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Nicole Monique Samuel

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African American women and HIV Prevention

By

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Thesis

Submitted to the Department of Health and Human Services

Eastern Michigan University

in partial fulfillment of the requirements

for the degree of

MASTER OF SCIENCE

in

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ABSTRACT

For many health conditions, non-Hispanic Blacks bear a disproportionate burden of disease, injury, death, and disability. The purpose of this study was to examine African American females and their HIV prevention methods, as well as to identify factors that may lead to the non-use of condoms. Seventy-one participants were recruited from Planned Parenthood in Detroit. The instrumentation used for this research was the Sexual Health and Beliefs Survey. Results indicated that 69 percent of the respondents had five or more sexual partners in the lifetime. Ninety-four percent of the participants knew where to purchase condoms, and 89 percent stated that they had access to condoms though during the last sexual encounter 68 percent stated they did not use a condom. These findings indicate that non-Hispanic Black women may need more knowledge on severity of HIV infection and that when condoms are not used they are more susceptible to the disease.

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CHAPTER I INTRODUCTION

According to the Centers for Disease Control and Prevention (CDC; 2007), of all racial and ethnic groups represented in the United States, African Americans have the largest numbers of HIV and AIDS cases. African Americans, which count for only 13 percent of the United States population, account for nearly half of the newly diagnosed HIV cases in the United States. Of the female population diagnosed with HIV in 2006, 56.2 percent of these women were African American, making transmission rates 19 times greater than those of Caucasian females (CDC, 2008).

In recent years the rate of HIV infection among African American women has become an increasingly growing epidemic. Among women the primary transmission rate is associated with high-risk heterosexual contact (CDC, 2005). In particular, the failure to use a male or female condom during vaginal-penile sexual intercourse has placed these women at great risk. Karon, Fleming, Steketee, and Cock (2001) examined the current status of the HIV epidemic in the United States and concluded that the epidemic increasingly affects women, minorities, persons infected through heterosexual contact, and the poor.

The Health Belief Model (HBM) has been proposed as a framework to conceptualize HIV/AIDS preventative behaviors. The HBM is one of the most influential and widely used theories to explain health conditions and health-related behaviors (Glanz, Rimer, & Lewis, 2002). The model proposes that individuals will take action to prevent illness if they believe they are susceptible to ill-health conditions (perceived susceptibility), if they believe the health condition will lead to potentially serious

consequences (perceived severity), if they believe that a course of action available to them will be beneficial in reducing either their susceptibility to or the severity of the condition (perceived benefits), and if they believe that the anticipated barriers to (or costs of) taking action do not outweigh the benefits (perceived barriers; Rosenstock, 1990).

This study sought to examine African American females and their HIV prevention methods (condom use), as well as to identify some factors that may have led to the non-use of condoms. Many factors have been identified that affect one's decision to use a condom. These factors include a history of sexual abuse, a history of drug abuse, lower income, age, previous history of sexually transmitted diseases, one's perceived risk of not using a condom, and one's perceived benefit or consequence of condom use.

Problem Statement

It is important for health educators and public health professionals to identify factors that contribute to and are associated with engaging in high risk heterosexual sex for African American women of a low to moderate socioeconomic status so they can provide programs that can help decrease risk of HIV infection.

Purpose of Study

The purpose of the proposed descriptive cross-sectional study was to examine the association between condom use among low to moderate income African American females and the constructs of the Health Belief Model such as perceived severity of HIV/AIDS, perceived susceptibility of HIV/AIDS, cues to action, and the perceived benefits and barriers to condom use.

Justification and Significance

For many health conditions, non-Hispanic Blacks bear a disproportionate burden of disease, injury, death, and disability (CDC, 2005a). Multiple factors contribute to racial/ethnic health disparities. Socioeconomic status is a primary factor that affects lifestyle behaviors, social environment, and access to preventative health-care services. Statistics present only a small part of the story of African American health. However, disease and death statistics provide an opportunity to consider differences that exist between races and areas of possible change. According to the CDC (2005b), HIV/AIDS is the seventh leading cause of death among African Americans. African American women are 18 times more likely to be diagnosed with HIV than Caucasian women. Much of the disease and premature death that affect people of all races can be linked to lifestyle choices. African Americans are no exception and, in fact, data suggest that a number of behaviors that are harmful to one's health, such as unprotected sexual intercourse, are common amongst this group (CDC, 2005b).

According to the Michigan Department of Community Health (MDCH), African Americans make up 23 percent of the general population of Southeast Michigan but

account for 70 percent of the HIV diagnosis in 2005 and 68 percent of the persons living with HIV/AIDS in the state (MDCH, 2007). Approximately two thirds of the new HIV diagnoses in Michigan are among residents living in the Detroit Metropolitan Area (MDCH, 2005). The new HIV cases in the Detroit metropolitan area are predominantly persons who are black and persons who are between the ages of 20-49 at the time of diagnosis (MDCH, 2005).

A focus on disparities in health status is important as major changes unfold in the way in which health care is delivered and financed. The information obtained from this study will greatly support efforts that seek to improve the quality and availability of health care, in particular HIV/AIDS education to all minority and under-served populations.

Research Questions

1. To what extent do low-to-moderate income African American females perceive themselves to be personally susceptible to HIV infection?
2. How severe do low-to-moderate income African American females perceive the consequences of HIV infection to be?
3. What do low-to-moderate income African American females perceive to be the barriers that might hinder condom use?
4. What do low-to-moderate income African American females perceive to be the benefits of condom use?

Limitations / Delimitations of Study

1. The data collection period was limited to three months.
2. The sample population consisted of women who reside in Wayne County.
3. The study was limited to women, ages 18 years of age and older.
4. The tools for data collection were self-reported measures, which can be inaccurate and unreliable. Scores are reliable to the degree that the respondent is honest and provides responses that truly characterize him- or herself (Cantania, Gibson, Chitwood, & Coates, 1990).
5. Convenience sampling was used during the data collection process.
6. The sample size of study was small (n=72).

Definition of Terms

1. HIV- HIV (human immunodeficiency virus) is the virus that causes AIDS. The virus attacks the immune system, making it difficult for the body to fight infection and disease.
2. Epidemic - A disease that has spread rapidly among a large number of people within a short period of time.
3. AIDS- Acquired Immunodeficiency Syndrome. A clinical definition of illnesses caused by HIV, resulting from a CD4 count less than or equal to 200, or one or more diagnosed opportunistic infections.

4. High-risk behavior: A behavior in a high prevalence setting that places an individual at risk for HIV or STDs or in *any* setting in which either partner is infected.
5. Socioeconomic status (SES): A description of a person's societal status using factors or measurements such as income levels, relationship to the national poverty line, educational achievement, neighborhood of residence, or home ownership.

CHAPTER II REVIEW OF LITERATURE

Introduction

The purpose of this study was to examine African American females and their HIV prevention methods (condom use), as well as to identify some factors that may lead to the non-use of condoms. This chapter will present a review of pertinent literature within this field. The first section will present literature on HIV and African American females and the extent of this epidemic. The second section will present literature on background factors and how these influence decision-making involved in condom use. The third section will include literature examining HIV and low income African American females will then be viewed. Last, literature examining the Health Belief model and condom use will be reviewed.

HIV and African American Women

According to the CDC (2007), African Americans have been most affected by HIV and AIDS among all racial and ethnic groups in the United States. African Americans which count for approximately 13 percent of the US population account for nearly half of the newly diagnosed HIV cases in the United States. Of the female population diagnosed with HIV in 2006, 56.2 percent of these women were African American making transmission rates nineteen times greater than that of a Caucasian female (CDC, 2008). Of the women diagnosed with HIV in 2006, 80 percent of the women contracted HIV through high risk heterosexual contact.

