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Deportation history among HIV-positive Latinos in two U.S.-Mexico border communities

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Abstract

Background—Health-related vulnerabilities associated with deportation are understudied. We conducted a cross-sectional study to identify factors associated with history of deportation from the U.S. to Mexico among HIV-positive Latinos.

Methods—From 2009-2010, we recruited a convenience sample from HIV clinics in San Diego, U.S. and Tijuana, Mexico.

Results—Of 283 participants, 25% reported a prior deportation. Factors independently associated with increased odds of deportation history were being male (AOR:2.77; 95%CI: 1.18-6.48), having high-school education (AOR:3.87;95%CI:1.84-8.14), ever using cocaine (AOR:2.46; 95%CI:1.33-4.57), and reporting personalized HIV-stigma: “some have told me HIV is what I deserve for how I lived” (AOR:2.23; 95%CI:1.14-4.37). Lower self-reported antiretroviral medication adherence (AOR:0.35; 95%CI: 0.12-0.96) and perceiving HIV-stigma: “most people believe a person who has HIV is dirty” (AOR:0.49; 95%CI: 0.25-0.94) were associated with decreased odds of deportation history.

Conclusions—Deportation is associated with specific socioeconomic indicators that are known to impact the health of individuals living with HIV.

Keywords

Deportation; HIV/AIDS; Latinos/Hispanics; ART adherence; stigma

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Background

For individuals living with HIV, deportation poses significant challenges to clinical disease management (e.g., medication adherence, care continuity) and may exacerbate healthcare disparities [1-3]. Deportation is a pervasive and complex global phenomenon that in most cases increases migrant vulnerability to poor health outcomes [4-6]. Deportation may facilitate binational disease transmission among undiagnosed cases, those whose HIV is poorly managed, or who experience barriers to accessing antiretroviral therapies (ART) [7]. In the United States (U.S.) deportations have increased over the last five years; in 2012, an unprecedented 409,849 individuals were removed from the U.S. [8-10], half of the removals were for criminal charges, and the most common crime was illegal drug activity [11,12]. Latinos, primarily of Mexican origin, comprise 97% of U.S. deportees [13]. Thus, the health of deportees, including those living with HIV, is an important binational issue.

San Diego, California is adjacent to Tijuana, Baja California, and the two cities share one of the most frequently crossed borders in the world [10,14,15]. Tijuana is a major deportee-receiving city, with an influx of ~200 deportees on a daily basis [8,14]. California and Baja California also share the largest number of cumulative HIV/AIDS cases of all U.S.-Mexico Border States. In 2010, California reported 165,410 cases of HIV (367 per 100,000 population) and Baja California 6,718 cases (201 per 100,000 population) [16,17]. Circular migration and engagement in high-risk sexual and drug using practices between residents of San Diego and Tijuana may exacerbate the HIV epidemic in both cities and complicate service provision for the U.S. and Mexico [15].

Undocumented U.S. Latinos are significantly disadvantaged in health when compared to other U.S. Latinos and non-Latino White populations, experiencing, for example, a differential delay in access to care [3,4,18]. Many HIV-positive U.S. Latinos, including undocumented immigrants face structural, social and economic barriers to health and well-being, including poverty, limited educational attainment, language barriers, chronic underemployment, and unstable and substandard housing [18,19]. Furthermore, HIV-positive migrants may suffer doubly from stigma and discrimination for being HIV-positive and undocumented [3]. As a consequence of these health-related disparities, which also include lack of insurance with limited access to HIV care and ART, undocumented HIV-positive Latinos have a shorter life expectancy due to late-stage diagnosis of HIV [20,21].

The health consequences of deportation are sorely understudied [7], especially among populations living with HIV. Health risks associated with deportation among HIV-positive individuals may include discrimination, worsening of existing behavioral risks (e.g. unprotected sex, drug use), or introduction of new risks (e.g. survival sex work) [5,7,22]. Other health consequences of deportation include stress and anxiety over being in unfamiliar surroundings, without financial resources and often without identification documents [6,22,23]. Thus, deportation is not only a barrier to healthcare, but it has been associated with heightened risk of acquiring and transmitting HIV infection [22]. This binational study identifies factors associated with deportation history among HIV-positive Latinos living in two U.S.-Mexico border communities.

