A Comparison of Sexual Health and Sexual Pressure among Young African American and Caucasian Women

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ABSTRACT

Introduction Condom self-efficacy, positive attitudes toward condom use, condom negotiation skills, HIV knowledge, and self-esteem have been associated with decreased HIV risk behavior among young women, but few studies have examined racial disparities that may exist in these sexual health indicators. Moreover, sexual pressure (inclusive of both coercive and non-coercive pressures to engage in unwanted or unprotected sex) has been understudied in women of different racial groups.

Study Purpose The purpose of this study was to compare racial similarities and disparities in indicators of sexual health and sexual pressure in a high-risk, urban sample of young African American and Caucasian women.

Methods A convenience sample of African American women and Caucasian women ages 19-25 (N = 100, 50% AAW) was recruited from a local health department located in a Southeastern metropolitan area. Statistical analyses included descriptive analyses, linear, and logistic regressions.

Major findings African American women reported higher self-esteem, but lower condom negotiation skills than Caucasian women. Although mean scores of sexual pressure did not differ between races, African American women scored significantly higher on the sexual coercion subscale. Condom use did not significantly differ between races.

Conclusions Identifying factors that empower young minority women toward safer sexual practices is an important step in implementing effective HIV prevention interventions. Interventions that target power imbalances and gender norms in sexual relationships will benefit from addressing ways in which to increase resistance to sexual pressure in both coercive and non-coercive situations. Lastly, researchers should tailor interventions based on the social context and ensure their relevance for various racial/ethnic groups.
INTRODUCTION

The HIV/AIDS epidemic has had devastating effects among African American women. Although women account for a smaller percentage of new HIV infections than men (20% of new cases), African American women comprise the great majority of these cases at 64% (Centers for Disease Control and Prevention [CDC], 2013). African American women are 20 times more likely to be infected with HIV than Caucasian women and five times more likely to be infected than Latinas (CDC, 2013). Since heterosexual contact is the most common route of HIV transmission among all women regardless of racial/ethnic group (CDC, 2013), it is important to determine factors that may predispose certain racial groups to HIV and other sexually transmitted infections as compared to other groups. Moreover, it is also imperative to examine factors that decrease this risk. Much is known from the current literature with regard to factors that either promote or impede condom use among women. Less is known, however, about commonalities and differences in these indicators and barriers that may vary by racial group. Information such as this is relevant to the development of culturally appropriate programs that improve condom use strategies, especially for disadvantaged women. The purpose of this study was to compare racial similarities and disparities in indicators of sexual health and sexual pressure in an urban sample of young African American and Caucasian women who engage in high-risk sexual behavior.

The literature on sexual health and condom use among women suggests that a number of factors contribute to a decreased risk of HIV and other sexually transmitted infections (STIs), particularly, self-efficacy in the use of condoms (Gazabon et al., 2007; Peipert et al., 2007), positive attitudes toward the use of condoms during sexual activity (Noar et al., 2006; Salazar et al., 2005), the ability to skillfully and successfully negotiate condom use with a partner (Lam et al., 2004; Salazar et al., 2005), being knowledgeable about HIV risk and prevention (Jackson et al., 2005; Williams et al., 2003), and having a high sense of self-esteem (Ethier et al., 2006; Gullette & Lyons, 2006; Sterk et al., 2004). These sexual health indicators, if effectively used in the context of intimate partner relationships, can empower women in their sexual choices and facilitate more protective health behaviors.

Contrary to factors that decrease sexual risk are those factors that place women at greater risk for HIV. Sexual pressure, in particular, has been shown to have a negative effect on HIV/STI risk and has been previously defined as “sexual choices that are limited by adherence to gender stereotypical expectations for sex and fear of, or experience with, adverse consequences, such as losing the relationship, threats, or physical coercion, if these expectations are not met” (Jones, 2006, p. 282). Based on this definition, a woman may experience both coercive and non-coercive demands that place burden on her sexual decision making. Thus, whether the pressure stems from physical force (i.e., coercive pressures) or from feelings of despair if a partner’s sexual desires are not met (i.e., non-coercive pressures), this in turn can result in negative repercussions for a woman’s sexual health.

Condom use remains the most effective method available for prevention of HIV/STI transmission for those who are sexually active. Previous research has shown African American women are more likely to use condoms during sexual activity than Caucasian women (Buhi et al., 2010) and that Caucasian women are more likely than African American women to perceive
that they are at greater risk for HIV and other STIs (Roberts & Kennedy, 2006). However, rates of HIV and other STIs such as chlamydia and gonorrhea for African American women continue to far exceed those of Caucasian women despite such findings. In fact, chlamydia, the most commonly diagnosed infectious disease in the U.S., disproportionately affects adolescent and young adult African American at higher rates than any other demographic (CDC, 2012).

