minutes (2 hours). The instructor must follow the sequence in which the modules are laid out in this curriculum. This curriculum can be implemented every 2-3 months to reinforce education and knowledge on common STIs and HIV. However, instructors and those interested in facilitating this education can use this curriculum to teach community members as often as necessary.

Module 1: The Male and Female Reproductive System	
Time	120 minutes
Material	♦ The printed curriculum, a black board, chalk/marker can be used to write down the information, and the instructors can provide visual handouts to the participants, if necessary ♦ Easel pad sheets ♦ Sticky notes ♦ Notebook Paper ♦ Markers, pens, pencils ♦ Pre-test handouts ♦ Anonymous bin
Module Summary	This module introduces participants to the STIs and HIV education project. This module facilitates instructor-participant and participant-participant interaction through lectures, activities, and discussion. The participants are introduced to the male and female reproductive system and engage in didactic and interactive activities on myths relating to sexual health.
Goal	The goal of this module is to educate participants on the male and female reproductive system and demystify current myths that may exist around sexual health within the community.
Objectives	By the end of this module, participants will be able to: 1. Identify the different parts of the male and female reproductive systems and their functions 2. Discuss various myths that may exist around sexual health within the community

Part 1: Introduction

Time	20 Minutes
Material	♦ Easel Pad sheets ♦ Paper ♦ Markers, pens/pencils ♦ Anonymous bin
Objective	♦ To introduce participants to the STIs and HIV health education project; to facilitate instructor-participant and participant-participant engagement; to set ground rules

- ♦ The instructors will sign everyone in to keep attendance and give each participant a writing utensil and papers to write on during the project
    - ♦ The instructors can record participants' names, ages, and education levels, and test-scores for analysis
- ♦ At the end of each module, the participants can choose to take their written materials home or leave them with the instructors for the next module.

- The instructors will introduce themselves and tell the participants the purpose of the STIs and HIV education project
- The instructors will ask the participants to introduce themselves
    - Ask participants to state their names, one fun fact about themselves, and what they expect from the project.
- The instructors will move forward with setting up ground rules that everyone will follow
    - The instructors are encouraged to place the ground rules in front of the room and revisit them at the beginning of each module

Ground rules
♦ Everyone is encouraged to participate ♦ Respect everyone ♦ Ask any questions ♦ If you do not want to speak out loud, write your questions and place them in the "Anonymous bin" and the instructor will answer them the next day before the next module ♦ Only one person speaks at a time ♦ Listen to each other ♦ Do not share people's stories with others outside of the room

- The instructors will ask participants other rules that they would like to add to the list and add them to the "Ground Rules" list
- The instructors will go over the topics and activities for the STIs and HIV education projects

Part 2: Pre-test

Time	10 minutes
Material	♦ Pre-test, pens/pencils
Objective	♦ To assess current participants' knowledge on STIs and HIV

- A pre-test handout will be passed to every participant
    - Participants will have 10 minutes to answer the pre-test True/False questions
- The instructor will read aloud each question and instruct participants to circle "T" for true of "F" for false after each question
    - This is to accommodate everyone regardless of literacy status
- Instructor will collect the pre-test and instruct participants that they will be given a post-test at the end of the project and the pre-and-post-test will be graded for evaluation

Part 3: Male and Female reproductive system

Time	30 minutes
Material	♦ The printed curriculum, a black board chalk/marker can be used to write down the information, the instructors can provide visual handouts (or draw) to the participants, if necessary ♦ Easel pad sheets ♦ Paper ♦ Pens/pencils,

Objective	♦ To teach participants about the male and female reproductive system

Lesson materials:

Why is the reproductive system important?

- ♦ Females: To produce female egg cells, oocytes, important for reproduction
- ♦ Males: To produce sperm cells necessary for reproduction
- ♦ The reproductive systems aid in the production of hormones necessary for sexual reproduction

The female reproductive system

- ♦ Uterus: Reproductive organ where the fetus develops and grows
- ♦ Ovaries: Organs that produces eggs and hormones
- ♦ Fallopian Tubes: Tubes that connects the ovaries to the uterus
  - ♦ The egg cells travel through these tubes from the ovaries to the uterus, it is also the place where fertilization occurs
- ♦ Endometrium: The inner lining of the uterus, the part that thickens in preparation for pregnancy
- ♦ Vagina: The female sex organ, also known as the birth canal, the vagina connects the cervix to the outside of the body
- ♦ Cervix: The opening that connects the vagina and the uterus

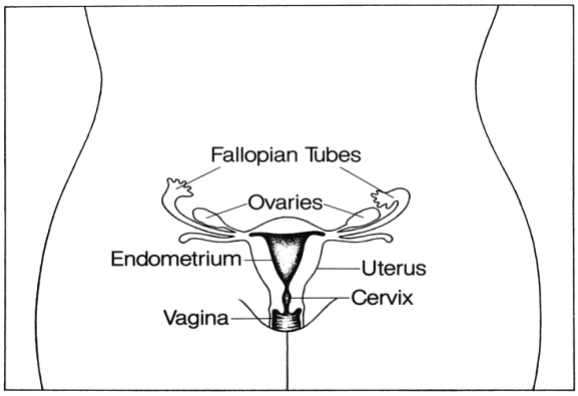


Image: Reproductive (Female). *Wikimedia Commons*, National Cancer Institute, 15 June 2015, commons.wikimedia.org/wiki/File:Reproductive_(female).jpg.

THE FEMALE REPRODUCTIVE SYSTEM

The male reproductive system

- ♦ Testicles (testis): The testicles are the organs that produce sperm cells
- ♦ Epididymis: The epididymis is where the sperm cells matures
- ♦ Vas Deferens: The vas deferens transports mature sperm cells to the seminal vesicles
- ♦ Seminal Vesicles: The seminal vesicles produce a fluid that provides energy for sperm cells
- ♦ Prostate gland: The prostate gland secretes prostate fluid which is a component of semen
- ♦ Bladder: The bladder stores urine

- Urethra: The urethra carries sperm out of the body, it also transports urine from the bladder to the outside of the body
- Penis: The male sex organ. The organ from which sperm is discharged

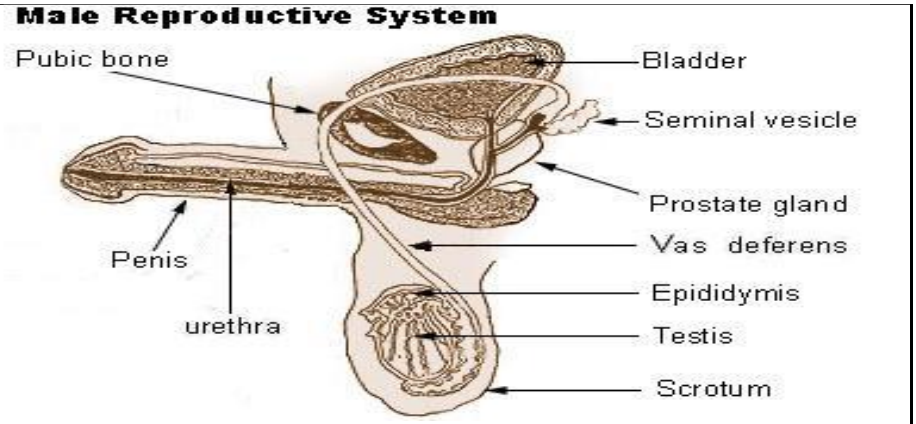


Image: **Male Reproductive System**. *Wikimedia Commons*, **n.d** https://upload.wikimedia.org/wikipedia/commons/8/82/Illu_repdt_male_erect.jpg.

