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Sexual Diversity and HIV Risk among Older Seropositive Heterosexual African American Males

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Abstract

The purpose of this study is to describe the occurrence of non-condom use during vaginal or anal intercourse controlling for HIV symptoms, AIDS knowledge, relationship status and safer sex discussion; in 73 self identified seropositive heterosexual African American males. The participants were analyzed as a subset from a larger sample of 130 HIV seropositive African American men. HIV related symptoms were reported by all of the study participants. Twenty-seven percent of the participants reported engaging in same sex behavior, 37% reported not using condoms during vaginal sex, and 75% reported non-condom use during anal sex during the past three months. Twenty-four percent did not decrease sexual risk behaviors, despite being seropositive. The Logistic regression analysis indicated the odds for participants not using condoms who did not engage in safe sex discussions were 77.4 times for vaginal sex, and 14.2 times during anal sex. These findings are compelling given that African Americans comprise 50% of new HIV infections each year.

Keywords

Heterosexuals; HIV/AIDS; Risky Sexual Behaviors; African Americans; Men

Epidemiology of HIV/AIDS among African Americans

Minority populations in the United States (U.S.) are disproportionately affected by the Human Immunodeficiency Virus (HIV). African Americans (AA) have a higher incidence, prevalence, and mortality rates for HIV infections than any other group, regardless of age, gender, or socioeconomic status according to the (Centers for Disease Control and Prevention [CDC], 2007). Despite wide-spread campaigns to educate the public about the disease, incidence rates of HIV and Acquired Immunodeficiency Syndrome (AIDS) among African Americans continue to increase steadily (CDC, 2007; Stone, 2004). The incidence and prevalence of HIV/AIDS in African Americans is disproportionately higher compared to Whites and other ethnic groups within the U.S. However, the prevalence rate reported by the (CDC, 2007) for heterosexual African American women does not comport with the prevalence observed in

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heterosexual African American men. Data indicate that African American heterosexual males comprise 22% of the HIV/AIDS versus 74% observed in heterosexual African American women. The CDC data suggest that the HIV prevalence rates are lower for heterosexual males compared to African American men who have sex with men (MSM). An important observation emerging from these epidemiological data is the extent to which self-identified African American heterosexual men engage in same sex behaviors, and how this contributes to the increased HIV prevalence observed in African American women.

HIV infections among African Americans approach rates seen in some parts of the developing world and occur at rates 3 to 4 times higher than members of other racial/ethnic groups in the United States (CDC, 2007; Harawa et al., 2004). Studies report the incidence rate of AIDS diagnosis among African Americans was almost 11 times the rate among whites; specifically, African American men are diagnosed at a rate 9 times higher than that of white men (CDC, 2007).

Other studies reviewing the incidence and prevalence of HIV infection among minority groups have consistently reported an alarmingly high rate of HIV cases among African American men (Adimora, Schoenbach, 2002; Funnys, Akhtar, Biamby, 2002). Older African American males in particular are at increasing risk for HIV infection. Americans 50 years of age and older currently comprise a prevalence rate ranging from (10–15%) of all HIV cases in the United States, but prevention campaigns rarely target this population (Siegel, Schrimshaw, Vittinghoff, 2004; Wutoh et al., 2001).

Sexual Diversity among African American men

Findings from several studies indicate that older African American gay/bisexual men were significantly more likely than white gay/bisexual men to report unprotected anal and vaginal sex in the previous 6 months, and since their initial HIV/AIDS diagnosis (Siegel et al., 2004; Wutoh et al., 2001). The authors therefore posit that some self-identified heterosexual African American men who engage in same sex behavior are possibly engaging in sexual behaviors that may potentially increase their risk for HIV acquisition and transmission.

One explanation for this, is a recent upsurge in visibility of the “down low” phenomenon, in which self identified heterosexual men who outwardly identify as heterosexual, often maintain marriages and/or steady female partnerships, while engaging in sex with men without disclosing their sexual activities to their female partners (Millett, Malebranche, Mason & Spikes, 2005).

Among African American men, MSM is the highest mode of exposure, however, among women, heterosexually acquired HIV is the primary cause of HIV infection (CDC, 2007). These data suggest within African American communities, men may be the primary agents in the transmission of sexually transmitted HIV infection for both men and women, and the “down low” phenomenon has been cited as the main reason for the increase in HIV infections in African American women over the past several years (Miller, Serner, Wagner, 2005; Millett, Malebranche, Mason, Spikes, 2005). Findings from a recent study of HIV positive men, reported 34% of self identified African American (MSM) also reported having had sex with women in the last 5 years, corroborating this supposition (Montgomery, Mokotoff, Gentry, Blair, 2003).