Although many factors associated with condom use are evident in the literature, there is a lack of information on sexual health and sexual pressure among more diverse samples of women who engage in high-risk sexual behavior. In order to examine whether sexual health indicators and sexual pressure vary by race, the following research questions were posed based on the existing literature:

1) Do sexual health indicators (i.e., condom self-efficacy, attitudes toward condom use, condom negotiation skills, HIV knowledge, and self-esteem) differ by race?
2) Do experiences with sexual pressure differ by race?
3) Does condom use differ by race?

METHODS

Participants

One hundred young adult women (50 African American and 50 Caucasian) aged 19 – 25 years ($M = 21.4; SD = 2.2$) were recruited from a county health department located in Birmingham, AL. Recruitment was conducted through brochures placed in the health department and by allocation of the staff, specifically in the sexually transmitted disease clinic and in the women, infants, and children nutrition program located in the health department. Potential participants were screened prior to their inclusion in the study. They were excluded if they: 1) did not self-identify as either African American or Caucasian; 2) were married; 3) were not sexually active with a male partner within the past 6 months; and 4) reported HIV-positive serostatus.

Instruments

Condom Self-Efficacy Scale This 14-item questionnaire measures a person’s self-efficacy in condom-use behaviors and communication in condom use with one’s partner (Hanna, 1999). An example of a condom-use behavior is, “I could carry a condom with me in case I needed one.” An example of a communication item is, “I could say no to sex if my partner refused to use a condom.” Response items are on a 5-point scale and range from very unsure to very sure. The Cronbach’s alpha of the instrument for the study sample was .94.

Attitudes Toward Condom Use Subscale of the Sexual Risks Scale. This 13-item questionnaire measures a person’s attitude and is a subscale of the larger Sexual Risks Scale (DeHart & Birkimer, 1997). An example of an item is, “Condoms interfere with romance.” Response items are on a 5-point scale and range from strongly disagree to strongly agree. The Cronbach’s alpha of the instrument for the study sample was .86.

Condom Influence Strategy Questionnaire This 36-item questionnaire measures a person’s ability to skillfully negotiate and communicate condom use with their partner (Noar et al., 2002). Participants answer items based on how likely they are to carry out a certain condom negotiation behavior. Response items are on a 5-point scale and range from very likely to very unlikely. For example, participants are asked to respond to how likely they would be to do the following: “Tell my partner that I will not have sex with him if we do not use condoms.” The
The instrument has six subscales. For the study sample, the Cronbach’s alpha for the subscales ranged from .86 to .95. For the combined instrument, the Cronbach’s alpha was .95.

**HIV-Knowledge Questionnaire** This 45-item questionnaire measures a person’s knowledge regarding HIV transmission and prevention methods (Carey et al., 1997) and is in a true/false format. An example of an item is, “Pulling out the penis before a man climaxes keeps a woman from getting HIV during sex.” Participants respond to the statement based on their knowledge about HIV transmission and prevention methods. The Cronbach’s alpha for the study sample was .69 for this instrument.

**Rosenberg Self-Esteem Scale.** This widely-used 10-item questionnaire measures a person’s report of self-esteem (Rosenberg, 1965). An example of an item is, “I feel that I am a person of worth, at least on an equal basis with others.” Response items are on a 4-point scale and range from strongly agree to strongly disagree. The Cronbach’s alpha for the study sample for this instrument was .87.

**Sexual Pressure Scale** This 19-item questionnaire measures women’s experiences with and views on coercive and non-coercive pressures to engage in unwanted or unprotected sex (Jones, 2006). An example of a coercive sexual experience item is, “How many times has your partner become violent physically (for example, push, slap, choke, pull your hair, hit, or kick you) AFTER you told him you would not have sex with him?” Response items are on a 5-point scale and range from never to always. An example of a non-coercive sexual view is, “I feel I should have sex with my partner because there are plenty of women who are willing to take him away.” Response items are on a 5-point scale and range from definitely do not feel to definitely feel. The instrument has 5 subscales. For the study sample, the Cronbach’s alpha for the subscales ranged from .74 to .84. For the combined instrument, the Cronbach’s alpha was .90.

**Condom Use Measure** Condom use was measured by self-reported frequency for three types of sexual activity – vaginal sex, oral sex, and anal sex – in the previous 6 months. More specifically, for each type of sexual activity, participants were asked, “In the past 6 months, how often have you used a condom when you have had (vaginal, oral, or anal) sex with your current or most recent main sexual partner?” Response items ranged on a 5-point scale from never to always. Participants also had an option to choose if they did not engage in a particular type of sexual behavior. The responses were further dichotomized into two categories for purposes of analysis: (0) never or almost never and (1) at least sometimes. Those who were considered at higher sexual risk were those who had never or almost never used a condom within the previous 6 months.