Extent of the Problem.

In recent years the rate of HIV infection among African American women has become an increasingly growing epidemic. Among women the primary transmission rate is associated with high risk heterosexual contact (CDC, 2005) - in particular, the failure to use a male or female condom during vaginal penile sexual intercourse. Karon, Fleming, Steketee, and Cock (2001) examined the current status of the HIV epidemic in the United States and concluded that the epidemic increasingly affects women, minorities, person infected through heterosexual contact, and the poor. According to the Michigan Department of Community Health (MDCH), African Americans make up 23 percent of the general population of Southeast Michigan but account for 70 percent of the HIV diagnoses in 2005 and 68 percent of the persons living with HIV/AIDS in the state (MDCH, 2007). Approximately two thirds of the new HIV diagnoses in Michigan are

among residents living in the Detroit Metropolitan Area (MDCH, 2005). The new HIV cases in the Detroit metropolitan area are predominantly persons who are black and persons who are between the ages on 20-49 at the time of diagnosis (MDCH, 2005).

Background Factors Influence On High Risk Sexual Activity

Sexual abuse.

Previous studies have shown that a history of sexual abuse may lead to high risk heterosexual sexual intercourse. The Women's Interagency HIV Study [WIHS] examined the prevalence and effect of domestic violence and childhood sexual abuse on women with HIV or at risk for HIV (Cohen, Deamant, Barkan, Richardson, Young, Holman, Anastat, Cohen, & Melnick, 2000). The sample used in this study consisted of 1,645 women 13 years of age and older. Among the sample, 1,288 of the women were HIV positive. Racial breakdown of the sample included 64 percent African American, 21 percent Latina for the HIV-seropositive women and 62 percent African American and 22 percent Latina for HIV-seronegative women. Also 59 percent of women reported living below the poverty level. Among the women, 66 percent of the HIV-seropositive women reported a lifetime prevalence of any type of domestic violence and 31 percent a history of childhood sexual abuse. The HIV-seronegative women reported a 67 percent prevalence of domestic violence and 27 percent history of childhood sexual abuse. The women who reported history of childhood sexual abuse also indicated history of drug abuse and having more than 10 male sexual partners who were at risk for HIV. The study concluded that early childhood abuse leads to later domestic violence, which may further lead to an increased risk for HIV.

Wyatt, Meyers, Williams, Kitchen, Loeb, Carmona, Wyatt, Chin, and Presley (2002) sought to determine if a history of trauma would contribute to HIV risk in women of color. The study sample consisted of 299 HIV positive and 158 HIV negative African American, European American, and Latina American women. Within the sample, 49 percent of the women reported having been sexually abused as children, 43 percent were abused as adults, and 51 percent had been in a physically abusive relationship. The study concluded that race and ethnicity was not an independent predictor of HIV; regardless of ethnicity, HIV positive women had more sexual partners, more sexually transmitted diseases and more histories of sexual abuse than women who were HIV negative.

According to Champion, Shain, Piper, and Perdue (2001), “The relationship between sexual abuse and sexually transmitted disease represents an important and under investigated context of domestic violence” (p. 241). The purpose of their study was to examine the association among sexual abuse, sexual risk behavior, and risk for reinfection and HIV among minority women with sexually transmitted diseases [STD]. The sample population consisted of 612 women, 424 Mexican and 193 African American, between the ages of 14 and 45. Of the surveyed women, 32.2 percent Mexican women and 30.6 percent of African American women reported having a history of sexual abuse, 90 percent of which they reported happening prior to the age of 20. Within the study, 47.4 percent of the abused women reported having a prior STD infection, while only 30.4 percent of non-abused women reported prior STD. The study concluded that women with a history of sexual abuse have higher sexual risk behaviors than those of non abused women.

Drug abuse.

Friedman, Flom, Kottiri, Zenilman, Curtis, Neaigus, Sandoval, Quinn, and Jarlais (2003) examined the relationships between drug use and prevalence of sexually transmissible diseases among young adults in a high risk neighborhood. The Drug Use and HIV Risk Among Youth [DUHRAY] study consisted of 18-24 year old women. The study compared two groups: a sample population and a targeted population in which the youth abused heroin, cocaine, crack, or injected drugs. Data were collected by offering testing for a range of STD's and other blood-borne infections; also participants completed an interview on sociodemographics, sexual behavior, and drug use. The behavior data were restricted to 12 months prior to the interview. The diseases being tested for included Hepatitis B and C, syphilis, gonorrhea, chlamydia, herpes simplex type 2, and HIV. The authors concluded that the use of harder drugs was associated with some but not all of the infections being tested for. Hardness of drugs was defined in increasing order as no drug use, marijuana use, non-injected heroin or cocaine use, crack smoking, and injection drug use.

Conspiracy beliefs.

Bogart and Thorburn (2005) sought to determine if HIV and AIDS conspiracy beliefs had a relationship with consistent condom use and condom attitudes among African Americans. The nationwide study consisted of a sample of 500 African Americans ages 15 to 44. The demographics of the study consisted of 30.4 percent ages 15-20, 44.6 percent 21-34, and 25 percent 35 or older; nearly 35 percent were males and 65.2 percent female. The education level of the population consisted of 51.0 percent being high school graduates or less and 49.0 percent some college or technical school; the

annual income of 53.4 percent of the participants was \$35,000 or less. The study asked questions involving the participants' STD history, condom attitudes, condom use, conspiracy beliefs, and partner factors. Conspiracy beliefs were evaluated with such questions as, "HIV is a man-made virus," "There is a cure for AIDS, but it is being withheld from the poor," and "AIDS was created by the government to control the black population." Male respondents in the study held stronger conspiracy beliefs, which were significantly associated with more negative condom attitudes and inconsistent condom use. The study concluded that HIV and AIDS conspiracy beliefs are a barrier to HIV prevention among African Americans and may represent a facet of negative attitudes and condom use among African American men.

Low Economic Status African American Females and High Risk Sexual Behavior

Many studies have examined the low economic status as a factor associated with the prevalence of high risk sexual behavior. Lauby, Phillip, Smith, Stark, Person, and Adams (2000) examined the effects of a multisite community-level HIV prevention intervention on women's condom use behaviors. This was a theory-based behavior intervention that was implemented in four urban low income primarily African American communities. The data were evaluated through pre- and post-cross-sectional surveys. The mean age of the women in the study was 25 years old, and 73 percent were African American, with 65 percent of the sample receiving public assistance the year previous to the intervention. The women in the intervention had characteristics that increased risk for HIV: 10 percent had injected drug use, 43 percent had used street drugs in the previous six months, 27 percent had two or more sexual partners in previous six months, 17 percent had exchanged sex for money, and 38 percent had a previous STD. The results of the study showed that at baseline, 68 percent of the women had no intention of using condoms with main partners and 70 percent were not using condoms consistently with other partners. After two years the participants in the treatment group showed a 37 percent increase in attempting to get their sexual partners to use condoms, an 18 percent increase in women who used condoms in most recent sexual activity, and a 9 percent decrease in those who reportedly never used a condom. The study concluded that community-level interventions may be an affective way to reach large number of women and change condom use behaviors.

Perrino, Fernandez, Bowen, and Arheart (2006) found a wide range of factors at the individual and relationship level that have been associated with condom use among

African American women. In this cross-sectional study the authors examined condom use attempts and actual condom use among 362 high-risk, low income African American women who reported having a main sexual partner. The women were recruited from public health clinics and community-based organizations; eligible women were currently sexually active, HIV negative, inconsistent or nonusers of condoms who had not exchanged sex for money or drugs. The method of the intervention involved five steps. First there were open-ended responses about a woman's main sexual partner responses reactions to women's condom use attempts. Second, the researchers reviewed whether women who had made a recent condom attempt were more likely to use condoms than those women who did not make an attempt. The women who had attempted condom use had descriptive statistics computed. Steps four and five involved computed data for the women who had used condoms during sexual intercourse and those women who had not. The authors concluded that it is very important for women to attempt condom use during sex because there is a more likely chance of condoms being used in the future.

