

Workplace violence among female sex workers who use drugs in Vancouver, Canada: Does client targeted policing increase safety?

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ABSTRACT

Workplace violence, by clients or predators, poses serious negative health consequences for sex workers. In 2013, the Vancouver (British Columbia), Canada Police Department changed their guidelines with the goal of increasing safety for sex workers by focusing law enforcement on clients and third parties, but not sex workers. We sought to examine the trends and correlates of workplace violence among female sex workers (FSW) before and after the guideline change, using data collected from prospective cohorts of persons who use illicit drugs in Vancouver, Canada. Among 259 FSW, 21.0% reported workplace violence at least once during the study period between 2008 and 2014. There was no statistically significant change in rates of workplace violence after the guideline change. In our multivariable analysis, daily heroin use was independently associated with workplace violence. The 2013 policing guideline change did not appear to have resulted in decreased reports of workplace violence. Increased access to opioid agonist therapies may reduce workplace violence among drug-using FSW.

Keywords: female sex workers, workplace violence, daily drug use, protection strategy.

INTRODUCTION

Sex workers suffer from higher rates of mortality and morbidity compared to the general population,¹⁻³ stemming in part from policies criminalizing sex work.⁴ It is well documented that the criminalization of sex work increases the risk of violence and HIV,^{3,4} partly by forcing sex workers to evade police detection and conduct business in secluded locations without support services nearby.⁵ As of December 2012, the World Health Organization and Joint United Nations Programme on HIV/AIDS (Human immunodeficiency virus that causes AIDS) reconfirmed its call for full decriminalization of sex work to remove unjustified punitive sanctions against and increase safety for sex workers.⁶ Countries such as New Zealand, the Netherlands, and Germany have previously decriminalized sex work.⁷ In New Zealand, the first country to do so, decriminalization increased sex workers safety by allowing longer pre-screening to detect potentially violent clients, increased ability to refuse clients, and better ability to negotiate safer sex practices.^{8,9} Without legal recognition, sex workers may also be hesitant to report violence, that may be perpetrated by clients, predators posing as clients, police, or exploitative third parties.¹⁰ Among street-based female sex workers who use drugs, the estimated prevalence of experiencing workplace violence, including physical, sexual, and verbal violence, varies widely both within and across regions of the world, with high rates of violence ranging from a lifetime prevalence of 82.0% and one year prevalence as high as 68.4%.¹¹⁻¹³

Violence against sex workers is both a human rights abuse and a public health issue linked to a range indicators of poor health including poor sexual and reproductive health, lack of access to health and social services, trauma, and depression.¹⁴⁻¹⁷ Evidence-

based strategies to reduce violence include screening prospective clients, access to safer workplaces, and working together with other sex workers.^{3, 18} These individual level strategies may, however, have limited effectiveness without broader structural changes to ensure safer work environments.

In Canada, selling sex for money has always been legal; however, activities relating to the exchange of sex (such as communication for the purposes of sex work including soliciting sexual transactions) were previously prohibited.¹⁹ In response to growing concerns for sex workers' safety, the Vancouver Police Department (VPD) updated their sex work enforcement guidelines in January of 2013, intending to build trust and ensure safety for sex workers in Vancouver. Previously the focus of the police had been to target sex workers as well as clients. With the changed guidelines, police officers no longer targeted sex workers, except in cases of last resort (e.g. gang affiliations, human trafficking), although consistent with the previous law targeting clients and third parties remained in place.²⁰ At the Canadian federal level in December 2014 after a constitutional challenge, Bill C-36 *Protection of Communities and Exploited Persons Act* (S.C. 2014, c. 25) came into effect, officially making the purchasing of sex a criminal act; it resembles the Nordic model.

Previous studies indicate that this model might *increase* safety concerns for sex workers.¹³ For example, when purchasing sex is criminalized and clients are targets of police officers, it is in the best interest of clients and sex workers to avoid police detection by rushing negotiations of services and charges, that are known to increase the likelihood of workplace violence.³ In light of these concerns, beginning in December 2014, the VPD stopped targeting clients and third parties as well.