**Procedures**

The university’s institutional review board provided approval prior to initiation of the study. After screening potential participants to determine if they met inclusion criteria, the principal investigator obtained written informed consent of each participant. After giving written informed consent, participants were administered the entire questionnaire which they completed in the waiting area of the health department, private rooms in health department clinics, or in the School of Nursing center of research. The participants were provided with a small monetary compensation for their time and effort.

**Analyses**

SAS Version 9.2 and SPSS Version 16.0 were used for all statistical analyses. Descriptive statistics were used to describe the study sample. Linear regression models were used to test the associations between race and sexual health indicators, controlling for education.
and income levels. Linear regression models were also used to test association between race and the sexual pressure scale and subscale scores, controlling for the aforementioned covariates. Logistic regression was used to test the bivariate associations between the independent variable (race) and the dichotomous dependent variables (vaginal, oral, and anal sex condom use), controlling for education and income levels. The significance level was held at the traditional 0.05 level.

RESULTS

Table 1 presents sample characteristics of the participants by race including the variables relevant to the study. Regarding condom use in the previous 6 months, 100% of the women had engaged in vaginal sex ($n = 100$) and of these, 40% never or almost never used a condom during vaginal sex. Seventy-five percent of the women ($n = 75$) had engaged in oral sex and of these, 82.7% never or almost never used a condom during oral sex. Lastly, close to one-third of the women ($n = 31$) had engaged in anal sex and of these, 74.2% never or almost never used a condom while engaging in anal sex. Condom use and the relationship to sexual health indicators for the sample as a whole have been reported elsewhere (Gakumo, Moneyham, Enah, & Childs, 2012).

Research Question 1: Do sexual health indicators (i.e., condom self-efficacy, attitudes toward condom use, condom negotiation skills, HIV knowledge, and self-esteem) differ by race? Based on the linear regression models, African American women reported significantly higher self-esteem, on the average, when compared to Caucasian women ($t = 2.53, p = .01$) after adjusting for education and income level. In contrast, African American women reported significantly lower condom negotiation skills, on the average, compared to Caucasian women ($t = -2.25, p = .03$). No other significant differences in sexual health indicators between races were noted.

Research Question 2: Do experiences with sexual pressure differ by race? Based on the regression analyses, the data did not provide significant evidence of differences in sexual pressure between African American women and Caucasian women ($t = .99, p = .32$). Based on these findings, each subscale of the Sexual Pressure Scale was tested individually to determine if there were differences in any of the 5 subscales. Although there were no differences in sexual pressure as a composite construct, the sexual coercion subscale differed between races. African American women were significantly more likely to experience sexual coercion than Caucasian women ($t = 2.21, p = .03$). This association remained significant even after controlling for education and income level.

Research Question 3: Does condom use differ by race? Based on the study findings, the data did not indicate that there were differences between races related to condom use for the 3 types of sexual activity (vaginal sex [OR AA vs. CA=, $X^2 = .66, df = 1, p = .41$]; oral sex [OR AA vs. CA=, $X^2 = .0003, df = 1, p = .99$]; anal sex [OR AA vs. CA=, $X^2 = .83, df = 1, p = .36$].
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Table 1. Sample Characteristics by Race