METHODS

Study population

Between July-2009 and January-2010, we recruited a convenience sample of 283 HIV-positive Latinos from community-based social services agencies and health clinics in San Diego (n=141) and Tijuana (n=142). Study details have been published previously [24-26]. Eligible participants were 18 years of age, HIV-positive by self-report, of Mexican or Latin American origin, residing in Tijuana or San Diego for 1 month in the prior year. Trained study recruiters read the consent statement to potential participants in their preferred language (Spanish or English), and voluntary written consent was obtained from all participants. This study was approved by the UCSD Human Research Protection Program and the Bioethics Committee at the General Hospital in Tijuana.

Measures

Surveys were administered face-to-face by trained bilingual staff interviewers at the recruitment site in private rooms. Clinic personnel were not in the room when the interview was conducted. The survey was adapted from our prior work with HIV-positive Latinos in the U.S.-Mexico border region [27,28] and was translated into Spanish by a professional translator. The interview took ~40 minutes and participants were offered \$20 USD as a token of appreciation for their time.

Dependent and independent variables

The primary dependent variable was U.S. deportation history based on the question “*Have you ever been deported from the U.S.?*” (yes vs. no). We also asked how many times the participant had been deported and if they have ever been stopped in the U.S. or held in an immigration detention facility. Participants were not asked their current immigration status and the reason of their deportation. Covariates were selected based on their relevance to the outcome variable and included: i) socio-demographic characteristics (e.g., age, gender, marital status, educational level and employment); ii) HIV care and binational care seeking practices, for example, time since HIV diagnosis, recent HIV-related medical visits, ART, use of complementary and/or alternative medicine (CAM), self-rated health and felt depressed in the past week, and medical insurance in the U.S. and Mexico; iii) drug use and unsafe sexual practices, (e.g., unprotected anal or vaginal sex in the last 3 months), ever bought, sold, or traded sex for money, drugs, alcohol or other goods, and “ever” used drugs (i.e., cocaine, methamphetamine, marijuana or injected any drugs).

We also included indicators of HIV-related stigma that have been validated in studies with other Latino populations [29]: personalized dimension (e.g. “some people have told me HIV is what I deserve for how I lived”, “*people seem afraid of me because I have HIV*”) and concern with public attitude dimension (e.g., “*most people believe a person who has HIV is dirty*”, “most are rejected when others learn of their status”). Participants were asked how often they agreed with the stigma statements on a 4-point scale (i.e., always, often, sometimes, never). Responses were recoded into a single binary variable for each statement “always/often” and “sometimes/never”.

Statistical analysis

We compared sociodemographic characteristics, healthcare practices, risk behaviors, and HIV-related stigma stratifying our descriptive analyses by “U.S. deportation history”. Continuous variables were examined using *t* tests. Categorical data were examined using Fisher's exact test or X^2 tests. Univariate and multivariate logistic regression were performed to identify factors associated with a self-reported U.S. deportation history. Variables that had a significance level of $P < 0.10$ in the univariate analysis were considered as potential factors for inclusion in the final multivariate model. The final logistic regression model contained only variables significant at $P < .05$. In the final model, we controlled for recruitment site, marital status, and years living with HIV and tested for potential interactions among all variables in the final model but found none to be significant. STATA statistical package version 11.0 was used to perform the analyses.

RESULTS

Study participant characteristics

Participants ($n=283$) had a median age of 40 years ($SD=10$) and were mostly male (78%). About two thirds (66%) were single, more than half reported less than high school educational attainment (61%) and half were unemployed (49%). A third (32%) had been stopped in the U.S. or held in an immigration detention facility and twenty-five percent ($n=71$) of study participants reported ever having been deported from the U.S. to Mexico. (See Table 1). Almost half (47%) were deported once, 29% were deported between two and three times and 24% of participants were deported more than three times.

HIV care and binational care-seeking practices

At the time of enrollment in our study, about half of the participants (47%) had been living with HIV/AIDS >6 years. Sixty-nine percent ($n=194$) first tested positive for HIV in Mexico and 29% in the U.S. ($n=81$). One third (32%) waited longer than the recommended 3 months before accessing HIV care, 17% accessed care from 30 days to 3 months, and half (51%) accessed care within 30 days. Ninety-one percent reported at least one HIV-related healthcare visit in the last 6 months. Sixty-three percent of the participants perceived their health as excellent/good, yet an indicator of depression revealed that almost half (46%) reported feeling depressed in the past week. Most participants (83%) reported currently being on ART. We asked participants how often they took their ART as their doctor prescribed and only 54% mentioned “all of the time.” The use of CAM was common; 71% reported the use of vitamins or supplements, 30% herbs or plants and 28% reported using non-prescription medications. Almost half reported using CAM to manage their HIV.

