Published in final edited form as:

Sex Health. 2014 March; 11(1): 81-83. doi:10.1071/SH13135.

# Concurrent Partnering and Condom Use among Rural Heterosexual African-American Men

JaNelle M. Ricks, DrPH<sup>a</sup>, Angelica Geter, MPH<sup>b</sup>, Richard A. Crosby, PhD<sup>b</sup>, and Emma (E.J.) Brown, PhD, APRN-BC, FAAN<sup>c</sup>

<sup>a</sup>Department of Behavioral Sciences and Health Education, Rollins School of Public Health, Emory University, Atlanta, GA, USA

<sup>b</sup>College of Public Health, University of Kentucky, Lexington, KY, USA

°CHARM, Inc., Lake City, FL, USA

### **Abstract**

**Background**—Limited research has targeted HIV risk among heterosexual African-American men in rural southeastern US.

**Methods**—A cross-sectional survey was administered to 538 men to assess HIV knowledge, attitudes toward HIV testing and sexual risk behavior.

**Results**—Fifty-one percent reported consistent condom use in past three months. Monogamous men reported more consistent condom use (t = 3.47, df = 536, p < .001). In concurrent partnerships condom use was inversely related to age (AOR=.98, 95% CI=.95-.998, p = .03) and increased by number of female partners (AOR=1.49, 95% CI=1.26-1.76, p < .001).

**Conclusions**—African American HIV prevention outreach should include focus on concurrent partnering in rural settings.

### **Keywords**

HIV prevention; men; condoms; heterosexuality

Heterosexual transmission is the second leading mode of HIV transmission in the United States. African-Americans bear a disproportionate burden of heterosexually-acquired HIV cases. Concurrent partnering is one sexual factor shown to increase HIV risk. 5-5 Compared to white men, African-American men are more likely to report concurrent sexual relationships. As such, concurrency has been identified as a likely factor accelerating the spread of HIV among heterosexual African-Americans. Applications 1.5 Page 1.5 P

Correspondence: JaNelle Ricks, DrPH 1518 Clifton Rd NE; Room 426 Atlanta, GA 30322 Phone: (614) 323-4567 janelle.ricks@emory.edu.

Financial Disclosure: The authors have no relevant conflicts of interest.

**Disclaimer**: The findings and conclusions in this report are those of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.

In areas of the rural southeastern U.S., the HIV epidemic has impacted African-Americans unequally. <sup>10-17</sup> Limited research has examined concurrent partnering and other correlates of HIV risk among heterosexual African-American men in this region. Evidence from the small body of existing empirical literature examining HIV risk among rural African-Americans has shown that men are more likely to engage in concurrent sexual partnerships <sup>17-20</sup> and inconsistent condom use <sup>15,17, 18</sup> than women. The purpose of this study was to identify correlates of consistent condom use by sexual concurrency status among low-income African-American men.

Potential participants were recruited through local door-to-door, street, and faith-based outreach and recruitment flyers posted throughout the community. Five hundred thirty-eight African-American men aged 18-64 years who identified as heterosexual and lived in northern Florida participated. Each completed a survey that assessed demographics, attitudes toward HIV testing, HIV testing history and intention to disclose positive test results, HIV-related knowledge, and perceptions of AIDS-related stigma. Descriptive statistics were conducted; bivariate analyses determined which variables to include in subsequent multivariate logistic regression analyses models.

The average age of men in this study was 38.7 years (SD=13.9). About one-third (33.8%) had not graduated high school and more than half (58.4%) reported monthly income less than \$500. Forty percent reported being in concurrent sexual relationships. Another 40% reported concurrent sexual relationships with female sex partners in the past three months. Consistent condom use was reported by 277 men (51.5%).

