


Association between Recent Criminal Justice Involvement and Transactional Sex among African American Men Who Have Sex with Men in Baltimore

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Abstract Non-Hispanic Black/African American men who have sex with men (AAMSM) have been disproportionately affected by criminal justice (CJ) involvement and HIV. One potential pathway between CJ involvement and high HIV prevalence and incidence among AAMSM is through risky sexual behavior. The goal of this study was to explore the association between recent CJ involvement, i.e., having been arrested and/or in prison/jail in the past 6 months, and transactional sex in a sample of AAMSM in Baltimore. We analyzed the baseline data of 396 AAMSM from a pilot behavioral HIV intervention conducted in Baltimore, MD, between October 2012 and November 2015. A multivariate

logistic regression model was conducted to explore the association between recent CJ involvement and transactional sex. A total of 65 (16%) participants reported recent CJ involvement, and 116 (29%) reported transactional sex in the past 90 days. After adjusting for age, education, employment, sexual identity, HIV status, and drug use, recent CJ involvement was significantly associated with transactional sex (AOR 3.31; 95% CI 1.72; 5.70). Being 24–40 years (AOR 2.73; 95% CI 1.17, 6.33) or over 40 years older (AOR 3.80; 95% CI 1.61, 8.98) vs. younger and using drugs (AOR 4.47; 95% CI 2.43, 8.23) also remained independently associated with recent transactional sex. Findings of the current study contribute to the literature on the association between recent history of CJ involvement and transactional sex among AAMSM. More evidence-based HIV prevention interventions for people involved in the CJ system who are at high risk for contracting HIV, particularly racial and sexual minorities such as AAMSM, are urgently needed.

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Introduction

Individuals who are involved in the criminal justice (CJ) system are at particularly high risk for HIV infection due to social and behavioral factors such as housing instability, poverty, mental illness, substance use disorders, and sexual risk behaviors [1]. Based on the current HIV

incidence rate in the USA, about 1 in 2 African American men who have sex with men (AAMSM) will be diagnosed with HIV during their lifetime [2]. While limited data exists with respect to the prevalence of incarceration among AAMSM, one study of over 1500 AAMSM from six sites in the HIV Prevention Trials Network 061 found that 60% of participants reported a history of incarceration [3]. A systematic review suggests AAMSM are more than twice as likely to have experienced incarceration relative to other MSM [4]. Evidence has been documented AAMSM involved in CJ had a high prevalence of sexual risk behaviors. For example, one study of a sample of 252 AAMSM recruited in nightclubs in North Carolina found those recently incarcerated were more likely to report insertive unprotected anal intercourse [5]. A longitudinal study of young MSM in Chicago found sexual behaviors among AAMSM were more substantially impacted by arrest or incarceration than those of non-black MSM [6].

There have been a few studies to explore the association between CJ involvement and transactional sex, although most existing studies have done so among heterosexual populations [7, 8]. Transactional sex refers to “the commodification of the body in exchange for shelter, food, and other goods and needs” [9, 10]. The estimated prevalence of history of transactional sex among MSM in industrialized countries ranges from 16 to 20% [11–13]. The limited studies exploring the association between CJ involvement and transactional sex among MSM mainly focused on a lifetime experience. For example, one study of a sample of primarily racial/ethnic minority young HIV-positive MSM found that history of incarceration was independently associated with history of transactional sex [14]. The association between recent history of CJ involvement and transactional sex among AAMSM merits further exploration. The stigma of CJ involvement compounds the disadvantages associated with race, posing greater barriers for AA individuals than white individuals in the labor market [15]. Research also suggested that AAMSM involved in CJ are more likely than their white peers to be associated with other CJ-involved MSM in their social or sex networks with a high turnover [16]. With few employment opportunities and lack of the access to stable social support or other resources during community re-entry, transactional sex may be one of few options for survival for AAMSM involved in CJ.

The goal of the current study was to explore the association between recent CJ involvement and

transactional sex in a sample of AAMSM in Baltimore. We hypothesized recent CJ involvement, more specifically recent arrest or incarceration, was significantly associated with transactional sex among AAMSM.