THE MALE REPRODUCTIVE SYSTEM

Questions and answers:

- The instructors will ask the participants if they have any questions and provide answers, accordingly

Part 4: Demystification Activity and discussion

Time	60 minutes
Material	♦ Sticky notes ♦ Pens/pencils ♦ Pre-written categories (3) on an easel pad **"Myths about STIs, including HIV"** **"Myths about condom use"** **"Different types of STIs"**
Objective	♦ To demystify current myths around sexual health that may exist in the community

- Instructors will ask participants to form groups of 3 and write down as many responses as they can for each category on the easel pad
- Participants will have 10 minutes to discuss, write on sticky-notes, and post them under each category
- Instructors will ask class to sit in a circle formation to discuss the activity
- Instructors will read all of the statements under each section on the easel pad and facilitate a conversation around each statement
    - Instructors should encourage all participants to participate in the discussion and share their opinions on the written statements on the sticky notes on the easel pad

- Instructors should guide the conversation in a way that promotes problem-solving and demystification of various myths that may exist around sexual health
- If necessary, instructors should revisit ground rules with the participant to foster a respectful environment

- Potential discussion facilitation questions:
  - What do you think about that statement? Do you agree? Disagree? Why?
  - Why do you think some people think that way?
  - How do you think we can go about making sure people know accurate information about sexual health? STIs/HIV?
  - How do you think certain beliefs influence sexual health practices among people?

Myths about STIs, including HIV	**Myths about condom use**	**Different types of STIs**
*post sticky-notes here	*post sticky-notes here	*post sticky-notes here

*Template for Demystification activity

Name: _____

STIs and HIV Pre-test

STIs is an acronym for sexually transmitted infections.

Circle (T) for True and (F) for false statements

1. You can catch STIs/HIV from a door knob, a chair seat, or a toilet seat. T / F
2. Sometimes, the signs and symptoms of STIs/HIV can go unnoticed. T / F
3. You don't need to see a doctor when the signs or symptoms of STIs go away. T / F
4. You cannot have more than one STI at a time. T / F
5. There are things you can do to reduce your risk of STIs. T / F
6. You cannot have the same STI twice. T / F
7. You cannot get infected with STIs/HIV the first time you have sex. T / F
8. You can always tell if people are infected with STIs/HIV by looking at their genitals. T/F
9. If you don't treat some STIs you can become infertile. T / F
10. Clean people cannot get infected with STIs/HIV. T / F
11. People who choose to not have sexual intercourse reduce their chance of being infected with STIS/HIV. T / F
12. All STIs can be cured. T / F
13. You can get HIV if you touch someone who is infected with the virus, with no open wounds. T / F
14. You are at greater risk of getting STI/HIV if you have many sexual partners. T / F
15. You can get infected with STIs/HIV by sharing needles with infected people. T / F
16. Sexual intercourse is the only way to get STIs/HIV. T / F

Direction to instructor (s):

Read each question out-loud and slowly. After each statement tell everyone to circle (T) for True statement and (F) for False statements. This is to include everyone regardless of literacy status.

*Use the same questionnaire for the post-test at the end of the project.

Name: _____

STIs and HIV Pre-test KEY

STIs is an acronym for sexually transmitted infections.

Circle (T) for True and (F) for false statements

1. You can catch STIs/HIV from a door knob, a chair seat, or a toilet seat. T / F
2. Sometimes, the signs and symptoms of STIs/HIV can go unnoticed. T / F
3. You don't need to see a doctor when the signs or symptoms of STIs go away. T / F
4. You cannot have more than one STI at a time. T / F
5. There are things you can do to reduce your risk of STIs. T / F
6. You cannot have the same STI twice. T / F
7. You cannot get infected with STIs/HIV the first time you have sex. T / F
8. You can always tell if people are infected with STIs/HIV by looking at their genitals. T/F
9. If you don't treat some STIs you can become infertile. T / F
10. Clean people cannot get infected with STIs/HIV. T / F
11. People who choose to not have sexual intercourse reduce their chance of being infected with STIS/HIV. T / F
12. All STIs can be cured. T / F
13. You can get HIV if you touch someone who is infected with the virus, with no open wounds. T / F
14. You are at greater risk of getting STI/HIV if you have many sexual partners. T / F
15. You can get infected with STIs/HIV by sharing needles with infected people. T / F
16. Sexual intercourse is the only way to get STIs/HIV. T / F

Direction to instructor (s):

Read each question out-loud and slowly. After each statement tell everyone to circle (T) for True statements and (F) for False statements. This is to include everyone regardless of literacy status.

*Use the same questionnaire for the post-test at the end of the project.

Module 2: Urinary Tract Infection and Common Bacterial STIs	
Time	120 minutes
Material	♦ The printed curriculum, a black board, chalk/marker can be used to write down the information, and the instructors can provide visual handouts to the participants, if necessary ♦ Easel pad sheets ♦ Ground rules sheet ♦ Paper ♦ Makers, pens, pencils ♦ Anonymous bin
Module Summary	This module introduces participants to information about urinary tract infection (UTI) and common bacterial STIs examined within the community. This module further facilitates instructor-participant and participant-participant interaction through lectures, activities, and discussion.
Goal	The goal is to educate participants on UTI and common bacterial STIs within the community (gonorrhea, chlamydia, and syphilis). Participants engage activities that facilitates discussion on STIs/HIV transmission.
Objectives	By the end of this module, participants will be able to: 1. Know the difference between UTI and common bacterial STIs 2. Know the common signs and symptoms of UTIs, gonorrhea, chlamydia, and syphilis 3. Identify various ways to reduce their risk of UTIs, gonorrhea, chlamydia, and syphilis 4. Discuss transmission of STIs/HIV

Part 1: UTI and Common Bacterial STIs (Gonorrhea, chlamydia, syphilis)

Time	60 Minutes
Material	♦ The printed curriculum, a black board chalk/marker can be used to write down the information, the instructors can provide visual handouts (or draw) to the participants, if necessary ♦ Easel pad sheets ♦ Paper ♦ Markers, Pens/pencils
Objective	♦ To teach participants about UTI and common bacterial STIs (gonorrhea, chlamydia, syphilis) seen within the community, signs and symptoms, prevention and treatment methods

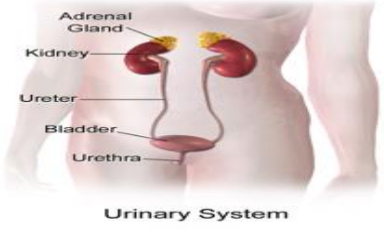
- ♦ The instructors will take attendance and distribute back to the participants their writing materials

- The instructors will go over the ground rules, then read any questions that participants left in the anonymous bin

Lesson Materials:

What is Urinary tract infection (UTI)?

