8-1-1999

Current Sexual Behaviors Of Hiv-Positive Women

Nina Sublette
CURRENT SEXUAL BEHAVIORS OF
HIV-POSITIVE WOMEN

by

NINA K. SUBLETTE

A Thesis
Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Science in Nursing
in the Division of Nursing
Mississippi University for Women

COLUMBUS, MISSISSIPPI

August 1999
Current Sexual Behaviors of
HIV-Positive Women

by

Nina K. Sublette

Bonnie E. Ford
Professor of Nursing
Director of Thesis

Lynda Chilton
Associate Professor of Nursing
Member of Committee

Dr. Melinda E. Bush
Assistant Professor of Nursing
Member of Committee

Barbara M. Meen
Director of the Graduate School
Abstract

The incidence of HIV among women of childbearing age in the United States continues to rise. Literature and statistics show that the number of new HIV infections continue to increase, despite the fact that the transmission of the disease is preventable. The purpose of this descriptive study was to describe the current sexual practices on HIV-positive women and to determine whether these behaviors had changed since the diagnosis of HIV. A convenience sample (N = 13) of HIV-positive women was obtained from a support group for HIV-positive women in a metropolitan city in the Southeastern United States. Albert Bandura’s Social Learning Theory guided the research study. The participants completed a researcher-devised questionnaire with demographic information and questions regarding previous and current sexual practices. The responses were entered onto a spreadsheet and analyzed using frequencies and percentages. The study concluded that although the sample had a decrease in the frequency of sexual activity since the diagnosis of HIV, they
continued to engage in sexual behavior without the use of barrier protection. HIV-positive women expressed fear, lack of interest, and lack of a sexual partner as reasons for sexual behavior changes. Recommendations for further researcher included replication of this study with grounded theory, working with HIV-positive women who are not in a support group, conduction of a study looking at the motivation for changing risk behaviors, and the conduction of a qualitative study exploring the meaning of the experience of being HIV positive.
Acknowledgments

I would like to thank all of the women with whom I have worked. You have taught me more about living with HIV than any textbook ever could. Thank you for sharing with me and allowing me to become a special part of your lives. A special thanks to Alice and Beverly. This thesis is dedicated to you. You have touched me in a very special way. I will always carry your memory with me.

I would like to thank my committee chair, Dr. Bonnie Lockard, and my committee members, Dr. Lynn Chilton and Dr. Melinda Rush, for their constant nudging and everlasting sense of perfection. I would also like to thank Lorraine Hamm. You understood my frustrations and helped me work through this year. Thank you for allowing me to be myself.

I would also like to thank my sidekicks, Kelly and LuAnn, for helping me through this year. I could not have done this without you. I am grateful for your humor, and I will never forget all of our escapades. Thanks to Jeff and Joe for keeping me sane through my moments and laughing.
with me when I really wanted to cry. Thanks to Brenda Comer for letting us crash at her camp house.

I would also like to thank my friends and mentors, Dr. Pat Flynn and Dr. Rani Lewis, for giving me the desire to learn as much as I possibly could. You have taught me more than you will ever know, and I am grateful.

Thanks to my best friend, Kim, for supporting me throughout this crazy year. I could not have done it without all of your help, encouragement, patience, and love. Thank you.
Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>iii</td>
</tr>
<tr>
<td>Acknowledgments</td>
<td>v</td>
</tr>
<tr>
<td>List of Tables</td>
<td>ix</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>I. The Research Problem</td>
<td>1</td>
</tr>
<tr>
<td>Establishment of the Problem</td>
<td>2</td>
</tr>
<tr>
<td>Theoretical Framework</td>
<td>8</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>10</td>
</tr>
<tr>
<td>Research Questions</td>
<td>11</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>11</td>
</tr>
<tr>
<td>Assumptions</td>
<td>12</td>
</tr>
<tr>
<td>Significance to Nursing</td>
<td>12</td>
</tr>
<tr>
<td>Summary</td>
<td>14</td>
</tr>
<tr>
<td>II. Review of the Literature</td>
<td>15</td>
</tr>
<tr>
<td>III. The Method</td>
<td>42</td>
</tr>
<tr>
<td>Statement of the Purpose</td>
<td>42</td>
</tr>
<tr>
<td>Design of the Study</td>
<td>42</td>
</tr>
<tr>
<td>Limitations</td>
<td>43</td>
</tr>
<tr>
<td>Setting</td>
<td>44</td>
</tr>
<tr>
<td>Population and Sample</td>
<td>45</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>45</td>
</tr>
<tr>
<td>Data Collection Procedure</td>
<td>47</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>48</td>
</tr>
<tr>
<td>Summary</td>
<td>49</td>
</tr>
</tbody>
</table>
List of Tables

Table 1. Demographic Data on the Sublette Sexual Behavior Questionnaire Expressed in Frequencies and Percentages .......... 51

Table 2. Number of Pregnancies and Living Children as Noted on the Sublette Sexual Behavior Questionnaire Expressed in Frequencies and Percentages .................................... 53

Table 3. Frequency and Percentage Response of Current Sexual Behavior on the Sublette Sexual Behavior Questionnaire .......................... 54

Table 4. Frequency and Percentage of Current Sexual Encounters on the Sublette Sexual Behavior Questionnaire ................. 57

Table 5. Frequency and Percentage of Use of Barrier Methods During Current Sexual Activity on the Sublette Sexual Behavior Questionnaire ........................................ 58

Table 6. Frequency and Percentage Responses of Previous Sexual Behavior on the Sublette Sexual Behavior Questionnaire ............. 60

Table 7. Length of Time Participants Had Been Diagnosed with HIV as Noted on the Sublette Sexual Behavior Questionnaire Expressed in Frequencies and Percentages .... 63
Chapter I
The Research Problem

The human immunodeficiency virus (HIV), the virus that causes the fatal disease, acquired immune deficiency syndrome (AIDS), is a significant health problem in the United States. The Centers for Disease Control and Prevention (CDC) reported 21,909 AIDS related deaths in the United States in 1997 (CDC, 1998).

The AIDS epidemic has had a major effect on morbidity and mortality in women between the ages of 25 and 44 years and disproportionately affects African-American and Hispanic women (CDC, 1996b). HIV infection is the third leading cause of death in U.S. women ages 25 to 40 years (about 11% of all deaths in that group). In 17 cities and several states, HIV is the leading cause of death in this group (Vasquez, 1996). Estimates suggest that women represent almost half of all new infections worldwide with the majority of transmission occurring before age 25; worldwide, 3 million women will die from AIDS in the 1990s. The majority of cases of HIV infection in women
have been reported since 1989, indicating that the infection rate among women is increasing (Stine, 1993).

The prevalence of HIV infection helps illustrate the importance of screening, testing, and educating sexually active clients. Early identification of the virus and education aimed at transmission prevention are critical in reducing the number of future infections. Testing programs must include a counseling component which focuses on promoting, reinforcing, and maintaining behavior changes in HIV-positive individuals, therefore preventing the further transmission of HIV (Coates et al., 1988).

Establishment of the Problem

The AIDS epidemic has made a tremendous impact on the entire population of the United States. What was originally thought of as a "gay, white man's disease" has grown to affect all members of society. The fact that HIV infections in the United States have stabilized disguises another fact: For some groups, including women, infection rates continue to climb.

Women represented 18.1% of all U.S. AIDS cases in 1995, a threefold increase over the 1985 percentage (Vasquez, 1996). The number of heterosexually transmitted
cases of HIV/AIDS are rapidly increasing. In 1995, there was an average of 8,500 daily new cases of HIV infections worldwide, and 40% of those occurred in women (Garcia-Ojeda, 1997). The rate of HIV transmission among women is disproportionate, affecting racial and ethnic minorities at a much higher rate (Rose & Clark-Alexander, 1996). Studies of international AIDS research found that more women between the ages of 13 and 25 years are being infected than women in other age groups, women are infected at a much younger age than men, and in developing countries, as many or more women are infected as men (Garcia-Ojeda, 1997). HIV/AIDS has a tremendous impact on the lives of young women who are infected with the virus and directly influences the lives of their significant others and family members.

The most common mode for HIV transmission in the United States is first through sexual contact, followed by parental exposure to contaminated blood or blood products by intravenous drug abuse or blood transfusion recipients, and lastly, between mother and fetus (Roper, 1991). Of all types of sexual contact, anal intercourse is the most efficient mode of male-to-female sexual transmission of HIV. Many women have anal sex as a method of birth control
Although the routes of transmission of the virus are known, the incidence of infection continues to increase. The number of women with AIDS acquired through heterosexual transmission continues to increase. Women’s biologic vulnerability places them at increased risk for HIV infection. Sperm releases a higher dose of HIV than vaginal fluids. The epithelium of vaginal and cervical tissues are directly infected with the virus. Menstrual cycle causes the pH of the vagina to be less acidic, thus more hospitable to HIV (Cotton & Watts, 1997). Young women are at risk for HIV infection as they reach adolescence and young adulthood. HIV prevention programs must reach young women before they initiate sexual activity (Wortley & Fleming, 1997). It is imperative that the sexual behaviors of all clients be explored and HIV prevention education implemented into the clinical arena.

Social stigma and fear have prevented society from speaking openly about the epidemic. The opportunity for teaching the community about the virus and its transmission has often been halted because of the sexually graphic content that must accompany HIV education and prevention programs. The current sexual behaviors of
HIV-infected women must be identified. This information is important to the development of counseling strategies for high-risk populations, therefore, preventing further transmission of HIV.

The importance of this growing epidemic among women is significant, encompassing women's physical, emotional, spiritual, and social needs. These needs are often compounded by the additional responsibility of children, some of whom may also be infected with the virus. Perinatal transmission of HIV has accounted for 7,512 cases of pediatric AIDS in the United States (CDC, 1998).