Given the serious and well documented harms associated with experiencing workplace violence among sex workers,^{14, 15} conducting research on the impact of the 2013 VPD guidelines had the potential to learn if the intended goals were achieved. An evaluation of the impact of the guidelines among street-based sex workers had previously shown that there were no differences in rates of physical or sexual violence in the year following the guidelines, compared to before the guidelines.²¹ Our study extends this work by drawing on longer-term longitudinal data to assess rates of workplace violence before and after the 2013 policing guidelines change. Our study is also positioned to help identify sub-populations of sex workers at higher risk of experiencing workplace violence. Taking advantage of data from ongoing prospective cohorts of people who use drugs in Vancouver, we sought to identify trends and factors associated with reporting workplace violence amongst female sex workers in these cohorts, both before and after the 2013 VPD guideline change.

METHODS

Study Procedures

The Vancouver Injection Drug Users Study (VIDUS), the AIDS Care Cohort to evaluate Exposure to Survival Services (ACCESS), and the At-Risk Youth Study (ARYS) are ongoing open prospective cohorts of people who use illicit drugs. Participants in all these studies are recruited through self-referral and street outreach in Vancouver, British Columbia, Canada. These studies have been described in detail previously.^{22, 23} Briefly, VIDUS enrolls HIV-negative adults (aged ≥ 18 years) who report injecting an illicit drug at least once in the month preceding enrollment; ACCESS enrolls HIV-positive adults who report using illicit drugs (other than or in addition to cannabis) in the previous

month. ARYS enrolls street-involved youth, defined as currently homeless or using services for homeless youth, aged 14-26 years who use illicit drugs (other than or in addition to cannabis) in the previous month. For all cohorts, other eligibility criteria include residing in the greater Vancouver region and providing written informed consent. The study instruments and all other follow-up procedures for each study are essentially identical to allow for combined analyses. At baseline and semi-annually thereafter, participants complete an interviewer-administered questionnaire eliciting socio-demographic data as well as information pertaining to drug use patterns, risk behaviors, and health care utilization. Participants receive a \$30 (CDN) honorarium for each study visit. The University of British Columbia/Providence Healthcare Research Ethics Board provided ethical approval for all studies.

Study sample and primary outcome measure

Included in the present analysis are all female adult participants aged ≥ 18 years who completed study visits between December 1, 2008 and November 30, 2014, and who reported sex work (exchanging sex for gifts, food, clothing, shelter, money, or drugs) and resided within the VPD's jurisdiction in the previous six months at each follow-up. The primary outcome of interest was having reported workplace violence in the previous six months during a follow-up interview. This variable was ascertained from a question: "In the past 6 months, have you had a bad date?" In the questionnaire a 'bad date' was an all-encompassing term for when a client or predator posing as a client becomes violent. Each participant was also asked what happened the last time she experienced workplace violence. For the present study, we restricted the definition of workplace violence to having reported physical, sexual, or verbal violence, including abduction, rape,

strangling, assault without weapon, assault with weapon, assault with a gun, attempted sexual assault, and verbal abuse. Participants were also asked: if they reported the workplace violence to anyone other than study staff during interviews, and if so to whom; if they received medical attention from anyone, and if so from whom; and if they received any counseling or talked to anyone about it, and if so to whom. Because the reports of workplace violence referred to anytime in the past six months, we excluded data collected between January 1st and June 30th of 2013 so that we could compare the time periods before and after the VPD guideline change that occurred in January 2013.

Study variables

Based on the literature,^{24, 25} we selected explanatory variables that we hypothesized might be associated with experiencing workplace violence. These included a time variable to compare the effect of interview dates (on and after 1 July 2013 – 30 November 2014 vs. before 1 January 2013). The period before 1 January 2013 referred to before the VPD guideline change, while on and after 1 July 2013 referred to the period after. Socio-demographic data included: age (per year increase); self-reported white ancestry; and homelessness (no fixed address, sleeping on the street, couch surfing, or staying in a shelter or hostel). Drug use patterns in the previous six months included: daily heroin use; daily prescription opioid use; daily stimulant drug use (specifically powder or crack cocaine or crystal methamphetamine); binge drug use, defined as high-intensity drug use that exceeds normal patterns of consumption;²⁶ and heavy alcohol use, defined by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) as more than 3 drinks per day or more than 7 drinks per week for females.²⁷ Variables for health status and healthcare access included: ever diagnosed with a mental health disorder; HIV

seropositivity; enrolled in drug or alcohol treatment; inability to access community health or social services (counselor, dentist, social worker, housing); and having been ‘jacked up’ (stopped, searched, or detained) by the police. Sex work related variables included: having ‘serviced’ clients (performed sexual acts) in public places; used drugs and/or alcohol with clients; ever used services specific for sex workers (mobile outreach, drop-in centres, food services) and protection strategies of only taking known clients; working out of home; and carrying a weapon including sharp household objects. All behavioural variables referred to the six months prior to the interview, unless otherwise stated, and were dichotomized as yes vs. no.

