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# HIV/AIDS Prevention: Educating Future Generations

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HIV/AIDS PREVENTION: EDUCATING FUTURE GENERATIONS

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### Abstract

The purpose of this study was to discover if implementing more educational interventions on HIV/AIDS would lead to lower incidents of HIV/AIDS among youth. A quantitative research design was used to determine the level of knowledge, perceptions, and attitudes of high school students in regard to HIV/AIDS. The targeted population were youth ages 14-18 years old, which are generally high school students who are at risk of contracting HIV/AIDS. Participants in this study were students from Human Resources Development Institute's Teen Pregnancy Prevention Program at Harper High School in Chicago, Illinois. The researcher administered questionnaires to the students at Harper High School. The researcher analyzed this data using descriptive statistics to explain the research phenomena of implementing effective interventions into school curriculums as a strategy to reduce the number of incidents of HIV/AIDS cases found among youth. Based upon the student's responses, the researcher has learned that intervention programs that are implemented in school curriculums have significant influence on the youth population's sexual activity and risk behaviors. This study has revealed 80% of the sample population were sexual active; with approximately 60% engaging in sexual activity by the age of 15. In revealing the sample population's sexual activity, this study also concluded that this population lacked knowledge on HIV/AIDs as it pertains to them on their sexual risk behaviors.

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## Chapter 1

### **HIV/AIDS PREVENTION: EDUCATING FUTURE GENERATIONS**

Every hour, two young people in the U.S. becomes newly infected with HIV (Rudy, 2010). In 2009, there were 890,000 new HIV infections amongst young people aged 15-24 and in 2010, five million 15-24 year olds were living with HIV (World, 2011). In 2013, HIV/ Aids had a greater impact on young people in the United States who bear the brunt of this serious epidemic. Adolescents and young adults in the U.S. are strikingly vulnerable to HIV infection, primarily through sexual transmission (CDC, 2006). The increased risk for HIV/AIDS among young people is a result of a variety of factors, including tendency of youth to engage in high-risk behaviors, unique biological and psychosocial factors associated with this developmental stage, and inadequate prevention and education programs targeting their needs. The researcher believes by understanding the unique dynamics of the HIV/AIDS epidemic among youth in the United States is critical to developing and implementing effective prevention and treatment programs. Previous research has been conducted on the epidemic of HIV/AIDS, but there has been minimal research on adolescents' understanding of scientific knowledge about HIV transmission.

#### **Problem Statement**

Young people are at the center of the global HIV/AIDS epidemic, in terms of new infections and opportunities for preventing the transmission of HIV/AIDS. Although this epidemic varies in different parts of the world, young people are potentially the greatest force for change if they can be reached by the proper interventions. Young people are much more likely to adopt and maintain safe behaviors to decrease the prevalence of this epidemic if effective

prevention interventions are implemented early. The current literature on this epidemic acknowledges these trends.

### **Purpose of the Study**

The purpose of this study was to show how educating future generations would lead to lower incidents of HIV/AIDS among youth. This study is significant to the targeted audience of youth ages 14-18, who are most vulnerable to HIV infection. The researcher believes HIV/AIDS education needs to be effectively implemented into high school curriculums to empower and motivate the youth by making them aware that what they learn is relevant to their lives and position them to take control of their sexual behavior. As a result of this study, the researcher's expectation was to learn how much youth ages 14- 18 know about the transmission and prevention of HIV/AIDS.

To help the researcher show how educating future generations would lead to lower incidents of HIV/AIDS among youth, this study addressed several research questions. These research questions included a central question, followed by sub-questions that addressed preventive measures. The questions also examined the High School curriculum on the education of HIV/AIDS.

## **Research Questions**

For the purpose of this study, the following questions were addressed:

### Central Question

What effect will implementing HIV/AIDS intervention in High School curriculum have on lower incidents of HIV/AIDS among youth?

### Sub-Question

1. What does the current prevention strategy used in High School curriculum having on reducing incidents of HIV/AIDS among youth?

This survey research study involved health behaviors of youth. To help explain the phenomenon and answer these research questions, the researcher used the Health Belief Model as the theoretical framework for this research.

## **Theoretical Framework**

The theory that the researcher used to explain the phenomenon being studied was The Health Belief Model. It was developed in the 1950s by social psychologists Hochbaum, Rosenstock and Kegels who were working in the U.S. Public Health Services, and it was used as a psychological model that attempts to explain and predict health behaviors by focusing on the individual's socio-demographic characteristics, knowledge, attitudes, and beliefs of individuals. The Health Belief Model has been adapted to explore a variety of long- and short-term health behaviors, including sexual risk behaviors and the transmission of HIV/AIDS. According to Rosenstock, Strecher and Becker (1994), this theory indicates that a person must possess six key concepts in order to execute the desired behavior including:

1. Perceived susceptibility
2. Perceived severity
3. Perceived benefits of performing a behavior
4. Perceived barriers of performing the behavior
5. Cues to Action
6. Self- Efficacy

As applied to this study, this theory holds that the researcher would expect the independent variable: more educational intervention programs to influence or explain that if these educational interventions are implemented effectively, the dependent variables: lower incidents to HIV/AIDS among youth will occur. As a result, they will be more likely to delay sexual debut and use condoms compared to students who do not participate in the life skills program. The HIV/AIDS epidemic has grossly spread throughout the world. People still have a stigma regarding the disease and are not knowledgeable of what it is or how it is contracted.

This study used a variety of terms that are commonly used when addressing this epidemic of HIV/AIDS. The researcher defined some of the terms that were used in this quantitative survey to provide a clear meaning of terms. The understanding of these terms validates the importance of the survey research.

### **Definitions of Terms**

HIV- Human Immunodeficiency Virus is a virus spread through body fluids that affects specific cells of the immune system, called CD4 cells, or T cells. Over time, HIV can destroy so many of these cells that the body can't fight off infections and disease. When this happens, HIV infection leads to AIDS. (CDC 2010)

AIDS – Acquired Immunodeficiency Syndrome is the final stage of HIV infection. People at this stage of HIV disease have badly damaged immune systems, which put them at risk for opportunistic infections. (CDC 2010)

Epidemic- affecting or tending to affect a disproportionately large number of individuals within a population, community, or region at the same time. (CDC 2010)

Interventions- to interfere with the outcome or course especially of a condition or process. (Diclemente et al 2007)

Youth- the period between childhood and maturity, especially adolescence and early adulthood. (Buysse 1996)

The topic of HIV/AIDs is not common among the sample population. To help guide the reader's understanding of this study, the researcher has provided clear definitions of terms used. These terms will be frequently used throughout this study.

### **Study Limitations**

The limitations of this survey research encompassed the sample population being from a Teen Pregnancy Program that concentrates on Prevention, including HIV/AIDS, throughout the school year. This is the only program sampled exclusively from Harper High School. The program included 40 students, 30 of which were used as the sample size. The sample population is from Harper High School, located on the South Side of Chicago in a predominately African American community, where the population was not ethnically diverse. Study results may have been different if the study had been conducted using a larger population, both inner city and suburban high school students, and more ethnically diverse.