Research indicates that African American men's gay identity and behavior are distinctly different from that of White men (Mays, Cochran, Zamudio, 2004). Notably, a larger proportion of African American men who have sex with men (MSM) self-identify as bisexual as compared to White (MSM) (Brooks, Rotheram-Borus, Bing, Ayala, & Henry, 2003; Montgomery et al., 2003). African American men who have sex with men (MSM) are less likely to disclose their

sexual orientation or to identify as homosexual (CDC, 2007; Kenamer, Honnold, Bradford, & Hendricks, 2000). These findings are validated by a study of self-identified heterosexual African American men in Los Angeles, in which 46% of the study sample reported having had anal sex with men (Wohl et al., 2002). Additionally, findings indicated African American (MSM) were more likely to report sexual encounters with females more frequently than White (MSM) (Heckman et al., 1999).

In their study of African American (MSM) in Brooklyn, Miller et al., (2003) identified that although participants reported it is widely considered disrespectful to have sex partners of both genders concurrently, 10 of 12 (MSM) participants in the cohort study reported having both male and female partners in the 30 days prior to their interview. Of the total 21 men interviewed, 15 (71%) reported vaginal intercourse with women in the past year and were reluctant to label themselves as gay and made efforts to conform to a masculine identity. The need for these study participants to exhibit a masculine persona in public, combined with difficulties in identifying as “straight-seeming” (MSM) in the community, possibly led these men to use discrete strategies including visiting “sex clubs,” and seeking sex partners on the Internet, where transmission of high-risk HIV behaviors is well documented (Miller et al., 2003). Furthermore, reported condom use among these (MSM) was rare, due to their perceptions using condoms served as a surrogate for being HIV seropositive. Additionally, not discussing or using condoms enabled the men to avoid discussing HIV risk or the stigma associated with being HIV seropositive (Miller et al., 2003).

Therefore, pressures to conform to social and sexual norms were pervasive influences on men who engaged in HIV risk sexual behaviors with both men and women. However, there is a lack of empirical science describing the association between sexual diversity and HIV risk behavior among older seropositive African American men; hence it is paramount to further document the occurrence of HIV risk behaviors among this understudied population. It is equally important to examine whether lack of safe sex discussions occur among sexually diverse individuals (Mays et al., 2004; Wolfe, 2003; Kenamer et al., 2000). Studies examining the importance of safe sex discussions have identified an important link to their occurrence and condom use.

Peterson (2000) explored the relationship between safe sex talk and condom and identified that couples with a positive attitude toward safe sex discussions were more likely to use condoms on a consistent basis. Crowell (2004) reported similar findings underscoring that individuals who engaged in safe sex discussion indicated using condoms during sexual encounters. Using a quasi-experimental design with follow-up assessments (Parsons, Huxzti, Crudder, Rich & Mendoza, 2000) identified those participating in the intervention targeting safe sex communication demonstrated higher efficacy for condom use compared to those not receiving the intervention. Examining men who have sex with men (MSM) through internet encounters (Carballo-Diequez, Miner, Dolezal, Rosser & Jacoby, 2006) results indicated that men who participated in safe sex discussions reported more frequent condom use during anal intercourse, compared to those who did not engage in safe sex discussions.

Purpose

Because few studies have examined the correlates of non-condom use among seropositive heterosexual men middle-age and older who may be sexually diverse; The purpose of this study is to describe the occurrence of non-condom use during vaginal or anal intercourse controlling for HIV symptoms, AIDS knowledge, relationship status and safer sex discussion in 73 self identified seropositive heterosexual African American males.

Risky Sexual Behavior among Heterosexual men

Studies examining factors including: low socioeconomic status (SES), sexual orientation, substance use/abuse, and psychosocial factors such as self-esteem and perceived locus of control reported these contributed to sexual risk taking among African American heterosexual men (Stokes & Peterson, 1998; Crisp & Barber, 1995). Findings from the Myers et al., (2003) study indicated that HIV positive African American men reported more frequent alcohol and drug use, higher prevalence of psychiatric disorders, higher level of psychological distress and depression, and lower perceived social supports compared to men who were seronegative.

