Transactional Sex and Incident Chlamydia and Gonorrhea Among Black Men Who Have Sex With Men in Atlanta, Georgia

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Background: Black men who have sex with men (BMSM) are disproportionately affected by sexually transmitted infections (STI), including chlamydia and gonorrhea. Transactional sex is an hypothesized risk factor for STI acquisition in BMSM.

Methods: We estimated the association of transactional sex with incident chlamydia/gonococcal infection among BMSM using longitudinal data from a randomized trial in Atlanta (2012–2015). BMSM were eligible for inclusion if they tested human immunodeficiency virus (HIV)-antibody-negative and reported both ≥2 male sex partners and any condomless anal sex in the last year. We defined chlamydia/gonorrhea incidence as the first occurrence of either rectal or urogenital chlamydia or gonococcal infections after a negative result at enrollment. We used Poisson regression to estimate the incidence rate (IR) for chlamydia/gonorrhea over 12 months. Incidence rate ratios (IRR) compared estimates by reported experience of transactional sex. Subgroup analyses assessed potential heterogeneity by age and sexual identity.

Results: This analysis included 416 BMSM, of whom 191 (46%) were gay-identified, 146 (42%) reported a history of transactional sex, and 57 (14%) had prevalent chlamydia/gonococcal infection at baseline. Over a median of 1 year of follow-up, an additional 55 men tested laboratory-positive for chlamydia/gonorrhea (IR, 17.3 per 100 person-years). Transactional sex was not associated with chlamydia/gonorrhea incidence overall. However, among gay-identified BMSM, transactional sex was associated with incident chlamydia/gonorrhea (IRR, 2.9; 95% confidence interval, 1.2–6.8).

Conclusions: Economic and social vulnerabilities may motivate engagement in high-risk sexual behaviors through commodified sex, potentially increasing the burden of STIs among BMSM. In this investigation, the relationship between transactional sex and chlamydia/gonorrhea was not homogenous across BMSM with diverse sexual identities in Atlanta, suggesting that within select sexual networks, transactional sex may drive STI risks. Delivering accessible and targeted STI screening for marginalized BMSM should be prioritized for STI and HIV prevention.

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Acknowledgments: The authors gratefully acknowledge the contributions of the participants in this study, as well as the dedicated study staff who worked tirelessly to implement this research.

Contributors: K.R. drafted the initial manuscript and was responsible for leading the analysis and interpretation of the data. E.L. collaborated on the analytic plan and analysis. K.R., L.E., R.W., J.M., and V.E. collaborated on the conceptualization and framing of the research question. L.E. led the initial study design, implementation and investigation. All authors participated in the interpretation of results and helped to revise the manuscript before submission.

Conflict of Interest: None declared.

Disclaimer: The findings and conclusions in this article are those of the author(s) and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Funding: This study received funding from the National Institutes of Health (NIH). K.R. and J.M. received research funding from the National Institutes of Allergy and Infectious Diseases (T32AI102623). L.E. was supported by the National Institute of Mental Health (R01MH109409; R34MH115798). R.W. and V.E. were each supported by an award through the National Institute on Drug Abuse (K01DA047918 and K01DA042881, respectively). The funders had no role in the study design, data collection and analysis, decision to publish, or preparation of the manuscript.

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Received for publication November 8, 2019, and accepted March 3, 2020.

Supplemental digital content is available for this article. Direct URL citations appear in the printed text, and links to the digital files are provided in the HTML text of this article on the journal's Web site (http://www.stdjournal.com).

