

HIV Testing Characteristics Among Hispanic Adolescents

Mindy Ma¹ · Lydia Malcolm¹ · Kristine Diaz-Albertini¹ · Vera A. Klinoff¹

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Abstract Hispanic adolescents are disproportionately impacted by HIV/AIDS. Among Hispanic people living with HIV, delayed testing and late entry into HIV care have been documented. The current study examined Hispanic adolescents' HIV testing characteristics and factors related to testing. Adolescents aged 13–16 ($N = 223$) completed a survey on HIV testing motivation, perceptions, and experience, sexual behavior, and substance use. Results indicate few adolescents (9 %) had taken an HIV test. Among those who have not been tested, 32.5 % expressed interest in testing. HIV testing was favorably perceived with 82.4 % reported testing should be done with all youth or those are sexually active. Adolescents who had engaged in high risk behaviors (history of sexual intercourse, substance use) were more likely to have been tested or to express interest in testing. Given that HIV testing is positively perceived by Hispanic adolescents, prevention efforts should focus on minimizing barriers and enhancing accessibility to HIV screening.

Keywords Hispanic adolescents · HIV screening · HIV risk

Introduction

The Centers for Disease Control and Prevention (CDC) has identified HIV testing as a critical component to HIV/AIDS treatment and prevention. Early diagnosis is associated with effective disease management and reduction in HIV

transmission [1]. Timely HIV testing is particularly critical for the Hispanic community in the United States given that Hispanics are disproportionately impacted by HIV. In 2012, Hispanics had an HIV infection rate that was approximately three times greater than non-Hispanic whites [2]. This disparity is amplified among youth, with Hispanic adolescents accounting for a four times greater rate of HIV diagnosis relative to their non-Hispanic white counterparts (7.9 vs 2.1 per 100,000 population) [2]. Youth aged 13–24 account for approximately a quarter of all new HIV infections, yet it is estimated that 50 % are unaware of their HIV status [3]. Data on youth suggest Hispanic adolescents are less likely to accept HIV testing (39 %) relative to their black (75 %) and white peers (52 %) [4]. Within the Hispanic community, the low rate of testing has been associated with late entry to HIV care, resulting in greater disease morbidity and mortality [5]. These findings underscore the critical need to focus on promoting HIV testing uptake among Hispanic adolescents.

Current literature has explored predictors of HIV testing and strategies to promote testing, including enhancing the effectiveness of HIV counseling, testing, and referral services, and implementing structural changes to HIV testing services [6]. Findings on ethnic/racially diverse samples of adolescents suggest predictors of testing include sexual experience, high risk sexual behaviors, experience with same-gender partner, HIV-related partner communication, substance use, prior sexually transmitted infections testing, access to free testing services, availability of rapid testing methods, and confidential results [6–10]. To date, little is known about HIV testing among Hispanic adolescents despite the serious threat of HIV infection in the Hispanic community. The objective of the current study was to examine HIV testing characteristics and factors related to testing among Hispanic adolescents.

✉ Mindy Ma
mmindy@nova.edu

¹ College of Psychology, Nova Southeastern University, 3301 College Avenue, Fort Lauderdale, FL 33314, USA

Methods

Participants were 223 Hispanic adolescents (53.4 % female) ages 13–16 ($M = 14.4 \pm 1.1$) from the Southeast region of the United States. Adolescents were recruited from programs serving Hispanic youth (e.g., parks, schools, after school programs), at shopping malls, and by the use of flyers. Purposive sampling was employed to recruit eligible participants (Hispanic youth ages 13–16). The majority of the participants were born in the United States (78 %). The sample consisted of 87.9 % white Latino, 9.0 % black Latino, and 3.1 % other Latino. Adolescents resided in households with the following income levels: 22.9 % less than \$20,000, 32.3 % from \$20,000 to \$34,999, 25.0 % from \$35,000 to \$49,999, and 19.8 % reported \$50,000 and over. The income data were collected from parents/guardians. Informed assent/consent was obtained from all study participants and their parent/guardian. The study was approved by the University Institutional Review Board.

Participants completed a survey on demographic variables, HIV testing, and HIV risk behaviors. Survey items included six questions on HIV testing motivation, perceptions, and experience, a question on history of sexual intercourse, and two questions on history of substance use (cigarette, alcohol, recreational drugs, prescription drugs). The survey was conducted on a tablet computer utilizing audio self-interview software (NOVA Research Systems, Questionnaire Development System). Participants self-selected the English or Spanish version of the survey for administration. Adolescents were oriented to the audio computer program with a brief tutorial. The survey was completed in private with a research assistant available to address questions. Following the computer screen with a headset, adolescents listened to a female recording delivering the survey questions. Participants responded by selecting options on the touch screen. Data were analyzed using the Chi-square test of independence.

