

**ASSOCIATIONS OF SEX WORK AMONG SAMPLE OF BLACK MEN WHO HAVE
SEX WITH MEN**

by

Sean Patrick Buehler

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This thesis was presented

by

Sean Patrick Buehler

It was defended on

August 12th, 2015

and approved by

Committee Member: Mackey Friedman, PhD, Assistant Professor, Infectious Diseases and Microbiology, Graduate School of Public Health, University of Pittsburgh

Committee Member: Ronald Stall, PhD, Professor, Behavioral and Community Health Sciences, Graduate School of Public Health, University of Pittsburgh

Thesis Chair: Amy Herrick, PhD, Visiting Assistant Professor, Behavioral and Community Health Sciences, Graduate School of Public Health, University of Pittsburgh

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Sean Patrick Buehler, MPH

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ABSTRACT: Black men who have sex with men (BMSM) occupy a severely marginalized position within society, experiencing high levels of discrimination as a result of their race and sexuality. Research into this population suggests that this social exclusion leaves BMSM susceptible to a variety of interrelated negative health outcomes. As a population they are vulnerable to physical assault, substance/alcohol abuse, depression, unemployment, homelessness, and high rates of HIV infection, all of which are exacerbated by poor access to health care and other social services, and are thus of public health importance. This marginalization leads a disproportionate number of BMSM to turn to sex work to make ends meet and/or to survive. The limited research done into the population suggests that black male sex workers experience similar types of negative health outcomes and comparable inequity in regards to their race and sexuality, but also need to contend with the stigma and illegality associated with engaging in sex work. How this further marginalization translates into the behaviors and health of black male sex workers is poorly understood and demands further research. In this analysis I examined a sample of 1,666 BMSM and compared those who have engaged in sex work (n=94) with those who had not (n=1572). The purpose of this investigation was to understand the associations and health implications involved in black

male sex work and if/how they contrasted to a general sample of BMSM. Results from the analysis showed that the sex workers in the sample reported a statistically higher prevalence across every syndemic measure, negative health outcome, and behavioral risk factor except, surprisingly, HIV prevalence. This suggests that behavioral and syndemic risks are not the only contributors to high HIV rates in this sample of BMSM. Although HIV rates did not differ between the two groups, the sex workers did report worryingly high rates of every other negative health outcomes and risk factor. Interventions designed to meet the needs of black male sex workers are crucial for the health of that vulnerable population. Finally, risk factors and syndemic associations traditionally thought to increase HIV rates in a given population did not hold up in this analysis and further research is required to understand what is driving HIV in BMSM.

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1.0 INTRODUCTION

In the United States black men who have sex with men (BMSM) occupy a severely marginalized position in society and are disproportionately vulnerable to a wide variety of negative physical and psychosocial health outcomes, most particularly in regards to the HIV epidemic.¹ BMSM have the highest HIV prevalence and incidence when being compared to any other United States subgroup, with a national prevalence of around 28%, and a mean incidence rate of around 4%.²⁻⁴ This translates into a situation where if one were to start with a cohort of 20 year old BMSM with an HIV prevalence rate of 0%, by the time that cohort turns 40 years old approximately 59.3% of them would be HIV positive.⁵ HIV transmission does not occur in a vacuum, however. Risky sexual behaviors including having unprotected anal intercourse, having multiple sex partners, and having sex while under the influence of drugs and/or alcohol have all been shown to be closely associated with higher HIV rates in a given population.⁶ These risk behaviors do not, however, account for the difference in HIV prevalence between white and black MSM, with white MSM having a prevalence of around 16%⁷ while also reporting comparable levels of risk taking behaviors to black MSM.⁸⁻⁹ It is widely accepted that there exists a number of comorbid psychosocial factors that operate together in a syndemic that drives HIV rates, particularly in this population of BMSM.¹⁰⁻¹² Some of these psychosocial factors include depression, poly-substance use and alcohol abuse, physical assault/violence¹ and sex work.^{1, 13}

Sex work brings with it an interesting dynamic because it exists as both a behavioral risk factor and a psychosocial outcome. Black male sex work is fraught with a range of poorly understood complex and interconnected issues including stigma, criminalization and/or incarceration, sexuality discrimination, racial discrimination, poverty, drug and alcohol abuse, homelessness, poor access to health care, and many others.¹⁴ There are also documented and well-researched health vulnerabilities associated with sex work (regardless of gender) including physical and sexual assault, depression, further drug and alcohol abuse, and the risk of contracting HIV and other STIs.¹⁵⁻¹⁷ Despite this, very little is actually known about the intricacies involved in male sex work as male sex workers are often represented only as subsamples in studies done on MSM (as is the case in this paper) or female sex workers.¹⁴

