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CONDOM ATTITUDES, PERCEIVED VULNERABILITY, AND SEXUAL RISK BEHAVIORS OF YOUNG LATINO MALE URBAN STREET GANG MEMBERS: IMPLICATIONS FOR HIV PREVENTION

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Abstract

We examined condom attitudes, perceived vulnerability to HIV, HIV testing experiences, and sexual and substance use risk behaviors of 161 active Latino male gang members, aged 18–26 years old, living in Los Angeles, California. Gang members reported negative condom attitudes and a perceived vulnerability to HIV. The majority (53%) of gang members reported unprotected vaginal intercourse (UVI) in the previous 12 months. Multivariate analyses indicated that participants who engaged in the following behaviors were more likely to report UVI: had sex with someone they just met (adjusted odds ratio [AOR] = 3.66), received money or drugs for sex (AOR = 5.05), or had sex with someone who had a sexually transmitted disease (AOR = 4.99). Participants with a higher perceived vulnerability to HIV were less likely to report UVI (AOR = 0.82). Our findings offer implications for development of an HIV prevention intervention for Latino male gang members.

Gang affiliation is not uncommon for many young Latino men living in impoverished and disenfranchised urban communities. Adolescents often join a gang as a way of dealing with social and psychological stressors in their lives, such as poor family relationships, poverty, discrimination, abuse, school problems, peer pressure, or struggles for self-identity (Calabrese & Noboa, 1995; Moore, 1978; Vigil, 1988). In general, gangs can be viewed as social networks that facilitate risk taking and health-compromising behaviors among its members.

Young Latino males who are part of an urban street gang may be particularly vulnerable to HIV infection. Compared with young people not involved in gangs, gang members engage in greater sexual risk behaviors, such as earlier age of sexual debut, higher rates of sexual activity, sex while under the influence of drugs or alcohol, and lower rates of condom use (Harper & Robinson, 1999; Little et al., 1999; Voisin et al., 2004; Wingood et al., 2002). These behaviors result in higher rates of unwanted pregnancies and sexually transmitted diseases (STDs) (Little et al., 1999) as well as an increased risk of contracting HIV.

Gang members also exhibit higher rates of alcohol and substance use than non-gang members (Esbensen & Huizinga, 1993; Harper & Robinson, 1999; Walker-Barnes & Mason, 2004). In addition, gang members initiate substance use behaviors at an earlier age, increase drug use while in a gang, and subsequently use more drugs after they leave the gang (Hagedorn & Giglio,

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1998; Mata et al., 2002; Waldorf, 1993). Previous research has indicated that substance users are more likely to engage in high-risk behaviors, such as unprotected sex or sex with multiple partners (Parker, Harford, & Rosentock, 1994; Stall, McKusick, Wiley, Coates, & Ostrow, 1986).

In this exploratory study we examined the sexual and substance use behaviors of Latino male gang members in Los Angeles, California. This investigation goes beyond previous studies of gang members' sexual and substance use behaviors by also examining condom attitudes, perceived vulnerability to HIV, and HIV testing experiences, items previously not examined in gang populations. We also identify predictors of high risk sexual behavior. The conceptual framework for this study was informed by the health belief model that posits perceived risk determines subsequent action or behavior (Janz & Becker, 1984). Additionally, previous research with other marginalized and at-risk young people (e.g., homeless and runaway youth, racial/ ethnic minority youth, and incarcerated youth) identified HIV risk behaviors that we believed might also be observed among young gang members. HIV testing was included as part of the study owing to the lack of any empirical data on HIV prevalence in gang populations. The following research questions guided this study. What are gang members' attitudes toward HIV? What are the HIV risk behaviors of gang members? What is the prevalence of HIV among gang members? We believe these findings can help inform the development of an effective HIV prevention intervention for young Latino male gang members.

METHODS

PARTICIPANTS

A cross-sectional survey was conducted with Latino male gang members, 18–26 years old, living in Los Angeles, California. Participants 18 years or older were recruited by staff from eight community-based organizations (CBOs) geographically dispersed throughout the city that provide outreach or intervention programs to gang members from multiple gangs. Staff were instructed to recruit only individuals they personally knew to be active gang members. All participants provided informed consent prior to participation. Participants completed an interviewer-administered survey conducted in small groups at one of the participating CBOs. To ensure comprehension of survey items, the interviewer read instructions and questions aloud, with participants marking their responses on the survey form. Participants received $25 compensation for completing the survey and were offered a free optional HIV test as part of the study.

MEASURES

Survey domains for this study included: sociodemographic characteristics, HIV testing experiences, sexual and substance use behaviors in the past 12 months. Condom attitudes (four-item scale; Cronbach's alpha = .82) and perceived vulnerability to HIV (seven-item scale; Cronbach's alpha = .86) scales were adapted for this population from existing scales (Koopman & Reid, 1998).