Crosby, Yarber, DiClemente, Wingood, and Meyerson (2002) compared HIV-associated sexual health history, risk perceptions, and sexual risk behaviors of low income rural and non-rural African American women. The sample consisted of 571 African American women 18 years or older attending Women, Infants, and Children [WIC] clinics in Missouri. Data were collected over a two-month period as participants were asked to complete a survey about previous sexual history. Of the sample population, 72 percent of the women reported being from urban communities and 28 percent from suburban and rural counties. The results of the study indicated that rural women were more likely to report not being counseled about HIV during pregnancy, that

a sex partner had not been tested for HIV, no preferred method of prevention was taken because of lack of worry about STD's, no condoms were being used, and belief of partner being negative despite lack of testing. The authors of the study concluded that low income rural African American women were in more need of HIV prevention than those of non-rural or suburban communities.

Sikkema et al. (2000) examined the outcomes of a community-level HIV-prevention program for women in low income housing developments. The intervention involved 690 women who participated in risk reduction workshops and community HIV-prevention events implemented by women who were in the community. The intervention consisted of the women participating in a baseline and 12-month follow-up population risk characteristic survey. The results of the study showed that there was a decline from 50 percent to 37.6 percent of women who had any unprotected sex. The percentage of women who used condoms during intercourse increased from 30.2 to 47.2. The authors of the intervention concluded that community level interventions that involve and engage women in neighborhood based HIV prevention activities can bring about reductions in sexual risk behaviors.

The HIV-risk reduction intervention [HIV-RR] (Carey, Braaten, Maisto, Gleason, Forsyth, Durant, & Jaworski, 2000) concluded that women who underwent the HIV-RR enhanced knowledge and strengthened risk reduction intentions and increased condom use. The sample population consisted of 102 women with the mean age 29, and 88 percent of the women were African American. The women completed a self-administered survey that measured demographics, HIV-related information, motivation, and risk-related behavior before and after the intervention. The facilitators of the

intervention used therapeutic goals, theoretical underpinnings, clinical strategies and materials to motivate women on reducing risk of HIV infection. When compared to a control sample, the women who underwent the intervention had higher HIV-related knowledge, had changed behaviors and intentions concerning sex and condom use, and had reduced risk-related behavior.

The Health Belief Model

The Health Belief Model has been used to explain change and maintenance of health-related behaviors and as a guiding framework for health behavior interventions (Glanz, Rimer, & Lewis, 2002). It was developed initially in the 1950s by a group of social psychologists in the U.S. Public Health Service to explain the widespread failure of people to participate in programs to prevent and detect disease. There are seven key concepts involved in the health belief model. The first variable is *Perceived Susceptibility*, one's belief regarding the chance of getting a condition; the application for this variable is to define populations at risk and risk level, to personalize risk based on a person's characteristics or behavior, and to make perceived susceptibility more consistent with an individual's actual risk. Next is *Perceived Severity* or one's belief regarding the seriousness of the condition or behavior. The application for this variable is to specify consequences of the risk and the conditions. *Perceived Benefits* refers to one's belief in the efficacy of the advised action to reduce risk or seriousness of impact, and the application is to define action to take: how, where, when and to clarify the positive effects to be expected. *Perceived Barriers* is one's belief about the tangible and psychological costs of the advised action; the application is to identify and reduce

perceived barriers through reassurance, correction of misinformation, incentives, and assistance. The *Cues to Action* is the strategies to activate one's readiness; the application is to provide how-to information, promote awareness, and employ reminder systems. The *Self-efficacy* variable is one's confidence in one's ability to take action; the application is to provide training, guide in performing action, use progressive goal setting, give verbal reinforcement, demonstrate desired behaviors, and reduce anxiety.

Gielen, Faden, Kass, and Anderson (1994) examined women from an urban area's report of efforts to protect themselves from becoming infected with HIV through protective sexual behaviors and the extent that the protective measures could be explained by the Health Belief Model. The study involved 573 heterosexual women of whom 90 percent were African American, 65 percent were under the age of 25, and 11 percent were married. The women were enrolled for the study during their first prenatal visit at the Johns Hopkins Hospital Obstetrical Clinic. The survey assessed women on their protective measures for the past year due to the fear of acquiring AIDS. Sixty-two percent of the women reported having fewer sexual partners, 48 percent had fewer sexual encounters, 72 percent talked with a partner about AIDS, 47 percent refused sex for fear that the partner was HIV infected, 49 percent used condoms, and 48 percent carried condoms. The women were also asked questions on their susceptibility to AIDS, severity of the disease, barriers to condom use, and benefits of protected sex. The authors concluded that the findings suggest that women are motivated by feelings of personal susceptibility to try protective behaviors but then conclude they are burdensome and discontinue.

Summary

Previous research that examined the relationship between condom use and low social economic status in African American women has discovered many findings. In multiple past studies researchers have found low SES African American women to be a population in need of intervention studies. This study seeks to determine the need for health education and prevention programs on HIV prevention and condom use to target African American women in low SES. Data obtained from the study will also provide background characteristics and factors that may contribute to condom use and attitudes about condom use in African American women.

CHAPTER III METHODOLOGY

The purpose of this study was to examine African American females and their HIV prevention methods (condom use), as well as to identify some factors that may lead to the non-use of condoms. This chapter will present the theoretical framework used to develop this study, as well as the methods and procedures used. In addition, this chapter will include the instrumentation, sample and recruitment, data collections procedures, and data analysis.

Institutional Review Board Approval

This study was approved by the College of Health and Human Services Human Subjects Review Board Committee at Eastern Michigan University in March 2008.

Sample and Sample Recruitment

The population of interest for this research study was African American women eighteen years of age and older living in the Detroit area who were currently sexually active. The participants were recruited from the Planned Parenthood of Mid and South Michigan Detroit location. Planned Parenthood provides education, HIV/AIDS Testing and Counseling, Birth Control/Family Planning, Pregnancy Testing and Counseling, Cancer Screening (Pap test), and Sexually Transmitted Infection Testing & Treatment.

Seventy-two participants were recruited from the Planned Parenthood facility. The recruitment took place during the Winter and Spring semesters of 2008. Participants coming in for treatment were asked on a volunteer basis by a receptionist and through posted flyers to participate in the research study. The participants were advised through the Letter of Consent and posted flyers that participation in the research study was on a

confidential and volunteer basis. Flyers were placed throughout the clinic as well as the collection box to help recruit participants for the study.

Instrumentation

The Sexual Health and Beliefs Survey, a 39-item questionnaire, was used to obtain the data (see Appendix A). The following is a brief description of the scales used to measure the variables of interest.

Demographics: Eight items were used to assess general demographics such as age, marital status, and living condition. An additional four items were used to assess social economic status and annual incomes.

Sexual Behavior: Five items were adapted from the 2007 State and Local Youth Behavior Risk Survey (CDC, 2007c). These items included sexual intercourse history, the use of a condom during last sexual intercourse, and the use of drugs or alcohol during the last sexual encounter. Six additional questions were used to assess patients' history of sexually transmitted disease and current HIV status. These items of the survey were assessed using "Yes" and "No" questions (e.g., "Have you ever been tested for a sexually transmitted disease?")

