

Heterosexual Women of Color and HIV Risk: Sexual Risk Factors for HIV Among Latina and African American Women

Claudia L. Moreno, PhD
Nabila El-Bassel, DSW
Allison C. Morrill, JD, PhD

ABSTRACT. This paper examines sexual risk for HIV among 2,318 Latina (60%) and African American (40%) women with a steady male partner who were attending an urban outpatient clinic.

We compared ethnic groups on demographic characteristics (including being born in the U.S.) and sexual HIV risk factors (number of partners, history of sexually transmitted infection, condom use, and reported knowledge and perception of partner risk) while controlling for other demographic characteristics.

African American women were about 1.5 times more likely than Latinas to report five or more sexual partners in their lifetime, to report two or more partners in the past year, and to perceive their partners as being risky. African American women were about 2.5 times more likely than Latinas to have had a history of sexually transmitted infections (STIs).

Claudia L. Moreno is Assistant Professor, Rutgers, The State University of New Jersey, 536 George Street, New Brunswick, NJ 08901 (E-mail: clmoreno@rci.rutgers.edu).

Nabila El-Bassel is Professor, Columbia University School of Social Work, New York, NY 10027 (E-mail: ne5@columbia.edu).

Allison C. Morrill is President, Capacities, P.O. Box 92, Watertown, MA 02471 (E-mail: a.morrill@capacities.org).

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They were also nearly twice as likely as Latinas to report having used condoms with their main partner in the past 90 days.

Intervention strategies for HIV prevention must address ethnic/racial differences in sexual risk factors for HIV among Latina and African American women. doi:10.1300/J013v45n03_01 [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <<http://www.HaworthPress.com>> 2007 by The Haworth Press, Inc. All rights reserved.]

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INTRODUCTION

Despite a general decline in the incidence of AIDS among several risk groups, heterosexual women of color represent the highest increase in cases of HIV/AIDS (Centers for Disease Control and Prevention [CDC], 2004a). In 2003, the CDC reported a greater rise in HIV infection rates for females (15%) compared with males (1%; CDC, 2003). One reason is that heterosexual transmission of the virus is 12 times more likely from men to women than from women to men (Padian, Shiboski, & Jewell, 1990). About 80% of the AIDS cases in females have been found in Latinas and African Americans (CDC, 2004b), and heterosexual contact has been identified as the leading route of transmission for both these groups (CDC, 2003, 2004a; Semple, Patterson, & Grant, 2002). Most women were infected by their primary male sexual partner (Marmor et al., 1990; O'Leary, 2000).

HIV/AIDS and Women of Color

African American and Latina women, respectively, comprise about 13 and 12% of the female U.S. population (U.S. Census Bureau, 2000). African American women represent 63% of the cumulative AIDS cases in the U.S., and this rate is three times more than the rate for Latinas and 23 times the rate for White women (CDC, 2004b). Latinas represent 15% of the cumulative AIDS cases (CDC, 2004a, b). African American women account for 64% of the AIDS cases transmitted via heterosexual contact and 33% of cases transmitted through injection drug use. Although Latinas account for a smaller proportion of AIDS cases transmitted

through injection drug use (16%) they account for the largest proportion of cases transmitted through heterosexual contact (75%; CDC, 2004b).

Negotiating safer sex represents a considerable challenge for women of color for a number of reasons that remain poorly understood and frequently overlooked in the prevention and intervention measures adopted (Amaro, 1995; Suarez & Siefert, 1998; Wingood & DiClemente, 1997). Gender-based power imbalances (Amaro, 1995; Amaro & Raj, 2000; Pulerwitz et al., 2002; Wingood & DiClemente, 1997), and psychosocial and cultural factors that include history of victimization, cultural norms, beliefs, attitudes, social networks, self-efficacy, and levels of environmental stress, can all influence women's decisions about sexual practices (McNair & Prather, 2004; Nyamathi & Stein, 1997). Specific contextual factors for African American women include the gender-ratio imbalance, historical and personal victimization, low levels of condom use, high rates of HIV infection among Black men, as well as drug and sexual HIV risk behaviors; in addition, researchers have identified low levels of risk perception for HIV, especially among women who are in monogamous relationships, as contributing to HIV risk (Fullilove, Fullilove, Haynes, & Gross, 1990; McNair & Prather, 2004; Pulerwitz et al., 2002; Weeks et al., 1995; Wingood & DiClemente, 1997).