HIV testing was done using the FDA approved ORAQUICK rapid HIV antibody test. Participants were informed of the type of HIV testing procedure being used prior to agreeing to be tested.

Our outcome of interest, unprotected vaginal intercourse (UVI), was defined as inconsistent condom use among those who engaged in vaginal intercourse in the past 12 months. Condom use was assessed using the following response categories: always, most of the time, sometimes, rarely or never. Participants who selected a response other than "always" were considered inconsistent condom users.

DATA ANALYSIS

Descriptive analyses were used to describe the overall sample. Correlation analyses were performed across factors to avoid potential collinearity problems. Factors identified as significantly associated with UVI or theoretically thought to contribute to UVI were entered into a multivariate logistic regression model to assess their independent contribution to predict UVI while adjusting for potential confounding factors. Model diagnostics were performed to assess model appropriateness. SAS, Version 9.1 (SAS Institute, Cary, NC, U.S.A.) was used for all analyses.

RESULTS

One hundred sixty-one Latino male gang members participated in the study. Average age was 21 years (standard deviation [*SD*] = 2.13). Complete descriptive statistics for sociodemographic characteristics, sexual activity, and HIV testing behaviors are provided in Table 1. From the sample, the overwhelming majority (86.3%) reported engaging in vaginal intercourse in previous 12 months. From this group, the majority (53.2%) also reported UVI in the past 12 months. In terms of HIV testing, more than a third (35%) reported being previously tested for HIV. The primary reason for being tested was, “Someone suggested that I get tested.” An overwhelming majority (81.9%) indicated that they would like to get tested for HIV and most (68.9%) reported that they knew where to get tested. When offered the optional HIV test as part of the study, half (50.9%) agreed to be screened for HIV; from this group, 51 (62.2%) were first-time testers and 31 (37.8%) were repeat testers. None of the study participants was positive for HIV infection.

As shown in Table 2, more than half of the participants reported negative attitudes on each item of the condom attitudes scale. In four out of seven items on the perceived vulnerability to HIV scale, more than half of the participants indicated concern about their risk for HIV.

As shown in Table 3, none of the sociodemographic variables assessed in the bivariate analyses was associated with UVI. Engaging in the following three risk behaviors in the past 12 months was significantly associated with UVI: had sex with someone you just met (odds ratio [OR] = 2.40), received money or drugs for sex (OR = 4.82), and had sex with someone who had a STD (OR = 4.40). In our sample, reported substance use in the past 12 months and condom attitudes were not significantly associated with UVI; however, a lower perceived vulnerability to HIV was associated with UVI. We had also examined unprotected anal intercourse in our sample and found no associations with any of our predictor variables (data not shown).

In our multivariate analyses, in which we controlled for age, relationship status, education, incarceration history, and number of years in a gang, UVI in the past 12 months was independently associated with education and notable high-risk sexual practices. Specifically, gang members with a high school education or more were 0.38 times less likely to report UVI. Participants who had sex with someone they just met were 3.66 times more likely to report UVI. Participants who received money or drugs for sex were 5.05 times more likely to report UVI, and participants who had sex with someone who had a STD were 4.99 times more likely to report UVI. In addition, participants who reported a higher perceived vulnerability to HIV were 0.82 times less likely to report UVI.

DISCUSSION

Our findings indicate that Latino male gang members are engaging high-risk sexual behaviors that place them at elevated risk of contracting and transmitting HIV. These findings are consistent with previous investigations demonstrating that gang-affiliated young people engage in high-risk sexual behaviors that place them at increased risk for STDs, unwanted

pregnancies, and HIV (Harper & Robinson, 1999; Minnis et al., 2008; Voisin et al., 2004; Wingood et al., 2002). Although sexual and substance use risk behaviors of gang members have been well documented, no rigorously evaluated HIV prevention intervention exists for this population. Based on our findings, we offer areas of consideration for development of an HIV prevention intervention targeting young Latino male gang members.

Surprisingly, more than a third of our young sample had been previously tested for HIV and one half participated in the free HIV screening offered as part of the study. In addition, we noted a strong desire to get tested and also knowledge of where to get tested. These findings suggest a willingness to participate in HIV screening, which is also an opportunity to engage these young men in HIV risk reduction counseling. We also noted that among individuals previously tested, the primary reason for seeking a test was that someone had suggested that they get tested. This finding suggests that a peer approach to promoting HIV testing may assist in increasing HIV screening with the population. It is important that HIV screening be an integral component of any prevention program for this population in order to identify infections early and prevent any further spread of the disease within the sexual networks of young Latino male gang members. Previous research has already demonstrated the concentrated distribution of STDs among the sexual networks of gangs (Bethea et al., 1993).