- UTI is an infection caused when bacteria, especially bacteria from the large intestines, go into the urethra and travel up to the bladder
- If left untreated, it can infect the kidneys and other organs of the urinary system
- People can become infected with a UTI if they practice poor personal hygiene that can lead to an overgrowth of bad bacteria in the urinary system
- People typically think UTI is synonymous with STIs, because they sometimes display similar symptoms, but they are different
    - You do not need to sexually active to have a UTI, but you can only get STIs when you engage in unsafe sexual practices with infected individual(s)
- However, sexual activities can also increase your chance of getting a UTI because bacteria from the colon and genitals can get into the urethra during foreplay and sexual intercourse
- Key Take away: You do not have to be sexually active to have a UTI, but you have to be sexually active to be infected with an STI



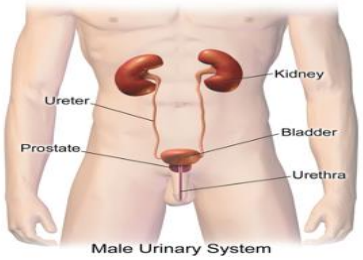


Image 1: Bruce Blause ,Urinary System (Female). *Wikimedia Commons*, 3 August 2017, https://commons.wikimedia.org/wiki/File:Urinary_System_(Female).png.

Image 2: Bruce Blause,Urinary System (Male). *Wikimedia Commons*, 3 August 2017, https://commons.wikimedia.org/wiki/File:Urinary_System_(Male).png.

URINARY SYSTEM

Common signs and symptoms of UTI?

- A burning sensation when you urinate
- Pain either in your back or lower abdomen
- A frequent need to urinate
- Feeling fatigue
- Fever and chills

Treatment for UTI?

- A doctor can help you identify whether or not you have a UTI using a urine sample to look for the type of bacteria that cause UTIs

- If you do have a UTI, your doctor will prescribe you antibiotics which will effectively cure you of the infection
- You must take the antibiotics as instructed by the doctor and the pharmacist

How to prevent UTIs?

- Practice good personal hygiene
    - Clean up using clean water
    - Avoid using soap, especially scented soap
- Empty your bladder as soon as you feel the need to
- After using the restroom wipe from front to back
- Clean your genital area before sex
- Urinate right after sex to flush any bacteria out of your urethra
- Keep genital area dry
    - Moisture creates a good environment for bacteria growth

Common Bacterial STIs (Gonorrhea, Chlamydia, Syphilis)

Gonorrhea

Who does it affect and how do you get it?

- Males and females
- Anyone who is sexually active
- It is very common among people between the ages of 15 and 24
- You can become infected if you engage in oral, anal, or vaginal sex with an infected individual

Common signs and symptoms of gonorrhea?
Males and females

- Burning sensation when you urinate
- Vaginal or penile discharge
- Vaginal bleeding between periods (females)
- Painful sexual intercourse
- Abdominal or pelvic pain
- Anal itching or discharge from anus
- However, often times the infection does not show any signs or symptoms

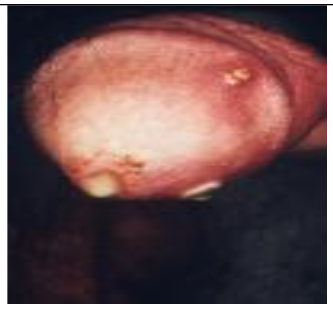
How does gonorrhea affect pregnant women?

- Pregnant women can transmit it to their baby during vaginal delivery
- Gonorrhea can put a pregnant woman at greater risk of developing complications such as miscarriages, infections, and premature births

Treatment for gonorrhea?

- The first thing to do is to go talk to healthcare provider
- The healthcare professional will conduct confirmatory testing to figure out if you have gonorrhea

- Gonorrhea is a bacterial STI and can be treated using appropriate mediations (antibiotics)
- You must take the medication as prescribed by the healthcare professional
- You have to wait a week (7 days) after taking the antibiotics before engaging in sexual activities



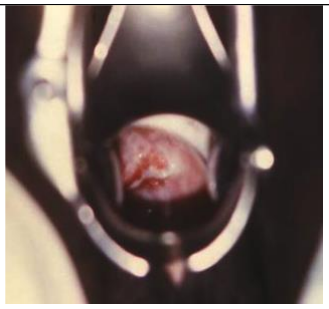


Image 1: Public Health Image Library (PHIL). (2017, December 20). Retrieved from https://phil.cdc.gov/Details.aspx?pid=4065

Image 2: Public Health Image Library (PHIL). (2017, December 20). Retrieved from https://phil.cdc.gov/Details.aspx?pid=4087

GONORRHEA

Chlamydia

Who does it affect and how do you get it?

- Males and females
- Anyone who is sexually active
- You can become infected if you engage in oral, anal, or vaginal sex with an infected individual

Common signs and symptoms of chlamydia?

Females:

- Abnormal vaginal discharge that may have an odor
- Vaginal bleeding between periods
- Abdominal or pelvic pain
- Itching or burning in the vagina
- Painful sensation when urinating
- Chlamydia infection in the throat (white patches)

Males:

- Discharge form penis
- Painful urination
- Painful sexual intercourse
- Itching or burning sensation around the opening of the penis
- Painful swelling around the testicles
- Chlamydia infection in the throat (white patches)

However, the majority of chlamydia can cause no symptoms

How does chlamydia affect pregnant women?

- Pregnant women can transmit it to their baby during vaginal delivery
- Chlamydia can result in eye infection and pneumonia in babies
- Chlamydia can put a pregnant woman at greater risk for miscarriage, stillbirth, or premature birth

Treatment for chlamydia?