Additionally, the results indicate that regardless of HIV serostatus, African American men who had sex with men and women (MSM/W) were engaging in significantly more risky sexual behaviors than both the (MSM) and the heterosexuals, a finding that is consistent with results from other studies (Catania et al., 1994; Smith et al., 2000). These findings suggest that some bisexual African American men potentially pose a significant risk to the African American community and constitute an important pathway for viral transmission of HIV to heterosexuals where sexual diversity is understudied and not well understood. Further, (Catania et al., 1994; Smith et al.,) identified many of these men indicated their female partners and heterosexual friends were unaware of their bisexual orientation. Additionally, they reported engaging in more anonymous sex, having more sex in high risk settings, and having sex more often while under the influence of alcohol and/or drugs.

Milam, Richardson, Espinoza, and Stoyanoff (2006) examined the correlates of unprotected sex among a sample of 121 HIV positive heterosexual men and identified that potential correlates of self-reported unprotected oral sex and vaginal sex include participant demographics (e.g., age, ethnicity), disease status (CD4 counts, viral load, years since diagnosis), safer sex beliefs (e.g., condom attitudes), substance use, psychological characteristics (depressive symptoms, dispositional optimism and pessimism), and sex partner characteristics (main/casual partner, HIV status of partner, and duration of relationship).

Results indicated that one-fifth of HIV positive sexually active heterosexual men in the (Milam, Richardson, Espinoza, and Stoyanoff, 2006) study reported having unprotected oral or vaginal sex with their partners. Unprotected oral sex (fellatio) was positively associated with age and CD4 count and inversely associated with optimism and positive condom attitudes, while unprotected vaginal sex was positively associated with duration of relationship and inversely associated with positive condom attitudes. Neither partner's HIV status nor type (main or casual) were associated with unprotected sex (Miller et al., 2003).

Essien, Meshack, and Ross (2002) conducted a study of 64 Latino and 69 African American heterosexual men and women in Texas. Data confirmed that a number of myths and misperceptions about HIV/AIDS were similarly prevalent in the study participants regardless of gender and ethnicity, including: HIV is an agent of genocide, suspicion of government information, belief that it is possible to identify risky partners by odor and appearance, that partners' reported histories are accurate, misperceptions about the meaning of "safe sex," and belief that specific classes of people (not oneself) are at risk for HIV resulted in sexual risk.

Perceived personal risk for acquiring HIV contributes to engagement in sexual risk behaviors particularly among some older heterosexual African American men. Older AA men in particular reported high risk sexual behaviors, including sex with multiple partners. However, older heterosexual African American men were reluctant to use condoms (Coleman, 2007; Coleman & Ball, 2007).

Therefore, the knowledge gaps regarding resistance to condom use, sexual diversity and the occurrence of risky behavior must be addressed in HIV prevention and education programs

that target older HIV seropositive heterosexual African Americans (Jackson, Early, Schim, and Penprase, 2005).

Design

A cross-sectional, correlational design using convenience sampling was used for this descriptive study. The study protocol was approved by the Institutional Review Board (IRB) housed in the Office of Regulatory Affairs.

Study Procedures

A survey was administered to a sample of 130 HIV infected African American men middle-aged and older recruited using convenience sampling from two infectious disease clinics located within the Mid-Atlantic region. We recruited study participants using flyers that were placed through-out both clinics. The participants were provided a private space within their respective sites to complete the survey. An honorarium of \$45.00 was provided for completing the questionnaire. The participants discussed in this study were part of the larger sample $N = 130$, recruited from HIV clinics in the mid-Atlantic region. Specifically, a subset of $n = 73$ seropositive men self-identified as heterosexual were selected for the analysis.

Study Instruments

Measures

For the analysis, a sociodemographic questionnaire, which included questions about sexual behavior, AIDS Knowledge Scale 40 items and part II of the Revised Sign and Symptom Checklist for Persons with HIV Disease (SSC-HIVrev) (45 items). The sociodemographic questionnaire was used to collect data about age, income, relationship status, educational level, employment status, current living situation, current residence, who was most supportive, mental health history and sexual behavior. Questions regarding sexual behavior included frequency of: same sex behavior, condom use, safe sex discussions and whether risky sexual behavior was altered due to being HIV seropositive. For this study, sexual diversity is defined as diverse sexual practices whereby men who identify as heterosexual may engage in sexual intercourse with both men and women.

