History of Arrest and Associated Factors among Men Who Have Sex with Men

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ABSTRACT *Incarceration has been proposed to be a driving factor in the disproportionate impact of HIV in African-American communities. However, few data have been reported on disparities in criminal justice involvement by race among men who have sex with men (MSM). To describe history of arrest and associated factors among, we used data from CDC's National HIV Behavioral Surveillance system. Respondents were recruited by time-space sampling in venues frequented by MSM in 15 US cities from 2003 to 2005. Data on recent arrest (in the 12 months before the interview), risk behaviors, and demographic information were collected by face-to-face interview for MSM who did not report being HIV-positive. Six hundred seventy-nine (6.8%) of 10,030 respondents reported recent arrest. Compared with white MSM, black MSM were more likely to report recent arrest history (odds ratio (OR), 1.6; 95% confidence interval (CI), 1.3–2.1). Men who were less gay-identified (bisexual [OR, 1.5; 95% CI, 1.1–1.9] or heterosexual [OR, 2.0; 95% CI, 1.2–3.5]) were more likely to report recent arrest than homosexually identified men. In addition, men who reported arrest history were more likely to have used non-injection (OR, 3.0; 95% CI, 2.4–3.6) and injection (OR, 4.7; 95%, 3.3–6.7) drugs, exchanged sex (OR, 2.7; 95% CI, 2.1–3.4), and had a female partner (OR, 1.5; 95% CI, 1.2–2.0) in the 12 months before interview. Recent arrest was associated with insertive unprotected anal intercourse in the 12 months before interview (OR, 1.4; 95% CI, 1.2–1.7). Racial differences in arrest seen in the general US population are also present among MSM, and history of arrest was associated with high-risk sex. Future research and interventions should focus on clarifying the relationship between criminal justice involvement and sexual risk among MSM, particularly black MSM.*

KEYWORDS *Black, MSM, Sexual identity, Incarceration, Risk behavior, HIV/AIDS*

INTRODUCTION

The HIV epidemic has disproportionately impacted black men who have sex with men (MSM) in the USA.^{1–5} However, a recent qualitative review found black MSM to have comparable or lower rates of HIV-risk behaviors than white MSM despite a high prevalence of sexually transmitted diseases and unrecognized HIV infection.⁶

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This suggests that much remains to be learned about the disparity in HIV/AIDS among black MSM beyond individual risk behaviors.

In CDC's "Heightened National Response to the HIV Crisis in African Americans," incarceration is proposed as one factor that elevates HIV risk among black Americans.⁷ Indeed, black men represent the largest proportion of all incarcerated men in federal or state prisons and local jails.⁸ The overall incarceration rate for black men in 2008 was 6.5 times the rate of white men.⁹ In addition, black men in state and federal prisons represent the largest proportion to report being HIV-positive among inmates who had ever been tested for HIV.¹⁰ However, the pathways by which incarceration may increase HIV risk is unclear, and it is unknown whether these mechanisms may be different for black MSM and blacks with other primary risks for HIV acquisition, such as injection drug use.

To determine whether the stark disparities by race in criminal justice involvement evident in the US population also exist among MSM, we sought to describe factors associated with history of recent arrest among MSM. Specifically, our null hypothesis was that black MSM were no more likely than white MSM to report history of arrest. Our secondary goal was to describe whether recent arrest was associated with high-risk sex; our null hypothesis for this goal was that MSM with a history of arrest were no more likely than MSM with no history of arrest to report engaging in unprotected anal intercourse (UAI) in the past 12 months. We tested our hypotheses by analyzing data collected in the Centers for Disease Control and Prevention (CDC) National HIV Behavioral Surveillance System (NHBS) from MSM in 15 US cities from 2003 to 2005.

METHODS

Study Population

We conducted a secondary analysis of data from MSM who participated in the first cycle of National HIV Behavioral Surveillance (NHBS-MSM1) from November 2003 to April 2005 in 15 US metropolitan statistical areas (MSAs). Analyses were conducted on data from the following 15 MSAs: Atlanta, GA; Baltimore, MD; Boston, MA; Chicago, IL; Denver, CO; Fort Lauderdale, FL; Houston, TX; Los Angeles, CA; Miami, FL; Newark, NJ; New York City, NY; Philadelphia, PA; San Diego, CA; San Francisco, CA; and San Juan, PR. NHBS is an ongoing behavioral surveillance system established by CDC in 2003 to assess trends in HIV-risk behaviors, testing, and HIV prevention services among three groups: MSM, injecting drug users, and heterosexuals at increased risk.¹¹ NHBS data are collected in rotating cycles, approximately once every 3 years from each of the three groups. NHBS is conducted in cities with high AIDS prevalence (where approximately 60% of all cases of AIDS are reported).¹¹

