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Survival Sex Work and Increased HIV Risk Among Sexual Minority Street-Involved Youth

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Abstract

Objectives—Exchanging sex for money, drugs, or other commodities for survival is associated with an array of HIV risks. We sought to determine if street-involved drug-using sexual minority youth are at greater risk for survival sex work and are more likely to engage in risk behaviors with clients.

Methods—We examined factors associated with survival sex work among participants enrolled in the At Risk Youth Study using logistic regression. Self-reported risk behaviors with clients were also examined.

Results—Of 558 participants eligible for this analysis, 75 (13.4%) identified as a sexual minority and 63 (11.3%) reported survival sex work in the past 6 months. Sexual minority males (adjusted odds ratio = 16.1, $P < .001$) and sexual minority females (adjusted odds ratio = 6.87, $P < 0.001$) were at significantly greater risk for survival sex work. Sexual minority youth were more likely to report inconsistent condom use with clients (odds ratio = 4.30, $P = 0.049$) and reported a greater number of clients in the past 6 months (median = 14 vs. 3, $P = 0.008$).

Conclusions—Sexual minority street youth are not only more likely to engage in survival sex work but also demonstrate elevated HIV risk behavior. These findings suggest that harm reduction and HIV prevention programs for sexual minority youth who exchange sex are urgently required.

Keywords

adolescent; HIV; LGBT; sex work; sexual minority; street youth

INTRODUCTION

Homeless and street-involved youth are vulnerable to HIV infection. The prevalence of HIV observed among this population in Canada and the United States has ranged from 2% to more than 10%.^{1–3} Street youth who participate in survival sex work are at a particularly elevated risk for HIV acquisition due in part to increased exposure to criminalization and violence, risk-enhancing environments, and high HIV prevalence social–sexual networks.^{4–7}

Street youth who engage in survival sex work are also at an increased risk for a host of other adverse health outcomes including depression, suicidality, and victimization.^{8–10} Most studies suggest that between 25% and 40% of street youth have ever engaged in survival sex work, with this activity being equally common among males and females.^{8,11,12}

A small but burgeoning literature has demonstrated the unique challenges faced by sexual minority (lesbian, gay, bisexual, or transgender/transsexual) street youth, including an elevated likelihood of victimization, suicidality, injection drug use, and HIV infection.^{13,14} Although it is clear that sexual minority street youth and those engage in survival sex work face markedly elevated risks for HIV infection, the intersection between sexual orientation and survival sex work among this population has not been well described. Therefore, the objectives of this study were to describe the prevalence of survival sex work among both heterosexual and sexual minority males and females and to determine whether HIV risk behaviors in the context of survival sex work differ between heterosexual and sexual minority street-involved youth.

METHODS

The At Risk Youth Study (ARYS) is an open prospective cohort of street-involved youth that has been described in detail previously.¹⁵ Snowball sampling and extensive street-based outreach was conducted to recruit participants into the study. Eligibility criteria included: being between the age of 14 and 26, self-reported use of illicit drugs other than or in addition to marijuana in the past 30 days, and the provision of informed consent. The study has been approved by the University of British Columbia/Providence Health Care Research Ethics Board.

All participants who completed a baseline survey between September 2005 and October 2007 were included in this analysis. At study entry, each participant completed an interviewer-administered questionnaire and provided blood samples for HIV and hepatitis C virus serology. Survival sex work was defined as answering “yes” to the following question: “In the past 6 months, have you received money, drugs, shelter, food, or gifts in exchange for sex?” The main independent variable of interest was sex/sexual orientation. A categorical variable was constructed by grouping participants into 1 of 4 categories: heterosexual males, sexual minority males, heterosexual females, and sexual minority females. Other variables that were included in this analysis included age, aboriginal ethnicity (self-identified First Nations, Inuit, or Métis ancestry vs. other), homelessness in the past 6 months, relationship status (single or casually dating vs. regular partner or married), injection drug use in the past 6 months, history of sexual abuse, and history of physical abuse. These variables were chosen based on a review of relevant literature examining sex work among street youth.^{11,12,16,17} Inconsistent condom use with clients and number of different clients in the past 6 months were also examined. As described previously, we defined inconsistent condom use as not always using a condom during vaginal and/or anal intercourse with all clients.¹⁸

Pearson χ^2 test was used to determine the association between survival sex work and sex/sexual orientation. This variable was then entered into a logistic regression model adjusting for all other covariates significant at $P < 0.05$ in bivariate analyses. Fisher exact test and the Wilcoxon rank-sum test were used to examine self-reported sexual risk behaviors with clients. All statistical analyses were conducted using SAS version 9.1.3 (SAS Institute, Inc., Cary, NC).