AIDS Knowledge Scale

The AIDS Knowledge Scale, (Kelly, Lawrence, Hood & Brasfield, 1989) assesses knowledge of AIDS risk behaviors using a dichotomous format of (40) true and false items. Test/re-test reliability (Kuder-Richardson) ranged from 0.73–0.83, (Kelly et al., 1989). Construct and content validity is established (Kelly et al., 1989). The reliability calculated for this study was 0.75 with a mean score 30.11 ± 4.58 ranging from 20–37.

Symptom Checklist for Persons with HIV Disease

The (SSC-HIVrev) Holzemer, Hudson, Kirksey, Hamilton, and Bakken, (2001) measures HIV related symptoms using a scale ranging from 1 = mild to 3 = severe. The scale is divided into Part I which assesses general symptoms and Part II which focuses on gynecological symptoms. The symptoms are endorsed only if a participant is currently experiencing the symptom during data collection and are left blank if symptoms are not experienced on that day. Cronbach's alpha estimates range from 0.76 to 0.91. For this study the calculated reliability was $\alpha = 0.90$ with a mean score 36.62 ± 28.98 ranging from 0–112. Part II of the scale comprised of (45 items) was used for the study.

The Statistical Package for the Social Sciences (12th version) (SPSS) was used for the analysis. Frequencies and percentages were used to describe demographics. Bivariate correlations were

calculated for the study variables and a stepwise multiple logistic regression using listwise deletion was used to calculate odds ratios for sexual risk behaviors among heterosexual seropositive men. Statistical significance was set at $p = <.05$ and all tests were two-tailed.

Statistical Analysis

Sample

The sample consisted of 73 self-identified HIV seropositive heterosexual men selected from a larger sample of 130 HIV infected African American men. The mean age was 46 with a range 40–75 years of age. The majority of the participants ($n = 54$, 74%) had a high school or less level of education, ($n = 62$, 85%) unemployed and ($n = 54$, 74%) reported relying on disability. Seventy-percent ($n = 51$) reported their income was less than \$10,000, and ($n = 29$, 40%) lived alone, while the remaining lived with friends, spouse or family.

The primary place of residence was an apartment ($n = 36$, 49%). Thirty-four percent of the participants reported their mother was the most supportive to them compared to other family members. A little less than a fourth indicated being treated for a mental health condition (primarily depression) and 33% reported being hospitalized during the past year with a mental health problem. Of those responding to the AIDS Knowledge scale, 66 answered 90% of the items correctly, and ($n = 7$, 10%) answered the items incorrectly.

The frequency of risky sexual behavior indicate that thirty-percent ($n = 22$) of the study participants, reported never using condoms during vaginal sex, the remaining ($n = 51$, 70%) reported they used condoms (24–99%) of the time. Thirty-seven, (51%) reported they did not engage in same sex behavior, and ($n = 14$, 19%) reported engaging in same sex behavior. Twenty-two (30%) of the study participants declined to respond.

The study participants were surveyed about whether they were experiencing HIV related symptoms on the day of the administration of the survey and ($n = 69$, 95%) endorsed more than half of HIV related symptoms 36.62 ± 28.98 an indication some were experiencing symptoms ranging from diarrhea to skin irritations.

Correlational Analysis

The correlational analysis suggested that Condom use during vaginal sex had a significant direct relationship with safe sex discussion ($r = .64$). Additionally, condom use during anal sex had a significant direct relationship with safe sex discussion ($r = .55$). Safe sex discussion had an inverse but significant association with relationship status ($r = -.30$), and AIDS knowledge had an inverse significant association with relationship status ($r = -.29$).

Multivariate Analysis

Few studies have explored the determinants of risky sexual behavior among middle-aged and older heterosexual African American men who are seropositive. Therefore, a simultaneous multiple logistic regression was performed to calculate the odds of not using condoms during anal or vaginal sex using list-wise deletion. In the parent study, a power analysis was calculated a priori, hence, for this analysis, applying Nunnally's (1994) principle of 10 subjects per predictors, we had sufficient participants to conduct the analysis with $n = 73$ participants using four predictors. For the analysis, risky sexual behavior is defined as not using a condom during anal or vaginal sex. The authors do not suggest, this definition is inclusive of all HIV risk factors, and do acknowledge other risk behaviors not explored in the study may have occurred.. For this analysis we entered the variables HIV symptoms, AIDS knowledge, relationship status, safe sex discussions additionally, a constant was included in the model. The following variables were dummy coded where relationship status yes = 1 in relationship 0 = no relationship, safe

sex discussion 1 = no and 0 = yes, condom use 1 = no and 0 = yes. The variables were entered simultaneously using the criteria for entry .05 and removal .10.