A venue-based, time-space sampling strategy was used to systemically recruit participants in venues frequented by MSM in these cities. These venues include bars, dance clubs, fitness clubs, Gay Pride events, parks or beaches, raves or circuit parties, restaurants or cafes, retail businesses, sex establishments or sex environments, social organizations, street locations, or other venue types. The NHBS sampling strategy and rationale have been described previously.¹²

Within selected venues, men were approached and screened for eligibility. Men were considered eligible if they were at least 18 years of age, a current resident of a participating MSA and able to provide informed consent. Men who were

determined to be eligible were invited to participate in a face-to-face interview. For the present analyses, we included only men who reported at least one male sex partner in the 12 months before the interview and excluded men who reported being HIV-infected. This exclusion was necessary in order to identify factors potentially associated with outcomes for persons at risk for acquiring HIV infection.

NHBS-MSM1 was determined to be non-research by the CDC Institutional Review Board (IRB). Each local NHBS site reviewed the CDC study protocol and returned a determination from their respective IRB.

Measures

The NHBS survey consists of questions concerning participants' sociodemographic characteristics (race/ethnicity, age, education, city, and the venue type in which the participants were recruited), HIV-risk related behaviors, sexual identity, HIV testing behaviors, and history of incarceration. Participants are asked about behaviors during three time frames: ever (at any point in the participant's lifetime), during the 12 months prior to the interview, and most recent (the most recent time the participant engaged in the behavior).

The primary analytic outcome of interest for this analysis was history of arrest. Arrest history in the past 12 months was used as a proxy measure for history of criminal justice involvement. History of recent arrest was assessed by the following question: "In the past 12 months, have you been arrested—that is, picked up by the police?"

Our secondary analytic outcome related to high-risk sexual behaviors. Men were asked several questions about their sexual behavior in the previous 12 months. Men were asked with how many male partners they had anal or oral sex. Male sex partners were further defined as main or casual partners. The overall number of male partners was recorded for casual and main partner types. Men were asked whether they had had oral, anal or vaginal sex with a female partner, and were asked if they engaged in UAI with a male partner. In our analysis, UAI was defined as having any unprotected anal intercourse, whether receptive or insertive, with a male partner during the past 12 months.

Several explanatory variables were included in our analysis because of their known associations with incarceration. These variables included drug use,^{13–15} exchange sex,^{13,16} and sexual risk behavior^{13–15,17,18} in the previous 12 months. Men were asked about their drug use history and whether they had engaged in exchange sex.

Data Analyses

Analytic methods were similar for the analyses of factors associated with recent arrest and of the relationship between UAI and recent arrest. In both cases, to determine whether to treat variables collected as continuous measures (age, number of male partners) as continuous or categorical variables in our multivariate logistic regression analysis, we produced estimated logit plots. Variables that demonstrated a non-linear relationship with the outcome were treated as categorical or were transformed. Otherwise, variables that demonstrated a linear relationship with the outcome were treated as continuous. To assess bivariate relationships for non-normally distributed continuous variables with the outcome, we performed the Wilcoxon rank-sum test.

To report bivariate associations with the outcomes, crude odds ratios and 95% confidence intervals (CIs) were calculated versus referent groups. Variables that were

significantly ($P < 0.10$) associated with arrest in bivariate analyses were eligible for consideration for inclusion in the final model. To control for possible confounding of demographic and behavioral covariates, we performed multivariate logistic regression to obtain adjusted odds ratios (aOR) and 95% CIs. MSA was included in all models. The variables were assessed for collinearity and screened using the backward selection method of SAS version 9.2 (SAS Institute, Cary, NC, USA). All possible two-way interactions of retained main effects were assessed for significance using forward selection; to account for assessment of a large number of potential interactions, the experiment-wise alpha was set at 0.05 using a Bonferroni-type correction. Interaction terms that were significant according to the adjusted P value were retained in subsequent models.

Further analyses were conducted to describe the association between arrest and UAI (any, insertive, and receptive), while controlling for demographic and behavioral covariates and including history of arrest as a covariate. The modeling procedures were the same as described for the model of factors associated with recent arrest.