DOI: 10.1097/OLQ.0000000000001168

In the last decade, reported bacterial sexually transmitted infections (STI), including syphilis, chlamydia and gonorrhea, have increased sharply in the United States (US).[1] Disparities in STI acquisition persist by gender, age, geographic region, and race/ethnicity across the US,[2] with communities of color and marginalized populations disproportionately burdened by high rates of infection.[3] Black men who have sex with men (MSM) are particularly affected by STIs,[4] which, if left untreated, can increase risk of both human immunodeficiency virus (HIV) acquisition and transmission.[5]

Disparities in chlamydia and gonococcal infections among MSM are rooted in both individual- and structural-level factors that can increase vulnerability to STIs. Condomless anal sex, substance use, an elevated number of sexual partners, and partner concurrency increase exposure to STIs,[6] particularly within social networks where STI prevalence is high.[3] For black MSM (hereafter BMSM), pervasive medical mistrust and health care-enacted intersectional stigmas prevent opportunities for routine STI screening, treatment, and other preventative health services,[7] potentiating risks of onward transmission. Diversities in sexual identity may also dictate risk behaviors through sexual partnering patterns, potentially differentiating STI acquisition and transmission risks for BMSM who are gay-identified from those with straight sexual identities.[8] Moreover, limited opportunities for education and employment promote economic distress[9] in the absence of social support, further marginalizing BMSM and further increasing financial and social vulnerability.

Transactional sex—comprising the exchange of sex for money, material goods, or shelter—may heighten sexual risk for BMSM in the context of such vulnerabilities. Transactional sex can increase financial resources, deliver basic needs, and offer social protection for BMSM who are marginalized. Transactional sex exists across a continuum of risk, with exchanges occurring within formal sex work and/or casual encounters, or as a function of an established relationship.[10] Although relationships that are defined by material exchanges are not themselves innately risky for STI acquisition and transmission, marginalized BMSM may lack the autonomy or power to negotiate safer sexual practices—including condom use—when sex is commodified.[11]

Black MSM who engage in transactional sex may experience differential patterns of vulnerability and sexual risk,[12] although epidemiological evidence quantifying the relationship between transactional sex and STIs is lacking. Despite the aforementioned rise in STI case rates among BMSM in the US, the extent to which transactional sex impacts STI acquisition in this population is relatively unknown. Moreover, whereas prevalent HIV infection is associated with transactional sex in MSM across multiple countries,[13] evidence from the US is mostly limited to distinct high-risk subpopulations, such as the homeless or street-based sex workers,[14,15] precluding more nuanced assessments of risk heterogeneity. In this study, we use longitudinal data from a randomized trial to assess heterogeneities in the relationship between transactional sex and incident chlamydia and gonococcal infections among BMSM in Atlanta, Georgia.

METHODS

Study Setting, Population, and Procedures

We performed a secondary analysis of longitudinal data from a randomized control trial conducted in Atlanta, Georgia between 2012 and 2015. This original trial was designed to compare a sexual partner selection and risk-decision intervention with established, standard-of-care HIV/STI risk-reduction counseling. Full study procedures and eligibility criteria have been published elsewhere.[16] In brief, participants were recruited in-person from lesbian-, gay-, bisexual-, and transgender-identified venues (eg, bars/clubs/parties), online (eg, dating sites and apps), and via phone (eg, flyers, word-of-mouth) between December 2012 and November 2014. Males or transgender women aged 18 and over who were assigned male sex at birth were eligible for participation if they reported HIV-negative or unknown serostatus, 2 or more male sex partners in the past year, and any condomless anal sex in the past year. After providing written informed consent, all eligible participants were tested for HIV using OraQuick ADVANCE Rapid HIV 1/2 (OraSure Technologies, Inc. Bethlehem, PA). Participants who tested HIV-antibody (Ab)-negative were offered enrollment into the trial, and those who tested Ab-positive for established infection were linked to care. Enrolled participants completed a computerized questionnaire that included items about their demographic characteristics, sexual risk behaviors, transactional sex, and history of STIs including chlamydia, gonorrhea, and syphilis. Using nucleic acid amplification testing, participants were tested for chlamydia and gonorrhea using self-collected urine samples and rectal swabs.

Study follow-up visits occurred approximately 3, 6, and 12 months after enrollment. At each assessment, participants repeated the computerized questionnaire and provided specimens for STI testing. At all study visits, participants testing positive for chlamydia or gonorrhea were linked to treatment and followed-up for confirmation of treatment by the project manager. Participants who tested HIV Ab-positive at 12 months received standard HIV counseling and were referred for treatment.

