Predictors of Risky Sexual Behavior Among Young African American Men Who Have Sex With Men

Trevor Hart, PhD, John L. Peterson, PhD, and The Community Intervention Trial for Youth Study Team

This study examined the prevalence and correlates of unprotected anal intercourse among 758 young African American men who have sex with men. A quarter of the sample reported unprotected anal intercourse in the past 3 months; nonsupportive peer norms and not carrying condoms predicted risky sexual behavior. Effective interventions are needed that promote the use of condoms by changing peer norms and encouraging carrying condoms. (Am J Public Health. 2004;94:1122–1123)

After 20 years, the HIV epidemic continues to disproportionately affect men who have sex with men (MSM) in the United States. HIV incidence and prevalence are pronounced among young MSM, especially among African American men. He examined the correlates of risky sexual behavior among a large community sample of young African American MSM. Data are presented on the HIV prevalence and associated sexual risks in young MSM.

METHODS

Participants and Procedures

Venue sampling was used to recruit participants (N=778) in the Atlanta, Ga, site of the Community Intervention Trial for Youth between 1999 and 2001 from a variety of venues (e.g., clubs, organizations, coffeehouses, public parks) frequented by African American MSM. AParticipants were aged 18 to 25 years, were African

American, and reported sexual contact with a man within the past year. Of the eligible participants (N=921), 84% (n=778) agreed to be interviewed. Analyses reported here are based on the 758 participants who answered all of the questions for the current study. Respondents were interviewed anonymously by trained African American interviewers and received a \$15 reimbursement.

Measures

Respondents reported unprotected insertive anal intercourse and unprotected receptive anal intercourse in the past 3 months by answering questions with high test-retest reliability. Respondents also reported their sexual identity, their HIV antibody status, whether they were carrying a condom, and their perceptions of peer norms regarding condom use $(\alpha\!=\!.79).^{11}$

Statistical Analyses

Univariate and multivariate logistic regressions were used to examine predictors of unprotected insertive and receptive anal intercourse in the past 3 months among those practicing anal intercourse.

RESULTS

Table 1 presents the demographic characteristics of the sample. Regarding risky sexual behavior, 26.5% (n=201) engaged in unprotected anal intercourse. Approximately 16.5% engaged in unprotected insertive anal intercourse, and 18.6% engaged in unprotected receptive anal intercourse. Participants with main partners were more likely than those without main partners to have had unprotected insertive anal intercourse (25.6% vs 12.1%) (odds ratio [OR]=2.50; 95% confidence interval [CI]=1.26, 4.97; *P*<.01) and unprotected receptive anal intercourse (30.8% vs 8.8%) (OR=4.62; 95% CI=2.14, 9.99; *P*<.001).

Demographic variables (age, educational level, and employment status), sexual identity, condom carrying, and peer norms were examined as predictors of unprotected insertive anal intercourse and unprotected receptive anal intercourse. When only participants who engaged in receptive anal

TABLE 1—Demographic Characteristics of the Sample (N = 758)

	%
Age, ^a y	
18-21	49.6
22-25	50.4
Education, ^b y	
<12	5.1
12	27.2
13-15	53.5
16	11.2
≥17	3.1
Born in United States	
Yes	94.1
No	5.9
Employment status	
Full-time	60.5
Part-time	22.8
Unemployed	16.6
Sexual identity	
Gay	53.4
Bisexual	32.6
Heterosexual	0.0
Undecided	5.6
Other ^c	7.8
HIV serostatus	
Seropositive	2.0
Seronegative	81.4
Unknown	16.6

Note. Figures may not add to 100% owing to rounding. a Mean = 21.56 y; SD = 2.08.

intercourse were selected, not carrying condoms was associated with increased likelihood of unprotected receptive anal intercourse (OR=2.75; 95% CI=1.35, 5.60; P < .01). Low peer norms were associated with increased likelihood of unprotected receptive anal intercourse (OR = 2.14; 95% CI=1.32, 3.47; P<.05). Demographic variables and sexual identity did not predict unprotected receptive anal intercourse. When only participants who engaged in insertive anal intercourse were selected, low peer norms were associated with increased likelihood of unprotected insertive anal intercourse (OR=1.90; 95% CI=1.15, 3.14; P < .05). All other variables were not asso-

bMean = 13.58 y; SD = 1.67.

^cThe vast majority of men in this group refused to identify using a sexual label.

RESEARCH AND PRACTICE

ciated with unprotected insertive anal intercourse.

All variables significantly predicting unprotected receptive anal intercourse were entered into a multivariate logistic regression. Both not carrying condoms (OR= 3.48; 95% CI=1.58, 7.66; P < .01) and low peer norms (OR=2.43; 95% CI=1.41, 4.22; P < .01) predicted increased risk of unprotected receptive anal intercourse. Hierarchical multivariate logistic regressions did not find significant interactions among predictor variables. 12

DISCUSSION

The prevalence of unprotected anal intercourse was moderately high (26.5%) among our sample of 758 young African American MSM; 18.6% had engaged in unprotected receptive anal intercourse. This is especially notable given the greater relative risk of unprotected receptive anal intercourse compared with unprotected insertive anal intercourse for HIV transmission.¹³

The effect of peer norms on risky behavior indicates the unique contribution of social norms to risky sexual behavior among young African American MSM and is consistent with prior research. 14,15 This finding suggests the need to strengthen social norms for condom use in the communities where the men reside. Interestingly, the effect of carrying condoms was found for reduced risk of unprotected receptive anal intercourse but not for unprotected insertive anal intercourse. These men may be aware of increased HIV risk during unprotected sexual intercourse as a receptive partner. However, this strategy would be less effective for men who expected to engage in insertive anal intercourse but were HIV seropositive and unaware of their serostatus. 16 More interventions are needed that promote knowledge of serostatus among young African American MSM who engage in insertive anal intercourse.