Women represent the fastest growing group of people with HIV. Worldwide, an estimated 8.8 million women and 800,000 children have HIV/AIDS. Most of these persons reside in sub-Saharan Africa where health care services are limited (CDC, 1996a). Transmission patterns indicate that the rate of heterosexual transmission of HIV is increasing. The CDC has reported 62,599 AIDS cases in the heterosexual exposure category in the United States (CDC, 1998).

Globally, heterosexual transmission of HIV may account for 80% of HIV infections by the end of the decade. The World Health Organization (WHO) projects that
the total number of HIV-infected adults will reach 30 million by the year 2000. Additionally, another 10 million pediatric cases are projected (Holmes, 1991).

Understanding the transmission of HIV is important, as the incidence of HIV among adolescents and young adults is increasing at an alarming rate. At the end of 1997, the CDC reported 3,357 cases of HIV in 13- to 19-year-olds and 23,969 cases of HIV in 20- to 24-year-olds in the United States (CDC, 1998). Adolescence is a developmental phase characterized by the initiation and experimentation of sexual activity. Researchers note that teenagers are having sex earlier than ever, often with multiple partners. By the time they reach the age of 20, 77% of girls and 86% of boys have had sexual intercourse. The majority of teens deny the consistent use of condoms (Collins, 1997). Each year approximately 3 million cases of sexually transmitted diseases (STDs) occur among teenagers, and approximately 1 million become pregnant. HIV infection is the sixth leading cause of death among persons aged 15 to 24 years in the United States. Unprotected sexual intercourse and multiple sex partners place young persons at risk for HIV infection, other STDs, and pregnancy (CDC, 1998).
The medical community continues to learn about the course of HIV infection and the consequences of HIV transmission among women. At least 90% of HIV-infected children received the virus from their HIV-infected mothers (CDC, 1998). HIV-infected infants and children, as well as the concept of an entire generation of HIV-negative orphans, are direct reflections of a society that has been affected by HIV infection among women of childbearing age.

Educational programs have attempted to make the public aware of the risks of HIV transmission, yet the incidence of HIV continues to increase. What was initially known as "the gay cancer" has grown to encompass many different cultures, despite political activism and educational efforts. HIV prevention programs must consider the risk factors that affect the vast majority of young people. Social vulnerability, the need to gain love and respect through sex, and power differentials within relationships are important risk factors in the subgroups of young people most affected by the HIV epidemic (Collins, 1997). The lack of peer support for condom use, the faulty perception of personal risk, the risk-taking behaviors of one's partner, the lack of adequate
information, and the lack of access to condoms are all factors which may lead to the transmission of HIV (Collins, 1997).

Theoretical Framework

Albert Bandura’s Social Learning Theory served as the theoretical framework for this study. Social Learning Theory stresses learning through observation and imitation, implying that human behavior is learned behavior (Dworetzky, 1982). Bandura theorized that the personality is shaped not only through environmental influences on the person, but also by the person’s ability to influence the environment (Bandura, 1978). Behavior modification, an offshoot of the Social Learning Theory, has evolved to further explain human behavior. Modeling, observational learning, and vicarious learning are themes found in behavior modification theories (Hogben & Byrne, 1998).

Bandura (1978) and his Social Learning Theory suggested that by arranging particular associations between stimuli or particular consequences for behavior, or by modeling behavior that is desired, it is possible to change a subject’s behavior. Social Learning Theory states
that the environment and the experiences of the subject can possibly be manipulated in order to change behavior (Dworetzky, 1982).

The Social Learning Theory suggests that human behavior is learned behavior. No reward or punishment is necessary to reinforce the behavior. Bandura tested this theory with an experiment involving a stuffed clown doll, referred to as a "Bobo doll" (Bandura, Ross, & Ross, 1961). He allowed children to watch a man hit the Bobo doll and act in a verbally aggressive manner toward the doll. When the children who observed this behavior were left alone with the doll, the children acted violently toward the doll, implying that the behavior was learned through observation. This classic experiment illustrated that violent behavior was an imitation of the observed aggressive behavior.

Sexuality theorists and researchers have made full and continuous use of the Social Learning Theory to explain the development of sexuality, adolescent sexuality and contraception, health-related sexual behavior, and models of coercive sexual behavior (Hogben & Byrne, 1998).
According to the Social Learning Theory, sexual behavior is learned through observation and experimentation during childhood and adolescence. Children are taught a variety of concepts regarding sex and relationships by their parents, friends, schools, and the media. Adolescence is a developmental period that is often characterized by the struggle for independence. As the adolescent female struggles to become an adult, sexual experimentation allows her to discover for herself what she does and does not like. Like the Bobo doll experiment, the adolescent learns through observation. Peer reports of sexual experiences, television, movies, and personal fantasies display sexual experiences that are not always synonymous with the information that is taught by adult mentors. Many times adolescents experiment with different sexual activities in order to fit in with a certain peer group. These sexual behaviors are not always reinforced with a reward or punishment, but they are reinforced through their own existence.

Statement of the Problem

The incidence of HIV transmission continues to increase. In June 1998, the CDC reported 665,357 cases of
AIDS in the United States (CDC, 1998). The prevalence of HIV infections in the heterosexual community has led to an epidemic that directly affects women of childbearing age. Identifying the current sexual behaviors of HIV positive women can determine the presence of high-risk sexual behaviors. These behaviors could potentially lead to further transmission and propagation of the pandemic.

Research Questions

This study was guided by two research questions:

1. What are the current sexual behaviors of HIV-positive women in a metropolitan city in the Southeastern United States?

2. Have these behaviors changed since the diagnosis of HIV?

Definition of Terms

HIV positive women: Theoretical: women who have been diagnosed with the human immunodeficiency virus. Operational: persons who are over the age of 18, English-speaking females who have been diagnosed with HIV, and are participants in the selected support group.

Current sexual behaviors: Theoretical: any response emitted by or elicited from an organism relating to sex
Operational: participation in vaginal, oral, and anal intercourse as identified on the Sublette Sexual Behavior Questionnaire.

Assumptions

The assumptions surrounding this study were as follows:

1. Women who participated in the support group were actually infected with the human immunodeficiency virus (HIV).

2. Women who agreed to participate in the research study were able to read and understand the Sublette Sexual Behavior Questionnaire.

3. Women who participated in HIV support group activities answered the Sublette Sexual Behavior Questionnaire honestly.

4. Human behavior is learned behavior.

Significance to Nursing

Family nurse practitioners (FNPs) have the unique opportunity to influence their environment through research, education, and practice. The knowledge gained from this research study will add to the existing information regarding HIV infected women. This research
study was significant in that there were many studies describing sexual practices of homosexual HIV-positive men, but few studies describing the sexual behaviors of HIV-positive women. This research study may provide the basis for HIV transmission prevention programs.

Nurse practitioners must provide education to not only their clients, but also to their coworkers and communities regarding HIV transmission prevention. Although HIV transmission continues to be a subject that is frowned upon in many social situations, family nurse practitioners have the opportunity to bridge the gap between science and society.

Coates et al. (1988) hypothesized that the decrease in high-risk sexual behaviors after counseling is directly related to the quality of counseling provided to the client. Nurses are often responsible for counseling the HIV-positive client. It is imperative that nurse practitioners explore the current sexual behaviors of their HIV-positive clients. This information is vital to the development of counseling strategies that may be implemented in order to prevent transmission of the virus.
Summary

The prevalence of HIV infection among women has become a significant problem in the United States. The number of heterosexually transmitted infections has increased significantly in this decade (CDC, 1998). Despite education regarding HIV prevention, the number of new infections continues to rise.

In this chapter, the establishment of the problem, statement of the problem, research questions, definition of terms, assumptions, and significance to nursing were discussed. Bandura’s Social Learning Theory served as the theoretical framework for the study and was discussed in detail.
Chapter II

Review of the Literature

A review of literature revealed only one study in which the current sexual behaviors of HIV-positive women are described. The remaining research addressed the trends of HIV transmission, the behavioral and demographic risk factors for HIV transmission in the heterosexual population, and the reliability and validity of self-report measures related to HIV-related sexual behavior. The use of the Social Learning Theory to explain differences in human sexuality was identified in the literature, as was the use of support group services for HIV-positive women.

Rosenberg and Biggar (1998) explored the trends in the incidence of HIV infection in young adults in the United States. Adolescence is a tumultuous stage that is often characterized by risk-taking behaviors. These risk-taking behaviors can result in potential exposure to many sexually transmitted diseases, including HIV. Rosenberg and Biggar (1998) found that most of the previous
surveillance data focused on AIDS diagnoses, thus ignoring the number of individuals who were infected with HIV, but had not yet developed AIDS defining illnesses.

Rosenberg and Biggar explored the incidence of HIV among adolescents and young adults in the United States. A retrospective design was employed in order to estimate the incidence and prevalence trends of HIV infection by age, race, and exposure categories for persons born between 1960 and 1974 who were diagnosed with AIDS. These researchers used a statistical method, back calculation, to track the number of young adults who were infected with HIV between the years of 1988 and 1993. This approach was used in order to capture the incidence of HIV infection from the AIDS surveillance data were available from the Centers for Disease Control (CDC). The incubation period of the virus allowed the researchers to predict the prevalence of HIV infection among their target population.

Rosenberg and Biggar (1998) defined prevalence as the number of new HIV infections combined with existing HIV infections for each specific category. The advent of highly active antiretroviral therapy in 1995 lengthened the incubation time from HIV to AIDS. Therefore, these researchers excluded patients diagnosed with AIDS after
1993. The assumption was made that the study population was not HIV-positive before the age of 13 years. Individuals who were perinatally infected, as well as those patients who were infected through blood transfusions, were excluded in order to streamline the risk-taking behavior incidences.

Adolescent and adult subgroups were analyzed according to birth cohorts, sex, race, and HIV transmission. Routes of HIV transmission were noted to be homosexual contact, injection drug use, homosexual contact with injection drug use, and heterosexual contact. The estimated mean incubation period from the time of diagnosis of HIV to the diagnosis of AIDS, based on the 1987 definition of AIDS by the Centers for Disease Control, was calculated to be 9.4 years.