The purpose of this thesis is to analyze a subsample of black male sex workers, taken from a larger sample of BMSM, and identify and quantify both their behavioral risk taking and their health and psychosocial vulnerabilities. I will then compare the data collected from the sex workers to the data collected from the general sample of black MSM in order to test if there are any statistically significant differences between the two populations. The differences found could be useful in understanding both the health risks involved in sex work and how best to alleviate that risk.

All data used in this analysis comes from Promoting Our Worth, Equality, and Resilience (POWER), a continuing, multi-city, community based sample of BMSM. Data was collected during the summer of 2014 at Black Pride events in Atlanta, GA, Detroit, MI, Houston, TX, Philadelphia, PA, and Washington, DC. The Institutional Review Board of the University of Pittsburgh approved all study protocols. The total sample of BMSM after the

first year of data collection came to 1666 different men, with 94 individuals claiming a history of sex work.

2.0 METHODS

2.1 SAMPLING

POWER utilized random time-location sampling (TLS) to approximate representative sampling of the BMSM who attended the events, and cases are weighted in the current analytic sample to reflect probability of selection via TLS. Through the process of TLS the events to be sampled, as well as the two-hour time blocks during those events to be sampled are randomized. Event venues and time blocks were weighted to echo expected attendance as estimated by the local event coordinators and were randomly chosen from the official Black Pride schedule in each city. At each recruitment site, research staff established an intercept zone, and those BMSM who crossed or entered this intercept zone were counted, greeted, and recruited for screening. When participants consented to screening, research staff escorted them to a close survey area where they were screened using electronic tablets for eligibility and, if eligible, finished a computer-assisted survey using the same tablet. Research staff recruited participants until all research staff and/or electronic tablets were engaged and continued recruiting until all tablets were filled with participants. In this fashion, recruitment was uninterrupted at the recruitment site following research staff and electronic tablet accessibility without selection bias by the research team.

2.2 SURVEY PROCEDURES

The survey instrument was a self-administered questionnaire conducted entirely on the study's electronic tablets. Each participant was given a unique identifier in order to ensure that there were no individuals taking multiple surveys. Upon completion of the questionnaire, participants were given an incentive of \$10.00 and offered an additional \$10.00 if they would get tested for HIV with the community-based organization we were collaborating with for that event. If participants tested with the community partner then they were told the results of their HIV tests. If participants declined to test with the community partner they were then offered an addition \$10.00 to test with the study anonymously and would not get told their results.

2.3 ELIGIBILITY

In order to be eligible to participate in the POWER study participants had to have (1) entered the intercept zone as defined by the TLS procedures, (2) identified as male or as having been assigned male at birth, (3) reported being at least 18 years of age, and (4) reported having had a male sexual partner in their lifetime.

3.0 MEASURES

3.1 SEX WORK

In order to have been included in the sex work subsample, participants had to have answered affirmatively to at least one of three items: “In the past 12 months, did you ever take any money for sex with a male partner?” “In the past 12 months, did you ever take any drugs for sex with a male partner?” “In the past 12 months, did you ever take any other goods, for sex with a male partner?”

3.2 HIV STATUS

HIV status was measured by collecting and analyzing the test results of the on-site HIV testing throughout the study. POWER used OraQuick™ to test the participants. Self reported positivity and negativity within the survey questionnaire were also included in the HIV status measure. In addition, a sub-analysis was conducted separately which measured HIV status using only biological testing data collected at each site.

3.3 PHYSICAL ASSAULT

Physical assault was measured with a single item: “In the past year have you been physically assaulted (hit, kicked, beat up or in any other way physically harmed)?”

3.4 DISCRIMINATION IN PUBLIC

Public discrimination was measured using a single item: “In the past year, have you experienced discrimination, been prevented from doing something, or been hassled or made to feel inferior when on the street or in a public setting?”

3.5 DISCRIMINATION IN SCHOOL

“In the past year, have you experienced discrimination, been prevented from doing something, or been hassled or made to feel inferior while at school?”

3.6 DISCRIMINATION TRYING TO GET A JOB

“In the past year, have you experienced discrimination, been prevented from doing something, or been hassled or made to feel inferior while trying to get a job?”