Attitudes toward HIV/AIDS: Nine items were adapted from a self-reported questionnaire developed by Brunswick and Banaszak-Holl (1996). These items included individuals' perceived risk of becoming HIV infected, their worry, the severity of the disease, and the outcome and behavior efficacy of AIDS. Additional items were added to assess beliefs about the spread of HIV and the epidemiology of the disease. Response choices were rated using the Likert scale ranging from 1= "Agree Strongly" to 5= "Disagree Strongly."

Data Collection Procedures

Individuals participating in the research study were asked to read The Letter of Consent (see Appendix B) which addresses the purpose of the study, as well as the rights of the participants. Completion and return of the survey signified consent to participate. The participants were also advised that they could withdraw at any time during the survey process. They were then asked to complete the 39-item questionnaire. The participants were assured that every measure was used to maintain their confidentiality. A sealed collection box was placed in the clinic for participants to place their completed surveys. The researcher emptied the boxes at the end of each week. An identification number was placed on each survey to help insure data did not get mixed in the collection process. Data were collected over a period of 3 months to ensure a sufficient amount of individuals be included in the research study.

Data Analysis

This study sought to answer four key questions: (1) To what extent do low-to-moderate income African American females perceive themselves to be personally susceptible to HIV infection? (2) How severe do low-to-moderate income African American females perceive the consequences of HIV infection to be? (3) What do low-to-moderate income African American females perceive to be the barriers that might hinder condom use? (4) What do low-to-moderate income African American females perceive to be the benefits of condom use?

The Statistical Package for the Social Science (SPSS) 14 for Windows was used for all statistical analyses. SPSS was used to conduct frequency analyses, reliability analyses, cross-tabulations, and the recoding and computing of new variables. The data obtained from The Sexual Health and Beliefs Survey were used to create variables that were then used to assess the relations from the research questions.

CHAPTER IV RESULTS

The present descriptive cross-sectional study sought to determine the association between condom use among low-to-moderate income African American females and the constructs of the Health Belief Model such as perceived severity of HIV/AIDS, perceived susceptibility of HIV/AIDS, cues to action, and the perceived benefits and barriers to condom use. This chapter includes a description of the sample that was surveyed and the results from statistical analysis used to answer the research questions.

Description of the Sample

The Sexual Health and Beliefs Survey was completed by 72 participants from the Planned Parenthood Clinic of Detroit. The results of this study reflect 71 of the participants' responses (see Table 1). One participant was dropped from the study for failure to meet the exclusion criteria of being sexually active.

Table 1
Participant demographics

Characteristic		(N)	Percent	Characteristic		(N)	Percent
Age				Children			
	18 - 25	22	31.0%		Yes	47	66.2%
	23 - 30	19	26.8%		No	24	33.8%
	30 - 35	16	22.5%				
	40 and up	14	19.7%				
Relationship Status				Number of Children			
	Single	31	43.7%		One	19	26.8%
	Married	17	23.9%		Two	10	14.1%
	Separated	1	1.4%		Three	12	16.9%
	Divorced	8	11.3%		Four	5	7.0%
	SO Not Married	14	19.7%		Five or more	3	31.0%
Education							
	<HS Graduate	6	8.5%				
	HS Graduate	12	16.9%				
	Some College	32	45.1%				
	College Degree	15	21.1%				
	Graduate School	5	7.0%	Annual Income			
					< \$10,000	17	23.9%
Mother's Education					\$10 - 20,000	10	14.1%
	<HS Graduate	19	26.8%		\$20-30,000	19	26.8%
	HS Graduate	22	31.0%		\$30-50,000	16	22.5%
	Some College	16	22.5%		>\$50,000	9	12.7%
	College Degree	8	11.3%				
	Graduate School	4	5.6%	Household Income			
	Unknown	2	2.8%		< 10,000	16	22.5%
					10 - 20,000	9	12.7%
Father's Education					20-30,000	12	16.9%
	<HS Graduate	20	28.2%		30-50,000	20	28.2%
	HS Graduate	25	35.2%		>50,000	14	19.7%
	Some College	9	12.7%				
	College Degree	2	2.8%				
	Graduate School	3	4.2%				
	Unknown	12	16.9%				

SO not married – significant other not married

Relationship Status

Participants were asked to identify current relationship status. The most frequently indicated relationship status was single (43.7%); 23.9 percent indicated married, 1.4 percent separated, 11.3 percent divorced, and 19.7 percent significant other not married (Figure 1).

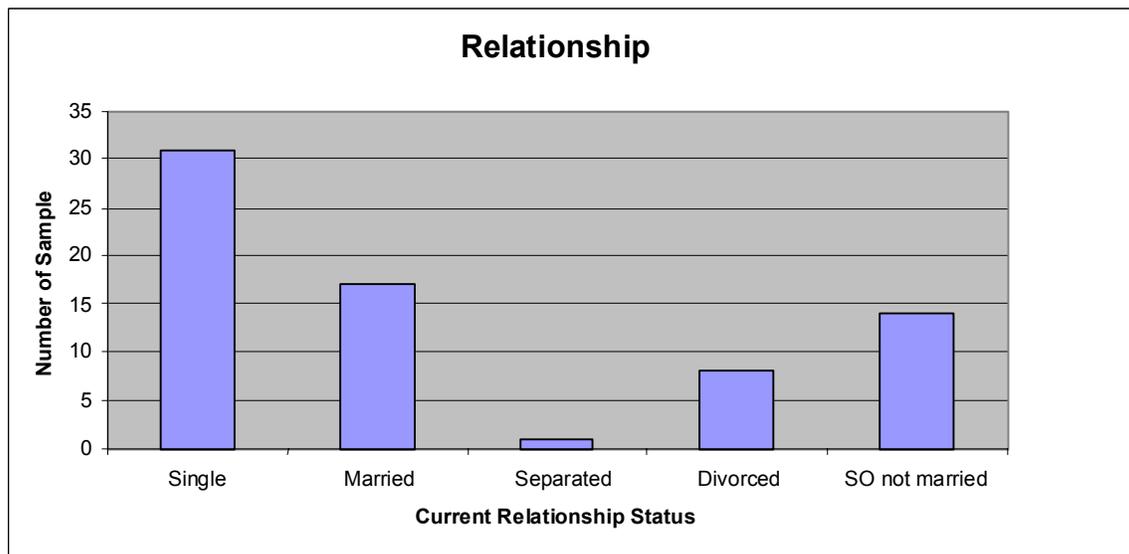


Figure 1. Current relationship status.

Level of Education

Participants were asked to identify highest level of education completed. The most frequently indicated level of education was some college or technical school (45.1%); 8.5 percent indicated less than high school graduate, 16.9 percent indicated high school graduate, 21.1 percent indicated college undergraduate degree, and 7.0 percent indicated graduate school (Figure 2).