RESULTS

Overall, 23,861 men were approached in gay-identified venues; 17,322 (73%) were eligible to participate, and 13,670 (79% of eligible) agreed to participate and completed an interview. In addition to the eligibility criteria, we restricted our analysis to 10,030 (73% of interviewed) men who reported being male, having had at least one male sex partner during the 12 months prior to the interview, and did not report being infected with HIV.

Six hundred seventy-nine (6.8%) of the men reported recent arrest. Table 1 summarizes demographic and behavioral characteristics of respondents included in the analysis. The participants reported a median age of 33.0 years. Nearly half of the men identified as non-Hispanic white, with lower numbers of non-Hispanic black, and Hispanic men. The majority of men identified as homosexual, although over one in six identified as bisexual. Most men were recruited in bars, dance clubs, raves, and circuit parties. The majority of men reported completing more than high school. Nearly half of men reported non-injection drug use, but few men reported injection drug use, in the past 12 months.

Most men reporting recent arrest had a main male partner and more than one male partner in the past 12 months (Table 2). The median number of male partners in the past 12 months was 4.0. A minority of men reported having a female partner or having an exchange sex partner in the past 12 months. Nearly half of men reported having a UAI partner in the past 12 months. When the men were asked about the last time they had sex with a main or casual male partner, 24.4% reported engaging in unprotected insertive anal sex and 18.4% engaged in unprotected receptive anal sex (data not shown in Table 2).

Table 2 shows the results from the multivariable analysis of factors associated with recent arrest. Men who had identified as black or Hispanic were more likely to report recent arrest than men who had identified as white. Bisexual and heterosexual sexual identities were significantly associated with recent arrest compared to homosexual identity. Men who reported having completed less education, using non-injection and injection drugs, exchanging sex, or engaging in UAI were more likely to report recent arrest than men who did not report these characteristics. Men who had a female partner were more likely to report recent arrest than men who did

TABLE 1 Demographic and behavioral characteristics of men who have sex with men participating in the National HIV Behavioral Surveillance System, 15 US cities, 2003–2005

Characteristic	Number ^f	Percent
Race/ethnicity		
White, non-Hispanic	4,510	45.0
Black, non-Hispanic	1,739	17.3
Hispanic	2,680	26.7
Asian/Pacific Islander	449	4.5
Other ^a	544	5.42
Age group (years)		
18–24	2,186	21.8
25–34	3,493	34.8
35–44	2,937	29.3
45–54	1,043	10.4
≥55	371	3.7
Education		
≤High school diploma or equivalent	2,249	22.4
>High school	7,775	77.5
Sexual identity		
Homosexual	8,305	82.8
Bisexual	1,516	15.1
Heterosexual	123	1.2
Other	83	0.8
Recruitment venue		
Bars, dance clubs, raves, and circuit parties	5,715	57.0
Sex establishments and environments	420	4.2
Other venues	3,788	37.8
Metropolitan statistical area		
Atlanta, GA	719	7.2
Baltimore, MD	563	5.6
Boston, MA	661	6.6
Chicago, IL	960	9.6
Denver, CO	723	7.2
Fort Lauderdale, FL	554	5.5
Houston, TX	418	4.2
Los Angeles, CA	1,245	12.4
Miami, FL	701	7.0
New York City, NY	447	4.5
Newark, NJ	411	4.1
Philadelphia, PA	481	4.8
San Diego, CA	394	3.9
San Francisco, CA	1,195	11.9
San Juan, PR	558	5.6
Used non-injection drugs, past 12 months		
Yes	4,322	43.1
No	5,702	56.9
Used injection drugs, past 12 months		
Yes	194	1.9
No	9,836	98.1
Had main male partner ^b , past 12 months		
Yes	6,856	68.4
No	3,174	31.7

TABLE 1 Continued

Characteristic	Number ^f	Percent
Had female partner, past 12 months		
Yes	1,450	14.5
No	8,580	85.5
Had male UAI partner ^c , past 12 months		
Yes	4,699	46.9
No	5,331	53.2
Had exchange partner ^d , past 12 months		
Yes	702	7.0
No	9,328	93.0
Number of male partners, past 12 months		
1	2,402	24.0
2–5	3,955	39.4
≥ 6	3,673	36.6
HIV status ^e , most recent test result		
Negative	8,968	89.4
Unknown	1,062	10.6
History of arrest, past 12 months		
Yes	679	6.8
No	9,349	93.2