Rosenberg and Biggar (1998) used variance calculations to account for the possible morbidity of injection drug users that was not AIDS related, such as drug overdose, suicide, and bacterial endocarditis. The actual number of individuals who engaged in HIV risk-taking behaviors was not known, so the number of individuals in the general population served as the denominator for the incidence calculations. Prevalence of
HIV among persons aged 18 to 22 was estimated by subtracting the number of AIDS related deaths from the sum of incidences of infection. Prevalence was calculated for persons aged 23 to 27 through a similar method. All of the estimates were multiplied by 1.18 to adjust for the number of AIDS cases unreported to the Centers for Disease Control.

Rosenberg and Biggar (1998) found that homosexual contact was the leading exposure category among white, black, and Hispanic males with AIDS. Injection drug use was followed by heterosexual contact in the exposure categories among men of all races. For white, black, and Hispanic women with AIDS, heterosexual contact was the most prevalent HIV exposure category. The prevalence of HIV among men from 1983 to 1988 doubled from 14,900 to 30,300. A significant decrease in the number of new infections among males was noted from 1988 to 1993 (27%), especially in the white male population. Women were noted to have different trends in their incidence of HIV infection.

Through the comparison of birth cohorts during the teenage years, heterosexual transmission of HIV increased, especially among women. Black women had the highest
incidence of HIV through heterosexual exposure. In 1993, 1 in every 1,000 20-year-old black women became infected with HIV through heterosexual exposure. A comparison of Hispanic women revealed that they were infected at a rate of 1 in 2,800, while white women were infected at a rate of 1 in 15,000.

The researchers (Rosenberg & Biggar, 1998) concluded that the incidence of HIV among young adults was changing. By the end of 1993, the rate of infection among homosexual men and injection drug users was slowing down, while the rate of infection among heterosexual minorities was increasing. The overall prevalence of HIV infection among persons aged 20 to 25 decreased 14% between 1988 and 1993.

Rosenberg and Biggar (1998) described the changing incidence of HIV in the United States. This study is germane to the current study in that the current study described the sexual behaviors of HIV-positive women, while Rosenberg and Biggar noted the incidence of HIV among the young adult population in the United States. A comparison of the trends of incidences of HIV infection in more specific geographical locations may suggest that Rosenberg and Biggar’s (1998) conclusions can be generalized to other populations.
In another study, Skurnick et al. (1998) identified behavioral and demographic risk factors for the transmission of HIV in heterosexual couples. A comparison was made between concordant (both partners were HIV infected) and discordant couples (only one of the partners was HIV infected). Skurnick et al. hypothesized that anal intercourse and vaginal intercourse without the use of condoms or during menses were high-risk transmission behaviors. The history or presence of sexually transmitted diseases, especially genital ulcerations, was noted by the authors to be hypothesized correlates of HIV transmission.

Skurnick et al. (1998) used a descriptive prospective design. The nonrandomized sample (N = 224) contained heterosexual couples who were discordant for HIV-I infection and were recruited from the New Jersey State Department of Health HIV Counseling and Test Sites, infectious disease clinics, or private physician practices in New Jersey. Inclusion criteria included stable heterosexual couples who reported sexual activity within the past 6 months. The partner who was not infected with HIV-I in the discordant group could have no other risk factors for transmission except sexual activity with his or her HIV-infected partner. Couples were excluded if the
seronegative partner had a history of injectable drug use or homosexual behavior during the 5 previous years. A comparison group of 78 HIV-I concordant couples was recruited in a similar manner for comparison.

All of the participants were screened for drug use through standard urine tests. HIV status was identified through HIV ELISA with confirmatory western blot, and the immune status of the HIV-infected partner was monitored through lymphocyte subsets. Both partners were examined for evidence of sexually transmitted diseases and physiological signs of intravenous drug use.

Trained multiethnic staff interviewed the individual participants. These structured interviews included demographic information, drug and alcohol histories, sexual histories within the couple and with other partners, and reproductive and medical histories. The sexual practices of the couple, before and after the diagnosis of HIV, were studied through responses relative to frequency. Monthly frequency of vaginal intercourse, vaginal intercourse during menses, anal intercourse, performance of male and female oral sex, and the frequency of condom use were targeted.
Skurnick et al. (1998) found a small number of discordant couples with an HIV-infected female partner, thus prohibiting any conclusions regarding female-to-male transmission. The most notable demographic difference between the groups was ethnicity, with more Hispanic and black subjects in the concordant group. Education was noted to be lower for the women in the concordant group, while median income was relatively similar among both groups. The sexual behaviors of the couples displayed similarities during the time immediately after the diagnosis of HIV, with the frequency of sexual activity decreasing for both groups. The adherence to condom use was noted in the discordant group. Discordant couples were more likely to be married (64% vs. 37%) or live together (90% vs. 70%) than their concordant counterparts. This study supports the current study in that it identified and described sexual behaviors that lead to the transmission of HIV among heterosexual couples. This study was applicable to the current study, as it explored the sexual behaviors and adherence to condom use, factors which could influence HIV transmission.

Massad, Farhi, Ackatz, Sha, and Benson (1995) determined the sexual and reproductive practices of
heterosexual women with HIV. The rate of heterosexually transmitted HIV infection in the female population led the researchers to investigate the means by which infection affects sexuality. Massad et al. added that the behaviors which place women at risk for the virus, as well as strategies that may modify risk behaviors, have been identified, but the actual relationship between HIV-infection and sexual behavior had not been investigated. Much of the existing data on HIV infected women were based on the indigent population, which included a large number of intravenous drug users. This population of interest ignored the isolated risk of heterosexual sex as a source of infection. In order to address the issue of sexual practices among heterosexual women who were infected with the HIV, Massad et al. surveyed a cohort of women who were followed in an outpatient infectious disease clinic that was associated with a private hospital in the urban Midwestern United States.

Women who were infected with HIV and sought medical care at the Rush Infectious Disease Outpatient Center in Chicago, Illinois, between May 1 and September 21, 1994, were asked to complete the research questionnaire. The instrument included questions regarding sexual experiences
and behaviors before and after the diagnosis of HIV infection. Subjects were included in the study when they met the definition of being infected with HIV according to the 1993 Centers for Disease Control and Prevention revised classification system for HIV infection. Those patients who were diagnosed with AIDS were subdivided into those with and without a previous opportunistic infection. The responses from the questionnaires were entered onto a spreadsheet, and these data were compared using $t$ tests, assuming equal and unequal variances. The paired categorical data were then analyzed using MacNemar's test; significance was assumed when $p < .05$ by two-tailed testing.

The results of the study by Massad et al. (1995) revealed a high participation rate on the part of the target population. Twenty-eight women were approached about participation; 25 (89%) women completed the research tool. The average age of the sample was 36 years, with a range of 24 to 54 years. Other demographic information included race, marital status, education, employment, and insurance status. The average monthly income of the participants was noted to be $1,465, with a range of $268 to $4,367. The average length of time from diagnosis was
45 months, with a range of 3 to 126 months. The average CD4 count was 221 cells/mm³ (range, 0-983 cells/mm³).

The portion of the questionnaire that focused on sexual behaviors of the subjects revealed interesting results. The entire sample described themselves as heterosexuals, although two of the participants revealed same-sex experiences. The subjects reported beginning sexual relationships at the average age of 17, with the range being 8 to 25 years of age. The average lifetime number of sexual partners was 13 (range 1 to 50). Only one of the subjects reported trading sexual intercourse for money or drugs. None of the subjects reported sharing needles. Four subjects reported having anal intercourse before the diagnosis of HIV, with two of the women reporting anal intercourse after the diagnosis of HIV. A great difference in behavior was noted in the number of women who engaged in oral intercourse. Seventy-two percent of the subjects reported engaging in oral sex before the diagnosis of HIV, but only 40% of the women reported engaging in oral sex after the diagnosis of HIV (p = .05) (Massad et al., 1995).

Questions regarding the frequency of sexual intercourse revealed that the number of episodes per week
had decreased since diagnosis. Research subjects reported an average of 2.6 episodes of sexual intercourse per week before the diagnosis of HIV, and an average of 1.4 episodes per week after diagnosis. Sixty-four percent of the sample expressed feelings that HIV infection had worsened the quality of their sex lives, while five of the subjects reported an improved sex life since the diagnosis of HIV. The subjects reported fear, lack of spontaneity, and lack of a partner as reasons their sex lives had declined since diagnosis. The subjects who reported an improved sex life described their bodies, their partners, and a greater appreciation for life as reasons for an improved sex life. Two participants reported that HIV infection had not changed their sex lives, and two other women did not respond. Fourteen of the respondents reported being sexually active and in a monogamous relationship. The HIV status of their partners varied. Five of the women had sex partners who were HIV positive, seven women reported uninfected partners, and the status of two of the partners was unknown. Only one of the participants had not revealed her HIV status to her partner.
The clinical presentation of the participants revealed that the women who declared themselves as abstinent had significantly lower CD4 counts ($p = .002$). Twelve of the women (48%) reported histories of sexually transmitted infections. There was one report of genital warts, one report of hepatitis B, two reports of gonorrhea, three incidences of Chlamydia, four reports of syphilis, and five reports of genital herpes. Two of the respondents were under current treatment for sexually transmitted infections (genital herpes).