Multivariate logistic regression analyses indicated that among currently monogamous men, consistent condom use was inversely related to age and positively associated with ever having been tested for HIV. Among men in concurrent sexual partnerships, multivariate logistic regression analyses revealed that consistent condom use was also inversely related to age. Additionally, condom use increased by 50% for each additional female sex partner reported in the past three months. Men with less than a high school education were 63% less likely to report consistent condom use (Table 1).

Empirical evidence suggests a limited degree of HIV-risk consciousness and consistent safe sex practice among African-American men.<sup>21-23</sup> A study that examined condom use by casual and primary relationship status found that African-American men were less likely to use condoms with primary partners.<sup>24</sup> The current study findings that a) reported consistent condom use was significantly greater among those reporting current monogamy and b) odds of consistent condom use increased in proportion to the number of recent female sex partners reported, may indicate a positive response to the AIDS epidemic in rural Florida from African-American men. Despite engaging in concurrent partnerships, these men may indeed be aware of HIV risk.

Results of this study should be considered in light of its limitations. First, findings are limited by the validity of retrospective self-report. Additionally, the sensitive nature of this study topic allowed for vulnerability to systematic over- or under-reporting of sexual

attitudes and behaviors. Finally, results may not be generalizable to other populations of heterosexual African-American men.

The complex nature of HIV transmission among specific populations makes comprehensive assessment of determinants of HIV risk behavior necessary for development of effective prevention intervention strategies. The current study warrants further research on correlates of risk behavior such as partner concurrency among African-Americans in rural settings.

## **Acknowledgments**

We thank the study team members who helped with data collection.

Funding Source: This study was supported by CDC's Minority HIV/AIDS Research Initiative project # II01PS000677

### REFERENCES

- Centers for Disease Control and Prevention. HIV Surveillance Report. Diagnoses of HIV infection and AIDS in the United States and dependent areas. Feb.2011:21. 2009. Report No.
- Centers for Disease Control and Prevention. HIV surveillance in adolescents and young adults. Divisions of HIV/AIDS Prevention National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Dec 2.2010
- 3. Kelley SS, Borawski EA, Flocke SA, Keen KJ. The role of sequential and concurrent sexual relationships in the risk of sexually transmitted diseases among adolescents. J Adolesc Health. 2003; 32(4):296–305. [PubMed: 12667734]
- Koumans EH, Farley TA, Gibson JJ, et al. Characteristics of persons with syphilis in areas of persisting syphilis in the United States: sustained transmission associated with concurrent partnerships. Sex Transm Dis. 2001; 28(9):497–503. [PubMed: 11518865]
- 5. Gorbach PM, Holmes KK. Transmission of STIs/HIV at the partnership level: beyond individual-level analyses. J Urban Health. 2003; 80(4 Suppl 3):iii15–iii25. [PubMed: 14713668]
- Adimora AA, Schoenbach VJ, Doherty IA. Concurrent sexual partnerships among men in the United States. Am J Public Health. 2007; 97(12):2230–2237. [PubMed: 17971556]
- 7. Adimora AA, Schoenbach VJ, Bonas DM, Martinson FE, Donaldson KH, Stancil TR. Concurrent sexual partnerships among women in the United States. Epidemiology. 2002; 13(3):320–327. [PubMed: 11964934]
- 8. Adimora AA, Schoenbach VJ. Social context, sexual networks, and racial disparities in rates of sexually transmitted infections. J Infect Dis. 2005; 191(Suppl 1):S115–S122. [PubMed: 15627221]
- 9. Neaigus, A.; Jenness, S.; Hagan, H.; Murrill, C.; Wendel, T. Individual and partner characteristics associated with sex partners concurrency among high-rish heterosexuals. National HIV Prevention Conference; Atlanta GA: 2009.
- Arial S, O'Leary A, Baker C. Sexually transmitted infections and HIV in the southern United States: An overview. Sexually Transmitted Diseases. 2006; 33(Suppl 7):S1–S5. [PubMed: 16794550]
- Centers for Disease Control and Prevention. HIV prevalence estimates-United States, 2006.
  Morbidity and Mortality Weekly Report. 2008; 57(38):1073–1076. [PubMed: 18830210]
- 12. Centers for Disease Control and Prevention. CDC HIV/AIDS fact sheet: HIV/AIDS among African- Americans. Jan. 2007a 2007http://www.cdc.gov/hiv/topics/aa/print/index/htlm
- 13. Centers for Disease Control and Prevention. HIV/AIDS and African-Americans. 2007b. http://www.cdc.gov/hiv/topics/aa/print/index/htlm
- Centers for Disease Control and Prevention. Update to racial/ethnic disparities in diagnoses of HIV/ AIDS-33 States, 2001–2005. Morbidity and Mortality Weekly Reports. 2007c; 56(9):198– 193.