Half of the participants reported having made one or more round trips across the U.S.-Mexico border in the last 6 months. Seeking healthcare and medications were the most frequent reasons for crossing the border. More than half of the participants had medical insurance or other type of healthcare coverage either in the U.S. (59%) or Mexico (57%) and some (20%) in both countries.

Drug use and unsafe sexual practices

Participants in our study were sexually active and illicit drug use was not uncommon. The most common lifetime drug used was marijuana (48%), followed by cocaine (36%) and methamphetamine (34%); 9% reported injecting drugs. About two-thirds of the participants (60%) reported having 1 or more sexual partners in the last three months, and 28% had unprotected vaginal sex. One quarter (24%) reported ever buying, selling or trading sex for money, alcohol or drugs.

Perceived HIV Stigma

Twenty-nine percent of the participants agreed with the statement “*People seem afraid of me because I have HIV*” and 29% with “People told me HIV is what I deserve for how I lived” (i.e., personalized HIV-stigma). Seventy percent agreed with “*People believe a person with HIV is dirty*” and 81% reported they agreed with “Most with HIV are rejected when others learn of their status” (i.e., concerned about public attitude).

Factors associated with history of U.S. deportation

In univariate analyses, we compared the characteristics of HIV-positive deported vs. nondeported Latinos using unadjusted logistic regression (See Table 1). We found no significant differences by age, marital status or perceived depression. HIV-positive deported participants had higher odds of being male (Odds Ratio [OR]=2.23, 95%CI:1.04-4.81), having less than a high school education (OR=4.22, 95%CI:2.14-8.31) and being unemployed (OR=1.89, 95%CI:1.09-3.27). Deportees had lower odds of having U.S. medical insurance (OR=0.37, 95%CI:0.21- 0.66). They also had significantly higher odds of ever having bought, sold or traded sex for money or drugs (OR=2.19, 95%CI:1.21-3.97) and ever having used cocaine (OR=3.10, 95%CI:1.78- 5.40), methamphetamine (OR=2.35, 95%CI:1.35- 4.08), heroin (OR=6.56, 95%CI:2.75-15.65), marijuana (OR=1.81, 95%CI: 1.05-3.13), and injected any drugs (OR=4.95, 95%CI:1.91-12.78).

HIV-positive deported Latinos were more likely than non-deportees to have experienced personalized instances of HIV-related stigma, such as “people told me HIV is what I deserved for how I lived” (38% vs. 22%, OR=2.15, 95%CI:1.20-3.84); yet they were less likely to be concerned with public attitudes toward HIV, including “most people believe a person who has HIV is dirty” (58% vs. 74%, OR=0.49, 95%CI:0.28-0.87) and “most with HIV are rejected when others learn of their status” (73% vs. 83%, OR=0.54, 95%CI: 0.28-1.02).

The final multivariate logistic regression model was controlled for gender, marital status, years living with HIV, and recruitment site (See Table 2). Factors independently associated with a history of deportation included being male (adjusted odds ratio [AOR]=2.77, 95% CI: 1.18-6.48), having less than a high school education (AOR=3.87, 95% CI:1.84-8.14), lifetime cocaine use (AOR=2.46, 95% CI: 1.14-4.37), and having experienced personalized stigma (AOR=2.23, 95% CI:1.14-4.37). Additionally, factors negatively associated with history of deportation were self-reported unsupervised changes to their ART regimen (AOR=0.35, 95% CI: 0.12-0.96) and awareness of stigma related to public attitude towards HIV (AOR=0.49, 95% CI: 0.25-0.94).

DISCUSSION

A quarter of our HIV-positive patients in two border communities were ever deported, and findings suggest that HIV-positive Latinos with deportation history have different social vulnerabilities and risk behaviors than non-deported HIV-positive persons. Deportees were more likely than non-deportees to have lower educational attainment, lifetime use of illicit drugs, such as cocaine, and report experiencing HIV-related stigma associated with shame and feeling that others were afraid of them. Interestingly, we found that HIV-positive deportees were also less likely to report making unsupervised changes to their ART, which may indicate higher medication adherence in this population. A discussion of these findings follows.