<table>
<thead>
<tr>
<th>Variable</th>
<th>Race</th>
<th>Difference between races</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AAW</td>
<td>CW</td>
<td>All</td>
</tr>
<tr>
<td>Annual Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;$10,000/yr.</td>
<td>25 (50)</td>
<td>24 (48)</td>
<td>49 (49)</td>
</tr>
<tr>
<td>≤ $10,000/yr.</td>
<td>23 (46)</td>
<td>26 (52)</td>
<td>49 (49)</td>
</tr>
<tr>
<td>No response</td>
<td>2 (4)</td>
<td>0 (0)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS or less</td>
<td>21 (42)</td>
<td>23 (46)</td>
<td>44 (44)</td>
</tr>
<tr>
<td>Some college</td>
<td>29 (58)</td>
<td>27 (54)</td>
<td>56 (56)</td>
</tr>
<tr>
<td>Sexual activity in past 6 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaginal sex</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>100 (100)</td>
</tr>
<tr>
<td>No/Rare use of condoms</td>
<td>19 (38)</td>
<td>21 (42)</td>
<td>40 (40)</td>
</tr>
<tr>
<td>Oral sex</td>
<td>30 (60)</td>
<td>45 (90)</td>
<td>75 (75)</td>
</tr>
<tr>
<td>No/Rare use of condoms</td>
<td>25 (83.3)</td>
<td>37 (82.2)</td>
<td>62 (82.7)</td>
</tr>
<tr>
<td>Anal sex</td>
<td>12 (24)</td>
<td>19 (38)</td>
<td>31 (31)</td>
</tr>
<tr>
<td>No/Rare use of condoms</td>
<td>10 (83.3)</td>
<td>13 (68.4)</td>
<td>23 (74.2)</td>
</tr>
<tr>
<td>Age (years)</td>
<td>21 (2.1)</td>
<td>21.7 (2.2)</td>
<td>21.4 (2.2)</td>
</tr>
<tr>
<td>HIV knowledge</td>
<td>36.5 (4.7)</td>
<td>36.9 (3.7)</td>
<td>36.7 (4.2)</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>35 (4.6)</td>
<td>32.1 (6.0)</td>
<td>33.6 (5.3)</td>
</tr>
<tr>
<td>Condom self-efficacy</td>
<td>56.1 (12.9)</td>
<td>52.9 (14.7)</td>
<td>54.6 (13.8)</td>
</tr>
<tr>
<td>Condom negotiation skills</td>
<td>2.1 (.6)</td>
<td>2.45 (.9)</td>
<td>2.3 (0.8)</td>
</tr>
<tr>
<td>Attitude towards condoms</td>
<td>50.7 (9.1)</td>
<td>48.2 (9.8)</td>
<td>49.3 (9.5)</td>
</tr>
<tr>
<td>Sexual pressure</td>
<td>1.7 (.7)</td>
<td>1.6 (.6)</td>
<td>1.7 (0.7)</td>
</tr>
<tr>
<td>Sexual coercion (subscale)</td>
<td>3.2 (1.9)</td>
<td>2.6 (1)</td>
<td>2.9 (1.5)</td>
</tr>
</tbody>
</table>

Note. AAW = African American women; CW = Caucasian women; HS = High school.

DISCUSSION
The purpose of this study was to compare racial similarities and disparities in indicators of sexual health and sexual pressure in an urban sample of young African American and Caucasian women who engage in high-risk sexual behavior. Out of the five sexual health indicators that were examined: condom self-efficacy, attitudes toward condom use, condom negotiation skills, HIV knowledge, and self-esteem, two were found to differ by race – condom negotiation skills and self-esteem. More specifically, African American women reported higher self-esteem, but lower condom negotiation skills than Caucasian women. Condom self-efficacy, attitudes toward condom use, and HIV knowledge did not significantly differ by race.
Our findings are somewhat consistent with those found in the literature. In a study of Black and White teenagers in the Midwest region of the U.S., French and Neville (2012) found that Black teenagers were more likely to report higher self-esteem than White teenagers. However, in a study among low-income women, Soler et al. (2000) found that African American women were more likely to be confident in condom negotiation skills than Caucasian women. Much can be learned from future studies that focus on the interrelationship between these two concepts and their role in sexual behavior in different racial and ethnic groups.

Crocker and Wolfe (2001) pose that self-esteem can have different forms. More specifically, global self-esteem refers to general feelings of self-worth, self-respect, and self-acceptance, whereas domain-specific self-esteem describes reflections on more contextual facets of self. One aspect of self-esteem (e.g., self-worth) may not necessarily cause a behavior irrespective of whether that behavior is socially acceptable or not (Crocker & Wolfe, 2001). To this end, perceptions of generally high self-worth may not translate into these same perceptions in an intimate sexual encounter during which condom use might warrant discussion. For example, the African American women in our sample collectively reported higher esteem towards self (i.e., global self-esteem), but were less effective at communicating and negotiating condom use with their sexual partners. It may be that the self-esteem of these women in condom negotiation strategies likely diminished given the context of their personal sexual situations or perhaps domain-specific self-esteem was low from the beginning. Because we measured self-esteem using a more global instrument (Rosenberg, 1965), perceived self-esteem during the sexual encounter may not have been as validly captured in the data. Based on our findings, much can be gained from future studies that examine different categories of self-esteem such as global self-esteem vs. domain-specific self-esteem, trait self-esteem vs. state self-esteem, explicit self-esteem vs. implicit self-esteem, and the like in association with condom use in diverse samples of women.