Our descriptive statistics indicated negative attitudes toward condoms among our sample. Although the condom attitudes variable was not significantly associated with UVI, it still remains an area of concern as condoms remain the most effective method of preventing the sexual transmission of HIV as well as preventing STDs and unwanted pregnancy. As such, any HIV prevention intervention for this population needs to emphasize changes in attitudes and self efficacy for condom use. Given that one third of our sample reported having children, the importance of condom use may be done in the context of overall sexual and reproductive health.

Men who reported a lower perceived vulnerability to HIV infection were more likely to engage in UVI. Some Latino gang members may subscribe to the view that HIV is primarily a gay disease, particularly in Los Angeles, where, men who have sex with men do compose the majority of new and existing HIV and AIDS cases (HIV Epidemiology Program, 2008). As a result, these young men may not perceive themselves at risk since the majority of them are not engaging in sex with men. Any HIV prevention intervention targeting this population must help them to recognize their own personal vulnerability to HIV infection given their high risk sexual behaviors and high levels of substance use.

More than one half of the young men in our study reported engaging in UVI in the past 12 months, with a number of risky sexual behaviors independently associated with UVI (i.e., had sex with someone they just met, received money or drugs for sex, had sex with someone who had a STD). These findings suggest a need for prevention efforts to help reduce risky sexual behaviors. However, a major challenge in changing risk behaviors of gang members is the powerful influence of gang membership in promoting and reinforcing negative behaviors through peer norms and within a gang's social network (Harper & Robinson, 1999; Little et al., 1999; Voisin et al., 2007; Wingood et al., 2002). For example, in terms of sexual relationships, Wingood and colleagues (2002) have suggested that "the circumscribed ways in which male and female gang members engage in sexual relationships may only serve to enhance the transmission of HIV and other STIs" (p. 4). By understanding and viewing gangs as social and sexual networks, with specific behaviors and norms, that play a significant role in the lives of some young Latino men, HIV prevention researchers will be better equipped to design interventions to help minimize risk behaviors.

Several limitations of the study should be noted. First, the validity of self-reported data, potential response bias, and the use of a convenience sample limit these data. Second, partner type (i.e. main vs. casual) was not collected for sexual behavior items, thus potentially masking true risk level. Third, the research was cross-sectional and hence precluded determining causal relationships. Fourth, information on cultural attributes of Latino gang members was not collected, thus precluding an examination of the influence of cultural factors on condom attitudes, perceived vulnerability to HIV and sexual risk behaviors. Future research with Latino gang populations would benefit from a longitudinal research design that includes an examination of social context and cultural factors.

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TABLE 1

Sociodemographic Characteristics, Sexual Activity and HIV Testing Behaviors of Young Latino Male Gang Members (n = 161)

Characteristic	Frequency	Percent
Sociodemographics and sexual activity		
Age, y (Mean: 21.0, *SD*: 2.14)		
18 – 20	74	47.1%
21 – 26	83	52.9%
Relationship status		
Married/living together	24	14.9%
Single/separated/divorced	137	85.1%
Education		
11th grade or less	70	43.4%
High school or more	91	56.5%
Employment		
Part-time	35	21.8%
Full-time	22	13.7%
Unemployed	103	64.4%
Have children	56	34.8%
Ever been incarcerated	101	63.5%
Age joining a gang member (Mean: 13.1; *SD*:2.53)		
Number of years belonging to a gang		
1–5	51	31.9%
6–9	59	36.9%
>10	50	31.3%
Vaginal intercourse in past 12 months	139	86.3%
Unprotected vaginal intercourse in past 12 months (n = 139)	74	53.2%
HIV testing behaviors		
Ever been tested for HIV	56	35.0%
Reasons for being tested for HIV (n = 56)		
Required for job, insurance or military service	2	3.6%
Someone suggested to get tested	27	48.2%
Thought one might have HIV/AIDS	8	14.3%
Required as part of a medical test	7	12.5%
Other reasons	14	25.0%
Would like to get tested for HIV	131	81.9%
Know where to get an HIV test	103	68.9%
Tested for HIV/AIDS in the study	82	50.9%
First-time testers	51	62.2%
Repeat testersa	31	37.8%
Tested positive for HIV (n = 107)[b]	0	0.0%

Note. *SD*: Standard deviation.

[a] Tested for HIV in the study and also had a prior history of HIV test.

[b] Sample size based on first-time testers and those with a prior history of HIV test. Missing data: Maximum number of missing data was ≤4 across all variables.