Latinas have a great deal of misinformation regarding HIV transmission and risky partners, stigma about condom use and lower scores on measures of self-efficacy for condom use (Marin & Marin, 1992; Pulerwitz et al., 2002; Yeakley & Grant, 1997). Furthermore, complex cultural scripts such as *machismo* and *marianismo* are implicated in Latina women's power differentials and, as a result, women are not comfortable negotiating safer sex or discussing sexual matters (Amaro, 1995; Marin, Tschann, Gómez, & Gregorich, 1998; Suarez & Siefert, 1998; Yeakley & Grant, 1997). Influenced by *marianismo*, a Latina's identity is often determined by her fertility and any barriers to conception are challenging (Ickovics et al., 2002). Due to *machismo*, men are expected to have multiple sexual partners (O'Leary, 2000). Gomez and colleagues (1999) stated that cultural constructs of traditional sexual norms and sexual comfort were key determinants of condom use.

Both groups are similar in the level of homophobia such that Latino and African American males do not disclose their bisexuality (Pulerwitz et al., 2002; Wohl et al., 2002), and both groups have a low use of condoms (Marin & Marin, 1992; Wingood & DiClemente, 1997). Most of the empirical research conducted with women of color has shown that Latina and African American women share the same demographic risk factors for HIV infection (CDC, 2004a; Suarez & Siefert, 1998; Warner &

Leukefeld, 1999; Marmor et al., 1990). Both ethnic groups have high rates of poverty, unemployment and lower educational attainment, single-parent homes, discrimination and oppression. Latinas differ from African Americans on immigration patterns, language barriers and some cultural factors that might distinguish and play a role in the disparity of HIV risk factors. However, the risk factors that distinguish Latinas from African American women can be complex and might relate to divergence in exposure, cultural factors, and vulnerability to the virus due to acculturation, immigration patterns, having risky partners, and a multiplicity of risk behaviors (Warner & Leukefeld, 1999).

Comparative Studies of HIV Risk Behaviors Among African Americans and Latinas

Some researchers maintain that ethnicity is not a predictive factor for risk but, rather, is a marker for social class (Ickovics et al., 2002). Thus, it is likely that together social class (education and income) and ethnicity can produce a better predictor of risk than ethnicity alone.

Soler and colleagues (2000) conducted a study with 393 sexually active, low-income women who attended family planning and sexually transmitted infection (STI) clinics. The study examined how the couple's relationship dynamics, characterized by attitudes, behaviors, and beliefs, varied the extent of condom use. The sample was 55% Latina, 26% African American and 31% White women. Black and Latina women reported higher levels of consistent condom use compared with White women, and that Latina women felt more at ease in discussing sex and condoms with their partners.

Although Latina and African American women share many demographic characteristics that have been identified as placing them both at higher than average risk for HIV transmission, more research is needed to compare not only their specific sexual risk factors, but also their differing patterns of association between individual characteristics and sexual risk for HIV. Our first research question was to identify similarities and differences between Latina and African American women in terms of sexual risk for HIV (number of partners, history of STIs, condom use with a main male partner, knowledge and perception of partner's risk factors) in a sample of 2,318 Latina and African American women attending an outpatient clinic in New York City. In addition, this research sought to determine whether any associations between ethnicity

and sexual risk for HIV are influenced by other demographic characteristics (age, marital status, educational level, employment, nativity).

