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## Hopelessness and Sexual Risk Behavior Among Adolescent African American Males in a Low-Income Urban Community

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### Abstract

African American youth bear a disproportionate burden of sexually transmitted infections. Environmental stressors may lead to increased hopelessness, which in turn can lead to increases in risk-taking behavior. This study explored the hypothesis that as hopelessness increases, sexual risk behavior will increase—specifically, inconsistent condom use and increased number of sex partners. In 2010, 108 African American men 15 to 24 years old responded to sexual behavior questions and Beck's Hopelessness Scale. The associations between hopelessness and sexual risk behaviors were evaluated with multivariate logistic regression. Increased hopelessness was associated with increased inconsistent condom use with non-main sexual partners (adjusted odds ratio = 2.3, 95% confidence interval = 1.3-4.0). There was no association between hopelessness and condom use with a main partner or sex with more than one partner in the past 3 months. These findings imply that hopelessness may encourage sexual risk-taking behavior in young males.

### Keywords

adolescent males; African American; condoms; hopelessness; sexual risk behavior

### Introduction

Adolescents are 25% of the U.S. population but account for 50% of new sexually transmitted infections (STIs; Centers for Disease Control and Prevention, 2009). African American men of ages 15 to 19 years have significantly higher rates of HIV, Chlamydia, and gonorrhea compared with young White men (Centers for Disease Control and Prevention, 2009). African American adolescents face unique structural and environmental factors that contribute to health inequities, such as high rates of incarceration, poverty, and violence

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(Adimora & Schoenbach, 2005). These environmental stressors, common in low-income urban areas, may lead to hopelessness or negative expectations for the future (Bolland, 2003; Stoddard, Henly, Sieving, & Bolland, 2011). When operating from a hopeless perspective, individuals may replace long-term goals, such as graduating from high school or staying healthy, with short-term gains. In this environment, the immediate benefits of risky behaviors—such as unprotected sex or sex with many partners—become more attractive (Bolland, 2003). Therefore, this study examined the associations between hopelessness, and condom use and number of sex partners among young African American men—a relationship that is not well understood.

## Method

This investigation is part of the ViewPoints study, a cross-sectional study conducted in a low-income, predominantly African American neighborhood (Saadatmand et al., 2012). Enrollment criteria included self-identifying as an African American male, age between 15 and 24 years, and being a resident of San Francisco.

Participants were recruited by trained outreach personnel from the Youth United Through Health Education (YUTHE) team at the San Francisco Department of Public Health. The YUTHE team is a community-based, peer-led STI prevention program designed to increase STI screening among African American young people in the area. The YUTHE team recruited participants systematically by approaching men consecutively along 13 recruitment routes in the commercial district and housing projects in the area. Recruiters screened participants for eligibility, explained the study, and obtained verbal consent before supplying participants with a handheld device (iPod Touch) for survey self-administration. Participants were compensated with \$10 gift cards on completion of the survey. The study protocol was approved by the Committee for Human Research at the University of California, San Francisco.

Hopelessness was evaluated using a reduced version of the Beck's Hopelessness Scale (Beck, Weissman, Lester, & Trexler, 1974). Respondents were asked to agree or disagree with statements about the future (“My future seems dark to me,” “I don't expect to get what I really want in life”). Originally, 14 questions were administered; however, only the 5 negatively phrased questions were ultimately included, given the lack of variation in responses to positively phrased questions. Previous research has similarly found that factors were largely determined by the phrasing of the question (positive or negative; Steed, 2001). Exploratory factor analysis confirmed that the 5 questions hung together in one factor (eigenvalue = 2.98); this was the only eigenvalue greater than 1, and results showed that the 5 questions were generally equally weighted. As such, questions were coded 0 = *disagree* or 1 = *agree* and summed; scores ranged from 0 to 5.