Contraceptive usage by the participants was described by Massad et al. (1995). Some of the respondents reported multiple methods of birth control. The type of contraception that was utilized varied with respect to the era of time before and after the diagnosis of HIV. The use of oral contraceptives was the most popular form of birth control before the women were diagnosed with HIV (84%). The number of women who reported using oral contraceptives as the primary source of birth control after the diagnosis of HIV dropped to only 3 out of 25. Only one woman reported current use of oral contraceptives. Condoms were noted to be used by 16 of the women before diagnosis, 12 women after diagnosis, and 10 women currently. Twelve
women reported using gel or foam before diagnosis, 5 women after diagnosis, and 4 women currently. The intrauterine device was used by 5 women before diagnosis, and no women after diagnosis or currently. Six women reported sterilization before diagnosis, 7 women after diagnosis, and 8 women currently. The rhythm method was used by 3 women before diagnosis, and one woman both after diagnosis and currently. Fourteen women reported using no method before the diagnosis, and only one woman reported using no method of contraception after diagnosis and currently. A difference was noted in the women in the sample who reported abstinence. Only one woman reported using abstinence as a form of birth control before diagnosis, but 11 women reported being abstinent after diagnosis, and 11 women reported current abstinence.

The results of the study by Massad et al. (1995) indicated that heterosexual women who are infected with HIV experienced a significant decrease in the frequency of sexual intercourse after the diagnosis of HIV. The abstinent women expressed fear of transmission and death of a partner as primary reasons for their abstinence. A history of rape or sexual abuse was common in the patient population. Twelve of the 25 women (48%) reported a
history of rape or physical or sexual abuse. No women reported abuse after the diagnosis of HIV. The prevalence of abuse was common, indicating that health care providers must screen their HIV-positive patients for possible abusive situations and treat the possible repercussions of the abuse. Condom use among the sample was not as common as expected, with some of the women reporting no condom use with sexual intercourse with their uninfected partners. The need to further investigate condom use and an additional contraceptive method to help prevent pregnancy was discussed.

A weakness of the study was noted by Massad et al. (1995) in the definition of oral sex. Terms such as received and performed were not used in the discussion of oral intercourse. The introduction of the study addressed the need to explore heterosexual HIV-positive women who did not have a previous history of intravenous drug use, yet the study included patients with histories of drug use. The sharing of needles was addressed, leading the reader to believe that intravenous drug use was present in the sample.

The Massad et al. (1995) study was relevant to the current study, in that it was the only available research
found that explored the current sexual behaviors of HIV-positive women. The current research identified the types of sexual practices used by HIV-positive women and differentiated changes in behaviors after the diagnosis of HIV. Massad et al.’s study was relevant to the current study in that similar sexual behaviors among HIV-positive heterosexual women were addressed. As the rate of heterosexuals with HIV infection continues to rise, the need for further exploration of sexual practices increases.

Weinhardt, Forsyth, Carey, Jaworski, and Durant (1998) studied the reliability and validity of self-report measures of HIV-related sexual behavior. This study was relevant to the current study in that the current study used a researcher-designed instrument. The degree of reliability and validity of the instrument had not been established and relied on the accurate self-reports of the participants. The self-reporting of sexual behavior has been criticized since the Kinsey report was published in 1948. Critics have declared that the self-report method of data collection is without reliability and validity due to the underreporting of stigmatized behaviors and the overreporting of normative behaviors. The self-report of
sexual behavior has been used to track the routes of HIV transmission since the onset of the disease. Although these methods have been criticized, the self-reporting of sexual behavior remains one of the most widely used tools in the field of HIV epidemiology and research.

Several different modes of self-reported sexual behavior assessments have been studied. Advantages and disadvantages have been noted with all types of assessment techniques. The self-administered questionnaire allows privacy and efficiency, but relies on the literacy of the respondents and does not allow for the probing of responses. The face-to-face interview is beneficial, in that it allows the interviewer to build rapport with the subject, explain unfamiliar terms, and probe ambiguous, internally inconsistent, or nonresponses. Credibility is enhanced with a face-to-face interview, and the probability of nonresponse is minimized. The disadvantages of the face-to-face interview technique are the lack of privacy (especially in household interviews), inefficiency, reaction to the interviewer, and the possibility of inaccurate interpretation of responses by the interviewer.
Telephone interviews allow the interviewer to probe ambiguous, internally inconsistent, or missing responses and allow the interviewer to explain unfamiliar terms. Telephone interviews allow for a greater amount of privacy than face-to-face interviews because there is no actual visual contact, which in turn leads to less interpersonal reaction with the interviewer. An understandable disadvantage of the telephone interview is the assumption that all of the target population have telephones, which does not allow the homeless, transient, or indigent to participate. Historically, the telephone interview has been associated with an absence telephone call, which obviously leads to a decreased credibility of the procedure.

Postal questionnaires allow for privacy and efficiency, but are literacy dependent and offer less credibility. The technique of self-monitoring minimizes the effects of memory error and has a lesser time between behavior and recall. Self-monitoring is reactive, a disadvantage, in that responding may influence sexual behavior. The technique requires more effort and commitment from the participant and depends on the literacy of the participant.
The audiotape-administered interview/questionnaire allows privacy with no interpersonal reaction to the interviewer but does not allow the researcher to probe responses. The technique’s other disadvantages are the facts that it is relatively difficult to repeat questions and the possibility of the respondent having a negative reaction to the voice on the tape. Computer-administered interviews or questionnaires have multiple advantages. They allow for greater privacy, possess the ability to explain unfamiliar terms, and probe ambiguous, internally inconsistent, or missing responses. The disadvantages of computer-administered interviews are the literacy factor, expense, and inefficiency (one participant per computer). The level of comfort or familiarity with computers may affect the quality of the responses.

Reliability of research must be established before validity can be assessed. The test-retest method of reliability is often used in the assessment of self-reports. When the same instrument is administered to the participants twice and the results are congruent, the tool can be declared reliable. Internal consistency can also be developed in a behavioral tool that poses the same questions in different ways, then testing for congruence.
The validity factor in the assessment of self-reported sexual behavior has been the lack of a "standard" to which the results can be compared. The accuracy of self-reported behavior makes it difficult to assess results of any instrument.

There has been little consensus among researchers regarding which administration technique yields the most reliable and valid sexual behavior data. There is a need for further investigation of the modes of instrumentation and administration with more diverse populations. The recommendations of Weinhardt et al. (1998) included further development of a quality sexual behavior assessment tool. From the research produced to date, there is evidence suggesting that well-designed interviews and questionnaires can provide acceptable data when administered appropriately (Weinhardt et al., 1998). In order to develop quality self-report instrument for the assessment of sexual behaviors, Weinhardt et al. recommend using psychometrically evaluated measures. It is also important to validate the measure, use a measure that is appropriate for the purpose of the assessment, use language that is easily understood, use focus groups, pilot data, and other formative methods to adapt to the
assessment protocol for sensitivity to cultural issues of the participants.

As the current research evaluated the current sexual behaviors of HIV-positive women, it was imperative that an appropriate instrument be utilized in the research process. The use of self-report in order to evaluate sexual behavior relies not only on the honesty of the participants’ responses, but also on the level to which the tool measures the intended behaviors. The current study used the recommendations from Weinhardt et al.’s (1998) study in the development of the researcher-devised instrument.

Bandura’s Social Learning Theory served as the theoretical framework for the current research study. Hogben and Byrne (1998) used the Social Learning Theory to explain the individual differences in human sexuality. Psychologists have used various forms of learning theory, such as classical conditioning, operant conditioning, and the Social Learning Theory as a source of frameworks for hypotheses. The researchers described early and current research in sexuality development, adolescent sexuality and contraceptive use, health-related sexual behavior, and coercive sexuality.
The history of sexual behavior theories was discussed by Hogben and Byrne (1998). Before the development of the Social Learning Theory, sexuality and sexual behaviors were explained as biological forces. The authors described the use of psychodynamic conceptualization in sexuality research. According to Hogben and Byrne (1998), the Freudian Psychodynamic Theory used biological drives or forces to explain sexuality. The major elements of the Social Learning Theory were drawn from behaviorism (Hogben & Byrne, 1998). According to the authors, classical conditioning had the greatest impact in explaining the origins of sexual behavior. The utilization of classical conditioning in sexual research was initially used to develop therapeutic interventions designed to treat sexual dysfunction.

Therapy used both conditioning and counter-conditioning. Systematic desensitization was used to replace negative responses to erotic cues (e.g., fear and anxiety) with positive responses (e.g., relaxation, sexual arousal). The reverse procedure, systematic sensitization (or aversive conditioning), associates unpleasant emotions (e.g., pain or anxiety) with undesired (or “undesirable”) erotic cues. (Hogben & Byrne, 1998, p. 59)

The first Social Learning Theory was developed by Rotter in the mid-1950s. Rotter’s theory was used to
explain and predict sexual behavior in the 1960s. Bandura and Bussey made significant contributions to the Social Learning Theory.

Indirectly, Bussey and Bandura (1984) referred to the powerful effects of sexuality (via gender constancy) in reciprocal determinism while providing evidence that modeling serves as the underlying root of gender constancy. In short, social learning theorists believe in the powerful reinforcing value of sexuality and sexuality-related variables at all ages, but tend to dismiss the notion of sexuality as an exogenous force such as a drive. (Hogben & Byrne, 1998, p. 59)

Hogben and Byrne (1998) suggested that sexual behavior is studied within the realm of many different scientific domains. The social sciences have helped society understand and predict sexuality and sexual behaviors. Hogben and Byrne illustrate that the Social Learning Theory differs from other theories of learning, in that the Social Learning Theory uses the combination of personality and environmental influences in order to describe sexual behavior. The researchers compared the use of behaviorism to the use of the Social Learning Theory when explaining sexual behavior. Behaviorists usually manipulate the subject’s environment in order to elicit a change in the subject’s behavior.
This research study by Hogben and Byrne (1998) was applicable to the current research study in that the current research study used Bandura’s Social Learning Theory as the theoretical framework. The Social Learning Theory has historically been used to explain and predict sexual behavior and was used by the current researcher as a basis for the current study.

In 1992, Chung and Magraw developed a support group for women living with HIV and AIDS and reported on their findings. This information is applicable to the current research study in that the current researcher used a support group for HIV-positive women as the setting for the descriptive study.