METHODS AND PROCEDURES

Sample Recruitment and Selection

Women in this study were being screened for eligibility to participate in Project Connect, a 4-year randomized clinical trial of a relationship-based HIV prevention program. That study was designed to examine the effectiveness of a theory-driven prevention intervention adapted to low-income Latina and African American women and their main sexual partners (El-Bassel et al., 2003; Schiff et al., 2003). Data collected during the screening interviews, which were administered to a much broader sample of women than those who ultimately qualified for Project Connect, were analyzed to address our research questions.

The women were recruited from a large, urban hospital in a low-income neighborhood in The Bronx, a borough of New York City. In four of the six areas served by this hospital, about 40% of the local residents live in poverty; about 48% are Latino and 35% are African American (New York City Department of Health, 2000). Neighborhood areas served by the hospital have one of New York City's highest rates of HIV/AIDS prevalence, 2-3 times higher than in other parts of the City (New York City Department of Health, 2000).

To recruit participants, recruiters posted fliers in the outpatient clinics to encourage women ages 18-55 years to join the study. The flier described Project Connect as an intervention designed to help couples stay healthy and enhance their communication with each other. In addition to recruitment via fliers, two female Project Connect staff, an African American and a Puerto Rican, approached women who came to the clinics and recruited participants during the hours of 9:00 a.m. to 3:00 p.m. The Puerto Rican recruiter was bilingual and primarily approached Spanish-speaking women.

Women who expressed interest were invited to complete a 15-minute face-to-face screening interview that took place in a private room at the clinic. This interview was available in either Spanish or English. As an incentive for completing the screening interview, interviewers gave participants a round-trip subway card, valued at \$3.00. The interviewer verbally explained to the women an informed consent, previously approved by the Institutional Review Board (IRB) of the university and the

health care facility. The document was also available in Spanish. After reviewing the document, the woman was asked to sign it and given a copy. Once the consent form was signed, the screening took place. A third of the women approached refused to complete the screening interview. No data were collected concerning women who declined the screening. Women who completed the screening interview reflected the population of patients served at the hospital in terms of age distribution, race/ethnicity, income, and employment status.

Measures

Demographic Characteristics

Demographic characteristics included age, race/ethnicity, marital status, work for pay (both legal and/or illegal activities) in the past month, years of education, and birth location.

Sexual Risk Factors for HIV

Respondents' sexual HIV risk behavior was measured using selected items of the Sexual Risk Behavior Questionnaire (SRBQ). The SRBQ was developed by the investigators and has been used in prior studies (El-Bassel, 1998; Gilbert, 2000) with over 2,000 women and men from similar health care settings, such as emergency departments, drug and Sexually Transmitted Infection (STI) clinics. The selected items included: (1) number of sexual partners in their lifetime, (2) number of partners during the last year, (3) ever having an STI (such as gonorrhea, syphilis, Chlamydia, or herpes). Additional items for those who had intercourse with a main partner in the past 90 days included (4) condom use (yes/no), and for those who had used one (5) frequency of condom use (from 0 = "never" to 4 = "every time"). A 3-month (90-day) time period was used based on conceptual and theoretical arguments indicating that it provides the most favorable balance of reliability and validity.

To measure partner risk factors, women were asked whether their main partner had any of the following factors in the past 90 days that might place the woman at risk for HIV infection: (1) had sex with men or other women; (2) contracted or exhibited symptoms of an STI (e.g., pain during urination, sores on the penis); (3) injected drugs; and (4) HIV positive diagnosis. Interviewers showed a card listing all four risk factors; participants who responded in the affirmative were not queried as to which specific risk factor their partner exhibited. In addition, participants

who answered in the negative were asked whether or not they believed their partner might have had any of those risk factors.