Lower educational attainment was found among our deportee population which coincides with prior research indicating that undocumented individuals and deportees are socioeconomically vulnerable [30]. Indeed, our earlier work revealed that lower educational attainment was also associated with lower health-related quality of life indicators among border region Latinos living with HIV [28], and these findings are consistent across other studies [3,31,32]. Strategies for reducing socioeconomic vulnerabilities, especially educational opportunities among immigrant populations at risk for deportation, will require policy changes that favor bringing immigrant persons out of the shadows of society and allowing them to participate in educational and formal economic opportunities. Policy changes such as President Obama's amendment of U.S. immigration policy in 2012, which allowed certain undocumented minors to forgo deportation, may improve educational opportunities for some undocumented Latinos [33]. This reform may also lead to better health outcomes among younger undocumented Latinos living with HIV. Because HIV disproportionately affects socioeconomically depressed communities, removal of educational and other structural barriers is a longer-term and broader impact solution to HIV prevention and care engagement [34]. We lack data on the timing (i.e., pre or post-deportation) or country where HIV infection occurred. The U.S. has removed the travel ban for HIV-infected individuals which may aid in reducing stigma and other social barriers for persons living with HIV [35-37]. This strategy may foster HIV-prevention activities (e.g., voluntary testing) among immigrant communities and promote binational collaboration around HIV/AIDS prevention and care provision. A multipronged approach to preventing and controlling HIV/AIDS is warranted in the U.S.-Mexico context.

Deportees in our study were more likely to report drug-use behavior than non-deportees; this finding may be due to U.S. immigration policy which has focused on deporting individuals with criminal backgrounds, including drug-related charges [22,38]. Other studies find that deportation is a possible risk factor for the uptake of higher-risk drug use once deported, the use of new drugs, and risk behaviors (e.g., sharing syringes) [5,30]. Ongoing efforts are needed to link substance users with effective and evidence based drug rehabilitation programs [39,40] in addition to HIV care. Current Mexican government efforts to link deportees with needed care include healthcare referral modules located strategically at Mexican border crossing ports of entry [19,41].

Deportees were less likely to report making unsupervised changes to their current ART regimens. This finding is consistent with our prior binational work that indicates higher ART adherence among HIV-positive Tijuana patients when compared with their counterparts in San Diego [25]. Since a greater proportion of our deportee study sample was recruited in Tijuana vs. San Diego (46 and 25 individuals, respectively), it is plausible that ART adherence indicators reflect higher adherence among HIV-positive Latinos who receive care in Tijuana and are not necessarily related to history of deportation. Adherence to ART is critical among people living with HIV for treatment success, to reduce AIDS-related mortality and to prevent HIV transmission [34]. Increasing access to care and improving health outcomes for people living with HIV, reducing HIV-health disparities, and reducing new HIV infections are the three primary goals of the National HIV/AIDS strategy in the U.S. [42]. In Mexico, there is also a comprehensive strategy to improve access to health services, including HIV care (e.g., Estrategia Integral a la Atención de la Salud del Migrante) [19,41]. Establishment of formal collaboration and binational strategies to promote HIV care and treatment for people living with HIV in the U.S.-Mexico border is clearly needed to improve the continuity of their ART regimen.

Deportees were twice as likely as non-deportees to report HIV-related stigma associated with feelings of guilt and shame (e.g., “HIV is what I deserved for how I lived”). These findings are important to consider within the context of other types of internalized stigma associated with undocumented status in the U.S. or deportation itself. Feelings of guilt or shame may contribute to poor mental health and delays in seeking care, which can undermine health outcomes (e.g., co-infections, ART adherence) among HIV-positive individuals [3]. Lastly, our finding that deportees were less likely than non-deportees to report generalized (“community”) indicators of HIV-related stigma (e.g., “Most people believe a person who has HIV is dirty”) may indicate that persons with a history of deportation may be more isolated and place less emphasis on perceived broader societal opinions than how they feel about themselves, which supports our earlier finding that personalized HIV-related stigma was more prominent among deportees than non-deportees. Interestingly, a recent border study of Latinos living with HIV noted that individuals who reported concern about others thinking badly of them because they are HIV-positive were more likely to engage in care sooner than individuals who did not report this concern about what others thought [43]. The apparent dissonance between personalized (“I feel”) versus society-driven (“others think”) in these cases may be due to our limited ability to measure the relative impact of different types of stigma. Clinic-based interventions may help Latino patients manage these feelings and promote continued care engagement, although development of interventions to promote effective HIV care engagement among Latinos living with HIV remains an area of research need.