Chung and Magraw described a support group for women living with HIV and AIDS based on supportive therapy and psychoeducational and cognitive-behavioral models. The 19 subjects were recruited through an organizational meeting. Demographic information revealed 19 female participants, aged 21 to 48 years. The racial breakdown of the group revealed 17 white women, one black woman, and one Hispanic woman. The majority of the women came from lower middle-class socioeconomic backgrounds.
The subjects participated in weekly hour-long meetings for 8 weeks. The meetings were professionally facilitated and were not structured in nature. The support group focused on supportive therapy. Educational and cognitive behavioral models were utilized in the support group. Social issues, such as isolation, stigma, and gender, were discussed in the support group setting. Medical issues and concerns also were frequent topics during the support group meetings. Personal subjects, such as relationships, children, and sexuality, were also noted to be points of discussion among the support group participants. Chung and Magraw used verbal comments of the support group participants and facilitators as the method of data collection.

Chung and Magraw (1992) revealed that the women expressed opinions openly in the support group setting. The support group participants showed an increased tolerance for direct challenges. The authors noted that the support group was not initiated for the purpose of changing behaviors, but there was a significant amount of behavioral changes that occurred during the course of the support group meetings.
Several limitations were noted in the study. There was no specific method of evaluation of the support group, and little demographic information was obtained from the participants. No information regarding the sexual orientation of the women was available. The current sexual behaviors were not specifically addressed by the participants. The authors focused on group structure and processes and allowed the group to follow their own agenda. Chung and Magraw (1992) addressed the usefulness and effectiveness of the support group as an essential intervention for women living with HIV and AIDS.

The Chung and Magraw (1992) study was applicable to the current research study in that it addressed a support group for HIV-positive women, which was the population utilized in the present study. There was little research available regarding support group services specifically for HIV-positive women.

In this review of literature, studies regarding HIV-positive women were considered. To date, only one study had been conducted on the sexual behaviors of HIV-positive women, thereby validating the need for the current study. Studies that discussed the trends of HIV transmission and the behavioral and demographic risk factors for HIV
transmission were included in the review of literature. A study evaluating the reliability and validity of self-reported sexual behavior was described. Hogben and Byrne (1998) discussed the use of the Social Learning Theory in the explanation of human sexuality, and Chung and Magraw illustrated a support group for HIV-positive women. The limited number of research studies regarding the sexual behaviors of HIV-positive women confirmed the need for further exploration of this topic.
Chapter III
The Method

The incidence of HIV infection continues to increase, especially among the heterosexual population. HIV is a virus that is commonly spread through exposure to infected blood and bodily fluids during sexual activity. As the rate of infections rise, it is important to determine the sexual behaviors that are prevalent among those who are infected with the virus.

Statement of the Purpose

The purpose of this study was to identify the current sexual behaviors of HIV-positive women and to determine if these sexual behaviors have changed since the diagnosis of HIV. In this chapter, the design of the study will be described, including the setting, population, and sample, instrumentation, procedure, and data analysis.

Design of the Study

A descriptive design was employed for the study. According to Polit and Hungler (1995), descriptive
research is used to observe, describe, and document specific phenomena rather than explaining the phenomena. This design was appropriate as the sexual behaviors of HIV-positive women were identified and described in this study.

Limitations

Several limitations were noted in this research study. The convenience sample consisted of HIV-positive women who were participants in a support group, which contributed to a weaker design than if random samples had been utilized. The sample was entirely composed of support group participants who were HIV positive, thus decreasing the generalization to other populations. The Sublette Sexual Behavior Questionnaire was developed by the researcher, which had no established reliability and validity. The purpose of the questionnaire was to describe the participants' demographic information and both previous and current sexual behaviors. Also, the potential inability of the subjects to accurately recall sexual behavior was another limitation of the study.
Setting

The setting was a support group for HIV-positive women in a metropolitan city in the Southeastern United States. The agency that sponsored the support group for HIV-positive women was a nonprofit agency providing support services to HIV-infected women and their children in the metropolitan area. The support services provided by the agency included transportation to medical appointments, child care, tutoring services for school-aged children, and an emergency pantry, which included food, diapers, formula, and personal hygiene items. The agency also sponsors a support group for HIV-infected women, organized group outings to community events, and arranged holiday functions that are funded by various community organizations. The agency was funded through Ryan White Title II, Ryan White Title IV, and private donations. Outpatient infectious disease clinics, the county health department, and other HIV community resources often refer their HIV-positive female clients to the agency for support services. The support group met on a weekly basis. Transportation and childcare were available to all support group participants. An average of 15 women participated in the weekly support group.
Population and Sample

The target population was HIV-positive women in a metropolitan area. The sample was one of convenience and consisted of HIV-positive women who participated in the selected support group. There were 14 women present at the support group, and one woman chose not to participate. The subjects gave written consent to participate in the study (see Appendix A) and completed the Sublette Sexual Behavior Questionnaire (see Appendix B). The final sample size was 13 subjects.

Instrumentation

The instrument used for collecting the data was the Sublette Sexual Behavior Questionnaire. The researcher-developed questionnaire contained 40 items related to demographic information, reproductive history, and sexual behavior. Nine items were related to demographic information, 7 items related to reproductive history, and 23 items related to sexual behavior. The demographic questions were designed to collect information about age, marital status, employment status, educational level, religion, and ethnic background.
There was a blank at the top of each questionnaire. A number was entered in the blank in order to identify the research participants. Question 1 was a fill-in-the-blank related to the participant's age. Questions 2 through 9 were checklist-type questions that described demographic information. Questions 10 and 11 were fill-in-the-blanks related to reproductive history. Questions 13 to 16 were checklist-style questions that described reproductive history and birth control usage. Questions 17 through 36 used a 4-point Likert scale to rate frequency of behavior. Question 37 was a checklist-style question that explored sexually transmitted disease history. Question 38 was a fill-in-the-blank question describing the length of time that the participant had been HIV positive. Question 39 asked if the participant's behavior had changed since the diagnosis of HIV (yes or no), and Question 40 was an open-ended question that explored how the reported behaviors had changed since the diagnosis of HIV. This instrument was developed for this study from a review of literature and professional experience. Its purpose was to gather information needed in investigating variables in the research questions. The instrument was reviewed by a panel
of experts and was determined to be appropriate for the study.

Data Collection Procedure

The researcher requested approval to conduct the study from the Committee on Use of Human Subjects in Experimentation of Mississippi University for Women. Upon obtaining approval (see Appendix C), the researcher secured use of the support group participants for research purposes. A written agreement was signed between the researcher and the executive director of the organization that sponsors the support group (see Appendix D).

The purpose of the study was explained to the support group participants by the researcher at a support group meeting. All support group members who desired to participate in the research study were included in the sample. Confidentiality and anonymity were preserved by instructing the participants to sign their name on the informed consents. The informed consents were then placed in an envelope. After informed consents were signed, the researcher distributed the questionnaires and was available for questions during the questionnaire completion process. The participants were instructed to
complete the Sublette Sexual Behavior Questionnaire, without writing their names or initials on the instrument, and place them in a separate envelope. The subjects were also asked to switch pens with another participant before completing the research questionnaire. These procedures discouraged the identification of the subjects.

The researcher was aware that although physical harm was not a danger in this study, care was taken to prevent psychological harm to the participants. The researcher provided time after the completion of the questionnaires for the participants to express thoughts and feelings. The signed informed consents and the completed research questionnaires were destroyed at the completion of the study.

Data Analysis

The responses from the Sublette Sexual Behavior Questionnaire were entered onto a spreadsheet, and these data were analyzed. Descriptive statistics including frequencies and percentages were used to summarize and describe the quantitative data obtained. Nominal measurement was used to assign numbers to demographic responses, classifying characteristics into categories.
Ordinal measurement was used to sort the responses relating to sexual behavior. Content analysis was used to describe the responses to the open-ended question at the end of the research questionnaire.

Summary

In this chapter, the design of the current study has been discussed. The limitations, setting, population, sample, instrumentation, and procedure were reviewed. The methods of data analysis were also identified.
Chapter IV

The Findings

The purpose of this study was to ascertain the current sexual behaviors of HIV-positive women. A descriptive design was utilized for this study. In this chapter a description of the sample (N = 13) and analysis of the data are revealed. Additional findings of interest also are presented.

Description of the Sample

Convenience sampling was utilized to collect the statistical data from HIV-positive women. The research participants (N = 13) attended the weekly support group for HIV-positive women in a metropolitan city in the Southeastern United States. Though 14 women attended the support group, one was unable to read the questionnaire and did not participate. The entire sample was Black, which was congruent with the findings of Rosenberg and Biggar (1998), who noted an increase in the incidence of HIV infection among heterosexual black women.
The ages of the research participants ranged from 20 to 48 years. The mean age for the women was 32.07 years. Questions 2 through 9 were related to marital status, employment, education, religion, and ethnic background. The entire sample participated in organized religion, with the majority of the sample being Baptist. The demographic information pertaining to the sample are found in Table 1.