- The first thing to do is to go talk to healthcare provider
- The healthcare professional will conduct confirmatory testing to figure out if you have chlamydia
- Chlamydia is a bacterial STIs and can be treated using appropriate mediations (antibiotics)
- You must take the medication as prescribed by the healthcare professional
- You have to wait one to two weeks (7 -14 days) after taking the antibiotics before engaging in sexual activities
- You should repeat testing about three (3) months after treatment

What can happen if someone doesn't get treated for chlamydia?
Females:

- The bacteria can spread into different reproductive organs such as the uterus and the fallopian tubes
- It can cause damages in the reproductive system
- It can lead to pelvic pain and inflammation
- It can put females at greater risk of infertility and ectopic pregnancy

Males:

- Males rarely experience reproductive issues
- The infection can spread into urethra
- Males can experience complication such as swollen and painful testicles
- Rarely does chlamydia cause infertility in men

Image 1: SOA-Chlamydia-trachomatis-female. *Wikimedia Commons*, 20 January 2005, https://commons.wikimedia.org/wiki/File:SOA-Chlamydia-trachomatis-female.jpg.

Image 2: SOA-Chlamydia-trachomatis-male. *Wikimedia Commons*, 20 January 2005, https://commons.wikimedia.org/wiki/File:SOA-Chlamydia-trachomatis-male.jpg.

CHLAMYDIA

Syphilis

Who does it affect and how do you get it?

- Males and females
- Anyone who is sexually active
- You can become infected if you engage in oral, anal, or vaginal sex with an infected individual

Common signs and symptoms of syphilis?

Primary stage

- A single or multiple sore where the syphilis entered your body
- The sores are typically round, firm, and painful that they often go unnoticed
- The sores last 3 to 6 weeks and go away
    - You should still seek treatment even if the sores go away to prevent the infection from moving into the secondary stage

Secondary stage

- Itching and sores in the mouth, vagina, or anus
- The sores can have a red of brown coloration in the palm or feet
- Fever, fatigue, and headaches
- These symptoms will go away with or without treatment
    - You should seek treatment to prevent the infection from moving into latent and the tertiary stage

Latent stage

- There are not visible signs or symptoms
- If left untreated, the bacteria will stay in your body for years with no signs or symptoms

Tertiary stage

- Occurs when people do not receive treatment for the infection
- This stage is extremely debilitating, it can cause paralysis, blindness, deafness, mental illness, damage to the brain, nerve, heart, liver, bones, joints, and various other organs

How does syphilis affect pregnant women?

- Pregnant women can transmit it to their baby during vaginal delivery
- Syphilis can result in low-birth weight and premature birth
- It can cause congenital syphilis in babies and lead to poor development and seizures

Treatment for syphilis?

- The first thing to do is to go talk to healthcare provider
- The healthcare professional will conduct confirmatory testing to figure out if you have syphilis
- Syphilis is a bacterial STIs and can be treated using appropriate mediations (antibiotics)



Image1: Public Health Image Library (PHIL). (**n.d**). Retrieved from https://phil.cdc.gov/PHIL_Images/20050128/7454a1e7ee0a496a9be5ce15d4ac9b35/6803_lores.jpg

Image 2: Robert E Sumpter, Public Health Image Library (PHIL). (20 December 2017). Retrieved from https://phil.cdc.gov/Details.aspx?pid=12624

Image 3:
Robert E Sumpter, Public Health Image Library (PHIL). (20 December 2017). Retrieved from https://phil.cdc.gov/Details.aspx?pid=12580#modalIdString_imgURL1

SYPHILIS

Prevention Methods

- There are many ways you can protect yourself from STIs such as gonorrhea, chlamydia, and syphilis
- The number one way is to not have any forms of sex (practice abstinence)
- You can reduce your chance of getting STIs by using condoms each time you have sex
  - Ex: If you have sex three times you need to use a new condom each time (3 times)
- You can reduce your change of getting STIs by having only one un-infected sex partner and still use condom consistently
- If you have multiple sex partners, make sure to ALWAYS use condoms, every time
- To know your sexual health status, you need to get tested every three to twelve months (3-12 months) depending on your sexual activity

Part 2: STI Handshake Activity and discussion

Time	60 minutes
Material	♦ Sticky notes ♦ Pens/pencils

Objective	♦ To engage participants in understanding transmission of STIs and the importance of adopting preventative measures such as consistent condom use

- Instructors will place participants in one of the three groups listed below

Group 1: People with a least one STI

Group 2: People without an STI but are not using condoms during sex

Group 3: People who are sexually active, do not have an STI, and use condoms consistently during sex

- The instructors will discretely tell each participant what group he or she is part of, without telling the participant what the group stands for
- The Instructors will instruct participants to not disclose what group they're part of to any other participant
- The Instructors will instruct participants to shake hands with no more than three people
    - Before participants shake hands with anyone else, everyone will need to receive verbal consent from the other persons
- Participants will shake hands with three other participants
- The instructors will disclose the information about each group
- The instructors will ask everyone who was assigned to Group 1 to raise their hands
- The instructors will ask every participant who shook hands with anyone from Group 1 to raise their hands, and anyone who was assigned to Group 3 who shook hands with anyone from Group 1 put their hands down since they were considered to be at reduced risk for contracting an STI
- After the activity, the instructors will ask the participants to reflect on the STIs handshake activity
- Potential discussion facilitation questions:
    - What do you think was the main idea behind this activity?
    - What did you learn from this activity?
    - For those who became "infected," how do you feel?
    - For those who shook hands with an "infected" person but was part of the group who use protection, how do you feel?

Module 3: Common Viral STIs	
Time	120 minutes
Material	♦ The printed curriculum, a black board, chalk/marker can be used to write down the information, and the instructors can provide visual handouts to the participants, if necessary ♦ Easel pad sheets ♦ Sticky notes ♦ Notebook Paper ♦ Markers, pens, pencils ♦ Pre-test handouts ♦ Anonymous bin
Module Summary	This module introduces participants information about common vital STIs examined within the community. This module further facilitates instructor-participant and participant-participant interaction through lectures, activities, and discussion.
Goal	The goal is to educate participants on common viral STIs within the community (Herpes Simplex 2 (HSV-2), Human Papillomavirus (HPV), and Human Immunodeficiency virus (HIV)). Participants engage in lectures, video watching, condom demonstration, and group discussion
Objectives	By the end of this module, participants will be able to: 1. Know the common signs and symptoms of Herpes Simplex 2, HPV, and HIV 2. Identify various ways to reduce their risk of getting HSV-2 HPV, and HIV 3. Discuss transmission of STIs/HIV 4. Demonstrate and practice putting on condoms

Part 1: Common Viral STIs (HSV-2, HPV, HIV)

Time	60 Minutes
Material	♦ The printed curriculum, a black board chalk/marker can be used to write down the information, the instructors can provide visual handouts (or draw) to the participants, if necessary ♦ Easel pad sheets ♦ Paper ♦ Markers, Pens/pencils
Objective	♦ To teach participants about UTI and common viral STIs (HSV-2, HPV, HIV) seen within the community, signs and symptoms, prevention and treatment methods, and practice putting on condoms

♦ The instructors will take attendance and distribute back to the participants their writing materials

- The instructors will go over the ground rules. They will also read any questions that participants left in the anonymous bin

Lesson Materials:

Common Viral STIs (HSV-2, HPV, HIV)

HSV-2

Who does HSV-2 affect and how do you get it?