Outcome and Exposure Definitions

Given the potential for reinfection over the 12-month follow-up period, we defined this study's primary outcome, incident chlamydia/gonorrhea, as the first diagnosis of rectal or urogenital chlamydia and/or rectal or urogenital gonorrhea (yes/no) after a negative result at enrollment. The date of infection was estimated as the midpoint between a positive test for either chlamydia or gonorrhea and the most recent negative result.

Transactional sex, our exposure, was operationalized as whether or not a participant reported at enrollment ever providing sex in exchange for money or other goods/resources. Four questions asked about lifetime history of providing sex in exchange for (1) money (yes/no), (2) shelter (yes/no), (3) food (yes/no), or (4) alcohol/drugs (yes/no). Those who responded "yes" to any of these items were considered to have engaged in transactional sex; those answering "no" to all 4 questions were classified as not having engaged in transactional sex. An additional categorical exposure variable was created to compare men who had exchanged sex for shelter, food, or alcohol/drugs (irrespective of whether or not they had exchanged sex for money), those who had only exchanged sex for money, and those who reported not having ever engaged in any type of transactional sex.

Statistical Analyses

Demographics and select characteristics of participants reported at enrollment were described using proportions for categorical variables and medians for continuous variables. We assessed differences by self-reported history of transactional sex, comparing participants who had engaged in transactional sex with those who had never engaged in transactional sex. Transgender women were excluded from analyses on account of additional vulnerabilities that may affect the relationship between transactional sex and STI acquisition.

We used a Poisson regression model to estimate incidence rate ratios (IRR) and 95% confidence intervals (CI) for the association between first chlamydia/gonococcal infection and transactional sex. The origin for each participant was their date of enrollment (baseline), and time was modeled in continuous months from baseline until first STI diagnosis, date of visit before loss to follow-up, or administrative censoring at the last visit. A causal directed acyclic graph was used to identify a minimally sufficient set of confounders for adjustment. Covariates in the minimally sufficient set were measured at enrollment and included age, highest level of education, employment status, substance use (cocaine, crack, poppers, methamphetamine, or Viagra), sexual identity, and having more than 1 sexual partner in the last 3 months. Collinearity among covariates was evaluated using Pearson's correlation coefficient. However, none of the covariates showed a significant correlation ($P \geq 0.05$). To balance adjustment with model parsimony, covariates in the adjustment set were retained if their removal resulted in a greater than 10% absolute change in the fully adjusted incidence rate ratio (aIRR).

To determine whether the relationship between transactional sex and chlamydia/gonorrhea varied by subgroup, and possibly across sexual networks, we considered potential effect measure modification (EMM) by age and sexual identity. Age was categorized as <30 or ≥30 years to differentiate younger BMSM from older BMSM.[17] To assess EMM by sexual identity, we assessed stratum-specific IRRs among participants who were gay-identified (eg, had identified as gay or same-gender loving via the original questionnaire), those who identified as bisexual, and those who identified as heterosexual. To test for EMM, we included an interaction term

between the dichotomous exposure and each proposed modifier and performed a likelihood ratio test (LRT), assessing the magnitude and precision of stratum-specific estimates on the multiplicative scale. We also assessed the proportion of participants who were HIV Ab-positive at 12 months.

All analyses were conducted using SAS statistical software (SAS, version 9.4, Cary, NC).

Ethics approval for this study was granted by the University of Connecticut Institutional Review Board.

RESULTS

A total of 416 BMSM were included in this analysis. The median age at enrollment was 29 years (interquartile range [IQR], 24, 44) (Table 1). More than half (55%) reported an annual income of less than 11,000 USD; 40% were unemployed. Nearly half (46% [41% gay; 5% same-gender loving]) were gay-identified; 40% identified as bisexual, and 14% identified as heterosexual. Almost one quarter (23%) were homeless or living in a shelter, and one third (33%) reported substance use in the 3 months before enrollment. Less than 10% were positive for either prevalent chlamydia or gonococcal infections; however, 12% reported having received a diagnosis for syphilis, chlamydia, and/or gonorrhea in the preceding 3 months.