Statistical Analyses

These analyses included only women who identified as Latina or African American, excluding 100 women (4%) who identified as white. We used descriptive statistics (t-test and Chi-square) to compare the demographic characteristics and sexual risk factors for HIV of Latina and African American women. We used multiple logistic regressions to measure associations between demographic characteristics and each of the six sexual risk factors for HIV. For each outcome the model initially included all demographic characteristics listed on Table 1, as well as interaction terms for ethnicity versus each of the other demographic characteristics. For the multiple regression analyses, the categorical variables marital status, education, and employment were collapsed to be dichotomous. The final model for each outcome retained (1) ethnicity, (2) education, employment, and birthplace because in bivariate analyses each was strongly associated with ethnicity ($p < .0001$), to control for possible confounding, (3) other predictors that were significantly related to the outcome (with α at .05) in the initial regression analysis, and (4) if an interaction term was significant ($\alpha = .05$), both of the relevant main variables. The analyses were performed using SAS (version 8.1).

TABLE 1. Demographic Characteristics of Participants by Ethnicity

Characteristic	African American (n = 921)	Latina (n = 1,397)	t (p)
	Mean (SD)	Mean (SD)	
Age (years), Range = 17-84	37.7 (10)	38.0 (12)	n.s.
	% (n)	% (n)	χ^2 (p)
Married	14 (131)	17 (232)	n.s.
Education (n = 2,113)			29.0 (< .0001)
Less than high school	41 (354)	53 (654)	
High school/GED	35 (300)	27 (335)	
College or higher	25 (215)	21 (255)	
Employed	27 (252)	19 (232)	20.4 (< .0001)
Born in the U.S.	93 (857)	40 (556)	661 (< .0001)

RESULTS***Ethnicity and Other Demographic Characteristics of Participants***

This sample was 60% Latina and 40% African American (Table 1). The mean age was about 38 years old, and most of the women (84%) were single. African American women were significantly more likely than Latinas to be employed, to have a high school diploma/GED or higher education, and to be born in the U.S.

Ethnicity and Sexual Risk Factors for HIV

Significant differences were found between African American and Latina women for most of the sexual risk factors for HIV (Table 2). Significantly more African American than Latina women reported having five or more lifetime sexual partners (29% vs. 18%), two or more sexual

TABLE 2. Sexual Risk Factors for HIV by Ethnicity

Characteristics	African American (n = 921)	Latina (n = 1,397)	Total (n = 2,318)	χ^2 (p)
	% (n)	% (n)	% (n)	
Number of partners–lifetime				89.8 (< .0001)
Four or fewer	38 (340)	67 (907)	56 (1,247)	
Five or more partners	62 (545)	33 (450)	44 (995)	
Number of partners–past year				175.3 (< .0001)
None	13 (116)	20 (285)	17 (401)	
One partner	55 (507)	64 (889)	60 (1,396)	
Two or more partners	32 (293)	16 (222)	22 (515)	
History of STI–ever	48 (441)	19 (271)	31 (712)	212 (< .0001)
<i>Among women who had intercourse with a main partner (n = 1,298)</i>				
Condom use with main partner–90 days				37.2 (< .0001)
No	65 (359)	80 (593)	73 (952)	
Yes	35 (197)	20 (149)	27 (346)	
Frequency (n = 346)				n.s.
Some of the time	55 (108)	64 (95)	59 (203)	
Every time	45 (88)	36 (55)	41 (143)	
Main partner's behavior				n.s.
Known to be risky	15 (85)	12 (87)	13 (172)	
Perceived to be risky (n = 1,190)	35 (167)	22 (142)	27 (309)	26.3 (< .0001)

partners in the past year (62% vs. 33%), and a history of STI (48% vs. 19%). At the same time, a significantly higher proportion of African American women than Latina women used condoms with their main partner (35% vs. 20%); however, among those who used condoms at all, the difference in frequency of use (45% vs. 36% used them all of the time) was not statistically significant. With regard to partner risk factors, although overall 13% knew their main sexual partner's behavior to be risky, significantly more African American than Latina women perceived their partner's behavior to be risky (35% vs. 22%).