- Males and females
- Anyone who is sexually active
- It is very common among people between the ages of 14-49 years old
- You can become infected if you engage in anal or vaginal sex with an infected individual

Common signs and symptoms of HSV-2
Males and females

- Cracked or red areas around genitals without experiencing any pain or itching
- Itching and/tingling around genitals areas
- Blisters that can cause painful sores
- Swollen glands in pelvic areas, under arms, or throat,
- Fever, chills. Headache
- Over time those signs may go away, but the virus will stay in your body for the rest of your life
- A lot of people infected with HSV-2 may not show any symptoms

How does HSV-2affect pregnant women?

- Pregnant women can spread the infection to the baby if the virus is present in the birth canal, this can cause neonatal herpes (rare disease) in babies
- Neonatal herpes can cause irreversible damage to the baby's central nervous system, mental retardation, or death
- Neonatal herpes can be prevented by having a caesarean section (C-section)
- Women who get genital herpes before pregnancy are a low-risk of transmitting the virus to their baby

Treatment for HSV-2?

- Unlike gonorrhea, chlamydia, and syphilis, there is no cure for HSV-2
- But there are medications that you can take to <u>treat</u> it and to reduce the symptoms
- When you take the medication, it reduces your chance of transmitting the infection to other people
- Before you take any medication, go see a healthcare professional who will conduct confirmatory testing to figure out if you have HVS-2
- The healthcare professional will prescribe you the appropriate medication
- You must take the medication as prescribed by the healthcare professional

What can happen if someone doesn't get treated for HSV-2?

- You can experience painful genital sores
- You can transfer the virus to other parts of your body if you touch the sores or fluids



Image 1: Flumara NJ, Gavin Hart, Public Health Image Library (PHIL). (20 December 2017). Retrieved from https://phil.cdc.gov/Details.aspx?pid=6471

Image 2: Millar J.D, Public Health Image Library (PHIL). (20 December 2017). Retrieved from https://phil.cdc.gov/Details.aspx?pid=2877

Image 3: Public Health Image Library (PHIL). (20 December 2017). Retrieved from https://phil.cdc.gov/Details.aspx?pid=15560#modalIdString_imgURL1

HSV-2

HPV

Who does HPV affect and how do you get it?

- Males and females
- Anyone who is sexually active
- One of the most common STIs among young people
- There are many different strains of HPV, some of them can even cause cancer
- You can become infected if you engage oral, anal, or vaginal sex with an infected individual

Common signs and symptoms of HSV-2
Males and females

- Genital itching
- Genital lumps or bumps
- Genital warts
- Most of the time HPV infections show no symptoms

- The majority of HPV infections can go away on their own within 1-2 years
- Persisting infection with high-risk strains of HIV can lead to deadly diseases (ex. cancer)

HPV and cancer?

- High-risk strains of HPV can cause vaginal or cervical cancer, penile cancer, anal cancer, mouth and throat cancer
- It takes many years for these cancers to develop
- The strains that cause genital infections are not the same strains as those that cause cancers
- There is no way to detect who will have cancer or other deadly disease among infect people with HPV

How does HPV affect pregnant women?

- In most cases, HPV-infected pregnant women will not transmit the infection to their babies
- No link has been found between HPV and pregnancy complications

Protection against HPV?

- Males and females can get vaccinated for HPV starting as early as 9 years old and before they are sexually active
- People taking the vaccine must take <u>all three doses</u> in order to have maximum protection
- People who are sexually active should use a condom each time they have sex
- Be aware that HPV can still infect the genital areas that are not covered by the condom

Treatment for HPV?

- There is no known cure for HPV
- Healthcare professional recommend people get vaccinated for HPV before they are sexually active
- There are treatments available to relieve the symptoms of HPV
- Before you take any medication, go see a healthcare professional who will conduct confirmatory testing to figure out if you have HPV
- The healthcare professional will prescribe you the appropriate medication
- You must take the medication as prescribed by the healthcare professional

What can happen if someone doesn't get treated for HPV?

- The symptoms of HPV may go away on their own
- Persisting genital wards may increase in size and number, but they will not turn into cancer
- High-risk strains of HPV can ultimately lead to cancer

Image 1: Wiesner, Public Health Image Library (PHIL). (20 December 2017). Retrieved from https://phil.cdc.gov/Details.aspx?pid=4151

Image 2: Millar Joe, Public Health Image Library (PHIL). (20 December 2017). Retrieved from https://phil.cdc.gov/Details.aspx?pid=4097

Image 3: Brian Hill, Public Health Image Library (PHIL). (20 December 2017). Retrieved from https://phil.cdc.gov/Details.aspx?pid=15128

HPV

HIV

Who does HIV affect and how do you get it?

- Males and females
- Anyone who is sexually active
- People who practice injecting drugs and share needles
- You can become infected if you engage in anal or vaginal sex with an infected individual
- You can become infected if you share needles during drug injection with an infected individual
- Mothers can transmit the virus to their baby through blood and/or breastmilk

Ways that you will not get infected with HIV?

- Through urine or sweat
- When you get bit by a mosquito
- From toilet seat, door knobs, or water fountains
- When you kiss someone and do not exchange fluid
- When you share food with someone

Ways that you can get infected with HIV?

- When you exchange bodily fluid with an infected individual
  - Blood
  - Semen
  - Vaginal fluid
- Unprotected sex with an infected individual
- Sharing infected needles, razors, and/or sharp objects with an infected individual
- Mother-to-baby transmission during pregnancy, birth, and breastfeeding
- Contaminated blood transfusion

Common signs and symptoms of HIV
Males and females

- Persistent fatigue
- Fever
- Weight loss
- Chronic diarrhea
- Painful mouth sores
- Swollen lymph glands
- Sores that will not heal
- Some symptoms may be mild that you don't even notice them

How does HIV affect pregnant women?

- Pregnant women can transmit the virus to their baby through mother-to-baby transmission during pregnancy, birth, and breastfeeding
- HIV can lead to complications during pregnancy

Treatment for HIV?

- There is no known cure for HIV
- But there are medications that you can take to reduce the symptoms
- When you take the medication, it reduces your chance of transmitting the infection to other people by suppressing your viral load
- Before you take any medication, go see a healthcare professional who will conduct confirmatory testing to figure out if you have HIV
- The healthcare professional will prescribe you the appropriate medication (antiretroviral therapy or ART)
- You must take the medication as prescribed by the healthcare professional

What can happen if someone doesn't get treated for HIV?