Methods

Data for this study came from baseline surveys of a pilot behavioral HIV intervention conducted in Baltimore, MD, between October 2012 and November 2015. HIV surveillance data in 2017 showed an HIV prevalence of 44% among AAMSM in Baltimore [17]. Baltimore also has one of the highest incarceration rates in the USA. Baltimore presented 10% of Maryland’s total population, but 35% of the state prison population [18]. Of the 21,000 inmates in Maryland in 2014, 71% were Black, although 30.5% of the population of the state of Maryland was Black at this time [19]. In 2016, an investigative report on the Baltimore City Police Department concluded that the Baltimore City Police Department, “engages in a pattern or practice of discriminatory policing against African Americans” [20]. Participants of the pilot behavioral HIV intervention were recruited using a variety of methods, including street-based outreach, advertising in area newspapers, and word-of-mouth referrals. Two types of participants were enrolled: index and network. Index participants were individuals aged 18 years and older who self-reported being African American or Black, biological sex at birth was male, and had sex with another man (MSM) in the prior 90 days. Network participants were individuals aged 18 years and older who were referred by the index participant to the research clinic to receive HIV antibody testing. Network members who were sex partners of the index or MSM and who reported a sexual risk were enrolled in the intervention study. The experimental behavioral intervention provided training to participants on how to (1) conduct peer health education; (2) to promote HIV risk reduction among their social network members; (3) promote HIV voluntary counseling and testing (VCT) among their social network members; and (4) recruit social network members for VCT. All participants who met the inclusion criteria and provided written informed consent completed a baseline study visit which entailed a survey on HIV risk behaviors. This study was approved by the Institutional Review Board.

The current analyses included all baseline study participants (both index and network participants) who

reported male sex, African American race/ethnicity, and sex with another male in the prior 90 days.

Measures

Transactional sex was assessed by one question “Thinking of those people [you had sex with in the past 90 days], have you had sex with any of them in the past 90 days to GET any of the following?”: “Money (\$25 or more)”, “Drugs,” “Food,” “A place to stay,” “Clothes or other gifts”, “Cigarettes”. A binary variable for transactional sex was created if participants chose at least one of the options.

CJ involvement was assessed by two questions “In the past 6 months, how many times have you been arrested?” “In the past 6 months, have you spent time in prison or jail?” Due to the limited sample size, we elected to combine arrest and incarceration into a single binary variable for CJ involvement if participants reported having been arrested at least once or having spent time in prison or jail in the past 6 months.

Participant characteristics included self-reported age, education level, sexual identity (homosexual vs. others), employment status, history of STI diagnosis (e.g., chlamydia, gonorrhea, or syphilis), and unprotected sex. HIV status was verified by documentation of previous HIV-positive test results or ART medication prescriptions, OraQuick, and confirmatory blood draw. Drug use was assessed by self-report of marijuana, crack, cocaine, heroin, recreational or prescription drug, methamphetamine, ecstasy, poppers, or club drugs use in the past 6 months.

Data Analysis

Bivariate associations were examined using chi-square statistics and unadjusted logistic regression. To evaluate independent associations between CJ involvement and transactional sex, all variables that were statistically significant ($p < .05$) in bivariate analyses were entered into a multivariate logistic regression model. All analyses were performed using Stata Version 14.0.

Results

The current analyses included 396 participants who met all study inclusion criteria. A total of 65 (16%) reported recent CJ involvement, i.e., having been

arrested or/and in prison/jail in the past 6 months, and 116 (29%) reported transactional sex in the past 90 days. The distributions of arrests and incarceration and other sociodemographic and behavioral characteristics of the participants are presented in Table 1.