3.7 DISCRIMINATION AT WORK

“In the past year, have you experienced discrimination, been prevented from doing something, or been hassled or made to feel inferior while at work?”

3.8 DISCRIMINATION IN HOUSING

“In the past year, have you experienced discrimination, been prevented from doing something, or been hassled or made to feel inferior when trying to get housing?”

3.9 DISCRIMINATION IN MEDICAL CARE

“In the past year, have you experienced discrimination, been prevented from doing something, or been hassled or made to feel inferior when trying to get medical care?”

3.10 DISCRIMINATION IN THE LEGAL SYSTEM

“In the past year, have you experienced discrimination, been prevented from doing something, or been hassled or made to feel inferior when interacting with the police or in the courts?”

3.11 HOMELESSNESS

Homelessness was measured with a single item: “In the past 12 months have you been homeless at any time? By homeless, I mean you were living on the street, in a shelter, in a Single Room Occupancy hotel (SRO), or in a car.”

3.12 ACCESS TO HEALTHCARE

The extent to which participants were able to access medical care was measured using one item: “During the past 12 months, was there any time when you needed medical care but didn't get it because you couldn't afford it?”

3.13 TESTING HISTORY

HIV testing history was measured using one item: “Have you ever been tested for HIV?”

3.14 DEPRESSION

Depression was measured using the validated CESD-10 scale.¹⁸ This scale consists of a series of ten questions with three possible responses corresponding to three point values. Respondents who upon answering the ten questions have at least ten points are considered have symptoms consistent with depression.

3.15 POLY-SUBSTANCE USE

Poly-substance use was measured as past 12-month use of two or more of the following substances: nitrates, crack cocaine, cocaine, methamphetamines (crystal, tina, speed), heroin, non-prescribed prescription opiates (Vicodin, OxyContin, etc.), and party drugs other than meth (MDMA, ecstasy, GHB).

3.16 UNPROTECTED RECEPTIVE ANAL INTERCOURSE (URAI)

URAI was measured with a single item: “Of the times you had receptive anal sex (bottomed), what proportion of the time did your partner wear a condom? Possible responses were: Never, Rarely, About half of the time, Most of the time, and Always. Respondents who answered with either “Never,” “Rarely,” or “About half of the time” were included in this variable.

3.17 SEX UNDER THE INFLUENCE

Having sex under the influence was measured with a single item: “Before or during the last time you had sex with this partner, did you use: Alcohol, Drugs, Both alcohol and drugs, neither alcohol nor drugs.” Respondents who answered “Alcohol,” “Drugs,” or “Both alcohol and drugs,” were included in this variable.

3.18 ALCOHOL ABUSE

Alcohol abuse was measured using four items: “Have you ever felt you should cut down on your drinking?” “Have people annoyed you by criticizing your drinking?” “Have you ever felt bad or guilty about your drinking?” and “Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (eye opener)?” Respondents who answered affirmatively to at least two of those questions were included in this variable.

3.19 INCARCERATION

Incarceration was measured using one item: “In the past 10 years, have you been incarcerated (spent a night or more in jail or prison)?”

4.0 DATA ANALYSIS

I conducted all data analysis in SPSS version 22. Chi square tests with the categorical measures outlined in the previous section were used to test if there was a statistically significant difference, across the range of measures, between those in the sample who have not engaged in sex work (non-sex workers) and those in the sample who have engaged in sex work (sex workers).

5.0 RESULTS

There were 94 participants in the sample who answered affirmatively to at least one of the sex work questions, which translated to 5.6% of the total sample. The sample represented diverse areas of the United States, including five major cities and their respective surrounding regions. The mean age of the sex workers in the sample was 32.3 years old ($SD = 11.0$), and the entire sample of sex workers, who identified their race (3 had missing data for this question), identified as Black or African American. 56.6% of the sex worker sample had an annual income of less than \$10,000 and 25.5% had an annual of between \$10,000 and \$30,000. In terms of education nearly a quarter (21.3%) of the sex workers had less than a high school education, 33% had finished high school or received a GED, and 42.5% had some post-high school education. All subsequent results come from Table 1.