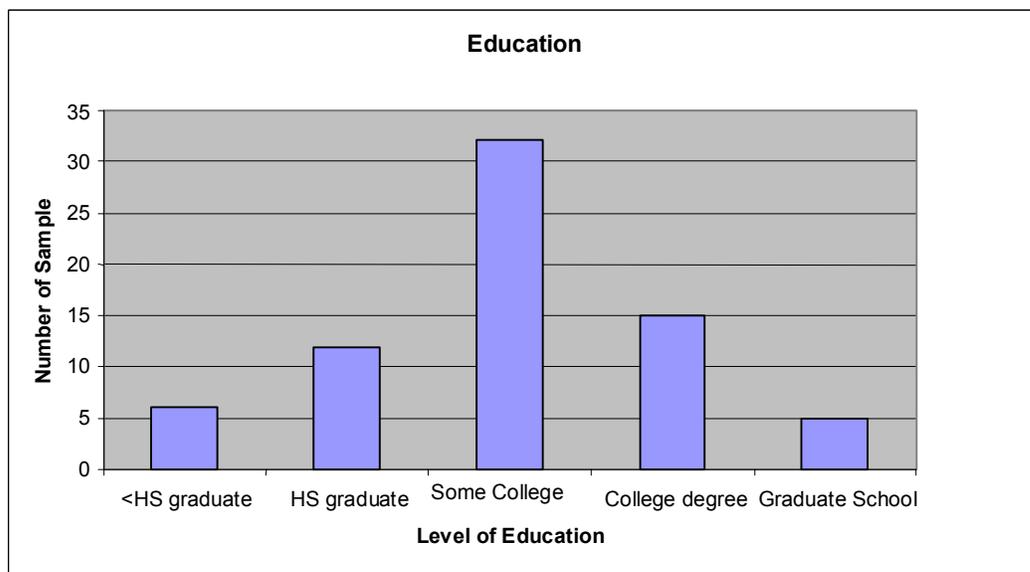


Figure 2. Participant education level.

Annual Income

Participants were asked to identify current annual incomes. The most frequently indicated level of income was \$20,000 - \$30,000 (26.8%), while 11.3 percent indicated greater than \$50,000 (Figure 3).

Number of Children

Participants were asked to identify current number of children. The most frequently indicated number of children was one (26.8%); 16.9 percent indicated three children, 14.1 percent indicated two children, 7.0 percent indicated four children, and 4.2 percent indicated five or more children (Figure 4).

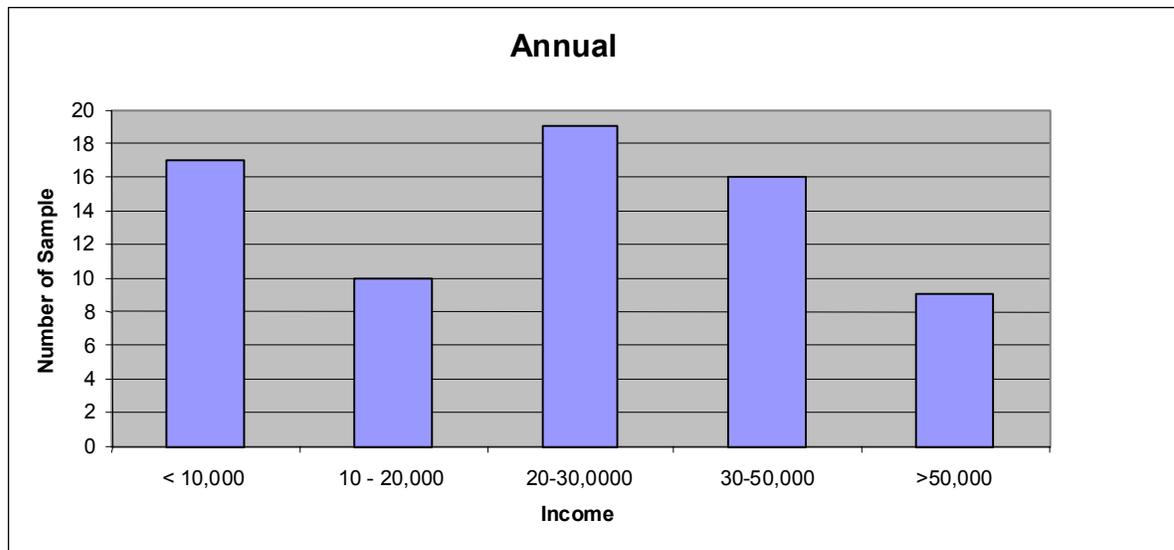


Figure 3. Annual Income.

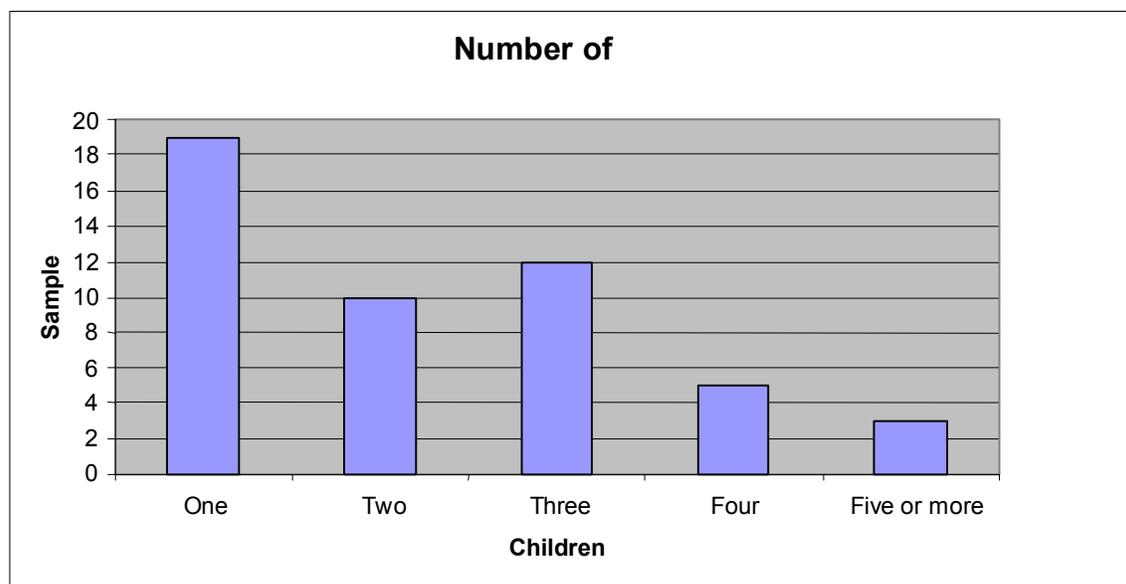


Figure 4. Number of children.

Sexual Behavior

The sexual behavior section of the questionnaire inquired about the participants' sexual intercourse history; the most frequently indicated number of lifetime sexual partners was five or more people (69.0%). The participants were asked about the use of a condom during last sexual intercourse and 67.6 percent indicated that a condom was not used. Also within this section, participants were asked about the use of drugs or alcohol during the last sexual encounter, past condom use, and if sexual health and sexual history were discussed with current partner (Table 2).

Table 2
Sexual behavior patterns

		(N)	Percent
Number of Sexual Partners			
	1	2	2.8%
	2	4	5.6%
	3	4	5.6%
	4	12	16.9%
	5	49	69.0%
Sexual Partners last 3 months			
	None	6	8.5%
	1	44	62.0%
	2	12	16.9%
	3	3	4.2%
	4	4	5.6%
	5	2	2.8%
Drugs or Alcohol used last sexual encounter			
	Yes	25	35.2%
	No	46	64.8%
Condom used last sexual encounter			
	Yes	23	32.4%
	No	48	67.6%
Number of sexual partners who used condoms			
	All of them	13	18.3%
	Majority of them	41	57.7%
	Some of them	15	21.1%
	None of them	2	2.8%
Discussed SHx with current partner			
	Yes	48	67.6%
	No	21	29.6%
Discussed SH with current partner			
	Yes	50	70.4%
	No	20	28.2%
Ever been forced to have sexual intercourse			
	Yes	21	29.6%
	No	49	69.0%
SHx : Sexual History			
SH : Sexual Health			

STD History

Participants were asked to record their sexually transmitted disease history. Eighty-four percent of the participants indicated being previously tested for an STD, and 50.7 percent indicated testing positive (Table 3). Chlamydia was the most commonly reported STD among the sample (29.6%).