^aIncludes 40 American Indian/Alaska Native, 332 multiracial and 172 other

^bA man with whom the participant had sex and to who he felt most committed (e.g., boyfriend, spouse, significant other, or life partner)

^cNeither the participant nor his partner used a condom

^dA partner with whom the participant had sex with in exchange for things they needed (e.g., money, drugs, food, shelter, or transportation)

^eNegative includes 21 indeterminate. Unknown includes 788 untested, 251 test but no result received, and 23 unknown

^fN=10,030. Numbers might not add to total because of missing data

not have a female partner. Having six or more male sex partners was associated with reporting recent arrest. The difference in distribution of age by recent arrest was significant ($P<0.0001$) and inverse.

In separate multivariable models of sexual risk outcomes controlling for race, age, and MSA, recent arrest was not associated with any UAI (aOR, 1.2; CI, 0.99–1.4) or receptive UAI (aOR, 1.1; 95% CI, 0.8–1.3) in the past 12 months, but was associated with insertive UAI in the past 12 months (aOR, 1.4; 95% CI, 1.2–1.7; data from full models not shown).

DISCUSSION

According to our data from a large sample of US MSM, the disparities in criminal justice involvement by race observed in the general US population are also present among black and white MSM. Overall, 6.8% of MSM reported arrest in the year prior to the interview.

Black MSM were more likely to report arrest history than white MSM. Our data provide additional information in this area where prior studies have reported mixed results. For example, no racial differences were found in reported incarceration history in a study of Young Men’s Survey (YMS) participants in Los

TABLE 2 Associations between demographic and behavioral factors and history of arrest in the past 12 months among men who have sex with men participating in the National HIV Behavioral Surveillance System, 15 US cities, 2003–2005

Categorical variables		History of arrest in past 12 months	No history of arrest in past 12 months	Crude OR (95% CI)	Adjusted OR (95% CI)
Race					
White, non-Hispanic		211 (31.5)	4,298 (46.5)	Referent	Referent
Black, non-Hispanic		209 (31.2)	1,530 (16.5)	2.8 (2.3–3.4)	1.6 (1.3–2.1)
Hispanic		186 (27.8)	2,493 (27.0)	1.5 (1.2–1.9)	1.3 (1.0–1.7)
Other ^a		63 (9.4)	930 (10.1)	1.4 (1.0–1.8)	1.4 (0.99–1.9)
Sexual identity					
Homosexual		406 (59.8)	7,897 (84.5)	Referent	Referent
Bisexual		229 (33.7)	1,287 (13.8)	3.5 (2.9–4.1)	1.5 (1.1–1.9)
Heterosexual		33 (4.9)	90 (1.0)	7.1 (4.7–10.8)	2.0 (1.2–3.5)
Other		11 (1.6)	72 (0.8)	3.0 (1.6–5.7)	1.8 (0.9–3.5)
Education					
≤High school diploma or equivalent		339 (49.9)	1,910 (20.4)	3.9 (3.3–4.6)	2.1 (1.7–2.5)
>High school		340 (50.0)	7,433 (79.6)	Referent	Referent
Recruitment venue					
Bars, dance clubs, raves, and circuit parties		377 (55.8)	5,337 (57.7)	0.9 (0.8–1.1)	–
Sex establishments and environments		35 (5.2)	385 (4.2)	1.1 (0.8–1.8)	–
Other venues		264 (39.1)	3,523 (38.1)	Referent	Referent
Used non-injection drugs, past 12 months					
Yes		484 (71.4)	3,837 (41.1)	3.6 (3.0–4.3)	3.0 (2.4–3.6)
No		194 (28.6)	5,507 (58.9)	Referent	Referent
Used injection drugs, past 12 months					
Yes		83 (12.2)	111 (1.2)	11.6 (8.6–15.6)	4.7 (3.3–6.7)
No		596 (87.8)	9,238 (98.8)	Referent	Referent
Had main male partner ^b , past 12 months					
Yes		417 (61.4)	6,437 (68.9)	0.7 (0.6–0.9)	–
No		262 (38.6)	2,912 (31.2)	Referent	Referent