Limitations of this study include a cross-sectional design, which limits our ability to understand temporal relationships between deportation, HIV diagnosis, and related health outcomes. Because the present study was not designed to investigate immigration issues among people living with HIV, the immigration status was not an inclusion criterion for the parent exploratory study on which the current study is based. We also lacked details surrounding dates and reasons of the deportation. Individuals living with HIV in this border region are a relatively small population and rely on local health services. For these ethical

considerations, the study investigators avoided questions that may affect population's access to health benefits or medical services. The present study focused on a local sample in two border cities and may reflect the dynamic with other binational cities along the U.S.-Mexico border which potentially limits its generalizability to non-border cities. However, given that in the past decade the immigrant population has been increasing in destinations beyond the traditional border-receiving states [44,45] (e.g., Illinois, Washington, Colorado, North Carolina, etc.), our population could have similar characteristics as other HIV-positive immigrant Latinos living in non-border states. Longitudinal studies with undocumented and deported populations are sorely needed, including studies on how deportation affects care-seeking practices among HIV-positive Latinos in a binational context. Although U.S. Immigration and Customs Enforcement protocols make reference to a coordinated 'hand-off' of deportees to Mexican officials [9,10], the U.S. deportation process often leaves individuals with health needs without adequate guidance or support to access care in Mexico [19]. Cities like Tijuana that receive a large volume of deportees each day [14,15] are now responding to a public health crisis to link deportees with diverse health needs into care (e.g., tuberculosis). Individual health status pre-deportation will influence the migrants' healthcare needs in the post-deportation period. Interventions or programs designed to help link deportees into care, shelters, and other services will benefit from ongoing quantitative and qualitative research to better understand the needs of this underserved population.

Our study provides a critical step in the process of understanding that deportation is associated with specific socioeconomic and stigma-related indicators known to impact the health of individuals living with HIV. Given the increased number of U.S. detentions and deportations, including individuals living with HIV, greater attention is needed to improve binational coordination of care entry and engagement in Mexico. Current deportation policies and lack of resources do not favor the coordination of clinical care for individuals living with HIV and will undoubtedly have broader repercussions on the health of our shared U.S.-Mexico border populations [23,31,46].

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Table I

Univariate analysis of factors associated with deportation from the United States to Mexico among HIV-positive Latinos living in the U.S.-Mexico border region (N=283)