Statistical Analysis

As a first step, we examined the baseline sample characteristics stratified by reports of experiencing workplace violence, using the Pearson’s Chi-squared test (for binary variables) and Wilcoxon Rank Sum test (for continuous variables). Fisher’s exact test was used when one or more of the cells contained expected values less than or equal to five.

Because analyses of factors potentially associated with experiencing workplace violence included serial measures for each participant, we used generalized estimating equation (GEE) with logit link that provided standard errors adjusted by multiple observations per person using an exchangeable correlation structure. Therefore, data from every participant follow-up visit were considered in this analysis. Because our study aimed to identify the set of variables that best explain a higher odds of reporting workplace violence, we used an *a priori*-defined backward model selection procedure based on examination of quasi-likelihood under the independence model criterion statistic

(QIC) to fit a multivariable model. In brief, we first included all explanatory variables that were associated with reporting workplace violence in bi-variable analyses in a full model. After examining the QIC of the model, we removed the variable with the largest p -value and built a reduced model. We continued this iterative process and selected the multivariable model with the lowest QIC value.²⁸

In a sub-analysis, we used descriptive statistics to examine specifically what happened the last time a participant experienced workplace violence, if and to whom she reported the workplace violence, if she received medical attention and from whom, and if she received counseling and if so from whom. All p -values are two sided. All statistical analyses were performed using RStudio, version 0.99.892 (R Foundation for Statistical Computing, Vienna, Austria).

RESULTS

In total, 259 participants were eligible for the present study. Among this sample, 126 (48.6%) self-reported white ancestry, and the median age at baseline was 35.5 years (interquartile range [IQR] = 28.1 – 44.9). Overall, the 259 individuals contributed 767 observations to the analysis and were followed for a median of 6.9 months (IQR: 0 – 41.8). Of the 259 individuals, 54 (21.0%) reported a total of 70 incidents of workplace violence. The baseline characteristics of all participants stratified by reporting workplace violence are presented in **Table 1**.

The results of the bi-variable and multivariable GEE analyses of factors associated with experiencing workplace violence are presented in **Table 2**. As shown, in the final multivariable model, factors that remained independently associated with

reporting workplace violence included: daily heroin use (adjusted odds ratio [AOR] = 1.99, 95% CI: 1.10-3.60), daily stimulant use (AOR = 0.53, 95% CI: 0.29-0.97), binge drug use (AOR = 2.11, 95% CI: 1.05–4.25), inability to access community health or social services (AOR = 3.65, 95% CI: 2.15–6.19), jacked up by police (AOR = 2.42, 95% CI: 1.33–4.40), sex work in public (AOR = 2.19, 95% CI: 1.14–4.21), and only taking known clients (AOR = 0.32, 95% CI: 0.15–0.70). Among individuals who experienced workplace violence, the community health or social services required – but which they were unable to obtain– included housing (18.5%), medical services (16.7%), drug treatment (14.8%), and dental services (9.3%). Additionally, the time period after the 2013 policy change was not significantly associated with experiencing workplace violence (OR = 1.09, 95% CI: 0.59–2.04).

In the sub-analysis, the top three descriptions of reported workplace violence included assaulted without weapon (47.1%), raped (28.6%), and strangled (11.4%) as shown in **Table 3**. Overall, participating women reported the majority of violent episodes to no one (50.0%), followed by reported to police (31.4%), and reported to a local drop-in centre for female sex workers (20.0%), as shown in **Table 4**. After the workplace violence only women having made 21 (30.0%) reports received any medical attention, and going to the emergency room 17 (24.3%) was the most common response by far (**Table 4**). Additionally, the top three groups of individuals to whom participants talked about the workplace violence were friends (12.9%), counselors (10.0%), and family (8.6%) (**Table 4**).

