though there is considerable concern regarding the themes and images expressed in rap music videos, limited empirical research has examined the effect of rap music videos on adolescents' behavior. This investigation sought to determine whether exposure to rap music videos at baseline could predict the occurrence of health risk behaviors and sexually transmitted diseases among African American adolescent females over a 12-month follow-up period.

STUDY SAMPLE

From December 1996 through April 1999, recruiters screened female teenagers residing in nonurban, lower-socioeconomic-status neighborhoods from school health classes and county health department clinics to determine their eligibility for participating in an HIV prevention program. Adolescents were eligible to participate if they were African American females, were between ages 14 and 18, had been sexually active in the previous 6 months, and provided written informed consent.

MEASURES

Level of exposure to rap music videos, the predictor variable, was determined by asking adolescents to estimate the number of hours they viewed rap music videos during an average day. This was multiplied by the number of days in the week that rap music videos were viewed.

Music video viewing characteristics assessed included the primary type of rap music videos viewed (gangsta, bass, or hip-hop), with whom adolescents usually viewed rap music videos, and where the rap music videos were viewed.

Covariates assessed included age, employment status, involvement in extracurricular activities, participation in religious events, family composition, family's receipt of public assistance, parental monitoring of adolescents' whereabouts, ⁵ and group assignment to either the HIV intervention or the comparison condition.

Outcomes

Health risk behaviors assessed whether adolescents had hit a teacher, been involved in a fight, been arrested, used alcohol or drugs (either tranquilizers, marijuana, amphetamines, lysergic acid diethylamide [LSD], cocaine, or crack), had multiple sex partners, or used condoms. Adolescents were also tested for 3 sexually transmitted diseases (chlamydia, trichomoniasis, and gonorrhea).^{6–8}

Data Analysis

Univariate analyses described music video viewing characteristics at baseline. Subsequent bivariate analyses examined the relations among adolescents' level of exposure to rap music videos at baseline, potential covariates, and the occurrence of health risk behaviors over the 12-month follow-up. Health risk behaviors and covariates significantly associated (P < .05) with exposure to rap music videos in bivariate analyses were included in logistic regression analyses. A separate logistic regression analysis was conducted to examine the relation between level of exposure to rap music videos at baseline and the occurrence of each health risk behavior over the 12month follow-up. All logistic regression analyses controlled for covariates and the corresponding baseline health risk behavior.9

RESULTS

The study enrolled 522 single African American females. Of those enrolled, 92.2% completed 12-month follow-up assessments. Descriptive statistics on adolescents' exposure to rap music videos are illustrated in Table 1. The median hours of exposure to rap music videos per week at baseline and at 6- and 12-month follow-up were 14 hours, 14 hours, and 12 hours, respectively, suggesting relatively stable viewing habits. Greater exposure to rap music videos was associated with unemployment and less parental monitoring; therefore, these variables and group assignment were used as covariates in the logistic regression analyses.

Over the 12-month follow-up, 37.6% acquired a new sexually transmitted disease, 4.8% hit a teacher, 12.1% reported being arrested, 14.8% had sexual intercourse with someone other than their steady partner, 44.2% reported using drugs, and 44.4% consumed alcohol.

Logistic regression analyses illustrated that after controlling for covariates, greater expo-

A Prospective Study of Exposure to Rap Music Videos and African American Female Adolescents' Health

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Rap music videos are a media genre that is attracting considerable attention. Rap music has evolved from African American music forms, with influences from rhythm and blues, fusion, contemporary gospel, and bebop.^{1–3} Al-

TABLE 1-Adolescents' Exposure to Rap Music Videos (N = 522): Birmingham, Ala, 1999

Exposure characteristic	No.	Percentage	
Ever viewed rap music videos			
Yes	498	95.4	
No	24	4.6	
Primary type of rap music videos viewed			
Gangsta	355	71.3	
Bass	83	16.7	
Hip-hop	60	12.0	
With whom rap music videos are usually viewed			
Brothers, sisters, cousins	228	44.1	
Alone	118	22.8	
Friends	83	16.1	
Boyfriend or someone you are interested in	79	15.3	
Parents	9	1.7	
Where do you watch rap music videos?			
Home	429	83.6	
Relative's home	28	5.5	
Boyfriend's home	28	5.5	
Friends' home	23	4.4	
Elsewhere	5	1.0	

readily when the modeled behavior is salient, simple, and prevalent and has functional value. Thus, exposure to rap music videos, particularly gangsta rap (the most popular type of music video), which is explicit about sex and violence⁴ and rarely shows the potential long-term adverse effect of risky behaviors, may influence adolescents by modeling these unhealthy practices. Alternatively, African American female teenagers may identify with the characters and themes in rap music videos, and exposure to these videos may reinforce teenagers engaging in such behaviors. Moreover, African American females desiring greater independence may rebel against parental media restrictions. Adolescents striving for independence and autonomy may be more likely to engage in risky behaviors.