Variables	Total	Ever Deported		OR (95% CI)
	n=283 N (%)	YES (n=71) n (%)	NO (n=212) n (%)	
Sociodemographics				
Mean Age (SD)	40 (10)	41 (11)	40 (10)	1.00 (0.97-1.02)
Gender: Female	60 (21%)	9 (13%)	51 (24%)	1.00
Male	222 (78%)	62 (87%)	160 (76%)	2.23 (1.04-4.81) *
Marital Status: single/separated ^a	188 (66%)	51 (72%)	137 (65%)	1.39 (0.77-2.51)
Less than high school of education	173 (61%)	59 (83%)	114 (54%)	4.22 (2.14-8.31) ***
Unemployed in the last 3 months	138 (49%)	43 (61%)	95 (45%)	1.89 (1.09-3.27) *
Recruitment site: San Diego	141 (50%)	25 (35%)	116 (55%)	1.00
Tijuana	142 (50%)	46 (65%)	96 (45%)	2.22 (1.27-3.88) **
HIV care and binational care seeking practices				
Years living with HIV: > 6 years since HIV diagnosis	132 (47%)	36 (51%)	96 (45%)	1.00
6 years since HIV diagnosis	151 (53%)	35 (49%)	116 (55%)	0.80 (0.46-1.37)
Had at least one HIV-related clinic visit in the last 6 months	237 (91%)	63 (95%)	174 (89%)	2.53 (0.73-8.78)
Currently taking ART	231 (83%)	56 (80%)	175 (85%)	0.73 (0.36-1.46)
Participants took their ARV as doctor prescribed “all of the time” ^b	154 (54%)	33 (47%)	121 (57%)	0.65 (0.38-1.12)
Participants made major changes from ARV’s doctor prescribed	44 (16%)	6 (8%)	38 (18%)	0.42 (0.17-1.04) [‡]
Used complementary and alternative medicine				
Herbs/Plants	83 (30%)	18 (26%)	65 (31%)	0.77 (0.42-1.43)
Vitamins/supplements	200 (71%)	50 (70%)	150 (71%)	0.96 (0.53-1.74)
Had U.S. medical insurance	166 (59%)	29 (41%)	137 (65%)	0.37 (0.21-0.66) ***
Had Mexican medical insurance	161 (57%)	37 (52%)	124 (58%)	0.77 (0.45-1.32)
Reported 1 round trip border crossing in the last 6 months	142 (50%)	51 (71%)	91 (43%)	0.29 (0.16-0.52) ***
Perceived health: excellent/ good ^c	179 (63%)	44 (62%)	135 (64%)	0.92 (0.53-1.61)
Felt depressed in the past week	131 (46%)	38 (54%)	93 (44%)	1.46 (0.84-2.50)
Drug use and unsafe sexual practices				
Sex partners in the last 3 months: 0	113 (40%)	34 (48%)	79 (37%)	1.00
1	108 (38%)	20 (28%)	88 (42%)	0.52 (0.28-0.99) *
2+	62 (22%)	17 (24%)	45 (21%)	0.87 (0.44-1.74)
Ever sold or traded sex for money, alcohol or drugs	67 (24%)	25 (35%)	42 (20%)	2.19 (1.21-3.97) **
Had vaginal or anal sex without condom in the last 3 months	46 (28%)	10 (28%)	36 (27%)	1.01 (0.44-2.31)
Lifetime drug use: Cocaine	102 (36%)	40 (56%)	62 (29%)	3.10 (1.78-5.40) ***
Methamphetamines	97 (34%)	35 (49%)	62 (29%)	2.35 (1.35-4.08) ***

Variables	Total	Ever Deported		OR (95% CI)
	n=283 N (%)	YES (n=71) n (%)	NO (n=212) n (%)	
Heroin	25 (9%)	16 (23%)	9 (4%)	6.56 (2.75-15.65) ***
Marijuana	136 (48%)	42 (59%)	94 (44%)	1.81 (1.05-3.13) *
Injected any drugs	26 (9%)	15 (21%)	11 (5%)	4.95 (1.91-12.78)
HIV-related stigma dimensions^d				
Personalized stigma				
People seem afraid of me because I have HIV	83 (29%)	26 (37%)	57 (27%)	1.60 (0.90-2.84) [‡]
People told me HIV is what I deserve for how I lived	74 (26%)	27 (38%)	47 (22%)	2.15 (1.20-3.84) **
Concern with public attitudes about people living with HIV				
Most people believe a person with HIV is dirty	193 (70%)	40 (58%)	153 (74%)	0.49 (0.28-0.87) **
Most with HIV are rejected when others learn of their status	229 (81%)	52 (73%)	177 (83%)	0.54 (0.28-1.02) *

^cParticipants who reported “always/often” they are agree with the statements of HIV-related stigma (reference group: “sometimes/never”)

[‡] $p < .10$

* $p < .05$

** $p < .01$

*** $p < .001$

^aSingle/separated vs. married/with partner

^b“All of the time” vs. “Most/some/a little of the time”

^c“Excellent/Good” (includes good/very good/excellent) vs. “Fair” (includes fair/poor/very poor)

Table 2

Factors independently associated with history of U.S. deportation among HIV-positive Latinos living in the U.S.-Mexico border region. (N=283)

Variable	AOR	95% CI
Male ^a	2.77	1.18 - 6.48
Less than high school education ^b	3.87	1.84 - 8.14
Reported making major unsupervised changes to ART as their doctor prescribed ^c	0.35	0.12 - 0.96
Ever used cocaine ^c	2.46	1.33 - 4.57
Some have told me HIV is what I deserve for how I lived ^d	2.23	1.14 - 4.37
Most people believe a person who has HIV is dirty ^d	0.49	0.25 - 0.94

Note: Adjusted for recruitment site, marital status and years living with HIV

AOR= Adjusted odds ratio CI= Confidence Interval

^aReference group: Female

^bReference group: High School

^cReference group: No

^dParticipants who reported “always/often” when asked how often they experienced specific instances of HIV-related stigma (reference group “sometimes/never”)