Results of the unadjusted and adjusted associations between recent CJ involvement and transactional sex are presented in Table 2. After adjusting for age, education, employment, sexual identity, HIV status, and drug use, recent CJ involvement was significantly associated with transactional sex (AOR 3.31; 95% CI 1.72, 5.70). In the adjusted analysis, AAMSM aged 25 to 40 years older (AOR 2.73; 95% CI 1.17, 6.33) or aged over 40 years older (AOR 3.80; 95% CI 1.61, 8.98) were more likely to report transactional sex compared with AAMSM ages 18 to 24. Participants using drugs were also more likely to report transactional sex relative to those with no drug use (AOR 4.47; 95% CI 2.43, 8.23).

Discussion

In the current study, recent CJ involvement was significantly associated with transactional sex after adjusting for age, education, employment, sexual identity, HIV status, and drug use among AAMSM in Baltimore. We observed a high prevalence of recent CJ involvement, i.e., 15% having been arrested at least once and 12% being in jail/prison during the past 6 months, which is comparable or higher than previous findings. One study in North Carolina found 8% of young AAMSM had spent time in jail or prison during the past 2 months [5], and another cohort study of young AAMSM in Chicago reported 20% of participants being in jail at least once during the 18-month study [16]. In our study, 29% of AAMSM reported transactional sex in the past 90 days, which is substantially higher than findings in other studies of MSM with a range from 5 to 17% [13, 21]. Those differences may partly be explained by various inclusion criteria of study populations and how CJ involvement and transactional sex were measured across different studies.

In addition to recent CJ involvement, we found older AAMSM and those using drugs were also more likely to get involved in transactional sex. Similar findings have been observed in another study of HIV-infected young MSM where participants aged 24 or older were more likely to report history of transactional sex than those younger than 24, suggesting risk of engaging in

Table 1 Characteristics of AAMSM participants in Baltimore ($n = 396$)

Characteristic	<i>n</i>	%
Number of times being arrested in the past 6 months		
0	341	86
1	43	11
2	8	2
3 or more than 3	4	1
Having spent time in prison or jail in the past 6 months		
No	347	88
Yes	49	12
Having transactional sex in the past 90 days		
No	280	71
Yes	116	29
Age		
18–24	65	16
25–40	150	38
> 40	181	46
Education level		
Less than high school	92	23
High school or GED or higher	304	77
Employment		
Unemployed	232	59
Employed full or part time	164	41
Sexual identity		
Others	205	52
Homosexual	191	48
Ever diagnosed with an STI ^a		
No	257	65
Yes	139	35
Unprotected sex in the past 90 days		
No	37	9
Yes	359	91
HIV status		
Negative	235	59
Positive	161	41
Drug use ^b in the past 6 months		
No	129	33
Yes	267	67

^a Including chlamydia, gonorrhea, or syphilis

^b Any marijuana, crack, cocaine, heroin, recreational or prescription drug, methamphetamine, ecstasy, poppers, or club drugs use in the past 6 months

transactional sex may have increased over life course, such as multiple incarcerations [14]. The association between transactional sex and substance use also has

been well documented in previous studies [10, 11, 21]. Those factors and CJ involvement may interact with each other synergistically to further increase HIV risk.

Findings from the current study suggest more evidence-based HIV prevention interventions for people involved in the CJ system who are at high risk for contracting HIV, particularly racial and sexual minorities such as AAMSM, are urgently needed. CJ settings may provide an opportunity to engage populations at greater risk of HIV in HIV biomedical interventions [22], including pre-exposure prophylaxis (PrEP) [23]. However, current CDC clinical practice guidelines for PrEP eligibility [24] rely heavily on behavioral information obtained through individual self-report. Such guidelines may not be appropriate in CJ settings given the risk that some sexual minorities can face while incarcerated [25]. For example, many MSM may feel uncomfortable disclosing same-sex behavior to correctional personnel. These challenges notwithstanding, using the current CDC guidelines, will likely miss potential PrEP candidates within CJ settings. Therefore, in order to maximize the opportunity to engage MSM in PrEP and/or other HIV prevention interventions within CJ settings, there is a crucial need to develop best practices for HIV risk screening and linkage to HIV prevention services, including PrEP, during the course of an individual's CJ involvement and community re-entry. For example, the World Health Organization (WHO)'s guideline for PrEP use that includes any individual at "substantial risk," i.e., belonging to a group with an HIV incidence greater than three per 100 person-years [26] is more applicable to CJ populations [27].