Demographic Characteristics and Sexual Risk Factors for HIV

In multiple regression models we observed the following differences by ethnicity, taking into account effects of other demographic characteristics (Table 3): African American women remained more likely than Latinas—about 1.5 times more likely—to report five or more lifetime partners, to report two or more partners in the past year, and to perceive that their main partner has risk factors, and remained more likely to have had an STI (about 2.5 times more likely). Similarly, African American women remained nearly twice as likely as Latinas to report using condoms for sexual activity with their main partner in the past 90 days.

Regression analyses also revealed that older women were less likely to have more than one partner in the past year, but their main partners were more risky. Being married was significantly associated with lower risk on five of the risk outcomes, as well as less condom use with a main partner. Being born in the U.S. was significantly associated with higher risk on all outcomes except condom use with a main partner. Being employed was significantly associated with perceiving fewer partner risk factors.

In the initial models, in only two instances was any interaction with ethnicity significant (with $\alpha = .05$). In the final models, neither of the interactions with ethnicity remained statistically significant.

DISCUSSION

The present study examined and compared HIV sexual risk factors of African American and Latina women from a community-based sample. African American and Latina participants were compared in terms of other demographic characteristics, sexual risk factors that included number of partners, history of STIs, condom use with the main partner, and knowledge and perception of main partner's risk.

TABLE 3. Demographic Characteristics and Sexual Risk Factors for HIV (Multiple Logistic Regression)

Sexual Risk Factor	Entire Sample (n = 2,318)		Among Women Who Had Intercourse with a Main Partner (n = 1,298)			
	Number of Partners (5 or More)—Lifetime	Number of Partners (2 or More)—Past Year	History of STI	Any Condom Use with Main Partner—90 Days	Main Partner Known to Have Risk Factor	Main Partner Perceived to Have Risk Factor (n = 1,128)
	Odds Ratio (95% Confidence Limits)					
Ethnicity (AA vs. Latina)	1.44 (1.16, 1.79)	1.62 (1.27, 2.07)	2.43 (1.94, 3.04)	1.78 (1.32, 2.40)	1.00 (0.67, 1.49)	1.59 (1.15, 2.20)
Age	—	0.98 (0.97, 0.99)	—	—	1.03 (1.01, 1.05)	—
Married	0.48 (0.36, 0.63)	0.35 (0.24, 0.52)	0.61 (0.45, 0.82)	0.46 (0.32, 0.66)	0.47 (0.28, 0.79)	0.37 (0.24, 0.56)
High school education	0.89 (0.72, 1.08)	0.94 (0.75, 1.17)	0.68 (0.55, 0.84)	1.08 (0.82, 1.41)	0.53 (0.37, 0.75)	0.75 (0.56, 1.01)
Employed	1.17 (0.93, 1.47)	0.84 (0.65, 1.00)	0.86 (0.68, 1.09)	0.91 (0.67, 1.23)	0.67 (0.43, 1.04)	0.39 (0.27, 0.56)
Born in the U.S.	5.34 (4.19, 6.80)	3.01 (2.22, 4.10)	3.21 (2.45, 4.21)	1.40 (0.99, 1.97)	1.92 (1.20, 3.09)	2.15 (1.46, 3.15)

Our data revealed that almost half of both African American and Latina had less than a high school education. Both groups were in a disadvantaged position because of low educational attainment and lack of employment which is consistent with other studies that suggest that HIV risk factors is more prevalent among poor minorities (Amaro & Raj, 2000; Fenton, 2004; Ickovics et al., 2002), yet the groups differed significantly in their demographic characteristics. Latinas reported lower levels of education and higher unemployment rates than African American women. Also, Latinas were far more likely to be recent immigrants. These findings are consistent with other studies that find that recent immigrants tend to have lower educational levels, be poor, and have lower levels of employment (Chapa & Valencia, 1993; U.S. Census Bureau, 2000).