Compared with participants who reported never having engaged in transactional sex, participants who reported transactional sex were older (median age, 37 years [IQR, 26–49 years] vs 29 years [IQR, 23–37]) and more likely to be unemployed (67% vs 45%), to be homeless or living in a shelter (37% vs 12%), to have experienced forced sex (34% vs 17%), and to have used substances in the last 3 months (53% vs 18%). One third (33%) of the participants reporting transactional sex were gay-identified compared with more than half (56%) of those not reporting transactional sex. Prevalence of chlamydia and gonorrhea at baseline was similar in both groups. Most of the 176 (90%) participants reporting transactional sex indicated that they had received money in exchange for sex (result not shown).

A total of 339 (81%) participants completed STI testing at all 3 follow-up visits. An additional 62 (15%) missed 1 follow-up visit; only 15 (4%) missed more than 1 follow-up visit. At month 3, 90% of participants completed STI testing. At month 6, 91% were tested for STIs; 93% were tested at month 12. Characteristics among participants who completed all 3 follow-up visits were largely similar to those who had missed 1 or more visits (Supplemental Digital Content 1 is available in the text, http://links.lww.com/OLQ/A482).

Over the 12-month study period, overall incidence of chlamydia/gonorrhea among participants without prevalent

TABLE 1. Characteristics at Baseline Among BMSM in Atlanta, 2012–2015*

	Overall, N = 416 (100%)		No Transactional Sex, n = 239 (58%)		Transactional sex,† n = 176 (42%)	
	Median	**IQR**	**Median**	**IQR**	**Median**	**IQR**
Age	29.0	24–44	27.0	23–37	37.0	26–49
	n	**%**	**n**	**%**	**n**	**%**
<30 y	239	57.6	149	62.3	90	37.7
Educational attainment						
Less than high school	25	6.0	6	2.5	18	10.2
High school or some college	288	69.2	164	68.6	124	70.5
College degree or more	103	24.8	69	28.9	34	19.3
Estimated annual income (US $)						
<11,000	225	54.6	107	45.3	118	67.4
11,000–30,000	125	30.3	86	36.4	39	22.3
≥30,000	62	15.1	43	18.2	18	10.3
Sexual identity						
Same-gender loving	20	4.8	15	6.3	5	2.9
Gay	170	41.2	118	49.6	52	29.7
Bisexual	167	40.4	85	35.7	82	46.9
Heterosexual	56	13.6	20	8.4	36	20.6
Unemployed	166	39.9	71	29.7	94	53.4
Homeless or living in a shelter	95	22.8	29	12.1	65	36.9
Partner number, last 3 mo						
0	21	5.1	12	5.1	9	5.1
1–2	165	40.1	107	45.2	58	33.1
≥3	226	54.9	118	49.8	108	61.7
IPV, ever	166	40.0	84	35.2	82	46.9
Forced to have sex, ever	101	24.3	41	17.2	60	34.3
IDU, ever	5	1.2	0		5	2.8
Substance use, last 3 mo‡	136	32.7	43	18.0	93	52.8
Any STI diagnosis, last 3 mo§	45	10.8	22	9.2	23	13.1
CT+	31	7.5	22	9.2	9	5.1
Rectal	25	6.0	18	7.5	7	4.0
Urogenital	7	1.7	5	2.0	2	1.1
GC+	29	7.0	15	6.3	14	8.0
Rectal	25	6.0	13	5.4	12	6.8
Urogenital	6	1.5	4	1.7	2	1.1

*Missing; transactional sex 1; income 4; sexual identity 2; partner number 4; IPV 1; forced sex 1.

†Transactional sex defined as having ever provided sex in exchange for money or other goods/resources.

‡Cocaine, crack, poppers, methamphetamine, or Viagra used in the last 3 months.

§Self-reported diagnosis of syphilis, chlamydia, and/or gonorrhea in the last 3 months.

IPV, intimate partner violence; IDU, intravenous drug use; CT+, chlamydia positive; GC+, gonorrhea positive.