Table 1

Demographic Data on the Sublette Sexual Behavior Questionnaire Expressed in Frequencies and Percentages

<table>
<thead>
<tr>
<th>Demographic data</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never married</td>
<td>9</td>
<td>69.2</td>
</tr>
<tr>
<td>Married</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>Widowed</td>
<td>2</td>
<td>15.4</td>
</tr>
<tr>
<td>Separated</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>Divorced</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Employment status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>2</td>
<td>15.4</td>
</tr>
<tr>
<td>Not employed</td>
<td>11</td>
<td>84.6</td>
</tr>
<tr>
<td>Educational level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finished eighth grade</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>Some high school</td>
<td>2</td>
<td>15.4</td>
</tr>
<tr>
<td>Finished high school or GED</td>
<td>4</td>
<td>30.8</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>4</td>
<td>30.8</td>
</tr>
<tr>
<td>Associate degree</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>Did not answer</td>
<td>1</td>
<td>7.7</td>
</tr>
</tbody>
</table>

(page continues)
Table 1 (continued)

<table>
<thead>
<tr>
<th>Demographic data</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baptist</td>
<td>8</td>
<td>61.5</td>
</tr>
<tr>
<td>Church of God in Christ</td>
<td>3</td>
<td>23.1</td>
</tr>
<tr>
<td>Catholic</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>Other (AME Zion)</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>Ethnic background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black (African American)</td>
<td>13</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\(^aN = 13.\)

Questions 10 through 16 were related to numbers of pregnancies, living children, and abortions, current pregnancy status, and types of birth control used by the participants. These items were included in the research questionnaire in order to elicit information regarding reasons why the participants might be engaging in sexual intercourse without the use of a barrier method of contraception. The data concerning numbers of pregnancies and living children are found in Table 2.
Table 2

Number of Pregnancies and Living Children as Noted on the Sublette Sexual Behavior Questionnaire Expressed in Frequencies and Percentages

<table>
<thead>
<tr>
<th>No. of pregnancies and children</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>No. of pregnancies</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>None</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>15.4</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>15.4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>30.8</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>23.1</td>
</tr>
<tr>
<td>No. of living children</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>None</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>15.4</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>30.8</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>23.1</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>7.7</td>
</tr>
</tbody>
</table>

*N = 13.

Results of Data Analysis

The Sublette Sexual Behavior Questionnaire was used to gather data for this research. Each question was analyzed using descriptive statistics. Frequencies and percentages were determined for each item of the research instrument. Data were submitted for analysis to ascertain the current sexual behaviors of HIV-positive women.
Questions 21 through 24 addressed the first research question, "What are the current sexual behaviors of HIV-positive women?" The current sexual behaviors were described as specific sexual encounters that the subjects participated in within the last 3 months. The questions were answered by checking "yes" or "no." Nominal measurement was used to categorize the responses, and both frequencies and percentages were calculated. There was a higher percentage of women in the sample that received oral sex than performed oral sex. Less than half of the sample reported engaging in vaginal sex, and only one member of the sample reported engaging in anal sex. The complete breakdown of these responses is found in Table 3.

Table 3

<table>
<thead>
<tr>
<th>Question</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you had vaginal sex in the last 3 months?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>6</td>
<td>46.2</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>53.8</td>
</tr>
</tbody>
</table>

(table continues)
Table 3 (continued)

<table>
<thead>
<tr>
<th>Question</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you performed oral sex in the last 3 months?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>4</td>
<td>30.7</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>69.3</td>
</tr>
<tr>
<td>Have you received oral sex in the last 3 months?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>7</td>
<td>53.8</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>46.2</td>
</tr>
<tr>
<td>Have you had anal sex in the last 3 months?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>No</td>
<td>12</td>
<td>92.3</td>
</tr>
</tbody>
</table>

*N = 13.

Questions 29 through 36 also addressed the first research question, "What are the current sexual behaviors of HIV-positive women?" The sexual preference of the sample was noted in Question 29. The participants were asked to identify the sex of the recent (past 3 months) partners. Question 29 could be answered men only, women only, or both men and women. The entire sample identified themselves as heterosexual, claiming to have only had sex with men during the past 3 months. Question 30 asked the
participants to estimate the number of times they had experienced specific sexual encounters within the last 3 months, with a fill-in-the-blank response. Sixty-four percent of the sample reported having vaginal sex, with 36.4% of the sample reporting at least four experiences within the last 3 months. At least half of the participants reported no oral sex (received or performed), and only one participant reported engaging in anal sex within the past 3 months. Question 31 asked the research participants if they had a steady sex partner. The answer yes or no was checked, and nominal measurement was used to categorize the responses. Less than half of the sample (46.2%) reported a steady partner. Question 32 addressed the number of sex partners encountered within the last 3 months with a fill-in-the-blank response. One third of the sample reported one partner, while 25% of the sample reported two partners. The estimated number of current sexual encounters experienced by the participants are presented in Table 4.
Table 4

Frequency and Percentage of Current Sexual Encounters on the Sublette Sexual Behavior Questionnaire

<table>
<thead>
<tr>
<th>No. of sexual encounters</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vaginal sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>4</td>
<td>36.5</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>18.2</td>
</tr>
<tr>
<td>50</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td>130</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td><strong>Anal sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>7</td>
<td>87.5</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td><strong>Received oral sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>5</td>
<td>50.0</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>20.0</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>10.0</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>10.0</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>Performed oral sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>6</td>
<td>60.0</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>20.0</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>10.0</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>10.0</td>
</tr>
</tbody>
</table>

*N = 13. Some participants chose not to respond to these questions.

Questions 33 through 36 focused on the use of barrier methods during sexual activity. Participants were asked to answer questions concerning the number of specific sexual
encounters they had engaged in over the past 3 months without the use of barrier methods. The responses of never, sometimes, often, and always were assigned nominal measurement and categorized. The majority of the sample reported never using barrier methods during all types of sexual activity. Table 5 describes the frequency and percentage of use of barrier methods.

Table 5

**Frequency and Percentage of Use of Barrier Methods During Current Sexual Activity on the Sublette Sexual Behavior Questionnaire**

<table>
<thead>
<tr>
<th>No. of sexual experiences</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vaginal sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>9</td>
<td>69.2</td>
</tr>
<tr>
<td>Sometimes</td>
<td>3</td>
<td>23.1</td>
</tr>
<tr>
<td>Often</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>Always</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Received oral sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>8</td>
<td>61.5</td>
</tr>
<tr>
<td>Sometimes</td>
<td>2</td>
<td>15.4</td>
</tr>
<tr>
<td>Often</td>
<td>2</td>
<td>15.4</td>
</tr>
<tr>
<td>Always</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td><strong>Performed oral sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>5</td>
<td>38.5</td>
</tr>
<tr>
<td>Sometimes</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Often</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>Always</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Did not answer</td>
<td>7</td>
<td>53.8</td>
</tr>
</tbody>
</table>

(table continues)
Table 5 (continued)

<table>
<thead>
<tr>
<th>No. of sexual experiences</th>
<th>f\textsuperscript{a}</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anal sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>13</td>
<td>100.0</td>
</tr>
<tr>
<td>Sometimes</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Often</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Always</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

\textsuperscript{a}N = 13.

Questions 17 through 20 addressed the second research question, "Have these sexual behaviors changed since the diagnosis of HIV?" All previous sexual behavior was used as a comparison to current sexual behavior. Questions 17 through 20 asked the participants if they had ever participated in specific sexual encounters. The research subjects answered these questions by checking yes or no. The answers were assigned nominal measurement for categorizing purposes. There was only one research participant who denied ever having vaginal sex. Less than half of the sample reported ever performing oral sex, while 85% of the sample reported receiving oral sex. Thirty percent of the sample had previously engaged in anal intercourse. Participants were also asked about sexual partners' drug, criminal, and sexual history.
Findings related to previous sexual history are depicted in Table 6.

Table 6

**Frequency and Percentage Responses of Previous Sexual Behavior on the Sublette Sexual Behavior Questionnaire**

<table>
<thead>
<tr>
<th>Question</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you ever had vaginal sex?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>12</td>
<td>92.3</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>Have you ever performed oral sex?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>6</td>
<td>53.8</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>46.2</td>
</tr>
<tr>
<td>Have you ever received oral sex?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
<td>84.6</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>15.4</td>
</tr>
<tr>
<td>Have you ever had anal sex?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>4</td>
<td>30.8</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>69.2</td>
</tr>
<tr>
<td>Have you ever had sex with a man who shoots up/used to shoot up drugs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>4</td>
<td>30.8</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>46.2</td>
</tr>
<tr>
<td>Don't know</td>
<td>3</td>
<td>23.1</td>
</tr>
</tbody>
</table>

(table continues)
Table 6 (continued)

<table>
<thead>
<tr>
<th>Question</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you ever had sex with a man who had other sex partners before you?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>61.5</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>15.4</td>
</tr>
<tr>
<td>Don't know</td>
<td>2</td>
<td>15.4</td>
</tr>
<tr>
<td>Did not answer</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>Have you ever had sex with a man who had other sex partners while you were his sex partner?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5</td>
<td>38.5</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>38.5</td>
</tr>
<tr>
<td>Don't know</td>
<td>3</td>
<td>23.1</td>
</tr>
<tr>
<td>Have you ever had sex with a man with a history of incarceration?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>61.5</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>23.1</td>
</tr>
<tr>
<td>Don't know</td>
<td>2</td>
<td>15.4</td>
</tr>
</tbody>
</table>

*N = 13.

The types of birth control that were used by the sample were explored. Three women in the sample (23.1%) reported using birth control pills, and 3 women (23.1%) reported using Depo-Provera injections. Two participants (15.4%) reported using a combination of condoms and bilateral tubal ligation. Two participants (15.4%)
reported bilateral tubal ligation as their only type of birth control. Only one woman (7.7%) reported using condoms as a single form of birth control.

Question 37 asked the research participants to check the sexually transmitted diseases that they had been diagnosed with, excluding HIV. Eleven of the research participants (84.6%) reported a previous sexually transmitted disease. Three of the participants (23.1%) reported a history of one sexually transmitted disease, while 3 participants (23.1%) reported a history of two sexually transmitted diseases. Five of the participants (38.5%) reported previous diagnoses of three sexually transmitted diseases.

The length of time that the participants had known of their HIV diagnosis was described in Question 38. The length of time ranged from 2 months to 11 years. The average length of time that the participants had known of their HIV diagnosis was 4 years 2 months. The frequencies and percentages for the participants' length of diagnosis are depicted in Table 7.
Table 7

Length of Time Participants Had Been Diagnosed with HIV as Noted on the Sublette Sexual Behavior Questionnaire Expressed in Frequencies and Percentages

<table>
<thead>
<tr>
<th>Length of time (months)</th>
<th>f&lt;sup&gt;a&lt;/sup&gt;</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>36</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>42</td>
<td>2</td>
<td>15.4</td>
</tr>
<tr>
<td>60</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>72</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>84</td>
<td>3</td>
<td>23.1</td>
</tr>
<tr>
<td>132</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>Did not answer</td>
<td>1</td>
<td>7.7</td>
</tr>
</tbody>
</table>

<sup>a</sup>N = 13.