RESULTS

Among 560 participants, 2 (0.4%) did not report their sexual orientation and were excluded from all subsequent analyses. Of the 558 participants, the median age was 21.9 [interquartile range (IQR): 19.8–23.9], 178 (31.9%) were female, 130 (23.3%) were of aboriginal ancestry, and 75 (13.4%) identified as a sexual minority. Engagement in survival sex work was reported by 63 participants (11.3%); of whom, 15 (23.8%) were heterosexual males, 22 (34.9%) were heterosexual females, 9 (14.3%) were sexual minority females, and 17 (27.0%) were sexual minority males.

We observed a significant association between sex, sexual orientation, and self-reported engagement in survival sex work ($\chi^2 = 77.68$, $P < 0.001$). As shown in Table 1, relative to heterosexual males, heterosexual females [odds ratio (OR) = 4.27, 95% CI: 2.14 to 8.52, $P < 0.001$], sexual minority females (OR = 6.04, 95% CI: 2.45 to 14.86, $P < 0.001$), and sexual minority males (OR = 23.52, 95% CI: 9.99 to 55.38, $P < 0.001$) were all significantly more likely to report survival sex work. However, sexual minority females were not significantly more likely to report survival sex work as compared with heterosexual females (OR = 1.41, 95% CI: 0.57 to 3.33, $P = 0.439$). The strength of these associations did not diminish even after adjustment for potential confounders (Table 1). Along with sex/sexual orientation, other factors that remained significant in the multivariate model included age (adjusted odds ratio = 1.12 per year older, 95% CI: 1.00 to 1.25, $P = 0.048$) and a history of sexual abuse (adjusted odds ratio = 2.30, 95% CI: 1.24 to 4.26, $P = 0.008$).

We then examined the number of clients and condom use patterns reported by the 63 individuals engaged in survival sex work. Several important differences between heterosexual and sexual minority youth emerged. Although heterosexuals reported a median of 3 (IQR: 1–10) different clients in the past 6 months, sexual minority participants reported 14 (IQR: 4–37.5; $P = 0.008$). Furthermore, of the 45 survival sex workers (71.4%) reporting vaginal or anal intercourse with clients, 9 sexual minority youth (45%) compared with only 4 heterosexual youth (16%) reported inconsistent condom use with clients (OR = 4.30, 95% CI: 1.07 to 17.15, $P = 0.049$).

DISCUSSION

Among a community-recruited sample of street-involved youth, more than 10% reported engaging in survival sex work in the past 6 months. The likelihood of reporting survival sex work was heavily dependent on sex and sexual orientation; for example, more than 50% of sexual minority males reported exchanging sex during the past 6 months. Of further concern is that, despite small numbers, trends suggest that compared with the heterosexual participants, sexual minority males and females reported significantly greater numbers of clients and were more likely to report inconsistent condom use with clients. Collectively, these data suggest that policy and programmatic interventions are urgently needed to address the elevated risk for HIV and sexually transmitted infection acquisition among sexual minority street youth engaging in survival sex work.

These results also support a recently published study demonstrating that sexual orientation is an important risk factor for survival sex work involvement among males.¹⁷ Although sexual minority status was not a significant correlate of survival sex work among females in this sample, other street youth studies have shown that women who report female sex partners are at a greatly increased risk of survival sex work initiation.^{12,16} Future research is required to further elucidate the intersection of sexual orientation and survival sex work among street youth populations. For example, in-depth qualitative research that explores sexual minority youth's rationale for engaging in survival sex work and risk behavior with clients may

provide better insight into the findings observed in this study. These results do suggest that public health programs must be sensitive to diverse sexual and gender identities of street youth who exchange sex.