There has been a lot of research regarding the topic of HIV/AIDS. The researcher has chosen to explore the topic in depth regarding its effect on the youth population. Current literature on HIV/AIDS and its relation to the youth, suggest this epidemic is on the rise among youth are increasing.

## **Chapter II**

### **Literature Review**

*“The United States will become a place where new HIV infections are rare and when they do occur, every person, regardless of age, gender, race/ethnicity, sexual orientation, gender identity or socio-economic circumstance, will have unfettered access to high quality, life-extending care, free from stigma and discrimination”* (Prejean, 2011)

For the past thirty years since the first cases of HIV/AIDS caught the world’s attention, this epidemic has claimed the lives of nearly 600,000 Americans and affects many more (Torrone, 2010). President Obama is committed to developing a *National HIV/AIDS Strategy* with three primary goals: (1) reducing the number of people who become infected with HIV, (2) increasing access to care and optimizing health outcomes for people living with HIV, and (3) reducing HIV-related health disparities. However, the task does not fall to the Federal Government alone, success will require the commitment of all parts of society, including state, tribal and local governments, businesses, faith communities, philanthropy, the scientific and medical communities, educational institutions, people living with HIV, and others. This chapter reviewed the related literature; explains some of the stigmas/barriers, community level interventions, patterns of condom use, and identified some of the gaps in prevention services for HIV/AIDS among youth.

#### **HIV/ AIDS Pandemic among Youth in the United States**

Around the world, 5 million young people are living with HIV. And with 41 percent of new HIV infections occurring among young people, that means every 30 seconds, another young

person becomes HIV-positive. (CDC, 2010) In the United States, 39 percent of all new HIV cases are among young people ages 13-29, and from 2007-2010, ages 15-19 and 20-24 were the only age groups to experience an increase in the rate of diagnoses of HIV infection. (Hall, 2008)

Young people in the United States continue to be at risk for HIV and AIDS. At the end of 2009, in 46 states and five U.S. dependent areas with confidential name-based HIV infection surveillance, 80,461 young people ages 13-29 were living with HIV, comprising ten percent of all people living with HIV. (CDC, 2010) Thirty-nine percent of all new HIV cases are among young people ages 13-29, and from 2007-2010, ages 15-19 and 20-24 were the only age groups to experience an increase in the rate of diagnoses of HIV infection. (CDC, 2012) Young people living in communities with high HIV prevalence, which includes many African American communities, are more at risk for HIV even if risk behaviors are the same as young people living in a community with lower HIV prevalence. (Barnett, 2005)

### **HIV/AIDS in Minorities and Different Ethnic Groups**

When risk behaviors are equal, minority youth are more at risk for HIV. Future research and resources must address the underlying social factors that contribute to these disparities and that policies and programs promote structural and social-economic changes to improve these factors.

In 2010, 77 percent of HIV/AIDS diagnoses in young people aged under age 25 were in males, and 23 percent were in females. The majority of HIV/AIDS cases diagnosed among young men were attributed to male-to-male sexual contact. High-risk heterosexual contact attributed to the majority of HIV/AIDS cases diagnosed among young women. (CDC, 2010) Also in 2010, African Americans/blacks and Latinos/ Hispanics accounted for 84 percent of all new HIV infections among 13- to 19-year-olds and 76 percent of HIV infections among 20- to

24-year-olds in the United States even though, together, they represent only about 35 percent of people these ages. Asian and Pacific Islanders (APIs) and American Indians and Alaska Natives each account for about one percent of new HIV infections among young people ages 13-24. (CDC, 2010)

Young women of color suffer disproportionate rates. At the end of 2010, African American/black and Latinas/Hispanic women accounted for 82 percent young women ages 13- to 24-year-old living with HIV in the United States, even though, together, they represent only about 30 percent of U.S. women these ages. (McCabe, 2011) A study among African American women in the South, a region with unusually high rates of HIV, concluded that socioeconomic factors, including financial dependence on male partners, feeling invincible, and low self-esteem, place young African American women at risk for HIV/AIDS. (Chandra, 2011) Dating violence and sexual assault play a role in HIV transmission, 20 percent of youth report experiencing dating violence. (Kline, 2008) Women who experience dating violence are less likely to use condoms and feel more uncomfortable negotiating condom use. In one study, half of girls who reported HIV or sexually transmitted infections (STIs) had been physically or sexually abused. (Kline, 2008)

Most young men who have HIV acquired it through male-to-male sexual contact, and the risk is increasing for young men who have sex with men (MSM). Between 2006 and 2009, HIV/AIDS cases among young men ages 13-24 who have sex with men increased across all ethnic groups, with young African American/black men most greatly affected. (CDC, 2010) Fifty-eight percent of HIV/AIDS infections among young men who have sex with men were in African Americans/blacks; 20 percent in Latinos/Hispanics; and 19 percent in whites. (CDC, 2010) From

2007-2010, cases of HIV/AIDS among young African American/black men ages 13- 24 who have sex with men increased by 48 percent. Diagnoses of HIV also increased among white and Hispanic men who have sex with men, but less sharply. (CDC, 2011) For many young men who have sex with men, social and economic factors, including homophobia, stigma, and lack of access to culturally competent health care and health care services may increase risk behaviors or be a barrier to receiving HIV prevention services. (McCabe, 2011)

According to Kirby (2005) more than thirty years into the HIV and AIDS pandemic, it remains one of the most serious challenges to global public health. It is important to promote programs that help young people lessen risky sexual behaviors by encouraging condom use, delay in sexual initiation, partner reduction, and early HIV testing and treatment.

### **Community/ School Based HIV/AIDS Prevention**

Schools play a pivotal role in providing HIV/AIDS education for young people, not only do schools have the capacity to reach a large number of young people, students are particularly receptive to learning new information (Lyles, 2007). Therefore, schools are a well-established point of contact through which young people can receive HIV/AIDS education. At the same time, in many countries where HIV and AIDS has been diagnosed in a sizable portion of the population, greater investment in education is vital for the provision of effective HIV prevention for young people. A UNESCO study in 2009, found that in Eastern and Southern Africa, children had 'low levels of knowledge' regarding HIV/AIDS which was attributed to, among other factors, lack of teacher training, lack of examination for students on the topic (and therefore little incentive to teach it) and unease teaching the subject resulting from embarrassment.

While many may argue that an educational institution's response to HIV and AIDS

should be limited to education about HIV prevention, schools and other public institutions can play a significant role in supporting all the dimensions of a comprehensive response to HIV and AIDS, including prevention, treatment, care and support (UNESCO, 2008).