TABLE 2 Continued

	History of arrest in past 12 months	No history of arrest in past 12 months	Crude OR (95% CI)	Adjusted OR (95% CI)
Had female partner, past 12 months				
Yes	257 (37.9)	1,193 (12.8)	4.2 (3.5–4.9)	1.5 (1.2–2.0)
No	422 (62.2)	8,156 (87.2)	Referent	Referent
Had male UAI partner ^c , past 12 months				
Yes	357 (52.6)	4,341 (46.4)	1.3 (1.1–1.5)	1.2 (1.0–1.5)
No	322 (47.4)	5,008 (53.6)	Referent	Referent
Had exchange partner ^d , past 12 months				
Yes	198 (29.2)	504 (5.4)	7.2 (6.0–8.7)	2.7 (2.1–3.4)
No	481 (70.8)	8,845 (94.6)	Referent	Referent
Number of male partners, past 12 months				
1	113 (16.6)	2,288 (24.5)	Referent	Referent
2–5	245 (36.1)	3,710 (39.7)	1.3 (1.1–1.7)	1.0 (0.8–1.2)
≥ 6	321 (47.3)	3,351 (35.8)	1.9 (1.6–2.4)	1.3 (1.0–1.7)
HIV status ^e , most recent test result				
Negative	566 (83.4)	8,400 (89.9)	Referent	Referent
Unknown	113 (16.6)	949 (10.2)	1.8 (1.4–2.2)	–
	Median value for history of arrest	Median value for no history of arrest	Crude OR (95% CI)	Adjusted OR (95% CI)
Continuous variables				
Age ^f (years)	27.0	33.0	0.6 (0.6–0.7)	0.7 (0.6–0.8)

History of arrest in past 12 months, N=679. No history of arrest in past 12 months, N=9,349. Numbers might not add to total because of missing data

^aIncludes 449 Asian/Pacific Islander, 40 American Indian/Alaska Native, 332 multiracial, and 172 other

^bA man with whom the participant had sex and to who he felt most committed (e.g., boyfriend, spouse, significant other, or life partner)

^cNeither the participant nor his partner used a condom

^dA partner with whom the participant had sex with in exchange for things they needed (e.g., money, drugs, food, shelter, or transportation)

^eNegative includes 21 indeterminate. Unknown includes 788 untested, 251 test but no result received, and 23 unknown

^fOdds ratios calculated per 10 years

Angeles,¹⁹ but a similar study using national YMS data found that young black MSM were more likely to report history of incarceration than other MSM.²⁰

MSM who were more gay-identified were less likely to report history of arrest. Similarly and independently, there was an association between reporting a recent female sex partner and higher odds of recent arrest. Approximately 17% of this sample was non-gay identifying (NGI) MSM (did not identify as homosexual) and 15% reported having a female partner; the majority of men exhibiting these characteristics were black. In comparison to other MSM, black MSM are less likely to identify as gay or to disclose their sexual identity²¹ and are more likely to be bisexually active.²² However, racial differences found in gay identity and disclosure of homosexuality among MSM were controlled for in our analysis, and thus, the association of black race and recent arrest was not the result of confounding with sexual identity. Regardless of race/ethnicity, MSM and men who have sex with men and women (MSMW) are much less likely to have ever been or recently been arrested and to have ever been charged with a criminal offense than heterosexual men.^{16,23,24} Even among MSM, men who have sex with men and women are more likely to report incarceration history than men who have sex only with men.²⁵

Men who reported using non-injection and injection drugs and exchange sex activity were more likely to report arrest history. These findings are consistent with previous studies.^{13–16} Although there are no racial differences in drug use and exchange sex among MSM,⁶ it is important to address these behaviors because they are associated with sexual risk behaviors in this population.^{26–31} In focus group interviews conducted among NGI black MSM/MSMW, the men revealed that they use drugs, alcohol, and exchange sex as coping mechanisms to resolve conflicts between their racial and sexual identities.³² Among the interviewed men, those in treatment for substance abuse indicated that self-acceptance of their sexuality was necessary for recovery. Interventions that assist NGI black MSM/MSMW in cultivating positive self-identification may prove to be an effective strategy for reducing their HIV-risk behavior.³³ Future research is needed to better understand the sociocultural contexts in which racial and sexual identities are reconciled among black men.^{32–34}

The finding of our secondary analysis—that arrest history was associated with insertive, but not receptive UAI—is consistent with a previous study with a small group of black MSM in North Carolina, which also found that criminal justice involvement was associated with subsequent unprotected insertive, but not receptive, anal intercourse.³⁵ The reason for this role-specific association is not clear, but the consistency of this finding in two studies suggests it may merit further investigation. Black MSM have been more likely to report insertive anal sex than white MSM³⁶ regardless of incarceration history, but this association would not explain why insertive UAI would be associated with recent arrest in a model controlling for race. Ideally, we would have liked to control for sexual risk behaviors *before* arrest in our analysis of the association of UAI and arrest, but these data were not available. Although our cross-sectional design precludes our knowing when these men engaged in insertive UAI with respect to their arrest, our data underscore the need to strengthen preventive programs and harm reduction strategies in correctional facilities.