Although not specifically referring to rap music videos, Poussaint¹¹ noted that the glorification of drugs, violence, and sex in films is particularly dangerous to young African Americans who are not exposed to many positive role models in the media. This concern is equally, if not more, applicable to African

sure to rap music videos was independently associated with a broad spectrum of health outcomes. Compared with adolescents who had less exposure to rap music videos, adolescents who had greater exposure to rap music videos were 3 times more likely to have hit a teacher; more than 2.5 times as likely to have been arrested; 2 times as likely to have had multiple sexual partners; and more than 1.5 times as likely to have acquired a new sexually transmitted disease, used drugs, and used alcohol over the 12-month follow-up period (Table 2).

DISCUSSION

This is one of the first studies to empirically show that greater exposure to rap music videos at baseline was prospectively associated with the occurrence of health risk behaviors and having a laboratory-confirmed new sexually transmitted disease 1 year later. Because potential mediating factors were not assessed, it is difficult to determine whether the relation between exposure to rap music videos and adolescents' health status was causal.

The results may be explained by social cognitive theory. 10 A cornerstone of this theory states that modeling will occur more

TABLE 2—Unadjusted and Adjusted Analyses Measuring the Association Between Exposure to Rap Music Videos and Adolescents' Health at 12-Month Follow-Up: Birmingham, Ala, 1999-2000

Adolescents' Health ^a	Bivariate Analyses					
	High Exposure	Low Exposure	PR ^b (90% CI)	P	Multivariate Analyses	
					OR ^c (90% CI)	Р
Violence						
Hit a teacher	7.1	2.4	3.0 (1.1, 8.1)	.02	3.0 (1.2, 7.3)	.04
Been in a fight	55.8	50.5	1.1 (0.9, 1.3)	.28	1.1 (0.6, 1.7)	.60
Antisocial behavior						
Was arrested	17.3	7.2	2.4 (1.4, 4.3)	.002	2.6 (1.4, 4.6)	.009
Sexual behavior						
Had multiple sexual partners	19.3	11.0	1.8 (1.1, 2.8)	.02	2.0 (1.1, 3.4)	.02
Never used condoms	14.8	13.7	1.1 (0.7, 1.7)	.74	1.1 (0.7, 1.8)	.80
STD						
Acquired a new STD	41.9	33.0	1.3 (1.0, 1.7)	.08	1.6 (1.1, 2.3)	.04
Drug use						
Used drugs	50.8	37.7	1.4 (1.1, 1.7)	.008	1.6 (1.1, 2.4)	.04
Alcohol use						
Used alcohol	53.7	46.3	1.2 (1.0, 1.5)	.04	1.6 (1.1, 2.3)	.05

Note. PR = prevalence ratio; CI = confidence interval; OR = odds ratio; STD = sexually transmitted disease.

^aAdolescent health behaviors and STD incidence were assessed over a 12-month follow-up period.

DAdolescents having less exposure to rap music videos were the referent for computing PRs.

ORs are adjusted by parental monitoring and adolescents' employment status

RESEARCH AND PRACTICE

American female adolescents, given their high level of exposure to rap music videos and the degrading portrayal of African American females in many rap music videos. 12,13 Future research on rap music videos should be conducted among different adolescent populations. Additional research should examine whether level of attention to rap music videos and changes in mediators, moderators, and exposure differentially affect the relation between exposure to rap music videos and adolescent health. Furthermore, public health practitioners are ideally suited to educate communities, schools, and advocacy groups about the potential public health risks associated with exposure to rap music videos in African American adolescent females.2

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Contributors

G.M. Wingood and R.J. DiClemente contributed to conception, design, acquisition, and analysis of the data. J.M. Bernhardt contributed to interpretation of the data. K. Harrington and S.L. Davies contributed to data acquisition. A. Robillard contributed substantially to the conception of the data. E.W. Hook III contributed by providing laboratory support for the assessment of sexually transmitted infections. All authors provided intellectual content for this brief.

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Human Participant Protection

The study protocol was approved by the University of Alabama, Birmingham's committee on human research.

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