Community level HIV/AIDS interventions have a significant role in the spread of this epidemic. By working with communities, the focus is now on changing policy, social structures, social norms and cultural practices that surround individual risk behaviors. Many of these approaches stress the importance of participatory methods to include and empower individuals. Researcher Cosandra McNeal examined the role of Black Churches in prevention. This study used both quantitative and qualitative analytical methods by using a survey that was given to 11 churches, by 11 different ministers, and one church member. The results showed that the majority of the ministers with their congregation's views on the topic of HIV/AIDS. Few ministers had previously supported or participated in HIV/AIDS workshops nor did they distribute HIV/AIDS educational material in the African American community. The study revealed that none of the churches had an established HIV/AIDS prevention program. The study concluded, most of the ministers were open to implementing an HIV/AIDS prevention program, provided that it did not violate the church doctrines. The results in this study suggested that Black churches represent an important potential resource for HIV/AIDS prevention. For success, the initial strategy should involve the minister in the early planning stage due to the fact people have a more personal relationship with their religious leaders. The focus is on expanding the scope of this study and improving communication between the church, community-based organizations, and health professionals.

While the community based organizations and schools have been effective tools to bring awareness to the HIV/AIDS epidemic, there is a greater need for prevention interventions for the

youth populations (Peersman, 2008). This may include incorporation of Health Education of HIV/AIDs into the School's curriculum. Health education as part of a school's curriculum can provide accurate knowledge of HIV/AIDS prevention.

### **HIV/STD Prevention Interventions for Adolescents**

Educating young people about HIV before they begin engaging in behaviors that place them at risk for HIV infection should be a priority. It is a parent's job to instill values and to provide the moral and ethical foundation for their children; however, schools have an important role in providing access to current and accurate information about the biological and scientific aspects of health education. It is important to provide access to a baseline of health education information that is grounded in the benefits of abstinence and delaying or limiting sexual activity, while ensuring that youth who make the decision to be sexually active have the information they need to take steps to protect themselves. According to Pinkerton (1998), every year, millions of American adolescents are infected with STDs, including HIV. The researchers in this study examined the personal, social, and economic consequences of adolescent STD infection. The study revealed individually-focused, and community-level educational and sexual risk reduction interventions can help prevent the spread of STDs among adolescents. There is little known about the economic efficiency, or cost-effectiveness of such programs. Due to funding for HIV/STD prevention programs are limited, health departments and other decision makers need accurate information about the cost-effectiveness of various prevention programs to help them appropriately target spending for programs. This study: (1) reviewed the magnitude of the multiple STD epidemics among adolescents; (2) described selected STD prevention interventions that have been shown to be effective at reducing adolescents' risk for contracting

STDs; and (3) discussed the cost-effectiveness of these programs, using what is known about the economic efficiency of HIV/STD prevention programs for adults as a guideline, and taking into account factors unique to the adolescent population. As the youth in future generations become increasingly exposed to multiple influences that increase their risk for HIV infection, effective and comprehensive interventions must be implemented to significantly reduce risk of HIV/AIDS in this targeted population.

Youth were identified as a group especially vulnerable to HIV due to poverty and social practices. 'Street kids' interviewed in one study reported poverty as a key reason for living on the street. In fact, 39% of the children reported that stealing was their primary means of income. Many of these children reported knowing friends and relatives who had died due to AIDS (39%) and many others reported being approached by adults to engage in sexual activities (33%). Child sexual abuse was highlighted in a number of other studies. One study found that women who reported child sexual abuse were twice as likely to be HIV positive, seven times more likely to engage in transactional sex, were more likely to be living in a violent relationship as an adult, and had a higher number of concurrent sexual partners compared to women who had not experienced sexual abuse as a child (Davis, 2010).

As more prevention interventions programs are introduced to young people, it reduces the stigma related to HIV/AIDS. The youth of today, have experienced various at risk sexual behaviors, yet still fail to seek treatment for health needs. One of society's biggest problem is the stigma and barriers of this epidemic.

## **Stigma/Barriers to HIV/AIDS**

Stigma related to HIV/AIDS and sexual orientation, may prevent young people from being forthcoming about their health needs, that ultimately create barriers to seeking prevention and treatment services. Intervention research with young people shows that the success of the approach depends heavily on the youth's level of sexual experience. According to the researchers (Reidpath D.D et al, 2005), HIV-related stigma is regarded as one of the major barriers in the development of effective prevention and care programs; however, the stigma associated with HIV stigma is not a singular entity. The study explored stigma of the infection is layered with other stigmas, such as those associated with the routes of transmission (e.g., sex work and injecting drug use) and personal characteristics (e.g., race, religion, ethnicity and gender). In developing programs and policies to overcome HIV-related stigma, precaution needs to be taken of all the sources of stigma, and how they may interact. The theory used in this study included the novel method. This method is described as examining the layers of HIV/AIDS-related stigma, and secondary data are adapted to illustrate this. The results of this study shows the importance of understanding the layering of stigma for the development of effective interventions for HIV/AIDS. The federal government should integrate campaigns designed to reach young people with messages aimed at eradicating the stigma associated with people living with HIV/AIDS and those perceived to be at risk for HIV.

Among the various stigmas/ barriers of HIV/AIDs, condom usage is one of them. Condom use is the best prevention tool used to reduce risk of contracting HIV during sexual activity. Adolescents are the population found to most likely not to use condoms (Peersman, 2008).

## **Patterns of Condom Use**

Condom use is the most effective method to reduce risk of HIV infection during sexual activity. Correct and consistent use of male condoms is estimated to reduce the risk of HIV transmission by 80 percent. Previous research reveals that interventions that combined Condom Distribution (CD) programs with additional individual, group, or community-level activities showed the greatest efficacy. One possible reason for this is that these different modes address different behavioral determinants as well as other prevention needs of individuals in affected communities (Outlaw, 2010). Over 1.1 million Americans are living with human immunodeficiency virus (HIV), and African-American youth and young adults are disproportionately affected (El Bcheraoui et al 2011). El Bcheraoui et al (2011) indicated that condoms are the most effective prevention tool, yet data regarding condom use patterns for African-American college youth are lacking. The study used a survey design method to inform and strengthen HIV prevention strategies with African-American college-age youth; the researchers' surveyed students attending 24 historically Black colleges and universities regarding condom use patterns. Students were administered anonymous questionnaires online to explore knowledge, attitudes, and practices related to condom use during last sexual intercourse (LSI). The data analysis reports among 824 sexually active respondents (51.8% female, median age 20 years, 90.6% heterosexuals), 526 (63.8%) reported condom use during LSI. Students who used condoms for disease prevention, whose mothers completed high school had some college education, or completed college were more likely to have used a condom during LSI. Spontaneity of sexual encounters, not feeling at risk of HIV, and partner-related perceptions were associated with condom non-use during LSI ( $p < 0.05$ ). The results of this study concluded that over a third of our college youth sampled did not use a condom during LSI, and this group

may benefit from increased condom education efforts. These efforts should highlight condoms' effectiveness in protection from HIV. The researchers recommend that future HIV education and prevention strategies with similar groups of young adults should explore the implications of maternal education, clarify perceptions of HIV risk, and consider strategies that increase consistent condom use to interrupt sexual transmission of HIV. CD programs have been shown to be cost-effective and cost saving. It was estimated that one state-wide CD program led to saving millions of dollars in future medical care costs by preventing HIV infections.