Table 1. Risk Factors for BMSM Non-sex workers Versus BMSM Sex Workers

Variable	Non-sex workers <i>n</i> = 1572 (94.4%)		Sex Workers <i>n</i> = 94 (5.6%)		χ^2	p-value*
	<i>n</i>	%	<i>n</i>	%		
Physical assault	205	13.2	43	45.7	73.16	<.001*
Discrimination in Public	270	17.4	47	50.0	60.52	<.001*
Discrimination in school	194	12.5	23	24.5	11.07	.002*
Discrimination trying to get a job	198	12.7	31	33.0	30.38	<.001*
Discrimination at work	208	13.4	28	29.8	19.41	<.001*
Discrimination in housing	119	7.7	27	28.7	48.46	<.001*
Discrimination in medical care	100	6.4	20	21.3	28.82	<.001*
Discrimination in legal system	185	11.9	38	40.4	61.42	<.001*
Never been tested for HIV	113	7.4	18	19.8	17.94	<.001*
Depression	349	22.2	47	50.0	37.83	<.001*
Poly-Substance use	134	8.5	42	44.7	122.71	<.001*
URAI	478	30.4	47	50.0	15.78	<.001*
Sex under the influence	488	31.0	66	70.2	61.31	<.001*
Alcohol abuse	264	16.8	44	46.8	53.02	<.001*
Incarcerated last 10 years	242	15.7	46	50.0	70.30	<.001*
Homelessness	156	10.2	42	46.2	103.57	<.001*
Could not afford medical care	281	18.5	41	46.6	41.19	<.001*
Positive HIV status	482	37.5	36	41.4	.51	.494

5.1 ASSAULT AND DISCRIMINATION

Nearly half (45.7%) of the sex workers reported having been physically assaulted in the past year, compared to only around 13% of the general sample, which was a statistically significant difference. In addition, the sex workers in the sample reported statistically higher rates of discrimination and/or harassment than the non-sex workers across every measure, including in public (50%), at school (24.5%), employment seeking (33.0%), while at work (29.8%), in housing (28.7%), as patients in a medical facility (21.3%), and in the legal system (40.4%).

5.2 PSYCHOSOCIAL FACTORS

These are measures that largely occur at the structural level, are less the result of individual behaviors, and are commonly associated with the syndemic model. Once again, every measure tested and discussed here produced a statistically significant difference between the two groups. Half (50.0%) of the sex workers reported being depressed, compared to 22.2% of the comparison group. In addition half (50.0%) of sex workers reported having been incarcerated at least once during the past 10 years, compared to only 15.7% of the non-sex workers. In terms of accessing medical care, nearly half (46.6%) of the sex workers experienced at least one instance in the past year when they needed medical care but could not afford it, and so went without. Around 18.1% of the general sample reported having this issue. The largest disparity in the psychosocial measures turned out to be homelessness. 46.6% of those engaged in sex work stated that they had been homeless during the past year, with about a tenth (10.2%) of the general sample reporting homelessness during the past year.

5.3 BEHAVIORAL RISK FACTORS

Generally speaking, the behavioral risk factor prevalence rates were high for both the non-sex workers and the sex workers, but as a group the sex workers demonstrated significantly higher risk taking behaviors than the non-sex workers. 44.7% of the sex workers were poly-substance users, compared to only 8.5% of the general sample. 50% of the sex workers in sample reported using condoms while bottoming “never,” “rarely,” or “about half of the time,” compared to the general sample’s rate of 30.4%. Those abusing alcohol in the sex worker sample came to 46.8%, with the non-sex workers at 16.8%. The largest disparity in the behavioral risk factor measures appears to be having sex while under the influence of drugs and/or alcohol. 70.2% of the sex workers reported being under the influence of drugs and/or alcohol during their last sexual encounter and the non-sex workers reported a rate of 31.0%.

5.4 HIV

While looking across all of the risk factors measured in the sample, and specifically upon examining the significance differences in those risk factors between the sex workers and the general sample, one would expect for there to also be a difference in HIV prevalence. However, there was no significant difference in HIV prevalence between the two groups. The general sample had an HIV rate of 37.5% while the sex workers had a prevalence of 41.1%, slightly higher, but not significantly higher. The χ^2 distribution for that analysis was .511 and it had a p-value of .494. I conducted a sub-analysis consisting of only the biological HIV testing data gathered by the study, eliminating both the self reported positive and negative

participants, and the results still did not show a statistical difference in HIV rates between the two groups. Of the 80 sex workers who provided an HIV test, 40 tested positive and 40 tested negative, showing an HIV prevalence of 50%. Of the 1216 non-sex workers who provided an HIV test, 542 tested positive and 674 tested negative, showing a prevalence of 44.6%. The difference was insignificant upon running a chi square test.