Table 3
STD History

STD			
Chlamydia		21	29.6%
Gonorrhea		16	22.5%
Genital Herpes		6	8.5%
Trichomoniasis		17	23.9%
Syphilis		1	1.4%
PID		7	9.9%
HPV		1	1.4%
Bacterial Vaginosis		10	14.1%
HIV		2	2.8%

Results of Research Questions

The following section contains a discussion of each of the research questions.

Research Question 1: To what extent do low-to-moderate income African American females perceive themselves to be personally susceptible to HIV infection?

Frequency analyses were used to examine participants' perceived susceptibility to HIV infection (see Table 4). Four items were used to address this research question. Participants were asked how likely it was that they were HIV positive. Approximately 68 percent answered *very unlikely*. Participants were then asked what their chances of getting HIV were. Approximately 34 percent responded *none*. In addition, almost one third of the participants (32.4%) *strongly disagreed* that they were not worried about HIV. Last when asked if they often worried about becoming infected with HIV, the participants (38%) *strongly agreed*.

Research question 2: How severe do low-to-moderate income African American females perceive the consequences of HIV infection to be?

Frequency analyses were used to examine to what extent the participants identified the severity of becoming HIV infected. One question was used to address this research question. Almost 34 percent of the respondents *strongly agreed* that HIV infection was the worst thing that could happen to an individual.

Research Question 3: What do low-to-moderate income African American females perceive to be the barriers that might hinder condom use?

Frequency analyses were used to identify some of the possible barriers to condom use (see Table 5). Six questions were used to answer this research question. Participants were asked if there they knew where to purchase condoms. A majority of the participants

strongly agreed (94.4%). Participants were also asked if they had access to condoms, and the majority of respondents (88.7%) indicated that they did. Another possible barrier to condom use identified was the question of whether the spread of HIV would continue regardless of one's effort to protect herself and approximately 24 percent *somewhat agreed*. Participants were *unsure* if the medications used to treat HIV were saving lives in the black community. Other questions used to help identify possible barriers to condom use included, if there was information was being withheld from the black community about HIV and approximately 25 percent *agreed*. Another question addressed was if HIV was a virus created and spread by the government approximately 49 percent *disagreed*.

Table 5
Barriers to condom use

Knowledge of where to purchase condoms		
	N	Percent
Agree Strongly	67	94.40%
Agree Somewhat	2	2.80%
Unsure	2	2.80%
Disagree Somewhat	0	0.00%
Disagree Strongly	0	0.00%
Access to Purchase Condoms		
	N	Percent
Agree Strongly	63	88.70%
Agree Somewhat	3	4.20%
Unsure	3	4.20%
Disagree Somewhat	2	2.80%
Disagree Strongly	0	0.00%

Table 6
HIV Beliefs

HIV will continue to spread regardless of efforts taken			Information about HIV is being withheld		
	N	Percent		N	Percent
Agree Strongly	11	15.50%	Agree Strongly	4	5.60%
Agree Somewhat	17	23.90%	Agree Somewhat	14	19.70%
Unsure	13	18.30%	Unsure	23	32.40%
Disagree Somewhat	15	21.10%	Disagree Somewhat	16	22.50%
Disagree Strongly	15	21.10%	Disagree Strongly	14	19.70%
Medications for HIV are saving lives			HIV is a government spread virus		
	N	Percent		N	Percent
Agree Strongly	8	11.30%	Agree Strongly	7	9.90%
Agree Somewhat	15	21.10%	Agree Somewhat	6	8.50%
Unsure	41	57.70%	Unsure	23	32.40%
Disagree Somewhat	5	7.00%	Disagree Somewhat	10	14.10%
Disagree Strongly	2	2.80%	Disagree Strongly	25	35.20%

Research question 4: What do low-to-moderate income African American females perceive to be the benefits of condom use?

Frequency analyses were used to examine how participants identified some of the possible benefits of condom use. Three questions were used to answer this research question. When asked if using a condom could protect one from HIV infection, 81.7 percent *strongly agreed*. Participants were then asked if they knew how to protect themselves from HIV infection; 61 individuals strongly believed they could. Last, individuals were asked if hearing about HIV had in any way changed their lifestyle. The majority answered *no* (84.5%).

Table 7
Perceived Benefits

Condoms protect against HIV infection			Hearing about HIV has changed lifestyle		
	N	Percent		N	Percent
Agree Strongly	58	81.70%	No	60	84.80%
Agree Somewhat	11	15.50%	Yes	11	15.50%
Unsure	0	0.00%			
Disagree Somewhat	0	0.00%			
Disagree Strongly	2	2.80%			
Knowledge of how to protect self from HIV					
	N	Percent			
Agree Strongly	61	85.90%			
Agree Somewhat	7	9.90%			
Unsure	1	1.40%			
Disagree Somewhat	0	0.00%			
Disagree Strongly	2	2.80%			

CHAPTER V CONCLUSIONS

The present study measured the association between condom use among low to moderate income African American females and the constructs of the Health Belief Model such as perceived severity of HIV/AIDS, perceived susceptibility of HIV/AIDS, cues to action, and the perceived benefits and barriers to condom use. This chapter will present the conclusions and recommendations from the assessment concluded in this study. The following research questions guided this study.

1. To what extent do low-to-moderate income African American females perceive themselves to be personally susceptible to HIV infection?
2. How severe do low-to-moderate income African American females perceive the consequences of HIV infection to be?
3. What do low-to-moderate income African American females perceive to be the barriers that might hinder condom use?
4. What do low-to-moderate income African American females perceive to be the benefits of condom use?

Summary of Findings and Discussion

Participant Demographics

Of the 71 respondents, more than half (80.3%) were between the ages of 18 and 35 and African American female, which is a good sample population because the new HIV cases in the Detroit metropolitan area are predominantly persons who are black and between the ages of 20-49 at the time of diagnosis (MDCH, 2005). More than half (56.4%) of the respondents reported not being in a current relationship, and sixty-six percent reported having children. The majority of the respondents reported some college education (45.1%). For both the mothers and fathers' educational level, more than half of the mothers (57.8%) and fathers (63.4%) had only a high school degree or less. The annual income for the majority of the participants was less than \$50,000 a year. These demographics are important because it helps to show the background of these participants in relation to previous studies. Karon, Fleming, Steketee, and Cock (2001) examined the current status of the HIV epidemic in the United States and concluded that the epidemic increasingly affects women, minorities, persons infected through heterosexual contact, and the poor, which are some of the same characteristics of these respondents.

Sexual Behavior Patterns

Of the respondents, 69 percent had five or more sexual partners in her lifetime and 30 percent had more than two sexual partners within the previous three months of the study. Nearly 70% percent of the respondents reported having not used a condom during their last sexual encounter. This is a dangerous and alarming number because among women the primary transmission rate is associated with high risk heterosexual contact (CDC, 2005). Lauby, Phillip, Smith, Stark, Person, and Adams's (2000) research

initially showed that 27 percent of women in their study had two or more sexual partners in previous six months, and 38 percent had a previous STD. The results of the study showed that at baseline, 68 percent of the women had no intention of using condoms with main partners and 70 percent were not using condoms consistently with other partners. After two years the participants in the treatment group showed a 37 percent increase in attempting to get sexual partners to use a condom, an 18 percent increase in women who used condoms in most recent sexual activity, and a 9 percent decrease in those who reportedly never used a condom. The study concluded that community level interventions may be an effective way to reach a large number of women and change condom use behaviors. Sikkema et al. (2000) study showed that after a community HIV intervention there was a decline from 50 percent to 37.6 percent of women who had any unprotected sex. The percentage of women who used condoms during intercourse increased from 30.2 percent to 47.2 percent. The authors of the intervention concluded that community level interventions that involve and engage women in neighborhood-based HIV prevention activities can bring about reductions in sexual risk behaviors. These previous studies indicate that women with baseline characteristics similar to those in this study may benefit from community level interventions to help reduce the number of women who engage in unprotected sexual intercourse. In the current study, 68 percent of the respondents reported that they discussed their sexual history with their current sexual partner, and 70 percent reported that they discussed their sexual health with their current partner. This is important because if the respondent discussed her history prior to sexual intercourse, she may be more inclined to discuss the topic of condom use. Perrino, Fernandez, Bowen, and Arheart (2006) concluded that it is very important for women to

attempt condom use during sex because there is a more likely chance of condoms being used in the future. However, many of the respondents within the current study reported not using a condom during their last sexual encounter. Approximately 44 percent of the women reported either being married or having a significant other; of these women, 90 percent reported not using condoms during their last sexual experience. Of the participants who reported being single, 51 percent of them reported not using condoms during their last sexual experience.