While condom use is an effective prevention strategy for the sexual transmission of HIV, there are plenty of other gaps in the movement of Prevention of HIV. One of the most important is funding. The HIV prevention programs for youth have limited resources. (Outlaw, 2010)

### **Identifying Gaps in HIV Prevention Services**

Human immunodeficiency virus (HIV) prevention programs and agencies are fighting growing rates of infection with decreasing resources. Torrone et al. (2010) identifies gaps in HIV prevention services and how they can help inform prevention funding and program policies through research studies. The framework was applied by conducting face-to-face interviews with prevention agencies and persons considered by others in their community to be "influential informants" of the community's HIV prevention services in a sample of counties in North Carolina. Using the county as the unit of analysis ( $n = 10$ ), the study investigated differences in gaps by community characteristics, such as disparities in sexually transmitted disease rates. Lack of programs and problems with service program coordination/cooperation were reported frequently by rural counties. The most commonly reported barrier to meeting the needs of persons at risk for HIV was funding, followed by stigma. The results from this study can inform

local and regional planners on how to efficiently target prevention programs, including programs aimed at reducing racial and geographic disparities in sexually transmitted diseases, such as HIV. Based on past studies, the researcher has identified several gaps that need to be fulfilled in order to help reduce HIV/AIDS infection in youth. These include: targeting youth at greatest risk, increase funding for youth-focused HIV/AIDS programs, provide age-appropriate/evidence-based comprehensive sex education, involve all sectors of society in eradicating HIV/AIDS among young people, incorporate new media tools to educate HIV/AIDS prevention, and involve young people in the development, implementation, and evaluation of HIV/AIDS prevention/treatment programs.

To fill the void in the current literature, the researcher has conducted a quantitative survey. Questionnaires were distributed to teenagers to assess their knowledge on HIV/AIDS Prevention. This method was used to help the researcher engage students on their knowledge of HIV/AIDS.

## **Chapter III**

### **METHODOLOGY**

#### **Research Method**

Quantitative research allows the researcher to measure and analyze data. It allows the researcher to examine the relationship between independent and dependent variables in detail. Quantitative research can also be used to test hypotheses in experiments because of its ability to measure data using statistics. This research method allows the researcher to be more objective about the findings of the research. The quantitative research method was used to determine the level of knowledge, perceptions, and attitudes of high school students in regard to HIV/AIDS. The researcher administered questionnaires to students at Harper High School in Chicago, Illinois to engage students on their personal experiences of risk behaviors, tested their knowledge of this epidemic, and gain a clear understanding of their attitudes towards the epidemic in order to effectively implement prevention interventions. The targeted populations were youth ages 14-18 years old, which generally are high school students. The researcher analyzed data from the students' responses to explain the research phenomena of implementing effective interventions into school curriculums as a strategy to reduce the number of incidents of HIV/AIDS cases found among youth. The advantage of using a quantitative survey research for this study was due to convenient data gathering. It was easier to collect data from the students, which were the targeted population, and provided the most statistically significant results for the study.

**Sample Population**

The sample population for these questionnaires were high school students from Human Resources Development Institute's Teen Pregnancy Prevention Program at Harper High School located in Chicago, Illinois. They were selected because this study's target population were youth ages 14-18 years old who are at high risk of contracting HIV/AIDS. The researcher used the convenience sampling technique, due to the nature of the study. Therefore, the researcher was more likely to have high a response rate and gain information without extensive travel.

**Instrumentation**

The data collection instrument was a questionnaire consisting of 16 questions that captured students' opinions regarding the HIV/AIDS epidemic and what preventive measures they have received from school intervention programs and their perceptions of the program's effectiveness. Their responses gave insight to the researcher, making it easier to manage the data for analysis as being effective or not effective. Surveys took approximately 30 minutes to complete. A copy of the questionnaire is presented in Exhibit A in the Appendixes.

**Data Collection**

The students that participated in this study were asked to sign a Letter of Assent attached as Exhibit B and parents of students were asked to sign a Letter of Consent attached as Exhibit C. Both documents were signed before the questionnaire could be administered. The researcher analyzed the questionnaire responses using descriptive statistics to explain whether the HIV/AIDS intervention programs are viewed by youth as being effective or ineffective in increasing their knowledge on HIV/AIDS, found among youth.

## **Data Analysis**

The objective of this study was to capture high school students' perceptions and knowledge on how HIV/AIDS is contracted and what impact school sponsored sexual education courses have on their sexual activities. The data collected from student questionnaire responses were nominal and ordinal; therefore, the statistical analysis is classified as non-parametric. Non-parametric statistical tests are used when data are nominal or ordinal and the data is not normally distributed.

The responses from completed questionnaires were used to develop frequency distribution tables showing how many students selected pre-determined responses on the questionnaire. Responses were compared based on the students' age and gender. This approach is the first step when conducting descriptive analysis. The raw data was converted into percentage distributions which allows for further comparisons. Even though this approach is simplistic, the researcher is able to evaluate whether offering sex education courses leads to greater awareness of HIV/AIDS perception among youth ages 14 -18.

## **Chapter IV**

### **Data Findings-Results**

The study participants consisted of 18 female and 12 male students, age 14 -18, who attend an inner city high school in Chicago. Even though students were given an opportunity to self-identify as bisexual or homosexual, all of the participants indicated their sexual orientation as heterosexual. Out of the thirty participants, three males and three females revealed they were not sexually active. The responses indicated that 80% of the sample population are sexually active. Many adults are uncomfortable with the idea of teen sexuality and prefer to remain in ignorance or denial. However, in the United States, 46 percent of all high school age students, and 62 percent of high school seniors have had sexual intercourse; almost nine million teens have already had sex (Outlaw et. al 2010).

Allowing sexually graphic scenes on free television stations and even more proactive programing appearing on cable television has led many scholars to conclude that society has given the green light to teenagers that pre-marital sex is acceptable. In addition, television programming such as 16 and Pregnant fosters the belief that it is natural for teenagers to start engaging in sexual encounters (Scott, 2011). Table 1 illustrates the ages of participants who acknowledged, their first sexual experience identified based on their age, the first time they had sex. For the male participants in this study, 38% of males had sex for the first time between the ages of 14 years old to 17 years old, while 62% of female participants also have had sex for the first time between the ages of 14 years old to 17 years old.

Table 1

First Sexual Encounter based on Gender

Age of Respondent	Male n =9	Female = 15
14 years old	2 (22%)	1 (6%)
15 years old	5 (56%)	5 (33%)
16 years old	1 (11%)	6 (40%)
17 years old	1 (11%)	3 (20%)
18 years old	0 (0%)	0 (0%)
<b>Total</b>	<b>9</b>	<b>15</b>

Note: Six students three (3) males and three (3) females indicated that they never had sex; therefore, the sample size for the data presented in Table 1 is n= 24.