Condom use inconsistency was evaluated for sex with “your main partner” and with a person/persons “who is/are not your main partner” in the past 3 months. Participants were asked how often they used condoms (frequency) and whether they used a condom during the previous intercourse. If a participant responded “always” to the frequency question and “yes” to using a condom at the previous intercourse, he was coded as a “consistent condom

user.” In our analysis, we explored the number of partners continuously, categorically, and dichotomously; however, as no significant relationship with hopelessness was identified in any model, we opted to present a simple logistic regression. As a result, number of sexual partners within the past 3 months was coded dichotomously as one or no partners or more than one partner; participants who had never had sex were excluded.

Nonparametric tests (Wilcoxon rank sum) were used to assess covariate association with hopelessness. Odds ratios for hopelessness and risk behaviors were generated using multivariate logistic regression in STATA Version 11.

## Results

In all, 202 potential subjects were approached. Of them, 34 subjects (17%) refused to participate, 9 had already participated previously, and an additional 28 did not meet the eligibility requirements. Of the 131 potential participants who were screened and found eligible, 112 (85%) enrolled and completed the survey, 3 (2%) enrolled but did not complete the survey, and 17 (13%) declined to participate. Among those who declined, “no time” was the most common reason given. One completed survey was lost as it was not saved on the survey device, and 3 participants who had stated that they were between 15 and 24 years of age during screening gave ineligible ages on the survey and were not thus included in this analysis, leaving 108 participants.

Participants were 15 to 24 years old (mean = 18 years); 63 (58%) had graduated high school, and 96 (89%) reported ever having sex. Of those ever having sex, 59 (62%) reported having more than one partner in the past 3 months. Sixty-one (56%) reported sex with a non-main partner, of whom 32 (53%) used condoms inconsistently. Sixty-eight (63%) reported sex with a main partner, of whom 49 (72%) used condoms inconsistently. The median hopelessness score was 2 (interquartile range [IQR] = 1-3; Table 1); a higher score indicated more hopelessness. Of the covariates, only having less education was significantly associated with increased hopelessness; however, all theoretical confounders were adjusted for in these data, including employment, socioeconomic status, and education.

After adjusting for covariates, increased hopelessness was associated with higher odds of inconsistent condom use with a non-main partner (adjusted odds ratio [AOR] = 2.3, 95% confidence interval [CI] = 1.3-4.0; Table 2). In both adjusted and unadjusted models, there was no association between hopelessness and condom use with a main partner (AOR = 1.1, CI = 0.8-1.6) or between hopelessness and having more than one sex partner in the past 3 months (AOR = 1.1, CI = 0.8-1.4).

## Discussion

Previous research identified conflicting results on the relationship between hopelessness and sexual risk. One study of high school students in low-income urban neighborhoods in Mobile, Alabama, found higher hopelessness to be associated with increased intentions of trying to get sexual partners pregnant, having a child, and having sex that week (Bolland, 2003). In contrast, a study using Wave 1 of the National Longitudinal Study of Adolescent Health showed no association between hopelessness and condom use, although only 11.9%

of the participants were of low socioeconomic status and only 15.4% were African American (Testa & Steinberg, 2010).

This study found that more hopelessness was associated with more inconsistent condom use with non-main sexual partners but not with main partners—a distinction earlier research had not explored. Most of the sexually active men (48) reported sex with a main *and* a non-main partner, meaning that the same men had different condom use behaviors with different partners. The difference could indicate that sex with the main partner is perceived as less risky. Having many partners may also not be seen as a risk in a community that highly values having many sexual partners (Bowleg et al., 2011); in this study, almost 75% of the men had sex by the age of 14 years, and more than 50% reported five or more sex partners in their lifetime. Previous qualitative research shows that concurrency, or simultaneously having sex with a main partner and other partners, is culturally acceptable among many African American men, and there is significant pressure to have sex even if it seems risky (Bowleg et al., 2011; Towner, Dolcini, & Harper, 2010). Unfortunately, the nature of the survey questions did not allow for examination of whether men were having sex with main partners and other sex partners *concurrently*.

Limitations include the small sample size and a cross-sectional design that prevents a causal interpretation. Only a subset of the Hopeless Scale items was used (negatively phrased questions); this choice was supported by exploratory factor analysis (all items loaded at 0.6 or above). Furthermore, the dichotomy of main and non-main partner does not fully describe nuanced relationships—for example, long-term side partners. Finally, the homogeneous nature of the sample can be viewed as both a limitation and a strength. Although these results cannot be generalized beyond this sample, having a strong characterization of a homogeneous at-risk sample improves researchers' ability to draw conclusions about this well-specified population.