Sexual Abuse

Previous studies have shown that a history of sexual abuse may lead to high risk heterosexual sexual intercourse. Thirty percent of the participants in the current study admitted to having been forced to have sexual intercourse at some point in their life. Among these women, 80 percent admitted to having not used a condom during their last sexual experience. In addition, only 9.5 percent admitted to having used condoms with all of their previous sexual partners. According to Champion, Shain, Piper, and Perdue (2001), women with a history of sexual abuse report a higher level of risky sexual behavior than non-abused women. Cohen, Deamant, Barkan, Richardson, Young, Holman, Anastat, Cohen, and Melnick (2000) reported in The Women's Interagency HIV Study [WIHS] that women who reported a history of childhood sexual abuse also indicated a history of drug abuse and having more than 10 male sexual partners who were at risk for HIV. The study concluded that early childhood abuse leads to later domestic violence, which may further lead to an increased risk for HIV.

Eighty-five percent of the women in the study reportedly had been tested for an STD prior to the study. More than half of those women had previously tested positive for

an STD. Of the respondents, 2.8 percent admitted being HIV positive. Wyatt, Meyers, Williams, Kitchen, Loeb, Carmona, Wyatt, Chin, and Presley (2002) concluded that race and ethnicity was not an independent predictor of HIV. Regardless of ethnicity, HIV-positive women had more sexual partners, more sexually transmitted diseases, and a greater history of sexual abuse than women who were HIV-negative. This is alarming because the women in this study not only have all of the factors that place them at greater risk for HIV, but they are also African American, which means they bear a disproportionate burden of disease, injury, death, and disability (CDC, 2005a). These results combined with the data gained from the current study provide evidence that there should be more HIV awareness programs available for these women to help raise awareness of the importance of HIV prevention. Carey, Braaten, Maisto, Gleason, Forsyth, Durant, and Jaworski (2000) concluded that when compared to a control sample, the women who underwent the HIV-risk reduction intervention had higher HIV related knowledge, had changed behavior intentions concerning sex and condom use, and had reduced risk-related behavior. Sikkema et al. (2000) also concluded that community-level interventions that involve and engage women in neighborhood-based HIV prevention activities can bring about reductions in sexual risk behaviors. Lauby, Phillip, Smith, Stark, Person, and Adams (2000) also concluded that community level interventions may be an affective way to reach large number of women and change condom use behaviors.

Perceived Susceptibility

Of the respondents 67 percent replied that it was highly unlikely that they were HIV-positive. In addition, one third believed that they had no chance of getting HIV.

The participants were also asked to gauge their level of their worry regarding HIV infection. Once again, the response reflected very little anxiety regarding their risk of infection. This is very alarming, given the number of participants who stated that a condom was not used during their last sexual encounter, and the alarming number of previously reported sexually transmitted diseases. Gielen, Faden, Kass, and Anderson (1994) studied this same behavior and concluded that women are motivated by feelings of personal susceptibility to try protective behaviors, but then conclude they are burdensome and discontinue, which is a very sad and dangerous behavior.

Perceived Barriers of Condom Use

The participants were asked if they knew where to purchase condoms and if they had access to purchase condoms. Ninety-four percent of the participants knew where to purchase condoms, and 89 percent stated that they had access to condoms. This clearly does not seem to be a barrier because participants know how to protect themselves. However sixty-eight percent stated they did not use a condom during the last sexual encounter. Respondents were also asked if they thought that the spread of HIV would continue regardless of efforts taken. Only 24 percent '*somewhat agreed*' with this statement. Another question addressed whether they thought information about HIV was being withheld from the Black community. Over half indicated that they believed it was or were unsure. Participants were also asked if HIV is a governmental-spread virus. Surprisingly, approximately half (51.1%) answered that they either agreed or were unsure with this claim. Bogart and Thorburn (2005) examined this line of thinking and concluded that HIV and AIDS conspiracy beliefs are a barrier to HIV prevention among African Americans and may represent a facet of negative attitudes and condom use

among African American men. Even though the authors concluded that this is true of men and hinders them from using condoms, this affects the women that they are sexually active with and puts both parties at risk.

Perceived Benefits of Condom Use

In response to their perceived benefits of condom use, 82 percent of respondents strongly believe that condoms offer protection against HIV infection. However, according to a previous question in the survey, approximately 66 percent did not use a condom during their last sexual encounter. Also 86 percent answered that they know how to protect themselves against HIV, yet many of them do not. In addition, approximately 85 percent indicated that hearing about HIV had not changed their lifestyle. According to this finding, women have the knowledge of how to protect themselves and use condoms yet they do not use them. Looking at the other components of the Health Belief Model, it can be assumed that the women do not perceive themselves susceptible; this is one's belief regarding the chance of getting a condition. Also to be assumed is that the women do not believe in the severity of HIV infection. These findings can indicate that these women may need more knowledge on severity of HIV infection and that when condoms are not used they are more susceptible to the disease.

Limitations

The present study's results were limited to African American women ages 18 and older residing in the Wayne County area. The response rate was very low (n=72) even after data collection time frame increased from one month to three months. As a result, the results of this study cannot be generalized to a larger African American female population.

The tools for data collection were self-reported measures, which can be inaccurate and unreliable. Scores are reliable to the degree that the respondent is honest and provides responses that truly characterize him- or herself (Cantania, Gibson, Chitwood, & Coates, 1990).

Past research suggest that people who agree to studies related to sexuality are typically more liberal in their views on sexuality. Strassberg and Lowe (1995) researched volunteer bias in sexuality research and concluded that volunteers reported a more positive attitude towards sexuality, less sexual guilt, and more sexual experience as compared to non-volunteers.

Implications to Health Education Programs

According to the findings of the current study, it can be assumed that African American women do not perceive HIV infection as being a serious condition. Therefore, women much like those who participated in the current study may need to be more educated on the severity of HIV infection, as well as their risk of contracting this deadly infection, in particular the failure to use a condom during sexual intercourse.

Holtgrave et al. (1995) concluded that HIV prevention programs have an impact on averting or reducing risk behaviors, particularly when they are delivered with sufficient resources, intensity, and cultural competency and are based on a firm foundation of behavioral and social science theory and past research. The CDC recommends that prevention programs have best practice and best evidence based interventions. Also the CDC recommends interventional videos, group discussions, and learning sessions to help facilitate HIV risk reduction interventions.

Current HIV prevention programs should not only be based on theory but should also be planned and based on the target audience to meet them at their current educational needs. Health educators not only should seek to find evidence-based interventions but also use more engaging and activity-based sessions.

When planning health education programs, health educators should find venues that a target audience would regularly visit to ensure follow-up and consistency in prevention message. Possible venues for the African American women in the study may include but are not limited to churches, hair salons, malls, and other venues frequently populated by at-risk African American women. Because of the growing epidemic of HIV

transmissions among African American women, prevention programs should be a high priority for current Health Educators to focus on.