The data illustrated in Table 2 revealed the number of sexual partners the participants have engaged in a sexual experience. Thirty-eight percent (38%) of the male participants had 1-3 sexual partners, while 62% of the female participants had 1-3 sexual partners. This data can be interpreted as females are more easily persuaded to have sex than males.

Table 2

Number of Sexual Partners

Number of Sexual Partners	Male	Female
1 Person	1 (11%)	7 (47%)
2 People	5 (56%)	8 (53%)
3 People	3 (33%)	0 (0%)
<b>Total</b>	<b>9</b>	<b>15</b>

Note: Six students three (3) males and three (3) females indicated that they never had sex; therefore the sample size for the data presented in Table 2 is n= 24.

Nearly four million adolescents a year are diagnosed with an STI (Sexually Transmitted Infections). Kann et. al (2011) Condoms, if used correctly, can greatly reduce the risk of both STIs and unintended pregnancies. Table 3 illustrates the participants' feelings on condom use. From the data collected, 27% of the participants indicated they strongly agree, 53% of the participants agreed and 20% of the participants disagreed. The question being asked refers to

question nine (9) on the questionnaire. Several factors are associated with lowering the likelihood of condom use among teens, including a large age difference between partners having experienced sexual abuse and substance abuse. There are cases where teens have experienced sexual abuse before and may have been force to perform unwanted sexual activity, causing a major influence on their perception of proper condom use. There are also cases where teens are under the influence of drugs and alcohol that influence their decision making of having unprotected sex. Conversely, factors associated with increased condom use in sexual relationships include higher parental education, more parental communication about contraception, having attended a sexual education course that discusses contraception, and believing that condoms are effective at preventing pregnancy and STIs. (Hall, 2008)

Table 3

## Feelings on Condom Use

<b>Gender</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Male	7 (88%)	4 (25%)	1 (17%)	0 (0%)
Female	1 (12%)	12 (75%)	5 (83%)	0 (0%)
<b>Total</b>	<b>8</b>	<b>16</b>	<b>6</b>	<b>0</b>

Note: Question was based on feelings toward condom use, all 30 students participated in this question

Major health issues that can be consequences of unprotected sexual activity. Although the majority of adolescents believe that “sex without a condom is not worth the risk”, many teens are misinformed about the protection that condoms provide against STIs and HIV/AIDS. Table 4 revealed participants’ attitude towards sexual intercourse without condom use. Sixty percent of the participants strongly agreed or agreed with the question 8. While the other 40% of participants disagreed with the question posed, “If I do not have a condom, I would have sexual intercourse anyway.” Having unprotected sex can lead to harmful and potentially life-

threatening sexually transmitted infections and diseases, young people, ages 15 to 24, make up about 40 percent of new HIV or human immunodeficiency virus infections which can lead to AIDS( McCabe et.al 2011).

Table 4

## Sexual Intercourse without Condom Use

<b>Gender</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Male	6 (75%)	2 (20%)	4 (34%)	0 (0%)
Female	2 (25%)	8 (80%)	8 (66%)	0 (0%)
<b>Total</b>	<b>8</b>	<b>10</b>	<b>12</b>	<b>0</b>

Note: Question was based on feelings toward condom use, all 30 students participated in this question

Table 5 illustrates the participants' attitude towards talking about condom use with sexual partner. Overall 90% of the participants agreed that they would feel comfortable about discussing condom use with boyfriend/girlfriend. According to Outlaw, (2010) the intimate discussions necessary to obtain information about a partner's sexual history and to negotiate safer sex may be particularly difficult for teenagers who have little experience with such discussions. Literature on adolescent partners' communication about sex is limited, but the likely factors include perceived norms for discussing sex, the perceived risk level of one's sex partner, the teenager's knowledge about sex, and the teenager's comfort and skill in discussing sex. In comparison to the participants' in this study, their comfort of sex communication stems from their prior knowledge of sex.

Table 5

## Talking with Partner about Condom Use

<b>Gender</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Male	0 (0%)	11(48%)	1(50%)	0 (0%)
Female	4(100%)	12 (52%)	1 (50%)	1(100%)
<b>Total</b>	<b>4</b>	<b>23</b>	<b>2</b>	<b>1</b>

Note: Question was based on attitudes toward condom use, all 30 students participated in this question.

Based on the data from Table 6, in reference to question 10 from the questionnaire, “How can HIV/AIDS be transmitted?” Participants both male and female have knowledge of the transmission of HIV/AIDS through sexual contact, pregnancy/childbirth/ breastfeeding, injection drug use, blood transfusion. Thirty-three percent of the male participants chose sexual contact and while the other 67% of males chose all of the above. The female participants answered similarly to the males. Twenty-eight percent of females chose Sexual Contact and the other 72% chose all of the above. According to the CDC, (2010) in the United States, HIV is spread mainly having anal or vaginal sex with someone who has HIV without using a condom or taking medicines to prevent or treat HIV, anal sex is the highest-risk sexual behavior. For the HIV-negative partner, receptive anal sex (“bottoming”) is riskier than inserted anal sex (“topping”). Vaginal sex is the second highest-risk sexual behavior and sharing needles or syringes through drug use are the top three ways HIV/AIDS can be transmitted. Although the correct answer was “all of the above”, the majority of the participants knew how the transmission of HIV/AIDS occurs.

Table 6

## Transmission of HIV/AIDS

<b>Transmission of HIV/AIDS</b>	<b>Male</b>	<b>Female</b>
Sexual Contact	4 (33%)	5 (28%)
Pregnancy, Childbirth, Breastfeeding	0 (0%)	0 (0%)
Injection Drug Use	0 (0%)	0 (0%)
Blood Transfusion	0 (0%)	0 (0%)
All Above	8 (67%)	13 (72%)
<b>Total</b>	<b>12</b>	<b>18</b>

Note: Question was based on knowledge on the transmission of HIV/AIDSs, all 30 students participated in this question

Data presented in Table 7, addresses the stigma of gays in relation to HIV/AIDS.

Question 11 from the questionnaire states, “Only people who have sex with gay people get HIV/AIDS.” Data illustrates that 87% of the participants understand that only people who have sex with gay people get HIV/AIDS is False. The researcher has provided other ways, other than Sexual Contact as a way of contracted HIV/AIDS. Studies have also shown that heterosexuals as well can transmit HIV/AIDS. In today’s generation the gay population is more common amongst the youth. According to Scott, (2011) the fear surrounding the emerging HIV epidemic in the 1980s largely persists today. At that time, very little was known concerning, regarding or on the subject as to how HIV was transmitted, which made people scared of those infected due to fear of contagion. This fear, coupled with many other reasons, lead to a significant number of people believing HIV and AIDS are always associated with death, HIV is associated with behaviors that some people disapprove, such as homosexuality, drug use, sex work or infidelity, HIV is only transmitted through sex, which is a taboo subject in some cultures. HIV infection is the result of personal irresponsibility or moral fault (such as infidelity) that deserves to be punished. The researcher addressed the sexual orientation of youth as a stigma to HIV/AIDS.