Our analysis determined study participants who did not participate in safe sex discussions were 77 times less likely compared to those who did, to use condoms during vaginal intercourse and 14 times less likely with men during anal sexual intercourse $\chi^2 = 17.23$, $df = 4$, $p = .002$ and $\chi^2 = 13.44$, $df = 4$, $p = .009$ respectively (See Tables 1 & 2). These findings are particularly disturbing given the study participants were HIV seropositive or had AIDS. The Wald Statistic was used to test the significant contribution of each individual predictor. Additionally, the Hosmer-Lemeshow goodness of fit statistic was used to test the logistical regression models (See Tables 1–2). Collinearity statistics were performed to assess the strength of the linear relationships among the predictor variables. Tolerance index calculated ranged from .610–1.000 for both models; thus, the analysis showed that collinearity was not a problem among the predictors selected in the models.

Discussion

In summary, we established sexual diverse behavior exists among this sample of seropositive heterosexual African American forty and older. More importantly, our study underscored those who did not engage in safer sex discussions were more likely not to use condoms.

Fifty-two percent of AIDS cases among adults fifty and older (CDC, 2007) are African American, however, we simply do not fully understand the complexity of sexual diversity and HIV risk behaviors among older seropositive heterosexual African American men, and thereby cannot create effective interventions. Understanding how sexual diversity affects sexual behavior is essential in order to implement innovative strategies and evidence-based interventions for HIV seropositive heterosexual African American forty years and older. Our study contributes important data about the importance of clarifying sexual identity from sexual behavior. It is important that our discourse about sexual diversity or the “down low” does not distract scientist and health care providers from concentrating on effective strategies to reduce non-condom use among sexually diverse heterosexual men.

It is important to maintain this clarity within the science of developing interventions to reduce HIV risk behaviors. Our findings underscore that for some sexually diverse heterosexual African American seropositive men, non-condom use is occurring. Hence, our study about sexual diversity contributes important science about the need to develop interventions for sexually diverse heterosexual men who HIV seropositive. We continue to know very little about the sexual diversity among HIV seropositive African American heterosexual men forty years and older. Given the prevalence rates of HIV infection for African American women, this study contributes important knowledge about the need to examine further the relationship of sexual diversity and risky sexual behavior among older heterosexual African American men.

Additionally, it is essential to continue to examine how sexually diverse behaviors potentially contribute to the transmission rates in heterosexual African American women. The high burden of HIV infection among African American heterosexual women begs for added attention regarding factors associated with the diversity in sexual behaviors among HIV seropositive African American heterosexual men.

The authors recognize the complexity of examining sexual diversity, and advocate for further investigations into this phenomenon given the high HIV prevalence among African American heterosexual women. Additionally, it is equally important to conduct studies with aging populations who are seropositive.

There is an urgent need for scientific data to inform the development and implementation of prevention approaches that are effective in reducing the HIV/AIDS epidemic in racial/ethnic minority communities, particularly in heterosexual African American men forty years and older, who may engage in sexually diverse behavior. While risky sexual behavior is known to be closely related to the disproportionate impact of HIV in racial/ethnic minority communities, few programs of research address HIV risky behavior among seropositive heterosexual older African American men. Hence, it is imperative that HIV risk reduction programs began to develop initiatives for this segment of African American men who are seropositive.

Study Limitations

The authors acknowledge relying on self-report data about one's sexual orientation is a study limitation. However, in recruiting subjects flyers were not targeted to heterosexual or gay men but to HIV seropositive African American men. The heterosexual men were selected for the analysis if they identified as having sex only with women. Men who identified as bisexual were not included in the analyses. In the parent study, gay men were identified as men who had sex with men exclusively. Additionally, the authors did not use a comparison group in the analyses thus the study findings are not generalizable to all seropositive heterosexual African American men. Finally, the sample size and the non-probabilistic design limit the generalizability of the study findings. Our data were obtained from a cross-sectional design comprised of a subset from a larger sample; nevertheless, important findings were yielded.

Without question, since the beginning of the HIV/AIDS epidemic, the proportion of HIV cases in African Americans has exceeded that among White and other racial and ethnic groups within the United States, especially with regard to men. However, the number of cases reported by the Centers for Disease Control and Prevention (CDC, 2007) for African American women 74% does not comport proportionally with the cases observed in heterosexual African American (AA) men, who comprise 22% of the HIV/AIDS cases for AA males (CDC, 2007). These data underscore the need for further study of sexual diversity and condom use among heterosexual African American men.