Regarding study limitations, data on sexual behavior were gathered by self-report and therefore were subject to social desirability effects despite efforts to reduce such bias. Despite the strength of our random sampling strategy, the venues sampled may

not represent the entire range of settings in which African American men who engage in same-sex behavior may be found. Nonetheless, this study, one of the first to use a large sample of young African American MSM, suggests that changing peer norms to make them more supportive of condom use and encouraging sexually active men to carry condoms may improve HIV intervention in this vulnerable population.

About the Authors

Trevor Hart is with the School of Medicine, Emory University, Atlanta, Ga. John L. Peterson is with the Department of Psychology, Georgia State University,

Requests for reprints should be sent to John L. Peterson, PhD, Department of Psychology, MSC 2A1155, 33 Gilmer St SE, Unit 2, Georgia State University, Atlanta, GA 30303 (e-mail: jpeterson@gsu.edu).

This brief was accepted July 3, 2003.

All authors contributed equally to the conception of the study, data analysis, and writing of the brief.

Acknowledgments

Funding for this study was provided by the Centers for Disease Control and Prevention cooperative agreements U62/CCU113642, U62/CCU214821, and U62/CCU113642-05.

We extend our gratitude to the young men who participated in the study and to the devoted research staff who contributed to its success.

The brief is based on data and methods that were part of a multisite study, the Community Intervention Trial for Youth Study, with a common protocol that was developed collaboratively by the following investigators at 8 research institutions and at the Centers for Disease Control and Prevention: John L. Peterson, Department of Psychology, Georgia State University; David Seal and Jeffrey Kelly, Center for AIDS Intervention Research, Medical College of Wisconsin; Kyung-Hee Choi, Center for AIDS Prevention Studies, University of California, San Francisco; Robin Miller and Joseph Stokes, Department of Psychology, University of Illinois at Chicago; Gary Remafedi, Youth and AIDS Projects, University of Minnesota; Lydia O'Donnell, Education Development Center; Ann Stueve, Mailman School of Public Health, Columbia University; Wesley Ford, Information Systems Branch, Los Angeles County Department of Health Services; Leslie Clark, School of Public Health, University of Alabama at Birmingham; Carolyn Guenther-Gray, Sandra Wright-Fofanah, and Esther Sumartojo, Centers for Disease Control and

Human Participant Protection

The institutional review board at the Centers for Disease Control and Prevention and at each of the 8 collaborating research institutions reviewed and approved the human subjects protocol for this study.

References

- 1. Fleming PL, Wortley PM, Karon JM, DeCock KM, Janssen RS. Tracking the HIV epidemic: current issues, future challenges. Am J Public Health. 2000;90:1037-1041.
- HIV/AIDS Surveillance Report. Atlanta, Ga: Centers for Disease Control and Prevention; 2001.
- 3. Catania JA, Osmond D, Stall RD, et al. The continuing HIV epidemic among men who have sex with men. Am J Public Health. 2001;91:907-914.
- 4. Valleroy LA, MacKellar DA, Karon JM, et al. HIV prevalence and associated risks in young men who have sex with men. JAMA. 2000;284: 198-204.
- Karon JM, Fleming PL, Steketee RW, DeCock KM. HIV in the United States at the turn of the century: an epidemic in transition. Am J Public $\textit{Health.}\ 2001; 91: 1060-1068.$
- Lemp G, Hirozawa AM, Givertz D, et al. HIV seroprevalence and risk behaviors among young gay and bisexual men: the San Francisco/Berkeley Young Men's Survey. JAMA. 1994;272:449-454.
- Osmond DH, Page K, Wiley J, et al. HIV infection in homosexual and bisexual men 18 to 29 years of age: the San Francisco Young Men's Health Study. Am J Public Health. 1994;84:1933-1937.
- Stueve A, O'Donnell LN, Duran R, San Doval A, Blome J. Time-space sampling in minority communities: results with young Latino men who have sex with men. Am J Public Health. 2001;91:922-926.
- Remafedi G. Predictors of unprotected intercourse among gay and bisexual youth: knowledge, beliefs, and behavior. Pediatrics. 1994;94:163-167.
- 10. Remafedi G. Cognitive and behavioral adaptations to HIV/AIDS among gay and bisexual adolescents. J Adolesc Health. 1994;15:142-148.
- 11. Choi KH, Coates TJ, Catania JA, Lew S, Chow P. High HIV risk among gay Asian and Pacific Islander men in San Francisco. AIDS. 1995;9:306-308.
- 12. Baron RM, Kenny DA. The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. J Pers Soc Psychol. 1986;51:1173-1182.
- 13. Vittinghoff E, Douglas J, Judson F, McKirnan D, MacQueen K, Buchbinder SP. Per-contact risk of human immunodeficiency virus transmission between male sexual partners. Am J Epidemiol. 1999; 150:306-311.
- 14. Peterson JL, Coates TJ, Catania JA, et al. Highrisk sexual behavior and condom use among gay and bisexual African-American men. Am J Public Health. 1992:82:1490-1494.
- 15. Heckman TG, Kelly JA, Bogart LM, Kalichman SC, Rompa DJ. HIV risk differences between African-American and white men who have sex with men. J Natl Med Assoc. 1999;91:92-100.
- 16. MacKellar DA, Valleroy LA, Secura GM, Behel SK. Unrecognized HIV infection, risk behaviors, and misperceptions of risk among young men who have sex with men-6 United States cities, 1994-2000. In: Program and abstracts of the XIV International Conference on AIDS; July 10, 2002; Barcelona, Spain. Abstract MoPeC3426.