Table 7

## Stigma of Gays and HIV/AIDS

<b>Gender</b>	<b>True</b>	<b>False</b>	<b>Do Not Know</b>
Male	2 (100%)	8 (30%)	2 (100%)
Female	0 (0%)	18 (69%)	0 (0%)
<b>Total</b>	<b>2</b>	<b>26</b>	<b>2</b>

Note: Question was based on the stigma of Gays in relation to HIV/AIDSs, all 30 students participated in this question

Data from Table 8 are the participants' responses on their knowledge on contraction of HIV/AIDS through unprotected oral sex. Participants were posed with the statement, "You can become infected with HIV/AIDS by having unprotected oral sex". Data suggested that 27% of participants believe that this is True, 50% of the participants believe this is False, while 23% of the participants did not know if this was true nor false. According to (CDC 2010), having unprotected oral sex can carry some risk of HIV transmission.

Table 8

## Contraction of HIV/AIDS through Unprotected Oral Sex

<b>Gender</b>	<b>True</b>	<b>False</b>	<b>Do Not Know</b>
Male	3 (37%)	5 (33%)	4 (57%)
Female	5 (63%)	10 (67%)	3 (43%)
<b>Total</b>	<b>8</b>	<b>15</b>	<b>7</b>

Note: Question was based on knowledge of contraction of HIV/AIDSs, all 30 students participated in this question.

Table 9, depicts data collected from participants, asking "If you had the opportunity to be tested for HIV/AIDS, would you?" Only 10% of the participants have already been tested before for HIV/AIDS, those tested were three female students. Although 73% of participants elected they would get tested if they were posed with the opportunity. Only 17% of the participants elected not to get tested. This data suggested that the majority of the participants care about

knowing their status. According to researchers Davis and Niebes (2010), African American youth are more likely to get tested for HIV than any other races or ethnicities.

Table 9

Opportunity to be tested for HIV/AIDS

<b>Gender</b>	<b>Tested</b>	<b>Yes</b>	<b>No</b>	<b>Do Not Know</b>
Male	0 (0%)	9 (41%)	3 (60%)	0 (0%)
Female	3 (100%)	13 (59%)	2(40%)	0 (0%)
<b>Total</b>	<b>3</b>	<b>22</b>	<b>5</b>	<b>0</b>

Note: Question was based on opportunity to be tested for HIV/AIDS, all 30 students participated in this question.

The data from table 10, has limitations, being that the sample population are from Human Resources Development Institute's Teen Pregnancy Prevention Program at Harper High School. This program engages students in HIV/AIDS prevention throughout the school year. This can explain why 93% of the participants have been exposed to some form of prevention of HIV/AIDS in the past 30 days. According to Kelly (2002) effective school-based education on HIV/AIDS ideally encompasses two elements: curriculum development and training of teachers. The researcher reviewed evaluations from multiple studies of such interventions and found that successful curriculum-based programs have 17 characteristics. Five of the 17 characteristics involved the development of the curriculum; eight involve the curriculum itself; and four described the implementation of the curriculum, including selection and training of teachers with desired characteristics. HRDI's Teen Pregnancy Prevention Program is an effective program that engages students to test their knowledge on HIV/AIDS.

Table 10

Exposed to HIV/AIDS Prevention in past 30 days

<b>Gender</b>	<b>Yes</b>	<b>No</b>
Male	11 (39%)	1 (50%)
Female	17 (61%)	1 (50%)
<b>Total</b>	<b>28</b>	<b>2</b>

Note: All 30 students participated in this question, who attend HRDI Teen Pregnancy Prevention Program.

The data shown in Table 11, illustrates the sources of HIV/AIDS prevention. The question posed was, “From which of the following sources have you learned about HIV/AIDS prevention.” Data shows that 70% of the student participants learned from school about HIV/AIDS prevention. This data confirms the researcher’s belief as to why it is important to implement more HIV/AIDS educational programs into high school curriculums. The data shows the majority of high school participants’ primary source of HIV/AIDS prevention is through the school system. According Kirby, (2005), sex education in the United States denies students the information necessary to make smart decisions about their sexual behavior; however, to combat this, curriculums must include an expansion of age-appropriate sex education in school system that stresses HIV, STI, and pregnancy prevention.

Table 11

Source of HIV/AIDS Prevention

<b>Sources</b>	<b>Male</b>	<b>Female</b>
Parents	2 (17%)	0 (0%)
Doctor	0 (0%)	1 (5%)
School	7 (58%)	14 (78%)
Media	3 (25%)	3 (17%)
<b>Total</b>	<b>12</b>	<b>18</b>

Note: Majority of all 30 students that participated, learned about HIV/AIDS from school based prevention programs.

The participants of this survey research study were overall comfortable with taking this survey. As Table 12 illustrates 90% of the participants felt either very comfortable or somewhat comfortable. This suggest that students are comfortable discussing the topic of HIV/AIDS prevention. According to McCabe, (2011) adolescents 12-18 are exploring their sexuality and tend not to express their feelings towards their sexual partners, leaving them to make bad decisions about sexual behaviors. Although the literature refutes the findings from this survey findings, there are factors that may cause discrepancy, including the sample population's race, cultural influence, and geographic location. These predominately African American students from the South Side of Chicago are from a generation where sexual experimentation and conversation is common and often talked about in every facet of their lives.

Table 12

Comfort ability of Taking Survey

<b>Gender</b>	<b>Very Comfortable</b>	<b>Somewhat Comfortable</b>	<b>Somewhat Uncomfortable</b>	<b>Very Uncomfortable</b>
Male	4 (36%)	6 (38%)	3 (75%)	0 (0%)
Female	7 (64%)	10 (62%)	1(25%)	0 (0%)
<b>Total</b>	<b>11</b>	<b>16</b>	<b>4</b>	<b>0</b>

Note: Based on the 30 participants of this survey, majority felt somewhat to very comfortable in taking this survey.

## Chapter V

### Conclusion

Interventions for youths have been proven effective for delaying initiation of sexual activity, increasing condom use, and reducing other risk behaviors. The risk reduction interventions in school and community settings to prevent HIV among adolescents is a good prevention strategy to use. Individual- and group-level HIV prevention interventions provide knowledge, skill building, and increased motivation to adopt behaviors that protect against HIV infection, and some are designed specifically for youths at high risk for HIV.