TABLE 2. Chlamydia and Gonorrhea Incidence Among BMSM in Atlanta Without Prevalent Infection Over 12 Months, Stratified by Infection Site*

	Infections	Person-Years	IR (95% CI)†
Chlamydia	43	349.1	12.3 (9.1–16.6)
Rectal	33	363.6	9.1 (6.5–12.8)
Urethral	14	397.3	3.5 (2.1–6.0)
Gonorrhea	21	370.1	5.7 (3.7–8.7)
Rectal	17	377.4	4.5 (2.8–7.3)
Urethral	7	404.5	1.7 (0.8–3.6)
Chlamydia or gonorrhea†	55	317.6	17.3 (13.3–22.3)
Rectal	44	321.9	13.7 (10.2–18.4)
Urethral	19	371.4	5.1 (3.3–8.0)

*Incidence rate per 100 person-years.

†First occurrence of either laboratory-confirmed chlamydia, gonorrhea, or both. Three participants were co-infected with chlamydia and gonorrhea at time of diagnosis (first occurrence of outcome).

infection at baseline was 17.3 per 100 person-years (95% CI, 13.3–22.3) (Table 2). The incidence of chlamydia alone was 12.3 per 100 person-years (95% CI, 9.1–16.6), and the incidence of gonorrhea was 5.7 per 100 person-years (95% CI, 3.7–8.7). Rectal infections were most common for both chlamydia and gonorrhea.

Incidence of chlamydia/gonorrhea was similar for men who reported having engaged in any transactional sex compared with men who reported never having engaged in transactional sex in both unadjusted and adjusted models (IRR, 1.4; 95% CI, 0.6–1.8; aIRR, 1.4; 95% CI, 0.8–2.4) (Table 3). Chlamydia/gonorrhea incidence remained similar between groups when we assessed transactional sex categorically—comparing men who exchanged sex for shelter, food, or alcohol/drugs, those who reported having only exchanged sex for money, and those who reported not having ever engaged in any type of transactional sex.

When examining heterogeneity by sexual identity, we found a high IRR among participants who were gay-identified (aIRR, 3.0; 95% CI, 1.3–6.9) (Table 4). The IRR for the association of transactional sex with chlamydia/gonorrhea was also higher among men under the age of 30 in subgroup analyses (IRR 2.0; 95% CI, 1.1–3.8); however, our estimate was attenuated after adjusting for identified confounders (aIRR 1.7; 95% CI, 0.9–3.4).

We observed 16 new HIV infections (4%) at the end of study follow-up among men without prevalent HIV or STIs at baseline (results not shown). Among the 55 men with incident chlamydia/gonococcal infection over the course of follow up, 6 (11%) became infected with HIV. Among the 308 men who did not acquire chlamydia/gonococcal infection, 10 (3%) were living with HIV by the end of follow-up. We report no differences in the proportion of men who tested positive for HIV by history of transactional sex.

DISCUSSION

In this study of BMSM in Atlanta, we expected that men who reported a history of transactional sex would have a higher incidence of bacterial STIs than men who had never engaged in transactional sex. Instead, we observed comparable incidence of chlamydia/gonococcal infection between these groups. However, among BMSM who were gay-identified, transactional sex was positively associated with chlamydia/gonorrhea incidence. Our findings demonstrate that the relationship between transactional sex and chlamydia/gonorrhea incidence is not homogenous across all BMSM, and that among gay-identified BMSM, economic and social vulnerabilities potentially increase STI acquisition risks.

The overall incidence of chlamydia/gonococcal infection in this study was 17.1 per 100 person-years, with rectal and urogenital infection rates for chlamydia and gonorrhea comparable to other published estimates among BMSM in Atlanta.[18] In general, few estimates of bacterial STI incidence exist for HIV-negative BMSM,[18] although prevalence estimates of rectal chlamydia and gonorrhea are routinely higher than urogenital estimates.[19] Investigations of incident STIs among BMSM often rely on data collected from STI-clinic settings[20] or through preexposure prophylaxis (PrEP) trials,[21] which may bias estimates toward a higher-risk population with more symptomatic STIs. In our study, participants were prospectively screened during routine follow-up visits for both urogenital and rectal chlamydia and gonorrhea irrespective of symptomology. Some infections may have been missed if participants had asymptomatic infections or if participants experienced symptomatic infections between study visits and sought outside testing and treatment. Still, our study's frequent screening and highly compliant study population helped to minimize missing data and may contribute to the overall generalizability of our findings.