Our data showed that although both groups of women of color engaged in risky behaviors, Latina women, compared with African American women, had significantly fewer sexual partners in their lifetime and were significantly less likely to have two or more partners during the year before the study. Significantly, more African American women had a history of STI. These findings are consistent with studies that have shown that African Americans become sexually active at a younger age and have more casual partners (Adimora et al., 2002).

Although more African American women exhibited these HIV risk behaviors, we also found that more of them than Latinas perceived their main partners as having HIV risk factors. Furthermore, African American women were more likely than Latinas to use condoms in their sexual activities with steady partners (although among the respondents who did use condoms, the frequency of condom use did not differ between African American women and Latinas). Nevertheless, condom use cannot be considered the sole indicator of protection. It is important to take into consideration the difficulties and challenges that women face, such as power imbalances in the relationship, lack of communication, and the need to learn skills needed to employ other HIV protection measures (e.g., alternative safer sexual activities, abstinence or harm reduction).

Overall, Latinas showed low use of condoms and low perceived HIV risk from their partners. The two findings are likely related, in that condom use has been found in other studies to be related to perception of risk (Catania et al., 1994), and Latinas in this study saw their partners as having lower risk than the African American women did. Prevention and intervention strategies for Latinas should aim to improve their ability to make a realistic assessment of their risks for HIV, and to eliminate

prevalent myths about transmission. Cultural factors and the context for use of protection also need to be explored with this group.

Another possible explanation for low condom use might be that the sample included a large number of foreign-born Latinas, and foreign-born Latinas have been reported to use condoms at a lower rate (Catania et al., 1994). Although this was not an hypothesis that these analyses were designed to test (very few African Americans in the sample were foreign-born, and the interaction of ethnicity versus birthplace fell short of significance), the significance of being born in the U.S. as a covariate indicates that being foreign-born can be a protective factor for some aspects of sexual risk for HIV and, moreover, may be more strongly associated with those risk indicators than employment and education. If confirmed in further research, this could mean that foreign-born and native women should receive different messages of prevention for HIV risk.

Differences between ethnic groups were robust; they remained consistent even when controlling for potential confounding effects of education, employment, and birthplace, as well as marital status (which did not differ by ethnicity). Other demographic factors were not associated with risk in interaction with ethnicity. Consequently, we conclude that the effects of ethnicity are independent, and not mediated by those other related or unrelated demographic factors.

One of the limitations of the study is that it included a non-random sample, so the results cannot be considered representative of African American and Latina women. Also, the refusal rate was relatively high. Because the purpose of the interview was to determine eligibility for Project Connect, which was described as “an intervention designed to help couples stay healthy and enhance their communication with each other,” it is possible that women who agreed to the screening interview were different from those who declined in significant ways that we did not have the opportunity to measure or control. For example, we do not know whether women with problematic relationships were more or less likely to agree to the screening. Other possible participation biases include the possibility of more participation by women who were healthier, more aware of risk behaviors, or more motivated to use preventive behaviors.

Another limitation is the possibility that some women, specifically Latinas, provided more socially acceptable responses, thus minimizing reporting of their risk behaviors, such as the number of partners and their history of STIs, when being interviewed by strangers (Marin & Marin, 1990; Nyamathi & Stein, 1997). Thus, an accurate picture of their high risk behaviors requires further study. Another limitation is that the analysis

focused on Latinas as a uniform group compared with African American women, but Latinas differ among themselves in terms of nativity, years in this country, and acculturation. The same can be said when studying African American versus African Caribbean cultures; and consideration of differences in such factors might lead to different results.

In spite of these limitations, the study provides useful information and insights about the differences in HIV risk factors for Latinas and African American women. Sexual activities take place within a relationship, a social context, and a culture. The findings have implications for the design of HIV prevention and intervention strategies for low-income Latina and African American women. To promote effective HIV intervention strategies for these groups, such strategies must address contextual and racial/ethnic differences as well as HIV risk factors, behaviors, and attitudes.

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