Concerning potential disparities in sexual pressure, African American and Caucasian women did not differ on overall scores of sexual pressure, but did differ significantly on the sexual coercion subscale of the sexual pressure scale. For this study, sexual coercion was conceptualized as threats or acts of physical violence that occurred after a woman refused unwanted sex. This finding remained after controlling for education and income level. Swan and O’Connell (2012) examined the effect of intimate partner violence in association with condom negotiation in a predominantly African American sample of women who engage in high-risk sexual behavior ($N = 118$). Findings indicated that intimate partner violence directly affected a woman’s confidence in negotiating condom use with her partner. Similarly, Trent et al. (2007) assessed the effect of sexual victimization on sexual health outcomes of urban youth. Their cross-sectional study included 1,698 African American and Caucasian young adults. Although sexual victimization did not vary by ethnicity, females who reported sexual victimization were more likely to have an STI than females who did not report victimization (Trent et al., 2007). Therefore, any type of forceful or violent behavior from an intimate partner can place a woman at a disadvantage as it pertains to her sexual health.

With regard to condom use, African American and Caucasian women did not differ significantly in condom use in vaginal, oral, or anal sex. Although Caucasian women were more likely to engage in oral sex, condom use did not differ between groups (see Table 1). These findings differ from the current literature. In a longitudinal study of HIV risk factors among a large sample of young adults ($N = 11,045$), Mojola and Everett (2012) found that African...
American women were significantly more likely to report higher rates of condom use than both Caucasian and Hispanic women. Similarly, African American women ages 15 – 44 are twice as likely to be tested for HIV as Caucasian women of the same age range (Anderson et al., 2005). These findings reflect a trend in current HIV infection rates because in 2010, the number of new HIV infections in African American women decreased for the first time since the history of reporting HIV incidence (CDC, 2013). African American women are likely to be more aware of their HIV risk and increased HIV and STI testing has had a key role in decreasing sexual risks. It is worthy to note that our sample was considered to engage in high-risk sexual behavior, as rates of condom use was consistently low across 3 types of sexual activity regardless of race. Thus, it may be unlikely to detect these differences among a sample that is already likely to demonstrate decreased condom use.

Although race was examined as a predictor of disparate sexual health outcomes, it often acts as a proxy for other factors such as low income or low education that place young African American women at risk for adverse sexual health outcomes compared with their Caucasian counterparts. For example, African Americans are more than twice as likely as Caucasians to live below poverty (U.S. Census Bureau, 2013). Though income and education levels for both racial groups in this sample were comparable, future studies that look beyond demographics to determine other social and environmental factors that may place certain groups of women at higher risk for health disparities are needed.

The findings from the study have important implications for public health professionals in the development and implementation of HIV/STI prevention interventions for young disadvantaged women. For example, in the study sample, nearly one-third of the participants engaged in anal sex, but condom use during this sexual activity was rare, if at all. Although not a significant finding, Caucasian women engaged in anal sex more than African American women, but African American women were less likely to use condoms during anal sex. Women may be more concerned with pregnancy prevention than HIV and if they are taking another form of contraception, they may be unlikely to use condoms. Because the risk of HIV transmission is substantially higher from anal sex compared to vaginal sex (Baggaley et al., 2010), women should be aware of this increased risk and educated on strategies to promote condom use. Although discussions of anal sex may still be considered taboo in the heterosexual community, safety messages included in prevention interventions and programs should incorporate such topics in an open, non-judgmental manner.

HIV prevention interventions for vulnerable women should also address power imbalances between men and women that may stem from gender norms in intimate relationships. According to the theory of gender and power (Connell, 1987), as women lose power and men gain power based on cultural norms and gender enforced roles, women are more likely to experience adverse health effects. This is likely true of sexual relationships in which women experience sexual coercion and other intimate partner violence, placing them at even greater risk for negative sexual health outcomes. Therefore, programs that identify approaches for women in enhancing both their global and contextual self-esteem as well as skill-building in partner communication and conflict resolution will counteract these effects.

CONCLUSION

Our study has its limitations. We recruited a convenience sample which primarily came from one clinic. Thus, findings may not be generalizable to a broader population. The
questionnaires that we used in the study were obtained through self-report. Social desirability may have been an issue because of the sensitive topic of sexual behaviors and sexually coercive experiences. In addition, the number of previous sexual partners and history of STIs was not obtained, which could have further strengthened the study. However, this study highlights racial disparities between African American and Caucasian women in protective factors as well as factors that increase sexual health risk. Identifying factors that empower young women toward safer sexual practices is an important step in implementing effective HIV prevention interventions. Interventions that target power imbalances and gender norms in sexual relationships will benefit from addressing ways in which to increase resistance to sexual pressure in both coercive and non-coercive situations. Lastly, researchers should tailor interventions based on the social context and ensure their relevance for various racial/ethnic groups.

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