Question 39 asked the participants if their sexual behavior had changed since their diagnosis of HIV. Twelve (92.3%) members of the sample reported that their behavior had changed since the HIV diagnosis. Only one member (7.7%) reported no change in behavior since the diagnosis of HIV.
Additional Findings

Additionally, the participants were asked to respond how their behaviors had changed since their diagnosis of HIV. Content analysis of the reasons why behaviors of the subjects had changed since the diagnosis of HIV was explored at the end of the questionnaire. The specific reasons why the participants' behavior had changed was varied, but three themes emerged. Eight participants (61.5%) reported specific reasons. Responses with specific themes related to fear, lack of interest, and lack of sexual partners were noted.

Fear. Fear was the first theme that emerged from the participants' responses to how their behavior had changed since the diagnosis of HIV. The following are examples of responses that indicated fear:

Because now I am scared too.

...  

Scared.

...

Lack of interest. The second theme that was noted was lack of interest. This theme garnered the highest frequency of responses. The following comments are examples of responses that indicated a lack of interest:
I’m just not having sex like a wild person anymore.

... 

I am less interested in having sex.

...

My sex drive is gone.

...

I don’t have a strong sex drive like I used to.

Lack of sexual partners. Another theme that emerged from the open-ended question at the end of the survey was lack of sexual partners. The following comments are examples of responses that indicated lack of sexual partners.

I am not sexually active.

...

I only have one partner now.

Summary

In this chapter, the results of the data analysis for sexual behaviors of HIV-positive women have been presented. Results of the data analysis will be expounded upon in Chapter V, the outcomes from this study.
Chapter V
The Outcomes

Despite education regarding HIV transmission, the incidence of HIV infections continues to steadily increase. An alarming increase in HIV transmission exists in the heterosexual population in the United States. It is obvious that the "safe-sex" campaign has failed; therefore, the purpose of this study was to ascertain the current sexual behaviors of HIV-positive women. The theoretical framework which guided this descriptive study was Bandura et al.'s (1961) Social Learning Theory.

Summary and Discussion of Findings

The sample consisted of adult women who were HIV-positive and participated in a support group for HIV-positive women. A sample of 13 women was administered the Sublette Sexual Behavior Questionnaire, a researcher-devised instrument. The sample consisted of 13 females, with an average age of 32.1 years. All of the participants were black. Two research questions guided this study.
HIV-positive women continue to participate in risky behavior, despite safe sex counseling. The majority of the target sample did not use barrier methods of protection during sexual activity. Condoms were not used during vaginal intercourse in 69.2% of the sample. Barrier methods of protection were not used during receptive oral sex in 61.5% of the sample. Barrier methods of protection were not used in the performance of oral sex in 71.4% of the sample. Although only one member of the sample reported engaging in anal sex, she denied using condoms during the act of anal intercourse. Massad et al. (1995) also reported that the condom use among the sample was not as common as expected, with some of the women reporting no condom use with sexual intercourse with their uninfected partners.

The current study revealed that there was a low percentage of anal sex reported on the Sublette Sexual Behavior Questionnaire. Researchers have reported (Cotton & Watts, 1997) that women frequently use anal sex as a means of pregnancy prevention, although the current researcher did not find this to be true within the target sample.
Although HIV was previously identified as a homosexual illness, this study confirms the heterosexual presence of the disease. Rosenberg and Biggar (1998) described the trends of the incidence of HIV infection, noting an alarming increase in the incidence of HIV infection among black women.

Women who have been diagnosed with HIV have been counseled regarding safe sex practices. Although the research participants were aware of their diagnosis, 61.6% of the sample did not use condoms or other barrier methods during sexual activity. Several findings from the research data served to further describe the sexual histories and behaviors of HIV-positive women. A high percentage of the sample had revealed in conversation to the researcher that they had histories of sexual relationships with men with histories of incarceration and drug use.

Several research participants were not sexually active at the time of the study. The majority of the participants (53.8%) did not have a steady partner. HIV affects a woman’s desire for a long-term relationship, based on the findings from the current study. Masad et al. (1995) reported that HIV-positive, abstinent women expressed fear of transmission and death of a partner as
primary reasons for their abstinence. More research is needed to determine the reasons why HIV-positive women do not engage in long-term relationships.

The first research question was, “What are the current sexual behaviors of HIV-positive women?” The current study found that HIV-positive women continued to engage in sexual activity without the use of barrier methods of protection. Such activity could lead to the acquisition of other sexually transmitted diseases. A compromised immune system is at greater risk for multiple infectious, sexually transmitted diseases (Cotton & Watts, 1997).

The current researcher proposed that the participants responded in a manner that was congruent with the denial of their disease, despite the fact that the women were participants in a support group for HIV-positive women. Although this research study did not address the health status of the participants, this researcher concluded that the participants perceived themselves as healthy, therefore, “not really sick enough” to take precautions during sexual activity.

The current HIV status of the participants’ partners was not explored in this study. Although the question was
not specifically addressed in the research questionnaire, this researcher speculated that the participants were not revealing their HIV status to their sex partners. The current researcher believes that the revelation of the respondents' HIV status to their partners would have shown an increase in the use of the barrier methods of protection during sexual activity. Skurnick et al. (1998) found a greater adherence to condom usage with the couples who were discordant for HIV infection.

Both supporting and conflicting research regarding the current sexual behavior of HIV-positive women exists in the literature, evidencing the need for further research. Rosenberg and Biggar (1998) described the changing demographics of the HIV-positive population. Although homosexual contact was the leading exposure category for males in the Rosenberg and Biggar (1998) study, an emphasis was noted in the increasing rate of infections among the heterosexual population. Due to the increasing prevalence of HIV among the heterosexual population, the current research study explored the sexual behaviors of HIV-positive women.

This researcher concludes that the responses on the Sublette Sexual Behavior Questionnaire were provided by
subjects who were already active in a support group for HIV-positive women, which may show an interest to “do better.” Responses indicating an interest in changing behavior for the better included, “I only have one partner now,” and “I’m just not having sex like a wild person anymore.”

The second research question that guided the current research was, “Have these behaviors changed since the diagnosis of HIV?” Skurnick et al. (1998) noted that the sexual behaviors of heterosexual couples were similar before and after the diagnosis of HIV. These findings were similar to the findings of this researcher.

This researcher found that although the frequency of sexual activity among the participants had decreased since the diagnosis of HIV, the use of barrier methods of protection during sexual activity had not become mandatory. Skurnick et al. (1998) found that the frequency of sexual activity among heterosexual couples that were both discordant and concordant for HIV had decreased since the diagnosis of HIV.

Massad et al. (1995) reported outcomes that were similar with the current research. A decrease in the frequency of sexual intercourse since the diagnosis of HIV
was noted in both studies. In the current study, the decrease in frequency of sexual intercourse may have been due to their report of fear. A report of fear was noted among the respondents’ write-in responses as exemplified by one subject who wrote that sexual activity had changed "because now I am scared too."

Conclusions

Based on the findings of this study, several conclusions were made:

1. HIV-positive women in the support group continued to engage in sexual behavior without the use of barrier protection.

2. HIV-positive women had a decrease in frequency of sexual activity since diagnosis.

3. HIV-positive women expressed fear as a reason for changing sexual behavior.

4. HIV-positive women expressed lack of interest and lack of sexual partner as reasons for sexual behavior changes.

Implications for Nursing

Research. Due to the lack of research regarding the current sexual behaviors of HIV-positive women, this study
emerged. This study will also add to the knowledge regarding heterosexual HIV transmission. In 1993, 1 in every 1,000 20-year-old black women became infected with HIV through heterosexual exposure (Rosenberg & Biggar, 1998). The need for further research regarding risk-taking behaviors and sexual practices among heterosexual women is imperative.

**Practice.** Findings from this study have a number of implications for advanced nursing practice. The family nurse practitioner could develop educational tools related to safe sexual practices that would decrease the likelihood of patients contracting sexually transmitted diseases. The primary focus for nurse practitioners should be implementation of programs that educate patients regarding health promotion and disease prevention.

Abstinence programs have not worked in reducing the incidence of HIV infections in the United States, and they will not work in preventing future infections. Nurse practitioners must realize that young women are curious and will experiment with risk-taking behaviors during adolescence. This researcher found that the participants continued to participate in unprotected sexual activity, despite the diagnosis of HIV. Nurse practitioners could
specifically implement programs teaching the importance of the use of barrier methods for women.

Theory. Findings of this study had implications for theory. The theoretical framework which guided this study was Bandura et al.'s (1961) Social Learning Theory. Use of the Social Learning Theory for research validates and strengthens the concepts of the model. The Social Learning Theory states that behavior is reinforced through participation in the behavior itself. This study supported Bandura et al.'s (1961) Social Learning Theory, as evidenced by the subjects' continued unprotected sexual activity. The majority of the participants did report that their sexual behavior had changed since the diagnosis of HIV, but the change that was noted was the lack of desire for sexual activity, not an increased use in barrier methods of protection during sexual activity.

Recommendations

Based on the findings of this study, the following recommendations were made for future nursing research:

1. Replication of this study with grounded theory, working with HIV-positive women who are not in a support group.
2. Conduction of a study regarding sex and STD education among HIV-positive individuals.

3. Replication of this study using a larger sample.

4. Conduction of a study looking at the motivation for changing risk behaviors.

5. Conduction of a qualitative study exploring the meaning of the experience of being HIV positive.
References


heterosexual HIV transmission study. Clinical Infectious Diseases 26, 855-864.