Future interventions and programs should recognize the competing priorities (e.g., employment, housing) and address challenges and opportunities during community re-entry among CJ-involved AAMSM. As we discussed earlier, transactional sex may be one of few options for survival for AAMSM involved in CJ with limited employment opportunities during community re-entry. Existing research has documented institutional distrust among sexual minority populations in general, CJ-involved sexual minority in particular [28, 29]. Using a peer-based approach to develop, adapt, and implement job training programs and HIV prevention interventions among CJ-involved sexual minorities may be a promising strategy. Community health workers (CHWs) or peer mentors with a history of incarceration can be trained to provide support and mentoring people with behavioral health needs,

Table 2 Association between recent CJ involvement and transactional sex among AAMSM in Baltimore ($n = 396$)

Characteristic	Transactional sex				OR (95% CI)	AOR (95% CI)
	Yes ($n = 116$)		No ($n = 280$)			
	<i>n</i>	%	<i>n</i>	%		
CJ involvement in the past 6 months						
No	81	70	250	89	Ref	Ref
Yes	35	30	38	11	3.60 (2.08, 6.23)***	3.13 (1.72, 5.70)***
Age						
18–24	9	8	56	20	Ref	Ref
25–40	44	38	106	38	2.58 (1.18, 5.67)*	2.73 (1.17, 6.33)*
> 40	63	54	118	42	3.32 (1.54, 7.16)**	3.80 (1.61, 8.98)**
Education level						
Less than high school	37	32	55	20	Ref	Ref
High school or GED or higher	79	68	225	80	0.52 (0.32, 0.85)**	0.69 (0.40, 1.19)
Employment						
Unemployed	80	69	128	54	Ref	Ref
Employed full or part time	36	31	152	46	0.53(0.34,0.85)**	0.64(0.38,1.03)+
Sexual identity						
Others	76	66	129	46	Ref	Ref
Homosexual	40	34	151	54	0.45 (0.29, 0.70)***	0.79 (0.45, 1.40)+
Ever diagnosed with an STI						
No	74	64	183	65	Ref	Ref
Yes	42	36	97	35	1.07 (0.68, 1.68)	–
Unprotected sex in the past 90 days						
No	9	8	28	10	Ref	Ref
Yes	107	92	252	90	1.32 (0.60, 2.89)	–
HIV status						
Negative	79	68	156	56	Ref	Ref
Positive	37	32	124	44	0.59 (0.37, 0.93)*	0.70 (0.40, 1.23)
Drug use in the past 6 months						
No	16	14	113	40	Ref	Ref
Yes	100	86	167	60	4.22 (2.37, 7.54)***	4.47 (2.43, 8.23)***

+ $p < .10$, * $p < .05$, ** $p < .001$

including HIV, substance use, and mental health, and other competing priorities (housing, employment, food, etc.) [30]. One national model, the Transitions Clinic Network (TCN) has demonstrated a great success of utilizing CHWs with a history of incarceration to assist individuals with linkage to primary healthcare and supportive services upon release from prison. The TCN program integrates peer CHWs as part of an integrated medical team, and it builds close partnerships with local re-entry organizations to address social determinants of health [31].

Our study has some notable limitations. Our findings are limited by the sampling and relatively small sample size and reliance on self-reported data. Cross-sectional study design does not allow to draw the causal inference between CJ involvement and transactional sex.

In conclusion, our findings contribute to the literature on the relationship between CJ involvement and HIV-related risk behaviors among a sample of age-diverse AAMSM from an HIV high prevalent urban setting. CJ settings provide an important opportunity to engage health disparity populations in evidence-based HIV

prevention and/or treatment-related interventions, and interventions and programs are also needed to address the challenges and opportunities during community re-entry among CJ-involved AAMSM.

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