We found little difference in chlamydia/gonococcal infection among BMSM who did and did not report a history of transactional sex. However, the precision of our estimates was limited by the small size of the original randomized control trial, and our findings should be interpreted with some caution. We were unable to identify both when and how frequently transactional sex occurred in this analysis, as participants were only asked about their lifetime history of exchanging sex for money or other goods/resources. In the case that transactional sex was less proximal to study enrollment or infrequent for some participants our estimates may have been attenuated, and future efforts that disentangle the relationship between transactional sex and incident STIs are likely warranted.

TABLE 3. IRRs for the Association of Transactional sex With Incident Chlamydia/Gonorrhea Among BMSM in Atlanta Without Prevalent Infection*

	Infections	Person-Years	IR (95% CI)	Unadjusted IRR (95% CI)	Adjusted IRR (95% CI)†
Dichotomous					
No transactional sex	31	181.3	17.1 (12.0–24.3)	Reference	Reference
Any transactional sex	24	135.3	17.7 (11.9–24.3)	1.4 (0.6–1.8)	1.4 (0.8–2.4)
Categorical‡					
No transactional sex	31	181.3	17.1 (12.0–24.3)	Reference	Reference
Money, shelter, food, or alcohol/drugs	12	91.7	13.1 (7.4–23.1)	0.7 (0.4–1.5)	1.2 (0.5–2.5)
Money only	12	43.6	27.5 (15.6–48.5)	1.6 (0.8–3.8)	1.7 (0.8–3.4)

*Incidence rate per 100 person-years.

†Adjusted for age, substance use, sexual identity, and having more than 1 sexual partner in the last 3 months.

‡Compares men who reported not having ever engaged in any type of transactional sex, those who had exchanged sex for shelter, food, or alcohol/drugs (irrespective of whether or not they had exchanged sex or money), and men who had exchanged sex only for money.

TABLE 4. Adjusted IRRs for the Association of Transactional Sex With Incident Chlamydia/Gonorrhea Among BMSM in Atlanta Without Prevalent Infection, Stratified by Age and Sexual Identity*,†, ‡

Analysis Description	n	%	Unadjusted IRR (95% CI)	Adjusted IRR (95% CI)	LRT (*P*)
Overall association	362	100	1.4 (0.6–1.8)	1.4 (0.8–2.4)	
Stratified by age					
<30 y	175	48.1	2.0 (1.1–3.8)	1.7 (0.9–3.4)	3.9 (0.05)
30 y or older	189	51.9	0.6 (0.2–1.8)	0.5 (0.2–1.4)	
Stratified by sexual identity					
Gay or same-gender loving	160	44.5	1.8 (0.8–4.1)	3.0 (1.3–6.9)	5.2 (0.07)
Bisexual	145	40.3	0.7 (0.3–1.5)	0.8 (0.3–1.8)	
Heterosexual	55	15.2	0.7 (0.2–3.3)	1.1 (0.2–5.2)	

*Transactional sex assessed dichotomously for all stratified analyses.

†Adjusted for age, substance use, sexual identity, and having more than 1 sexual partner in the last 3 months. In stratified analysis, age and sexual identity were assessed as effect measure modifiers and not confounders.

‡Missing; sexual identity, 2.