APPENDIX A

INFORMED CONSENT
Informed Consent

Because you are a woman who is infected with the human immunodeficiency virus (HIV), the virus that causes AIDS, you are invited to volunteer for the research study named above. This is a descriptive study of the current sexual behaviors of women who are HIV positive. Before you can decide whether or not to participate in the study, you must first understand the risks and benefits of the study and what is expected of you.

The purpose of this study is to describe the current sexual behaviors of HIV-positive women in an urban southeastern city in the United States and to determine whether these behaviors have changed since the diagnosis of HIV.

Your participation is voluntary. You may decide not to take part in the study.

If you decide to enroll in this study and sign this consent form, you will be asked to complete the research questionnaire. The questionnaire asks personal questions about your sexual behavior. It is important that you complete the questionnaire as honestly as possible.

There are no foreseeable risks or discomforts to you for taking part in this research study. You will not benefit directly from the study, but your participation may help prevent others from becoming infected with HIV in the future.

There is no cost for participating in the study, and you will receive no payment for participating in the study.

Your questionnaire will be identified by a code number. This is an anonymous survey; you will not sign your name or any other identifiers to the questionnaire. The informed consents and the completed questionnaires will be stored in separate folders.

Once you have read (or had explained to you) and understand the purpose of this study, the procedures to be followed, the risks and benefits, and you voluntarily agree to participate, please sign your name below.

If you have any questions about this study, you can contact Nina Sublette at (901) 545-6369.

Thank you for your participation in this research. Your input is greatly appreciated.

_________________________  __________________________
Date                        Signature of Participant
APPENDIX B

SUBLETTE SEXUAL BEHAVIOR QUESTIONNAIRE
Sublette Sexual Behavior Questionnaire

Code Number:______

Please provide the following information about yourself by putting a check (✔) by your appropriate response or filling in the blank.

1. **How old are you?________**

2. **What is your marital status?**
   - a. Never married
   - b. Married
   - c. Widowed
   - d. Separated
   - e. Divorced

3. **Are you employed?**
   - a. Yes
   - b. No

4. **What is the highest level of education you have completed?**
   - a. Some elementary school
   - b. Finished 6th grade
   - c. Finished 8th grade
   - d. Some high school
   - e. Finished high school or got GED
   - f. Finished trade school
   - g. Associate's degree
   - h. Some college--no degree
   - i. Bachelor's degree
   - j. Master's degree
   - k. Doctorate level degree (MD, JD, PhD, EdD)

5. **What is your religion?**
   - a. Baptist
   - b. Protestant
   - c. Catholic
   - d. Jewish
   - e. Seventh Day Adventist
   - f. Muslim
   - g. Church of God in Christ
   - h. None
   - i. Other (please specify):________________________
The following questions apply to your race and ethnic background. Check (✓) the answer or answers that apply to you.

6. Are you?
   ___ a. Black
   ___ b. White
   ___ c. Hispanic or Latino
   ___ d. Other (please specify): __________________________

7. If you are black, are you?
   ___ a. African
   ___ b. African American
   ___ c. Hispanic or Latino
   ___ d. Italian
   ___ e. West Indian

8. If you are white, are you?
   ___ a. Non-Hispanic
   ___ b. Hispanic

9. If you are Hispanic or Latino, are you?
   ___ a. Puerto Rican
   ___ b. Cuban
   ___ c. Mexican
   ___ d. Central American
   ___ e. South American
   ___ f. Other (please specify): __________________________

10. How many times have you been pregnant? ________________

11. How many living children do you have? ________________

12. Are you currently pregnant?
   ___ a. Yes
   ___ b. No

13. Were you trying to get pregnant in the past 3 months?
    ___ a. No
    ___ b. Yes

14. Did you have a baby within the last 6 weeks?
    ___ a. No
    ___ b. Yes
15. Which of the following types of birth control have you used in the past 3 months? Check (✓) the letter or letters for each method which you have used.
   ___ a. Birth control pills
   ___ b. Norplant contraceptive implants
   ___ c. Diaphragm or cervical cap
   ___ d. Sponge, foam, jelly, or film
   ___ e. Withdrawal (pulling out)
   ___ f. Rhythm method (natural family planning)
   ___ g. Contraceptive injections (Depo-Provera)
   ___ h. "Morning after pill"
   ___ i. Condoms
   ___ j. I have had my tubes tied.
   ___ k. My partner has had a vasectomy.
   ___ l. IUD (intrauterine device)

16. Have you ever had an abortion?
   ___ a. No
   ___ b. Yes

17. Have you ever had vaginal sex (a man's penis in your vagina)?
   ___ a. No
   ___ b. Yes

18. Have you ever performed oral sex (your mouth on a man's penis)?
   ___ a. No
   ___ b. Yes

19. Have you ever received oral sex (a man's mouth or tongue on your vaginal area)?
   ___ a. No
   ___ b. Yes

20. Have you ever had anal sex (a man's penis in your anus/behind)?
    ___ a. No
    ___ b. Yes

21. Have you had vaginal sex in the last 3 months?
    ___ a. No
    ___ b. Yes

22. Have you done oral sex (your mouth on a man's penis) in the last 3 months?
    ___ a. No
    ___ b. Yes
23. Have you received oral sex (a man’s mouth or tongue on your vaginal area) in the last 3 months?
   ___ a. No
   ___ b. Yes

24. Have you had anal sex in the last 3 months?
   ___ a. No
   ___ b. Yes

25. Have you ever had sex with a man who shoots up or used to shoot up drugs?
   ___ a. No
   ___ b. Yes
   ___ c. Not sure

26. Have you ever had sex with a man who had other sex partners before you became his sexual partner?
   ___ a. No
   ___ b. Yes
   ___ c. Not sure

27. Have you ever had sex with a man who had other sexual partners while you were his sexual partner?
   ___ a. No
   ___ b. Yes
   ___ c. Not sure

28. Have you ever had sex with a man who had a history of incarceration (jail)?
   ___ a. No
   ___ b. Yes
   ___ c. Not sure

29. Who have you had sex with in the past 3 months?
   ___ a. Men only
   ___ b. Women only
   ___ c. Both men and women

30. Please estimate the number of times in the past 3 months you have had
   ___ a. vaginal sex (a man’s penis in your vagina)
   ___ b. anal sex (a man’s penis in your anus/behind)
   ___ c. received oral sex (someone’s mouth or tongue on your vagina area)
   ___ d. given oral sex (your mouth or tongue on someone’s penis or genitals)

31. Do you have a steady sexual partner?
   ___ a. No
   ___ b. Yes
32. **In the past 3 months**, with how many different people have you had sex (vaginal, oral, or anal)?

33. **In the past 3 months**, how often did you have vaginal sex **without** using a condom?
   - a. Never
   - b. Sometimes
   - c. Often
   - d. Always

34. **In the past 3 months**, how often did you receive oral sex (someone’s mouth or tongue on your vaginal area) **without** a protective barrier, such as a condom or dental dam?
   - a. Never
   - b. Sometimes
   - c. Often
   - d. Always

35. **In the past 3 months**, how often did you give oral sex (your mouth or tongue on someone’s penis or genital area) **without** a protective barrier, such as a condom or dental dam?
   - a. Never
   - b. Sometimes
   - c. Often
   - d. Always

36. **In the past 3 months**, how often did you have anal sex **without** using a condom?
   - a. Never
   - b. Sometimes
   - c. Often
   - d. Always

37. Which of the following sexually transmitted/venereal diseases (STD/VD) have you **ever** had? Please check the number for each STD that you have had.
   - a. Gonorrhea (clap)
   - b. Syphilis (bad blood)
   - c. Chlamydia
   - d. Herpes
   - e. Abnormal pap smear
   - f. Chancroid
   - g. Hepatitis
   - h. Trichomonas (Trich)
   - i. Genital warts
   - j. Other (please specify):_____________________________
38. How long have you known that you were HIV-positive? ______

39. Do you think that your sexual behaviors have changed since you have been infected with HIV?
   ___ a. No
   ___ b. Yes

40. If yes, how? Please describe.
APPENDIX C

APPROVAL OF THE COMMITTEE ON USE OF HUMAN SUBJECTS IN EXPERIMENTATION OF MISSISSIPPI UNIVERSITY FOR WOMEN
April 16, 1999

Ms. Nina Katherine Sublette
c/o Graduate Program in Nursing
Campus

Dear Ms. Sublette:

I am pleased to inform you that the members of the Committee on Human Subjects in Experimentation have approved your proposed research provided you maintain security of the documents, preferably under lock and key.

I wish you much success in your research.

Sincerely,

Susan Kupisch, Ph.D.
Vice President
for Academic Affairs

SK:wr

cc: Mr. Jim Davidson
    Dr. Mary Pat Curtis
    Dr. Bonnie Lockard
APPENDIX D

PERMISSION TO CONDUCT STUDY
Dear xxxxxxxxxxx:

As a graduate student at Mississippi University for Women, School of Nursing, in Columbus, Mississippi, I am conducting a research study in partial fulfillment of the requirements for a Master of Science in Nursing degree. The study I plan to undertake is entitled “The Current Sexual Behaviors of HIV-Positive Women.”

The purpose of this study will be to describe the current sexual behaviors of HIV-positive women and to determine whether these behaviors have changed since the diagnosis of HIV. I am requesting your assistance and written permission to utilize your support group participants in my proposed research study.

Participation by the subjects will be on a voluntary basis, and the subjects will be informed of the details of the study and their rights as research subjects. The subjects will be asked to complete a questionnaire regarding their current sexual practices. The anonymity of the subjects will be maintained, and confidentiality will be ensured. Subjects will be assured that their participation or their refusal to participate will not affect their ability to participate in the support group.

I am enclosing a duplicate of this letter for your records. Please return the signed original one to me in the enclosed envelope. Thank you for your consideration and attention to this request.

Sincerely,

Nina K. Sublette

Permission granted:________  Permission denied:_______

________________________________________  _______________________
Signature of Participant                  Date