Most men with HIV in prison come into prison with HIV; we have previously reported that, in the Georgia prison system, only 11% of prevalent infections in prison were acquired in prison.³⁷ Nonetheless, prison is a high-risk setting for sex: Prevalent HIV infection rates were 4.4 times as high in prisons as in the general

population in 2002,¹⁰ although prevalence rates have since declined 26%.³⁸ Furthermore, there is limited access to condoms in most correctional facilities, with less than 1% of national prisons and jails permitting condom distribution.^{10,39}

There are a number of limitations in this study. First, the cross-sectional design of the study makes it difficult to interpret associations because the direction of causation cannot be established. Second, the study sample was restricted to men who frequented MSM-identified venues in selected MSAs and therefore it is not representative of all MSM. Moreover, our findings may not be generalized to MSM in rural areas or smaller cities in the USA. The majority of men in our study were recruited in bars, dance clubs, raves, and circuit parties. Because attendance in these venues has been associated with drug use and sexual risk behaviors,⁴⁰ it is possible that our results may overestimate the true extent of drug use and sexual risk behavior among MSM. Also, the NHBS sampling strategy used for recruitment did not sample men via the Internet; there is growing recognition of the important role of Internet use for meeting sexual partners among MSM, and MSM who meet sex partners online may have higher levels of sexual risk behaviors.⁴¹ Also, it did not sample current prisoners, whose MSM behaviors may have been limited to while they were incarcerated.⁴² Third, the participants may not have accurately disclosed their risk behaviors during the interview. Although their responses are subject to social desirability bias, it is believed to be minimal because the interview was anonymous and confidentiality was assured. In addition, the participants may not have accurately recalled behaviors for all three time frames (recall bias): ever, the 12 months before interview, and at most recent sex. Finally, the assessment of history of arrest reflects differential involvement in crime: "In the past 12 months, have you been arrested—that is, picked up by the police?" Given that only the most serious offenses lead to imprisonment, it is possible that our proxy measure of arrest may overestimate the true extent of incarceration among MSM. Our use of arrest history as a proxy for incarceration history also assumes that racial disparities in arrest are similar to those in incarceration, and this assumption is not well validated.⁴³ Although 27% of persons arrested nationally were black in 2004, a higher percentage of jail populations, and an even higher percentage of state prison systems, was black.⁴⁴

Given that our data suggest that criminal justice involvement is more common among black than white MSM, incarceration is a candidate factor that might help explain black/white disparities in HIV prevalence and incidence among MSM. However, the mechanisms by which such an effect might operate among MSM are not clear. A greater portion of black men with HIV infection were reported to have passed through a jail or prison in the past year (estimated between 22% and 28%), compared to white men with HIV infection (estimated between 11% and 17%).⁴⁵ Incarceration has been proposed to impact HIV risk by decreasing the number of marriageable men in black communities with high rates of incarceration, thereby promoting partner concurrency,^{32,46} but this consideration is less relevant for MSM. Men may have additional HIV risk behaviors while incarcerated. A study in the Georgia prison showed that risk from male–male sex was a primary driver of within-prison transmission and that most men who had male sex partners in prison did not have male sex partners before entering prison.³⁷ Further, being incarcerated may change patterns of protective behaviors for MSM: Incarcerated men and men with a history of incarceration may become habituated to unprotected sex.⁴⁷

The association between history of insertive, but not receptive, UAI, is intriguing. In the context of the discussion of how incarceration may shape men's

risk for HIV, it will be important to ascertain whether the tendency to engage in insertive UAI and a propensity to be arrested are both related to some underlying trait of certain men, or whether the experience of being incarcerated leads to an adoption of insertive UAI behavior. This will be best done by collecting more detailed data about sex behaviors before, during, and after incarceration, using both quantitative and qualitative methods.

Despite these limitations, the findings from this study shed light on how race, criminal justice involvement, and sexual identity relate to sexual risk behavior among MSM. Understanding these relationships and addressing modifiable factors in prevention programs is critical in our efforts to address differentially high rates of HIV infection among black MSM.

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