- If you do not treat HIV, it can lead to chronic HIV infection where your body's immune system is destroyed
- Eventually that will lead to Acquired Immune Deficiency Syndrome (AIDS) where you begin to experience many other illnesses such as pneumonia, Kaposi sarcoma, cancers, and eventually lead to death

Prevention Methods

- There are many ways you can protect yourself from STIs such as HSV-2, HPV, and HIV
- The number one way is to not have any forms of sex (practice abstinence)
- You can reduce your chance of getting STIs by using condoms each time you have sex
    - Ex: If you have sex three times you need to use a new condom each time (3 times)
- You can reduce your change of getting STIs by having only one un-infected sex partner and still use condom consistently
- If you have multiple sex partners, make sure to ALWAYS use condoms, every time
- To know your sexual health status, you must get tested every three to twelve months (3-12 months) depending on your sexual activity

- For HIV, you can take pre-exposure prophylaxis (PrEP) which can reduce at-risk people's chance of getting HIV by 92% but the medication is currently not easily accessible and available in Haiti

Part 2: (REDO) STI Handshake Activity with a twist and discussion

Time	15 minutes
Material	♦ Sticky notes ♦ Pens/pencils
Objective	♦ To engage participants in understanding transmission of STIs and the importance of adopting preventative measures such as consistent condom use

- Instructors will place participants in one of the three groups listed below

Group 1: People who are sexually active, do not have an STI, and use condoms consistently during sex

Group 2: People with a least one STI

Group 2: People without an STI but are not using condoms during sex

Group 3: People with a least one STI

**Notice that the groups have changed

- The instructors will discretely tell each participant what group he or she is part of, without telling the participant what the group stands for
- The Instructors will instruct participants to not disclose what group they're part of to any other participant
- The Instructors will instruct participants to shake hands with no more than three people
    - Before participants shake hands with anyone else, everyone will need to receive verbal consent from the other persons
- Participants will shake hands with three other participants
- The instructors will disclose the information about each group
- The instructors will ask everyone who was assigned to Group 1 to raise their hands
- The instructors will ask everyone who was assigned to group 2 and shook hands with group 1 to raise their hands
    - Lesson 1: People from group 1 were protected from STIs from group 2—Group 2 did not transmit the infection to people in group 1
    - Lesson 2: People in group 3 who shook hands with people from group 2 became infected, but they did not transmit the infection to anyone they shook hands with in group 1
- After the activity, the instructors will ask the participants to reflect on the STIs handshake activity
- Potential discussion facilitation questions:
    - What is something new that you learned now that you've done the activity twice?
    - How has your feeling changed now that you've done the activity twice?
    - How does your prior knowledge of the activity reinforce your ideas about sexual health?
    - What are some practical steps you or other people can take to reduce their chances of STIs?

- The instructor will guide participants to conclude that the prevention steps they learned from module 2 and 3 are practical for every STI
- The instructors will guide participants to think about ways they can use what they learn and apply it to their lives.

Part 3: Condom demonstration and Practice

Time	45 minutes
Material	♦ Male and female condoms. If no female condoms are available, instructors should inform participants that there are female condoms and still show them the steps ♦ Green plantains or bananas ♦ lubricants

- The instructors will construct a play or an activity to introduces the condom demonstration activity
- This activity should apply humor to help break the ice and ease the participants nerves into practicing putting on condoms
- The instructors will carry out a formal condom (males and female condoms, if possible) demonstration in front of the class
- The participants will pair up and each person will take turn practicing putting on the male and female condoms (if possible)
- Instructors will advise participants to say aloud the steps of putting on the condom as they practice it

Steps to put on male condoms

Materials: Male condoms, lubricant (optional), plantains/bananas

Plantains/bananas are used as in the place of a penis

Image: Used with Permission from AVERT.org
Condoms - how to use a male condom. (2019, January 30). Retrieved from https://www.avert.org/sex-stis/safer-sex-hiv/condoms

Steps to put on female condoms

Materials: Female condoms, lubricant (optional)

For practice purposes, participants can from an oval shape with their thumb and index finger

Image: Used with permission from AVERT.org

Female condoms - how to use a female condom. (2018, February 08). Retrieved from https://www.avert.org/sex-stis/safer-sex-hiv/female-condoms

Facts about Lubricants:

Lubricants can reduce the symptoms of dryness at the penetration sites during sex.

There are many types of lubricants:

- **Water-based lubricants:** Inexpensive, can be used with condoms, doesn't last long

-You can either put 1-2 drops of lubricants inside the condom before putting it on or put it outside the condom after you have the condom on
-Can cause inflammation and yeast infection (mainly among women)

- **Silicon-based lubricants:** Can be used with condoms, last longer than water-based lubricant, hard to rinse off

- You can either put 1-2 drops of lubricants inside the condom before putting it on or put it outside the condom after you have the condom on
-Can cause inflammation and yeast infection (mainly among women)

- **Oil-base lubricants:** Cannot be used with condoms because they weaken the latex in condoms which can cause the condom to break, can be used for other sex activities not involving condoms

-Examples: coconut oils, baby oils, other form of oils.

Discussion:

- The instructors will facilitate the discussion on the module
- Potential facilitation questions:
    - Can someone give me a recap of what we went over today?
    - How did you feel about the information you received from the lectures, STI handshake activity, condom demonstration?
    - How has the education you received today influence the way you view sexual health?
        - What about condom use?
    - What did you think about the condom demonstration?
    - How did you feel about practicing putting on a condom?
        - Did you feel comfortable/uncomfortable?
- The instructors will encourage participants to share information on where they typically go to get condoms, lubricants, etc.
- The instructors will also provide resources (condoms, lubricants, etc.) to participants and provide them with a list of locations that they can go to get condoms in addition to the resources that participants shared among each other

Module 4: Healthy sexual relationships	
Time	120 minutes
Material	♦ The printed curriculum, a black board, chalk/marker can be used to write down the information, and the instructors can provide visual handouts to the participants, if necessary ♦ Projector, speaker, laptop, if possible. The activities within this module can also be facilitated without technology (Read the options) ♦ Easel pad sheets ♦ Ground rules sheet ♦ Construction paper ♦ Markers ♦ Paper, pens, pencils ♦ Anonymous bin
Module Summary	This module will engage participants in watching videos that presents information on healthy (sexual) relationships and safe sex. For organization that may not be able to play the videos provided in this curriculum, some suggestion on play-writing and presentations are provided.
Goal	The goal is to engage participants in understanding the importance of safe sex and healthy sexual relationships.
Objectives	By the end of this module, participants will be able to: 1. Understand the importance of condom use 2. Understand the need for sexual consent 3. Understand the importance of STIs testing 4. Create educational presentations to teach other people about sexual health

Part 1: Videos/Scenario and Discussion

Time	45 minutes
Material	Option 1: ♦ Laptop ♦ Projector ♦ Speakers ♦ WIFI and electricity Option 2: ♦ The printed curriculum, a black board, chalk/marker can be used to write down the information, and the instructors can provide visual handouts to the participants, if necessary
Objective	♦ To reinforce knowledge and understanding of preventative measures (condom use and STIs testing), to introduce the idea of consent before sex, to promote communicating healthy sexual relationships

- The instructors will take attendance and distribute back to the participants their writing materials
- The instructors will go over the ground rules. They will also read any questions that participants left in the anonymous bin.