Among gay-identified BMSM in this analysis, those who reported a history of transactional sex had nearly 3 times the rate of chlamydial/gonococcal infection than men who reported no history of transactional sex. However, this association was not observed among men who identified as bisexual or those who identified as heterosexual. Insularity, characterized by a lack of sexual mixing among men outside of their respective sexual networks, may exist as a plausible explanation for variation in STI incidence and prevalence among BMSM. Our finding that transactional sex may increase STI incidence among some—but not all BMSM—speaks to potential heterogeneity of network prevalence of bacterial STIs in this population. Among BMSM, younger age and gay identity are associated with membership in larger social networks,[22] which may be closely linked to individual high-risk sexual behaviors.[23] Within networks of gay-identified MSM, norms, such as partner concurrency, group sex, and drug use during sex may facilitate transmission amidst an already high prevalence of STIs.[24] Moreover, BMSM who identify as gay may be more likely to report engagement in sexual risk behaviors such as condomless sex and multiple sexual partners than their non–gay-identified counterparts, although findings are inconclusive. Although all men in this study reported some degree of sexual risk as a condition of study eligibility (eg, condomless sex with 2 or more partners in the preceding year), for those BMSM who engaged in transactional sex, more routine participation in high-risk sexual behaviors may have increased STI exposure, particularly among men who were gay-identified.

We were unable to discern whether financial exchanges for sex occurred within or outside the context of formal sex work in this analysis. However, most BMSM reporting transactional sex indicated they had received money in exchange for sex, potentially increasing their susceptibility to HIV and other STIs.[25] In general, investigations of transactional sex, including both formal sex work and other informal sexual exchanges, are limited among BMSM.[26] Transactional sex remains highly stigmatized on a global scale,[27] and as such difficulty to ascertain even within high-income settings. As such, BMSM engaged in transactional sex represent a subset of individuals who have been mostly ignored to date in the context of the global HIV/AIDS response. Even in settings where targeted services are offered for men engaged in sex work, intersectional stigmas and discrimination may prevent BMSM from self-identifying as such, limiting their access to preventative screening and treatment.

There are a few other limitations to this study. Measures were collected by self-report, and the magnitude of effects may be underestimated if participants underreported their engagement in transactional sex. Moreover, we cannot discount the possibility of unmeasured confounding in our estimates. Finally, our data are nested within a randomized trial, and results may have been affected by the intervention. For example, it is possible that participants reporting transactional sex decreased their high-risk sexual behaviors after receiving HIV/STI risk-reduction counseling, reducing incidence of chlamydia/gonorrhea and biasing our estimates toward the null. However, the intervention was not significantly associated with STI acquisition,[16] reflecting the larger challenge of identifying effective combination STI and HIV prevention approaches for BMSM.

Amidst expanded availability of antiretroviral PrEP for HIV prevention, increases in STI incidence among MSM more broadly have been attributed, in part, to compensatory behavioral disinhibition or more frequent screening through increased engagement in preventative care.[28] Among BMSM, however, PrEP use remains largely unassociated with STI incidence,[21] and PrEP awareness, uptake and persistence is generally low.[18,29] Fittingly, there has been renewed interest in identifying more structurally salient determinants of increasing STI incidence among BMSM, and poverty and other measures of socioeconomic status are strongly associated with STI diagnosis across multiple settings.[30] In this study, we have provided additional insights into how economic and social vulnerabilities may motivate engagement in high-risk sexual behaviors through commodified sex, potentially increasing the burden of STIs and HIV among BMSM. These findings suggest that implementation of targeted STI screening programs that focus on those with heightened economic and social risks, such as BMSM engaged in transactional sex, may be most impactful in decreasing the burden of STIs among BMSM.

Racial disparities in HIV prevalence persist among MSM in the US, with heterogeneity in infection rates not fully explained by differences in individual-level sexual-risk behaviors. A growing literature suggests that amidst a complex fabric of social and structural challenges, high rates of bacterial STIs heighten HIV risk for BMSM.[31] However, STI-associated vulnerabilities are not homogenous across all BMSM, and—as with HIV—differences in STI risk likely exist across a continuum. In this study of BMSM in Atlanta, Georgia, we hypothesized that men who had engaged in transactional sex would have a higher incidence of chlamydia/gonococcal infection over 12 months than men who reported no such sexual exchanges. However, STI rates were largely similar between these groups. Among men who identified as gay or same-gender loving, transactional sex was associated with chlamydia/gonococcal infection, suggesting that within select sexual networks transactional sex may drive STI risk.

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