HIV/AIDS education and prevention programs that target young people do exist in the United States. Most of these programs have attempted to reach a wide range of individuals, and some programs have been developed to target specific racial/ethnic groups. In spite of these efforts, there are important racial differences in knowledge of HIV/AIDS prevention methods and how that knowledge is used. For example, black youth are more likely than others to know about condoms as a prevention method, but they tend to be less knowledgeable about other prevention methods. Even though knowledge about condoms is high among blacks, there may be cultural and practical barriers (e.g., low perceived risk of HIV infection, or differential access to condoms) that prevent blacks from using them. More culturally sensitive prevention programs may be needed that not only increase young people's knowledge about HIV/AIDS prevention, but also assist them in acting upon that knowledge. In conclusion, theoretical models predict that HIV/AIDS knowledge is an important factor influencing HIV/AIDS risk perceptions and risk behaviors. In a country with high HIV prevalence such as the United States, understanding the factors influencing HIV/AIDS prevention knowledge has important policy implications. This

study emphasizes the importance of continuing to assess knowledge about HIV/AIDS among high school youth, and sheds new light on the importance of race to the process by which young people learn about HIV/AIDS and use that knowledge. Blacks have been disproportionately affected by the HIV/AIDS epidemic. The researcher's findings suggest that HIV/AIDS education and prevention programs in high prevalence countries should pay particular attention to devising culturally sensitive ways to teach socially disadvantaged groups about HIV/AIDS knowledge and to empower them to act upon their HIV/AIDS knowledge.

## References

- Barnett, T. and Parkhurst, J. (2005) HIV/AIDS: sex, abstinence, and behavior change. *The Lancet Infectious Disease*, Volume 5, Issue 9, pgs 590-593.
- Bajali A et al. (2009) Association Between HIV-Related Risk Behaviors and HIV Testing Among High School Students in the United States, *Arch Pediatr Adolesc Med*. 2012;166 (4):331-336.
- Buysse, A. (1996). Adolescents, young adults, and AIDS: A study of actual knowledge vs. perceives need for additional information. *Journal of Youth and Adolescence*, 25 (2), 259-271.
- CDC. HIV/AIDS Surveillance Report; Volume 22. March 20
- Available at: <http://www.cdc.gov/hiv/topics/surveillance/resources/reports/>.
- CDC. HIV/AIDS Surveillance in Adolescents and Young Adults (2006) Slide Series.
- Availableat:<http://www.cdc.gov/hiv/topics/surveillance/resources/slides/adolescents/index.htm>.
- CDC. HIV/AIDS Surveillance Report; Volume 20. June 2010. Available at:
- <http://www.cdc.gov/hiv/surveillance/resources/reports/2008report/index.htm>.
- Clark, LF, Adult identity mentoring: reducing sexual risk for African American seventh grade students. *Journal od Adolescent Health* 2005; 37:337.

- Chandra A, (2012) HIV Risk- Related Behaviors in the United States Household Population Aged 15–44: Data from the National Survey of Family Growth, 2002 and 2006–2010. National health statistics reports; no 46. Hyattsville, MD: National Center for Health Statistics.
- Davis MJ, Niebes-Davis AJ. Ethnic differences and influence of perceived future certainty on adolescent and young adult sexual knowledge and attitudes. *Health, Risk & Soc.* 2010; 12:149-167
- DiClemente RJ, Salazar LF, Crosby RA. (2007) A Review of STD/HIV Preventive Interventions for Adolescents: Sustaining Effects Using an Ecological Approach. *Journal of Pediatric Psychology*; 32(8): 888-906.
- Dittus P.Miller, Why Parents Matter? : The conceptual basis for a community based HIV Prevention program for the parents of African American youth. *Journal of Child and Family Studies* 2004; 13(1):5-20
- El Bcheraoui, Charbel ; Sutton, Madeline Y. ; Hardnett, Felicia P,(2011) Patterns of condom use among students at historically Black colleges and universities: Implications for HIV prevention efforts among college-age young adults. *AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV*, 15(2)
- Hall, Henry, Rhodes, P., (2008) Estimation of HIV incidence in the United States. *JAMA* ; 300:520-429
- Karofsky, PS (2000) Relationship between adolescent parental communication and initiation of first intercourse by adolescents. *Journal of Adolescent Health* 2000: 28; 41-45.
- Kann L, O'Malley Olsen E, McManus T, et al. Sexual identity, sex of sexual contacts, and health risk behaviors among students in grades 9-12 — youth risk behavior surveillance,

- selected sites, United States, 2001-2009. *Morbidity and Mortality Weekly Report*. 2011;60:7.
- Kirby,D. and Short, L. (2005) School-Based programs to reduce sexual behaviors: a review of effectiveness. *Public Health Reports* 109, 3:339-360
- Kelly, A., Akuani, F., Kep. (2008) *Young people's attitudes towards sex and HIV in the Eastern Highlands of Papua New Guinea*. Monograph 1/2008. Sydney: National Centre in HIV Social
- Kelly, M.J. (2002) *Defeating HIV/AIDS through Education*. Paper for Presentation to the National Conference on HIV/AIDS and the Education Sector – An Education Coalition Against HIV/AIDS, Midrand, South Africa, 31 May 2002. eSearch, The University of New South Wales.
- Kline, A. (1998) HIV- infected women and sexual risk Reduction: the relevance of existing models of behavior change. *AIDS Education and Prevention* 6(5):390-402
- Lyles CM, Kay LS, Crepaz N, Herbst JH, Passin WF, Kim AS, Rama SM, Thadiparthi S, DeLuca JB, Mullins MM. (2007) Best-evidence interventions: findings from a systematic review of HIV behavioral interventions for US populations at high risk, 2000-2004. *American Journal of Public Health*; 97:133-143.
- McCabe J, Brewster KL, Harker Tillman K. Patterns and correlates of same-sex sexual activity among U.S. teenagers and young adults. *Perspect Sex Reprod Health*. (2011); 43:142-150.
- McNeal, Cosondra, (2007). Potential Roles of Black Churches in HIV/AIDS Prevention. *Journal of Human Behavior in the Social Environment*, 15 (2-3)

- Outlaw A, Naar-King S, Janisse H, et al. Predictors of condom use in a multisite study of high-risk youth living with HIV. *AIDS Edu. Prev.* 2010;22:1-14.
- Peersman, G., Levy J. (2008). Focus and Effectiveness of HIV-prevention efforts for young people. *AIDS* 12(Suppl. A): S191-S196
- Prejean J, Song R, Hernandez A, et al. (2011) Estimated HIV incidence in the United States, 2006—2009; 6:e17502
- Poobalan AS, Pitchforth E, Imamura M, Tucker JS, Philip K, Spratt J, Mandava L, van Teijlingen E. (2009) Characteristics of effective interventions in improving young people's sexual health: a review of reviews. *Sex Education*; 9(3):319-336
- Pinkerton, S. D.; Cecil, H. ; Holtgraved, R. (1998). HIV/STD Prevention Interventions for Adolescents. *Journal of HIV/AIDS Prevention & Education for Adolescents & Children*,2 (2)
- Reidpath D. D.; Chan K.Y. (2005) A method for the quantitative analysis of the layering of HIV-related stigma. *AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV*,17(4)
- Rudy BJ, Kapogiannis BG, Lally MA, Gray GE, Bekker L, Krogstad P, McGowan I. (2010) Youth-Specific Considerations in the Development of Pre-exposure Prophylaxis, Microbicide, and Vaccine Research Trials. *Journal of Acquired Immune Deficiency Syndrome*; 54(Supp1):S31-S42.
- Scott ME, Wildsmith E, Welti K, et al. Risky adolescent sexual behaviors and reproductive health in young adulthood. *Perspect Sex Reprod Health.* 2011; 43:110-118.