Evidence suggests there is a greater efficiency of HIV transmission from men to women than women to men even when the number of sexual partners of women is controlled for in multivariate analysis (Louria et al., 2000 & Padian, Shiboski, Glass & Vittinghoff, 1997). Since sexual orientation and sexual behavior are not absolutely concordant it is essential not to assume that heterosexual men are exclusively having sex with women.

Since the implementation of Highly Active Antiretroviral Therapy (HAART), in 1996, seropositive individuals are living longer, and AIDS has become a manageable chronic disease (Gross, Bilker, Friedman, & Strom, 2001). HIV seropositive heterosexual African American men middle-aged and older are clearly an understudied group. Additionally, given the state of HIV treatment, individuals will live longer with HIV/AIDS, so age appropriate interventions are warranted.

There have been few empirical studies conducted among self-identified seropositive heterosexual men to elucidate any reasonable hunches about how sexual diversity is associated with the prevalence rates among African American women. That said, the current epidemiological profile observed among seropositive African American women and men suggests, further studies are needed that focus on determining the correlates associated with unsafe sexual behavior among self-identified seropositive heterosexual African American men.

Conclusion

In conclusion, we need to develop innovative strategies to decrease the probability for sexually diverse seropositive heterosexual African American men middle-aged and older of engaging in non-condom use. Since individuals are clearly living longer with HIV, this study has significant implications for younger populations as well. Interventions are needed for older HIV seropositive heterosexual African American men who are sexually diverse, but not until necessary descriptive data is obtained to ensure approaches best-suited for this population.

Research applications

It is imperative that nursing interventions are developed for seropositive heterosexual African American men middle-aged and older. Future research studies are needed to explore the complex relationship between sexual diversity and safe sex discussions among seropositive Heterosexual African American men middle-aged and older.

Nursing practice applications

Our findings underscore the importance of nurses in clinical practice settings, to assess for HIV risk factors among older seropositive heterosexual African American men. For example, an understanding of sexual diversity among heterosexual men provides nurses the skill-set to be gender neutral when inquiring about the potential wide range of sexual behaviors that may increase the likelihood of HIV exposure among seropositive heterosexual men. Second, it is essential that nurses inquire about myths or perceived stereotypes about HIV transmission for heterosexual men in light of the stigma associated with HIV/AIDS. Given the current epidemiological profile of HIV cases in the U.S., it is imperative that clinicians be able to adapt research findings about seropositive heterosexual African American men middle-aged and older to their clinical practice settings. Bridging a strong partnership between nurse researchers and clinicians will strengthen the science of HIV prevention with HIV seropositive heterosexual men.

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Table 1

Summary of Multiple Logistic Regression Analysis for Variables Predicting Condom use during vaginal sex (n = 34)

Variable	Coefficient	P	Exp(b)	CI
HIV Symptoms	-.037	NS	.964	.916–1.01
AIDS Knowledge	-.129	NS	.879	.687– 1.12
Relationship Status	.527	NS	.749	.067– 42.6
Safe Sex Discussion	4.35	.005*	77.4	3.78–159.0

Percent correct of cases classified = 82%. The sample represents only those who indicated engaging in non-condom use during vaginal sex, so the sample size will vary. Hosmer and Lemeshow Test nonsignificant.

* $\chi^2 = 17.23$, $df = 4$, $p = .002$, Relationship Status = 1 = in relationship 0 = no relationship; Safe Sex Discussion 1 = no discussion and 0 = yes discussion; Condom use 1 = no and 0 = yes

Table 2

Summary of Multiple Logistic Regression Analysis for Variables Predicting Condom use during anal sex (n = 33)

Variable	Coefficient	P	Exp(b)	CI
HIV Symptoms	.012	NS	1.01	.970#x2013;1.05
AIDS Knowledge	-.119	NS	.888	.698#x2013;1.13
Relationship Status	-.708	NS	.493	.020#x2013;12.4
Safe Sex Discussion	2.65	.009*	.14.2	1.96#x2013;102.8

Safe Sex Discussion 1 = no discussion and 0 = yes discussion; Condom use 1 = no and 0 = yes Percent correct of cases classified = 80%. The sample represents only those who indicated engaging in non-condom use during anal sex, so the sample size will vary. Hosmer and Lemeshow Test nonsignificant.

* $\chi^2 = 13.44$, $df = 4$, $p = .009$, Relationship Status = 1 = in relationship 0 = no relationship