This study has a number of limitations that should be noted. ARYS is not a random sample of street-involved youth, and thus generalizations to the entire street youth population may be limited. It is important to note that the sociodemographic characteristics of our cohort are similar to other street youth studies that have been conducted in our setting.^{19,20} Second, self-reported behaviors are known to be subjected to recall bias and social desirability bias. To this end, we have no reason to believe that street youth engaging and not engaging in survival sex would differ with respect to socially desirable reporting. However, because survival sex work is a stigmatized behavior, we may have underestimated the true prevalence of this behavior, which would have attenuated our results toward the null. Finally, because our data are cross sectional, we are only able to infer a correlational relationship between sexual orientation and survival sex work; longitudinal studies investigating the temporal association between sexual identity and engagement in survival sex work are required.

In summary, we have demonstrated a dramatically high prevalence of survival sex work among sexual minority street-involved youth. This finding in conjunction with the fact that sexual minority youth who exchange sex report higher rates of HIV-related risk behaviors compared with their heterosexual counterparts point to the urgent need for public health intervention. Innovative youth-friendly programs that address sex work-related vulnerabilities and are inclusive to all sexual and gender identities are urgently required.

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TABLE 1
Factors Associated With Engagement in Survival Sex Work Among a Cohort of Street-Involved Youth (n = 558)

Characteristic	Sex Work, n (%), n = 63	No Sex Work, n (%), n = 495	OR (95% CI)	P	AOR (95% CI)	P
Age (per year older)			1.11 (1.01 to 1.22)	0.033	1.12 (1.00 to 1.25)	0.048
Sex/sexual orientation ¹						
Male heterosexual	15 (4.3)	332 (95.7)	1.00	–	1.00	–
Female heterosexual	22 (16.2)	114 (83.8)	4.27 (2.14 to 8.52)	< 0.001	4.12 (1.95 to 8.70)	< 0.001
Sexual minority females ²	9 (21.4)	33 (78.6)	6.04 (2.45 to 14.86)	< 0.001	6.87 (2.59 to 18.25)	< 0.001
Sexual minority males ²	17 (51.5)	16 (48.5)	23.52 (9.99 to 55.38)	< 0.001	16.06 (6.37 to 40.45)	< 0.001
Aboriginal ethnicity						
No	39 (9.1)	389 (90.9)	1.00	–	1.00	–
Yes	24 (18.5)	106 (81.5)	2.26 (1.30 to 3.92)	0.003	1.56 (0.81 to 3.02)	0.186
Homeless ³						
No	11 (8.1)	125 (91.9)	1.00	–	–	–
Yes	52 (12.3)	370 (87.7)	1.60 (0.81 to 3.16)	0.175	–	–
Relationship status						
Single/casual dating	49 (11.8)	368 (88.2)	1.00	–	–	–
Married/regular partner	14 (9.9)	127 (90.1)	0.83 (0.44 to 1.55)	0.555	–	–
Injection drug use ³						
No	34 (8.6)	361 (91.4)	1.00	–	1.00	–
Yes	29 (17.8)	134 (82.2)	2.30 (1.35 to 3.92)	0.002	1.50 (0.80 to 2.80)	0.207
Sexual abuse ⁴						
No	29 (7.1)	382 (92.9)	1.00	–	1.00	–
Yes	34 (23.1)	113 (76.9)	3.96 (2.31 to 6.79)	< 0.001	2.30 (1.24 to 4.26)	0.008
Physical abuse ⁴						
No	27 (8.8)	281 (91.2)	1.00	–	1.00	–
Yes	36 (14.4)	214 (85.6)	1.75 (1.03 to 2.97)	0.037	1.10 (0.60 to 2.02)	0.761

All variables significant at $P < 0.05$ were included in the adjusted multivariate model.

AOR = adjusted odds ratio.

¹ Categorical variable with “male heterosexual” as the reference level.

²Sexual minority denotes lesbian, gay, bisexual, transgender, ortranssexual (LGBT).

³Refers to activities in the past 6 months.

⁴Refers to lifetime history.