TABLE 2

Condom Attitudes and Perceived Vulnerability to HIV among Young Latino Male Gang Members (n = 161)

	"Strongly Agree" or "Agree"	
	Frequency	**Percentage**
Condom attitudes		
My friends think that it is too much trouble to use condoms.	96	61.2
I don't use condoms because sex is better without them.	100	63.3
It is a hassle to use condoms.	88	55.7
Condoms are irritating.	97	61.4
Perceived Vulnerability to HIV		
There is a good chance I will get HIV/AIDS during the next 5 years.	32	20.1
I am at risk for HIV/AIDS.	83	51.9
My friends are at high risk for HIV/AIDS.	104	65.8
There is a possibility that I have HIV/AID.S	65	41.1
I may have had sex with someone who was at risk for HIV/AIDS.	75	47.5
My sexual activities put me at risk for HIV/AIDS.	95	60.5
I am worried that I might get infected with HIV.	102	64.2

TABLE 3

Associations of Sociodemographic Characteristics, Risk Behaviors, Substance Use, Condom Attitudes and Perceived Vulnerability to HIV with Unprotected Vaginal Intercourse among Sexually Active Young Latino Male Gang Members (*n* = 139)

	Unprotected Vaginal Intercourse (*n* = 74)	Bivariate Analyses			Multivariate Analyses		
		Crude Odds	95% CI		Adjusted Odds	95% CI	
Characteristics	***n*(%)**	**Ratios**	**lower**	**upper**	**Ratios**	**lower**	**upper**
Sociodemographics							
Age, y							
18 – 20	29 (39.7%)	1.00	—	—	1.00	—	—
21 – 26	44 (60.3%)	1.90	0.96	3.76	1.47	0.57	3.81
Relationship status							
Married/living together	15 (20.3%)	1.00	—	—	1.00	—	—
Single/separated/divorced	59 (79.7%)	0.63	0.26	1.56	0.40	0.13	1.24
Education							
11th grade or less	38 (51.4%)	1.00	—	—	1.00	—	—
High school or more	36 (48.7%)	0.56	0.28	1.09	0.38*	0.17	0.86
Ever been incarcerated	45 (61.6%)	1.22	0.61	2.44	1.37	0.61	3.08
Number of years belonging to a gang							
1–5	24 (32.4%)	1.00	—	—	1.00	—	—
6–9	24 (32.4%)	0.68	0.30	1.53	0.43	0.16	1.16
>10	26 (35.1%)	1.14	0.49	2.68	0.56	0.17	1.87
Risk behaviors in the past 12 months							
Injected street drugs	9 (12.2%)	1.15	0.40	3.28	—	—	—
Sex with someone who injected drugs	9 (12.2%)	2.11	0.62	7.21	—	—	—
Sex with someone who shared needles	10 (13.5%)	1.88	0.61	5.80	—	—	—
Drank alcohol before sex	62 (83.8%)	0.62	0.23	1.69	—	—	—
Used drugs before sex	57 (77.0%)	1.10	0.50	2.39	—	—	—
Had sex with someone you just met	61 (82.4%)	2.40*	1.09	5.28	3.66*	1.43	9.37

	Unprotected Vaginal Intercourse (n = 74)	Bivariate Analyses			Multivariate Analyses		
		Crude Odds	95% CI		Adjusted Odds	95% CI	
Characteristics	***n*(%)**	**Ratios**	**lower**	**upper**	**Ratios**	**lower**	**upper**
Had sex with multiple partners	15 (20.3%)	0.93	0.41	2.10	—	—	—
Gave money or drugs for sex	15 (20.3%)	1.02	0.44	2.34	—	—	—
Received money or drugs for sex	14 (18.9%)	4.82*	1.32	17.63	5.05*	—	—
Was diagnosed with a STD	15 (20.3%)	1.58	0.64	3.91	—	1.15	22.14
Sex with someone who had a STD	13 (17.6%)	4.40*	1.20	16.23	4.99*	—	—
Sex with someone who was incarcerated	17 (24.0%)	3.56*	1.24	10.34	2.76	1.30	19.15
Substance use in the past 12 months							
Heroin	12 (16.2%)	1.90	0.67	5.40	—	—	—
Powder cocaine	23 (31.1%)	1.18	0.57	2.45	—	—	—
Crack cocaine	32 (43.2%)	1.14	0.58	2.25	—	—	—
Methamphetamine	24 (32.4%)	1.16	0.56	2.39	—	—	—
Ecstasy	10 (13.5%)	0.69	0.28	1.72	—	—	—
Marijuana	58 (78.4%)	0.66	0.28	1.58	—	—	—
Binge drinking (> 5 drinks per episode)	32 (43.2%)	0.95	0.48	1.85	—	—	—
Perceived attitudes: Mean (SD)							
Condom attitudes score (range = 0 –4)	2.34 (0.74)	1.05	0.67	1.64	—	—	—
Perceived vulnerability to HIV score (range = 0 –7)	3.1 (2.39)	0.87*	0.75	0.98	0.82*	0.69	0.97

Note. STD=Sexually transmitted diseases; CI=Confidence Intervals; SD=standard deviation. Multivariate analyses adjusted for age, relationship status, education, incarceration history, and number of years in a gang.

* $p < .05$.

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