Lesson Materials:

CONDOM USE

OPTION 1: Organizations that have the technology to play the video from YouTube

- The instructors will facilitate video watching and discussion on condom use
    1. Communicating condom use with sexual partner (s)

Watch Video:

S. (2010, June 09). Kreyòl ayisyen / Haitian Creole film, English captions: "Pour une fois" (Global Dialogues). Retrieved from https://www.youtube.com/watch?v=vufLXnKcZxg

- The instructors will facilitate discussion
- Possible facilitation questions:
    - Can someone give me a recap of what we just watched?
    - How did that video portray the need for consistent condom use?
        - What about the need for consent before sex?
    - What lessons did you learn from the video?
    - How does this video relate to condom use?
        - What about communicating condom use?
        - What about healthy sexual relationships?
    - What are some of the practices seen in this video that you can adopt?
        - What are some other practices that you can adopt that weren't portrayed in the video?
    - What does this video show in terms of who should have condoms?

OPTION 2: Organizations that do not have the technology to play the video

- The instructor will read the scenario presented below to the participants

David sees Joseline from afar, and he is really excited to see her. He runs up to her and so begin this conversation. David: Joseline, I am so happy to see you. I want to spend some quality time with you." Joseline: "what kind of quality time?" As she smiles at him. David: "Come on. You know. I want to have sex with you! Do you want to have sex with me?" Joseline: "Yes, I do. Do you have a condom? David: No, I don't, but we're only going to do it once, so it won't be a big deal." Joseline: "No David, we can't have sex without a condom. It takes one time to get infected, you know. The doctor told me that when I went to the clinic."

David: "Okay, I will go get a condom and come back."
Joseline: "I'll be waiting!"

David comes back

David: "Joseline, I have the condom. Do you still want to have sex?"
Joseline: *pulls out a condom form her drawer* "So do I! and Yes, I still want to have sex with you."
David: "You made me go through all this trouble for a condom when you had one?"
Joseline: "Of course David, I just wanted to see if you cared about sexual health the way I care about mine. Plus, now that we have two condoms, we can have safe sex up two times."

*David and Joseline laughs, and the rest is history.

- The instructors will facilitate discussion
- Possible facilitation questions:
    - Can someone give me a recap of the scenario I just read?
    - How did that scenario portray the need for consistent condom use?
        - What about the need for consent before sex?
    - What lessons did you learn from the scenario?
    - How does this scenario relate to condom use?
        - What about communicating condom use?
        - What about healthy sexual relationships?
    - What are some of the practices seen in this scenario that you can adopt?
        - What are some other practices that you can adopt that weren't portrayed in the scenario?
    - What does this scenario show in terms of who should have condoms?

TESTING

OPTION 1: Organizations that have the technology to play the video

- The instructors will facilitate video watching and discussion on STIs testing

1. Communicating condom use with sexual partner (s)

Watch Video (In French):

S. (2009, April 06). Rapport non protégé !? ("De Bon coeur", version française, English captions ; Global Dialogues). Retrieved from https://www.youtube.com/watch?time_continue=1&v=efklD7o9wzI

- The instructors will facilitate discussion
- Possible facilitation questions:
    - Can someone give me a recap of what we just watched?
    - How did that video portray the need for STIs testing?
    - What lessons did you learn from the video about STIs testing?
    - How does that video relate to healthy sexual relationships?
        - What about STIs testing?

- How does this video relate to condom use?
    - What about the lack of condom use during sex?
- What is your takeaway from this video?

OPTION 2: Organizations that do not have the technology to play the video

- The instructor will read the scenario presented below to the participants

Joe and Marie met at a bar one night and ended up having consensual sex. In the morning Marie became very frantic because they did not use a condom, and she did not know Joe's sexual health status. Marie talked to her best friend, and her best friend told her that the only way to make sure she is not infected is to go get tested at the local health clinic. Marie rushed through to the clinic where she was met by helpful healthcare professionals who performed STI testing. It was her first time getting tested, she was very nervous. The healthcare professional called her into his office for her result. Her test results came back negative, and Marie was relieved. The healthcare professional told her that she must use a condom every time she has sex and to get tested regularly to make sure she knows her sexual status.

- The instructors will facilitate discussion
- Possible facilitation questions:
    - Can someone give me a recap of what I just read?
    - How did that scenario portray the need for STIs testing?
    - What lessons did you learn from the scenario about STIs testing?
    - How does that scenario relate to healthy sexual relationships?
        - What about STIs testing?
    - How does this scenario relate to condom use?
        - What about the lack of condom use during sex?
    - What is your takeaway from this scenario?
- The instructor will inform participants of other ways to reduce their risks of STIs
    - Use condoms ALWAYS
    - Get tested REGULARLY
    - Reduce their number of sexual partners
    - Aim for one un-infected sexual partner

Part 3: Draw the "perfect" sexual partner and discussion

Time	30 minutes
Material	♦ Construction paper ♦ Markers
Objective	♦ To promote communication healthy sexual relationships

- The instructor will separate the class into two groups
    - The groups can be of the same gender or mixed-gender, however, it may be more useful to separate the two groups into two groups of the same gender
- The instructor will ask each group to communicate and come up with the "perfect" sexual partner

- This activity will give participants the opportunity to see the different aspects other participants believe to be important in a healthy sexual partner
    - These aspects can be tangible and intangible, emotional, physical, etc.
    - Ex: Communication, consent, condom use, care about his/her sexual health, etc.
- The instructors will instruct each group to present their "perfect" sexual partner to the rest of the participants
- The instructor will facilitate discussion
- Possible discussion question:
    - How was the process of coming up with a "perfect" sexual partner with a group?
    - What did this activity tell you about people's "perfect" sexual partners?
    - What role did communication play in developing that "perfect" sexual partner?
    - What did you learn from this activity?
    - What did this activity teach you about communication between sexual partners?