Another marked strength of this study was the focus on an understudied population at very high risk for STIs. Although the sampling methods used could have inadvertently excluded individuals in the workforce, recruitment took place in high-traffic commercial areas *and* housing projects, ensuring participation of youth who are normally excluded from research due to the difficulty of entering housing projects. The survey mechanism, a self-reported questionnaire on an iPod touch, was also appropriate for the age-group and setting, and it helped ensure participation, privacy, and ease of use and has been shown to improve reporting of sensitive behaviors (Hewett et al., 2008).

The study's findings suggest that interventions in urban, low-income communities should address determinants of hopelessness as an avenue to increasing condom use. Previous research found that a change in the mother figure during adolescence, witnessing violence, traumatic stress, and lack of employment were determinants of hopelessness; a sense of community, warmth toward the mother, and religiosity were protective against hopelessness (Bolland, Lian, & Formichella, 2005). This provides insight into how interventions could be designed to reduce or prevent hopelessness—for example, incorporating work programs or community building. Approaches to reducing hopelessness may include programs incorporating models of self-esteem and self-concept, which have demonstrated reduced

sexual risk behavior among African American adolescents (DiClemente et al., 2008). In addition, interventions that target upstream contextual factors that influence hopelessness could prove more effective and sustainable and reach greater numbers. For example, Safer Choices, a school-based intervention that incorporated school, community and family components, increased condom use in intervention schools compared to control schools (Basen-Enquist et al., 2001). Connect to Protect is a 6-year community mobilization intervention that is under way in sites throughout the United States and aims to build community coalitions to reduce sexual risk and vulnerability among urban adolescents (Ziff et al., 2006). Additional investments in approaches to modify aspects of the social, cultural, and economic environment that lead to hopelessness among young African American men are urgently needed.

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**Table 1**

Hopelessness Scores and Sociodemographic Characteristics of a Sample of Adolescent Males Living in a Low-Income Neighborhood in San Francisco, 2010

Sociodemographic characteristics	Total		Hopelessness score (higher score equals more hopelessness)	
	<i>N</i>	Percentage	Median	IQR
Sample size	108	100.0	2	1-3
Age (years)				
15-19	75	69.4	2	1-3
20-24	33	30.6	2	1-3
Currently in school				
Yes	72	66.7	2	1-3
No	36	33.3	1.5	1-3
Education *				
Less than high school	45	41.7	2	1-4
High school or more	63	58.3	1	0-3
Reported SES				
Lower (poor and struggling/barely making ends meet)	29	26.9	2	1-4
Higher (making it/well off)	79	73.1	1	1-3
Work in the past 3 months				
No	44	40.7	2	1-3
Yes	64	59.3	2	1-3

Note. IQR = interquartile range; SES = socioeconomic status.

\*  $p < .05$ .

**Table 2**

Proportions of Sexual Risk Behavior and Adjusted Odds Ratios<sup>a</sup> of Risk Behavior by Hopelessness Scores in a Sample of Adolescent Males Living in a Low-Income Neighborhood in San Francisco, 2010

	<i>N</i> (%)	<b>OR</b>	<i>SE</i>	<b>95% CI</b>	<i>p</i>
Inconsistent condom use with a main partner <sup>b</sup>	49 (72)	1.1	0.2	[0.8, 1.6]	.6
Inconsistent condom use with a non-main partner <sup>c</sup>	32 (53)	2.3	0.7	[1.3, 4.0]	<.01
More than one sex partner <sup>d</sup>	59 (62)	1.1	0.2	[0.8, 1.4]	.6

*Note.* OR = odds ratio; *SE* = standard error; CI = confidence interval.

<sup>a</sup> Adjusted for employment, socioeconomic status, and education.

<sup>b</sup> Among 68 with main partners.

<sup>c</sup> Among 61 with non-main partners.

<sup>d</sup> Among 96 sexually active.