There was statistically significant difference between the two groups when it came to ever having been HIV tested, with 19.8% of the sex workers never having had an HIV test and only 7.4% of the non-sex workers never having had an HIV test. This important difference still did not lead to a significantly prevalence of HIV for the sex workers.

6.0 DISCUSSION

Across every syndemic variable measured in this analysis, the sex workers in the sample exhibited statistically higher risk and negative health outcomes than the non-sex workers, with the sole exception being HIV prevalence, which will be discussed in more detail later. The driving purpose behind this analysis was exploratory, to identify the risks involved within the context of black MSM engaged in sex work and to understand how those risks compare to a general sample of black MSM. The lives and health risks of male sex workers, and even more so the lives and health risks of black male sex workers, are under researched and poorly understood. This analysis was able to show that in a sample of BMSM who are already at extreme risk for many negative health outcomes, those among them who engage in sex work are at an even more intolerable risk.

There are a few limitations inherent in the study and analysis. The most apparent limitation is that the BMSM who attend black pride events may be different than BMSM who do not. Issues such as travel money, the ability to take time off of work/school, levels of outness and familial/friend acceptance, and other factors could prevent people from attending black pride events. This could have led to a sample of BMSM that is not entirely representative of the population. There is, however, quite a large amount of variability within the sample. Another limitation is the fact that all of the data collected is cross-sectional and thus making conclusions of cause and effect are not possible. Finally, the sample size of sex

workers is small compared to the overall sample of BMSM, which reduces the power in the analysis.

In contrast to the limitations mentioned above, the POWER study has a set of strengths that lend credibility and reliability to the results of this investigation. Participants in the study are from a wide variety of regions in the United States and represent many different incomes, levels of education, and backgrounds. It utilizes a thorough survey instrument that addresses a large range of different issues and health outcomes pertinent to the population. TLS ensured that different types of events and times during the Black Pride festivals were represented and the HIV surveillance methods utilized by the study allowed for a sizeable number of participants to give us prevalence data. By the end of the first year of data collection POWER had collected over 1,600 completed surveys by BMSM, an impressive number, and with two more years planned it is very likely that it will end with one of the largest, if not the largest, sample of BMSM ever obtained. With 94 of the first year surveys being completed by participants with a history of sex work, it also is one of the largest samples of black male sex workers ever obtained. The method of data analysis allowed a comprehensive examination of the health of both the sex workers and general sample separately, and also allowed for a detailed comparison of the two groups. Finally, there has been very little research done on the health of black male sex workers and this analysis expands that body of literature.

Sex workers, and specifically for the purposes of this discussion male sex workers whose clients are male, have traditionally been understood to be at a high risk of several negative health outcomes.¹⁴⁻¹⁷ They are oftentimes ignored in analyses surrounding the health of gay men and of sex workers in general and are thus a poorly understood population. Most

studies that have been done on this population corroborate the hypothesis that male sex workers are at a high risk for substance use, depression, assault, and HIV, among others.¹⁹

In this analysis, it was shown that nearly half of the sex workers had been physically assaulted in the past year (compared to only 13.2% of the non-sex workers), were poly-substance users (compared to only 8.5% of the non-sex workers), had been homeless within the past year (compared to only 10.2% of the non-sex workers), and could not afford medical care (16.8% of the non-sex workers could not access medical care). It also revealed that more than half of the sex workers had experienced public discrimination or harassment (compared to only 17.4% of the non-sex workers), were depressed (compared to 22.2% of the non-sex workers), were incarcerated (15.7% of the non-sex workers), and had reported high instances of unprotected receptive anal intercourse (30.4% of the non-sex workers). Of course this is only one analysis with one sample, but with a sample size of 94 it is one of the larger samples of black male sex workers in the literature. It is worth noting that the prevalence of these various health risks and outcomes are quite high for the general sample of BMSM when compared to the general population of the United States, and that the heightened risks exhibited by the sex workers only further reveals the dire state in which black male sex work exists.