Strunin, L. and Hingson, R. (2006). Acquired immunodeficiency syndrome and adolescents: Knowledge, beliefs, attitudes and behaviors. *Journal of Pediatrics*; 79:825-828

Torrone E.A. ; Levandowski B.A. ; Thomas J.C. (2010) Identifying Gaps in HIV Prevention Services. *Social Work in Public Health* 15(4)

UNICEF (2002) *HIV/AIDS and Children Affected by Armed Conflict* A UNICEF Fact Sheet, New York, 2002.

Walter, H. and Vaughn, R. (2004) AIDS: risk reduction among a multiethnic sample of urban high school students. *Jama* Vol. 270 (6): 725-730

World Bank (2000) *Exploring the Implications of HIV/AIDS Epidemic for Educational Planning in Selected African Countries: The Demographic Question*. World Bank paper presented to IIEP workshop on the Impact of HIV/AIDS on Education, Paris, September 2000.

**Exhibit A**

I am Carmella Williams a Graduate student at Governors State University, conducting research study thesis entitled “HIV/AIDS PREVENTION: EDUCATING FUTURE GENERATIONS”. I will be administering this questionnaire. Please be assured that all information given to the researcher will be kept confidential and used only for the purpose of this research.

**Thank you for your help**

**Instructions:** Read each question carefully. Mark your answers in the square next to the questions. Mark one answer for each question, unless the instructions say to mark more than one answer.

**ABOUT YOURSELF**

1. What is your gender
  - Male
  - Female
  
2. How old are you?
  - 14
  - 15
  - 16
  - 17
  - 18
  
3. What is your sexual orientation?
  - Heterosexual
  - Bisexual
  - Homosexual
  - Transsexual

4. Have you ever had sex?

- Yes
- No

5. How old were you the first time you had sex?

- younger than 12
- 13 years old
- 14 years old
- 15 years old
- 16 years old
- 17 years old
- 18 years old
- I have never had sex

6. How many people have you had sex with in your life?

- I have never had sex
- 1 person
- 2 people
- 3 people
- 4 people
- 5 people
- 6 or more

#### **WHAT DO YOU THINK ABOUT CONDOMS?**

7. Condoms would be too much trouble to use?

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

8. If I do not have a condom, I would have sexual intercourse anyway.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

9. I feel comfortable talking with boyfriend/ girlfriend about using condoms.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

### **WHAT DO KNOW ABOUT HIV/AIDS?**

10. How can HIV/AIDS be transmitted?

- Sexual Contact (Vaginal, Oral, Anal)
- Pregnancy, Childbirth, Breastfeeding
- Injection Drug Use
- Blood Transfusion
- All Above

11. Only people who have sex with gay people get HIV/AIDS.

- True
- False
- Do not know

12. You can become infected with HIV/AIDS by having unprotected oral sex.

- True
- False
- Do not know

13. If you had the opportunity to be tested for HIV/AIDS, would you?

- I have already been tested
- Yes
- No
- Do not know

### **PREVENTION EDUCATION**

14. In the past 30 days have you been in any classes or programs where they talked about preventing HIV or AIDS?

- Yes
- No

15. From which of the following sources have you learned about HIV/AIDS prevention.

- Parents
- Doctor
- School (Teachers, Nurse, Classes)
- Media

16. How comfortable was it for you to answer the questions in this survey?

- Very comfortable
- Somewhat comfortable
- Somewhat uncomfortable
- Very uncomfortable

**Thank You!!!!**

**You Have Completed this Interview**

**Exhibit B.****Student Assent Form**

Governors State University

My name is Carmella Williams, I am a student researcher from Governors State University. I am asking if you would like to take part in a research study called “HIV/AIDS PEVENTION: EDCATING FUTURE GENERATIONS”, which focuses on reducing the incidents of HIV/AIDS.

If you agree to be in this study, you will be asked to complete a questionnaire that focuses on what you know about HIV/AIDS.

Please talk this over with your parents before you decide whether or not to participate. We have asked your parents to give their permission for you to take part in this study. But even if your parents said “yes” to this study, you can still decide to not take part in the study, and that will be fine.

If you do not want to be in this study, then you do not have to participate. This study is voluntary, which means that you decide whether or not to take part in the study. Being in this study is up to you, and no one will be upset in any way if you do not want to participate or even if you change your mind later and want to stop.

Due to the nature of the study, counselors will be available if the parent and/or child feel that counseling may be deemed necessary.

You can ask any questions that you have about this study. If you have a question later that you did not think of now, you can call me at [REDACTED], or ask me next time.

Signing your name at the bottom means that you agree to be in this study. You and your parents will be given a copy of this form after you have signed it.

Name of Student (please print)

---

Signature of Student

Date

---

**Exhibit C.****Parent Consent Letter**

Dear Parent:

I am a Graduate student from the Masters of Public Administration at Governors State University in University Park, IL and I would like to include your child, along with about 30 of his or her classmates, in a research project titled HIV/AIDS Prevention: Educating Future Generations, that will explain the research phenomena of implementing effective interventions into school curriculums as a strategy to reduce the number of incidents of HIV/AIDS cases found among youth. If your child takes part in this project, he/she will take part in a four page questionnaire to examine their knowledge, perceptions, and attitudes towards HIV/AIDS.

Your child's participation in this project is completely voluntary. Only those children who have parental permission and who want to participate will do so, and any child may stop taking part at any time. You are free to withdraw your permission for your child's participation at any time and for any reason without penalty.

The information that is obtained during this research project will be kept strictly confidential and will not become a part of your child's school record. Any sharing or publication of the research results will not identify any of the participants by name.

In the space at the bottom of this letter, please indicate whether you **do or do not** want your child to participate in this project and return this note to your child's teacher before February 20, 2015. Please keep the second copy of this form for your records.

If you have any questions about this project, please contact me using the information below. If you have any questions about your rights as a participant in this study or any concerns or complaints, please contact the Governors State University Institutional Review Board at

██████████

Sincerely,

Carmella Williams

MPA Graduate Student

██████████



**do/do not (circle one) give permission for my child \_\_\_\_\_ (name of child) to participate in the research project described above.**

\_\_\_\_\_

(Print) Parent's name

\_\_\_\_\_

Parent's signature

\_\_\_\_\_

Date