Recommendations for Future Research

It would be interesting to conduct this study on a larger scale with more participants to see if there would be similar results. Using more than one facility in different geographical locations would be good to see if all communities would have similar results. Crosby, Yarber, DiClemente, Wingood, and Meyerson (2002) concluded that low income rural African American women were more in need of HIV prevention than those of non-rural or suburban communities. It is also recommended that a similar study be conducted that includes in its sample males with a similar background as the female participants in the current study. The women in this current study admitted to having knowledge on condoms and where to purchase them, so maybe future education may include the severity of HIV and why it is important to protect themselves and help reduce the spread of HIV in the African American community.

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APPENDIX A

Sexual Health and Belief Survey**Demographics**

1. What is your current age: 18-25 _____ 25-30 _____ 30-35 _____ 40 and up _____
2. Please circle the following racial or ethnic group that best describes you?
 1. Black/African American
 2. Biracial or multiracial (please indicate _____)
 3. Other (please indicate _____)
3. What is your current relationship status?
 1. Single
 2. Married
 3. Separated
 4. Divorced
 5. Widowed
 6. Significant other not married
4. With whom do you currently live?
 1. Alone
 2. Significant other
 3. Parent
 4. Grandparent
 5. Other (please indicate _____)
5. Do you currently have any children?
 1. Yes
 2. No
6. If yes, how many children do you have?
 1. One
 2. Two
 3. Three
 4. Four
 5. Five or more

7. What was your highest level of education completed?
 1. Less than high school graduate
 2. High School graduate
 3. Some college/ technical school
 4. College undergraduate degree
 5. Graduate school
 6. Unknown

8. What was the highest level of education completed by your mother?
 1. Less than high school graduate
 2. High School graduate
 3. Some college/ technical school
 4. College undergraduate degree
 5. Graduate school
 6. Unknown

9. What was the highest level of education completed by your father?
 1. Less than high school graduate
 2. High School graduate
 3. Some college/ technical school
 4. College undergraduate degree
 5. Graduate school
 6. Unknown

10. What is your current annual income?
 1. Less than \$10,000
 2. \$10,000 - \$20,000
 3. \$20,000- \$30,000
 4. \$30,000 - \$50,000
 5. Greater than \$50,000

11. What is your current household income?
 1. Less than \$10,000
 2. \$10,000-\$20,000
 3. \$20,000-\$30,000
 4. \$30,000-50, 000
 5. \$Greater than \$50,000

Sexual Behavior

1. Have you ever engaged in sexual intercourse?
 1. Yes
 2. No

2. During your life, with how many people have you had sexual intercourse?
 1. Never had sexual intercourse

2. 1 person
 3. 2 people
 4. 3 people
 5. 4 people
 6. 5 or more people
3. During the past 3 months, with how many people have you had sexual intercourse?
1. None
 2. 1 person
 3. 2 people
 4. 3 people
 5. 4 people
 6. 5 or more people
4. During your last sexual encounter did you or your partner use drugs or alcohol?
1. Yes
 2. No
5. During your last sexual encounter did you or your partner use a condom?
1. Yes
 2. No
6. How many of your sexual partners have you used condoms with?
1. All of them
 2. Majority of them
 3. Some of them
 4. None of them
7. Have you ever discussed your sexual history or status with your current or most recent sexual partner?
1. Yes
 2. No
8. Have you ever discussed sexual health history with your current or most recent sexual partner?
1. Yes
 2. No
9. Have you ever been tested for a sexually transmitted disease?
1. Yes
 2. No
10. Have you ever tested positive for a sexually transmitted disease?
1. Yes

2. No
11. If yes, please indicate
 1. Chlamydia
 2. Gonorrhea
 3. Genital Herpes
 4. Trichomoniasis
 5. Syphilis
 6. PID – Pelvic Inflammatory Disease
 7. HPV – Human Papillomavirus Infection
 8. Bacterial Vaginosis
 9. HIV
 10. Other
12. Have you ever been treated for a sexually transmitted disease?
 1. Yes
 2. No
13. What is your HIV status?
 1. Positive
 2. Negative
 3. Unsure
14. During your lifetime have you ever been forced to have sexual intercourse against your consent?
 1. Yes
 2. No

Attitudes toward HIV/AIDS

1. What are the chances that you have HIV/AIDS today?
 1. Very Likely
 2. Somewhat likely
 3. Do not know
 4. Somewhat unlikely
 5. Very unlikely
2. What are your chances of getting HIV/AIDS?
 1. Very Likely
 2. Fairly high
 3. Don't know
 4. Fairly low
 5. None

3. I am not at all worried about getting AIDS?
 1. Disagree Strongly
 2. Disagree Somewhat
 3. Unsure
 4. Agree Somewhat
 5. Agree Strongly

4. I often worry whether I will get AIDS?
 1. Agree Strongly
 2. Agree Somewhat
 3. Unsure
 4. Disagree Somewhat
 5. Disagree Strongly

5. Has hearing about HIV/AIDS changed your life/lifestyle in any way?
 1. No
 2. Yes

6. HIV/AIDS is the worst thing that can happen to a person?
 1. Agree Strongly
 2. Agree Somewhat
 3. Unsure
 4. Disagree Somewhat
 5. Disagree Strongly

7. A person can do things to protect them against HIV/AIDS by using a condom
 1. Agree Strongly
 2. Agree Somewhat
 3. Unsure
 4. Disagree Somewhat
 5. Disagree Strongly

8. I know what to do to protect myself against HIV/AIDS
 1. Agree Strongly
 2. Agree Somewhat
 3. Unsure
 4. Disagree Somewhat
 5. Disagree Strongly

9. I know where I can purchase condoms to protect myself against HIV/AIDS
 1. Agree Strongly
 2. Agree Somewhat
 3. Unsure
 4. Disagree Somewhat
 5. Disagree Strongly

10. I have access to purchase condoms to protect myself against HIV/AIDS
 1. Agree Strongly
 2. Agree Somewhat
 3. Unsure
 4. Disagree Somewhat
 5. Disagree Strongly

11. The spread of HIV/AIDS will continue to grow no matter what a person does to protect themselves.
 1. Agree Strongly
 2. Agree Somewhat
 3. Unsure
 4. Disagree Somewhat
 5. Disagree Strongly

12. The medications used to treat HIV are saving lives in the black community.
 1. Agree Strongly
 2. Agree Somewhat
 3. Unsure
 4. Disagree Somewhat
 5. Disagree Strongly

13. Information about HIV/AIDS are withheld from the black community.
 1. Agree Strongly
 2. Agree Somewhat
 3. Unsure
 4. Disagree Somewhat
 5. Disagree Strongly

14. HIV is a virus created and spread by the government.
 1. Agree Strongly
 2. Agree Somewhat
 3. Unsure
 4. Disagree Somewhat
 5. Disagree Strongly

APPENDIX C

HUMAN SUBJECTS APPROVAL



EASTERN MICHIGAN UNIVERSITY

February 12, 2008

Nicole Samuel
c/o Christine Karshin
School of Health Promotion and Human Performance
Eastern Michigan University
Ypsilanti, MI 48197

Dear Ms. Samuel,

The CHHS Human Subject Review Committee has reviewed your request entitled "The Relationship between African American women and Condom Use" and it is approved for initiation. The study cannot be initiated, though, until the letter of support from the STI Clinic In Detroit is on file here.

The Committee may request further approval if secondary analysis of the data is conducted.

Sincerely,

Stephen A. Sonstein, PhD
Chair, CHHS Human Subjects Review Committee