Despite the limited knowledge researchers regarding this population, very few, if any, interventions exist whose purpose is to serve male sex workers.²⁰ A partial reason for that disparity can be accounted for by the stigma and illegality surrounding sex work in general, but it is also the result of the marginalized and hidden nature of many gay and bisexual men. For many, engaging in sex work is a legitimate decision, thought out and chosen. For others, there is less or no autonomy involved. But for all sex workers risk is a reality, sometimes a mortal one, and as public health researchers and practitioners it is our job to understand these

marginalized populations, accept that sex work is oftentimes a choice, and attempt to either assuage some of the risks involved through harm reduction methods, or to reach those sex workers who wish to get out of the industry and assist them in gaining the skills to do so. Efforts to reduce rates of homelessness, physical assault, drug and alcohol abuse, depression, and access to medical care issues are imperative if this population's needs are to be addressed.²⁰ In addition, interventions aimed at making sex work safer and healthier in terms of risk taking also need to be pursued. In order to design appropriate and effective interventions aimed at serving this population however, more research attempting to understand the health vulnerabilities and pathways of risk in the context of male sex work is necessary. Qualitative research designed to understand the unique cultural needs of this population would also be essential when attempting to design appropriate questionnaires for quantitative research. It will be important going forward to include black male sex workers in research regarding both the health of gay men and of sex workers in general.

It is widely accepted that behavioral risk factors such as unprotected receptive anal intercourse, having sex while intoxicated, and frequency of HIV testing, are linked to higher HIV rates in a population.⁶ Despite high levels of risk taking and high prevalence of traditional syndemic associations, the sex workers in the sample did not have a statistically significant higher prevalence of HIV than the general sample of BMSM. When analyzing all of the other variables and seeing the sex workers reporting higher risk and more negative health problems across the board, having HIV rates come out as not significant was unexpected. There are a number of explanations or combinations of explanations that could account for this apparent discrepancy. One possible reason is that due to the pressures and surveillance, both perceived and genuine, that many BMSM live with as a result of their race

and sexuality, participants in the study may not have been comfortable admitting to engaging in sex work during the survey. If this was the case, then the number of sex workers in the sample could have been larger, the power of the analysis could have been more robust, and the results of the HIV analysis may have been different. In a similar vein, stigma surrounding self-disclosure of one's HIV status could have inhibited participants and would have led to misleading HIV data. Another possible explanation could reside in the questions themselves. The way sex work was measured in the survey could have impacted the ability of participants to answer accurately. In a similar way to the previous possible explanation, this would have impacted the sample size of the sex workers, which could have influenced the results. Additionally, it is possible that the black male sex workers experience higher rates of mortality and morbidity than the non-sex workers. This would have made it difficult or impossible for POWER to proportionately sample black male sex workers because they were unable to attend the sampling events. These are all instances where more qualitative research is required in order to more appropriately and precisely gather information from participants.

Even though it is widely accepted that risky sexual behaviors are associated with higher rates of HIV, recent research on the topic suggests that behavior is not the only factor that leads to HIV.⁸⁻⁹ The concept that sexual networks and high background levels of community viral load²¹⁻²² are leading contributors to HIV incidence and prevalence could be explaining this phenomenon in the sample. It is possible that the reason there is no difference between the sex worker's rate of HIV and that of the general sample is that the small and closely bound sexual networks of the two groups overlap to a high degree, essentially equalizing the exposure to the virus across both groups of men. Community viral load in many BMSM populations is much higher than the national average and drives sexual risk for being

infected with the virus, even among individuals who do not commonly engage in risky behavior.^{3, 8} Additionally, rates of health insurance and health care acquisition are low in many BMSM populations and low in both groups in the sample. This is undoubtedly affecting HIV testing, treatment, and ultimately contributing to higher incidence in the population. Finally, while rates of risk taking behavior and psychosocial factors are particularly high for the sex workers in the sample, the rates for the general sample of BMSM are also quite high. The high rates of all of these other factors could be making adding the additional risk factor of sex work irrelevant to one's chances of acquiring HIV infection as a BMSM in the sample.

7.0 CONCLUSION

High prevalence of a number of behavioral risk factors, negative psychosocial health outcomes, physical assault, and HIV, among others revealed by this analysis, indicates a significant need for further research into, and the tailoring of interventions for, black male sex workers. Being an extraordinarily disenfranchised and vulnerable group, combined with the position of sex work as a possible mode of transmission of HIV, calls for a need for more attention to be paid to this population. The sex workers in the sample demonstrated higher behavioral risk associated with HIV and higher rates of common syndemic associations of HIV, but did not follow up with the expected corresponding higher prevalence of the virus. If behavioral risk factors are not the leading determinant of HIV in these populations, and indeed this analysis points towards that conclusion, then more research, both quantitative and qualitative, will be crucial in understanding the health needs and the pathways of HIV in communities of BMSM.

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