 Fleming P, Lansky A, Lee LM, Nakashima AK. The epidemiology of HIV/AIDS in women in the southern United States. Sexually Transmitted Diseases. 2006; 33(Suppl 7):S32–S38. [PubMed: 16794553]

- 16. Reif S, Geonnotti KL, Whetten K. HIV infection and AIDS in the Deep South. American Journal of Public Health. 2006; 96(6):970–973. [PubMed: 16670228]
- 17. Thomas JC. From slavery to incarceration: Social forces affecting the epidemiology of sexually transmitted diseases in the rural south. Sexually Transmitted Diseases. 2006; 33(7):S6–S10. [PubMed: 16794556]
- 18. Brown EJ, Brown JS. HIV prevention outreach in African-American communities of three rural north Florida counties. Public Health Nursing. 2003; 20:204–210. [PubMed: 12716400]
- Adimora AA, Schoenbach VJ, Doherty IA. HIV and African-Americans in the Southern United States: Sexual networks and social context. Sexually Transmitted Diseases. 2006; 33(Suppl 7):S39–S45. [PubMed: 16794554]
- 20. Farley TA. Sexually transmitted diseases in the southern United States: Location, race, and social context. Sexually Transmitted Diseases. 2006; 33(Suppl 7):S58–S64. [PubMed: 16432486]
- Chatterjee N, Hosain GM, Williams S. Condom use with steady and casual partners in inner city African-American communities. Sex Transm Infect. 2006; 82(3):238–242. doi: 10.1136/sti. 2005.018259. [PubMed: 16731677]
- 22. Lescano CM, Vazquez EA, Brown LK, Litvin EB, Pugatch D. Condom use with "casual" and "main" partners: what's in a name? J Adolesc Health. 2006; 39(3):443, e441–447. doi: 10.1016/j.jadohealth.2006.01.003. [PubMed: 16919809]
- Pallonen UE, Timpson SC, Williams ML, Ross MW. Stages of consistent condom use, partner intimacy, condom use attitude, and self-efficacy in African-American crack cocaine users. Arch Sex Behav. 2009; 38(1):149–158. doi: 10.1007/s10508-008-9391-4. [PubMed: 18574684]
- 24. Wright, Gullette DL.; Booth, PB.; BM; Feldman, Z.; Stewart, KE. Stages of change decisional balance, and self-efficacy in condom use among rural African-American stimulant users. J Assoc Nurses AIDS Care. 2009; 20(6):428–441. doi: 10.1016/j.jana.2009.04.003. [PubMed: 19887285]

Table 1

Results of logistic regression analyses testing correlates of consistent condom use by sexual concurrency status of African-American men (N=538) residing in rural Florida

AOR		95% CI	P-value
Men reporting monogamy			
Age	.98	.96997	.019
Less than high school education	.71	.44-1.16	.17
Ever declined an HIV test	.33	.1474	.007
Men reporting sexual concurrency	y		
Age	.98	.95998	.032
Less than high school education	.37	.1975	.005
Number of female sex partners $I$	1.49	1.26-1.76	<.001

<sup>&</sup>lt;sup>1</sup>Past 3 months