Part 4: Sexual Health educational Presentations

Time	45 minutes
Material	♦ Paper ♦ Pen/Pencils
Objective	♦ To engage participants in creating educational presentations to teach other people about sexual health

- The instructors will give participants the opportunity to create their own community skit/play to present to the rest of the class and the community
- Participants will sign up for 1 of the 5 presentation categories
- The instructors will give the participants protected time to construct their presentations to be presented at the next module (the next day)
- The instructor will have a sign-in sheet with a pre-determined number under each category to make sure each group has an even number of participants
- The categories are as followed:
    - Common Bacterial STIs
    - Common Viral STIs
    - Healthy sexual relationships
    - Prevention methods
    - STIs testing
- Groups can create a skit/play/music/poem/video no more than 5-minutes long around the topic that they choose
- Instructors will encourage participants to be as creative as possible

Module 5: STIs and HIV Campaign Development	
Time	120 minutes
Material	♦ The printed curriculum, a black board, chalk/marker can be used to write down the information, and the instructors can provide visual handouts to the participants, if necessary ♦ Easel pad sheets ♦ Ground rules sheet ♦ Construction paper ♦ Markers, coloring pencils ♦ Paper, pens, pencils ♦ Anonymous bin
Module Summary	This module will engage participants in creating and presenting their educational presentations about sexual health. Participants will develop visual campaigns on constructor paper. Instructors will test participants using post-tests to evaluate any change in knowledge. Participants will also graduate form the project and receive certificates of success or participation
Goal	The goal is to engage participants in creating educational tools that can be used to communicate and more bring awareness about sexual health
Objectives	By the end of this module, participants will be able to: 5. Know if their knowledge of STIs/HIV has changed 6. Develop creative educational tools to educate others about sexual health 7. Present creative educational tools to other participants and other communities 8. Receive recognition for their participation in the project

- ♦ The instructors will take attendance and distribute back to the participants their writing materials
- ♦ The instructors will go over the ground rules. They will also read any questions that participants left in the anonymous bin

Part 1: Post-test

Time	10 minutes
Material	♦ Post-test, pens/pencils
Objective	♦ To assess current participants' knowledge on STIs and HIV

- ♦ A post-test handout will be passed to every participant
  - ♦ Participants will have 10 minutes to answer the pre-test True/False questions
- ♦ The instructor will read aloud each question and instruct participants to circle "T" for true of "F" for false after each question
  - ♦ This is to accommodate everyone regardless of literacy status
- ♦ Instructor will collect the post-test, one of the instructors or assistants will grade the post-test will project continues

Part 2: Rehearsal, demonstration of educational presentations, Discussion

Time	Rehearsal: 10 minutes	Presentations: 25 minutes	Discussion: 10 minutes	Total: 45 minutes
Material	♦ N/A			
Objective	♦ To reinforce sexual health education, to give participants the opportunity to create their own sexual health educational presentations			

- The instructors will give the participants 10 minutes to rehearse and go over their educational presentations with their group
- The instructors will give each group 5 minutes to present
- The groups are as followed:
    - Common Bacterial STIs
    - Common Viral STIs
    - Healthy sexual relationships
    - Prevention methods
    - STIs testing
- The instructors will facilitate a short discussion with the participants
- Possible facilitation questions:
    - What did you learn from these presentations?
    - What did you guys think about the presentations?
    - Which one(s) was/were your favorite? Why?
    - What were some take-aways from these presentations?

Part 3: STIs and HIV poster campaign development

Time	30 minutes
Material	♦ Posters ♦ Easel pads ♦ Construction paper ♦ Markers, Coloring pencils ♦ Pens/pencils
Objective	♦ To engage participants in creating brief educational messages about sexual health on poster/construction papers

- The instructors will instruct participants to individually create brief educational messages about sexual health on posters/construction papers
- The instructors will pass out materials to participants
- The instructors should encourage participants to be as creative as possible
- The instructors should give participants the option to use their posters to create a collage that can be hung at the organization/location where the project took place

Part 4: Review post-test

Time	10 minutes
Material	♦ Pre-and-Post-test
Objective	♦ To evaluate participants' knowledge of STIs and HIV

- ♦ The instructors will grade the participants' pre-and-post-test and note their scores
- ♦ The instructors will give the participant's their pre-and-post-test so that they can see their scores
- ♦ The instructors will give the participants opportunities to ask questions, and they will answer these questions accordingly

Part 5: Course Evaluation

Time	10 minutes
Material	♦ Course evaluation sheet
Objective	♦ To evaluate the usefulness of the SRH education project

- ♦ The instructors will give each participant a course evaluation
- ♦ The instructors should choose a participant to read aloud the questions and directions to accommodate people who may not know how to read
- ♦ The instructors should leave the education for confidentiality purposes

Part 6: GRADUATION!!!!

Time	15 minutes
Material	♦ Organization-stamped Successful completion certificate ♦ Organization-stamped Participation certificate
Objective	♦ To recognize participants for their participation in the project

- ♦ The instructors will give each participant a certificate and thank them for their commitment
  - ♦ Organization-stamped Successful completion certificate: participants who attended 4 out of 5 modules and earned at least an 80% on the post-test
  - ♦ Organization-stamped Participation certificate: Participants who attended at least 1 out of 5 modules or earned less than 80% on the post-test

*Discretion is advised, instructors can choose to use a different method of incentive that reflects the organizations' values.

Name: _____

STIs and HIV Post-test

STIs is an acronym for sexually transmitted infections.

Circle (T) for True and (F) for false statements

1. You can catch STIs/HIV from a door knob, a chair seat, or a toilet seat. T / F
2. Sometimes, the signs and symptoms of STIs/HIV can go unnoticed. T / F
3. You don't need to see a doctor when the signs or symptoms of STIs go away. T / F
4. You cannot have more than one STI at a time. T / F
5. There are things you can do to reduce your risk of STIs. T / F
6. You cannot have the same STI twice. T / F
7. You cannot get infected with STIs/HIV the first time you have sex. T / F
8. You can always tell if people are infected with STIs/HIV by looking at their genitals. T/F
9. If you don't treat some STIs you can become infertile. T / F
10. Clean people cannot get infected with STIs/HIV. T / F
11. People who choose to not have sexual intercourse reduce their chance of being infected with STIS/HIV. T / F
12. All STIs can be cured. T / F
13. You can get HIV if you touch someone who is infected with the virus, with no open wounds. T / F
14. You are at greater risk of getting STI/HIV if you have many sexual partners. T / F
15. You can get infected with STIs/HIV by sharing needles with infected people. T / F
16. Sexual intercourse is the only way to get STIs/HIV. T / F

Direction to instructor (s):

Read each question out-loud and slowly. After each statement tell everyone to circle (T) for True statement and (F) for False statements. This is to include everyone regardless of literacy status.

*Use the same questionnaire for the post-test at the end of the project.

Name: _____

STIs and HIV Post-test KEY

STIs is an acronym for sexually transmitted infections.

Circle (T) for True and (F) for false statements

1. You can catch STIs/HIV from a door knob, a chair seat, or a toilet seat. T / F
2. Sometimes, the signs and symptoms of STIs/HIV can go unnoticed. T / F
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4. You cannot have more than one STI at a time. T / F
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9. If you don't treat some STIs you can become infertile. T / F
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Direction to instructor (s):

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*Use the same questionnaire for the post-test at the end of the project.

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