Results

The demographic and behavioral variables for the study sample are presented in Table 1. Few adolescents (9 %) reported having had an HIV test. Among the participants who had been tested, the number of times tested ranged from 1 to 4 ($M = 1.7$, $SD = 0.9$). Testing was initiated by a number of sources, including self-initiation (35 %), adolescent's mother (30 %), physician (20 %), intervention program (5 %), and don't recall (10 %). Approximately a fifth of the adolescents (23.3 %) indicated a positive history of sexual intercourse. Significantly more sexually experienced adolescents reported testing compared to sexually abstinent adolescents [Chi-square (1 df) = 12.3,

Table 1 Demographic and behavioral characteristics

Variable ($N = 223$)	M	SD
Age	14.4	1.1
	N	%
Gender		
Male	104	46.6
Female	119	53.4
Birthplace		
US born	174	78.0
Foreign born	49	22.0
Ethnic background		
White Hispanic	196	87.9
Black Hispanic	20	9.0
Other Hispanic	7	3.1
Household composition		
Dual parent	107	48.0
Single parent	105	47.1
Guardian	11	4.9
Sexual intercourse history		
Yes	52	23.3
No	171	76.7
Substance use history		
Yes	88	39.5
No	135	60.5
HIV testing history		
Yes	20	9.0
No	203	91.0
Interested in HIV testing ^a		
Yes	66	32.5
No	135	66.5
Don't know	2	1.0

^a Participants who have not had an HIV test ($N = 203$)

$p < 0.001$; 21.2 vs 5.3 % tested] (see Table 2). Additionally, adolescents with a history of substance use were significantly more likely to have had an HIV test [Chi-square (1 df) = 3.9, $p < 0.05$; 13.6 vs 5.9 % tested]. For those who had not been tested for HIV, 32.5 % expressed an interest in testing. More adolescents who had been sexually active indicated an interest in testing relative to sexually naïve adolescents [Chi-square (1 df) = 7.9, $p < 0.01$; 51.2 vs 28.1 % interested in testing]. Interest in testing was also positively associated with history of substance use [Chi-square (1 df) = 4.8, $p < 0.05$; 42.1 vs 27.2 % interested in testing]. A majority of the participants were in favor of HIV testing as indicated by the responses to a question of who should get tested for HIV: all adolescents—49.8 %, adolescents who have sex only—32.6 %, adolescents with multiple sex partners only—7.7 %; adolescents who have sex and use drugs

Table 2 Results of Chi-square tests of HIV testing and interest in testing by history of sexual intercourse and substance use

Variable	Positive history (%)	Negative history (%)	χ^2	<i>p</i> value
Tested for HIV ^a				
Sexual intercourse history	21.2	5.3	12.3	<.001
Substance use history	13.6	5.9	3.9	0.049
Interested in HIV testing ^b				
Sexual intercourse history	51.2	28.1	7.9	0.005
Substance use history	42.1	27.2	4.8	0.029

^a All participants (*N* = 223)^b Participants not tested who endorsed “yes” or “no” to interested in HIV testing (*N* = 201)

only—4.3 %, adolescents with multiple sexual partners and use drugs only—3.4 %, and no one or don’t know—2.1 %.

Discussion

Findings of the current study underscore the need to explore and eliminate barriers to HIV testing among Hispanic adolescents. Our results suggest that despite the low testing rate, HIV testing is favorably perceived by Hispanic youth. Approximately 50 % of the study sample endorsed testing for all adolescents regardless of risk. This is consistent with findings from the Kaiser Family Foundation indicating twice as many Hispanic youth (61 %) endorsed that HIV/AIDS is a “very serious issue for their generation” compared to their white peers (32 %) [11]. The study also reported that 48 % of Hispanic youth perceived HIV/AIDS as an issue that concerned them personally, relative to 35 % white youth. Additionally, Hispanic youth (61 %) were more likely than whites (34 %) to express an interest in obtaining more information on HIV/AIDS. Consistent with prior research on youth from diverse ethnic/racial backgrounds [7], high risk Hispanic adolescents (history of sexual intercourse, substance use) were more likely to have been tested for HIV or to express an interest in testing.

Despite the CDC recommendation of routine opt-out HIV screening for all individuals aged 13–64 years in health-care settings [1], over 90 % of the adolescents in the current study had not been tested, including those expressing interest in testing. Although more than 80 % of Hispanic youth in the United States have health insurance coverage [12], only 31 % had a preventive care visit in the previous 12 months [13]. This suggests that testing venues need to expand beyond healthcare settings. In the present study, only 20 % of the HIV tests were initiated by physicians. HIV testing among adolescents has also been associated with sexually transmitted infection testing [7], a venue that reaches primarily high-risk youth. Alternative strategies to enhance universal HIV testing access may include door-to-door testing, mobile outreach, adolescent-based programs in community settings, and school-based testing.

The current study has a few notable limitations, including the cross sectional design, self-report data, and the inclusion of Hispanics into a single homogeneous group due to the small sample size of subgroups of Hispanic youth. Despite these limitations, our results expand the current literature by gaining insight into Hispanic adolescents’ testing experience and perceptions. Although interested in testing, a majority of sexually active adolescents had not been tested for HIV. Future research and clinical practice should explore social and structural barriers to HIV testing that are specific to Hispanic youth, and identify culturally appropriate strategies to enhance testing accessibility.

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Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

Research involving human participants The study was approved by the University Institutional Review Board.

Informed consent All respondents and their parent/guardian provided assent/consent to participate in the study.

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