DISCUSSION

We found that approximately one-fifth of our study sample of female sex workers who used drugs experienced physical, sexual, or verbal workplace violence at least once during the study period. There was no significant change in reporting workplace violence before and after the VPD guideline change. The positive associations identified in the multivariable analysis appeared to speak largely to markers of intense substance dependence and social-structural vulnerability.

Our findings suggest that despite the 2013 VPD guideline change intended to increase safety for sex workers, there has been no statistically significant decrease in experiencing workplace violence among our sample. This is consistent with a previous study in Vancouver that found, eight months after the policy change, there was no statistically significant change in violence experienced by sex workers.²¹ Although our findings suggest that the 2013 guideline change has not achieved the intended goal of reducing workplace violence experienced by sex workers, our study period concluded in November 2014 and the VPD further updated their guidelines in December 2014 to no longer target clients and third parties. Additional research should be conducted using a longer time frame to account for this further policy shift.

Our finding that female sex workers who only took clients known to them were less likely to report workplace violence had not been specifically identified previously as a protection strategy, but previous studies have identified careful screening of clients as an effective risk reduction technique for sex workers.^{3, 29} For sex workers who only see regular (known) clients, previous encounters without incident may have functioned as a similar safety screening procedure.

Our results indicate that daily heroin users were more likely to report workplace violence, while daily stimulant users were less likely to do so. This finding had not been previously identified either. Alcohol, a known depressant, has been positively associated with sexual workplace violence among sex workers.³⁰ Among men who inject drugs, frequent heroin injection was positively associated with being a victim of violence.³¹ To avoid the painful symptoms of heroin withdrawal, there may be increased incentives to rush through pre-screening procedures that are known to protect sex workers from workplace violence.³ Ensuring the availability and accessibility of opioid agonist therapy or prescription heroin/diacetylmorphine may potentially serve to reduce workplace violence among this vulnerable sub-population. In the province of British Columbia, opioid agonist therapies using methadone or buprenorphine-naloxone are generally made available with a low threshold. Still issues of access and adherence remain.³²⁻³⁴

Female sex workers who reported inability to access community health or social programs likely represent some of the most vulnerable and marginalized people in the community. They may lack support service connections and a social safety net, a situation that has been previously associated with increased workplace violence.³⁵ This group of female sex workers will likely benefit the most from service provider policy changes to improve connections and remove barriers for vulnerable sex workers. To aid our study participants, interviewers were trained to identify those in need of services/support during each 6-month follow up and to provide information on available resources in the community. Even so, our findings indicate a gap still exists in reaching those in need of services.

Consistent with previous studies,^{12, 25} we identified a positive and independent association between sex workers having serviced clients in public and having reported workplace violence. Police confrontations may encourage moving away from main streets and locations to ones with less pedestrian and vehicle traffic, where social safety networks of other sex workers is disrupted due to working in areas without other sex workers nearby. This may limit the effectiveness of the peer networks to keep a close watch over each other. Disruption of social safety networks has been shown to be associated with an increase in workplace violence.²⁵ Also, of great concern, sex workers who sought and serviced clients away from main streets due to policing have been more likely to be pressured into having unprotected sexual intercourse, exacerbating HIV risk.⁵ In line with previous research that has shown the use of safer workspaces is critical to reducing risks of violence; the results from this study reinforce this need.^{4, 5, 18} A recent study demonstrated improvements in safety behaviours among female sex workers who used a brief ‘trauma-informed intervention’,³⁶ which included conversations around violence and HIV risk, harm reduction techniques, and normalization of violence support services. Provision of a safe indoor work environment (e.g. supportive private housing, brothels) may reduce vulnerabilities to workplace violence in this population.¹⁸

This study has several limitations. First, the VIDUS, ACCESS, and ARYS cohorts are not random samples and therefore may not generalize to other populations of female sex workers who use drugs. These cohorts are comprised solely of those who use drugs and likely will not generalize to other populations of female sex workers. Second, data collection was based on self-report and thus could be subject to reporting bias, including socially desirable responses. Still, self-reported data have been shown to be

largely accurate among adult drug-using populations.³⁷ Third, as with any observational research, unmeasured confounders may exist that we did not account for in our analyses. Fourth, while our study sample included only those residing in the VPD jurisdiction, some participants may have worked in other municipalities where police officers continue to target sex workers. This limitation may have masked a decrease in workplace violence within the VPD jurisdiction. We do note that our results were consistent with a previous study.²¹

CONCLUSION

In summary, despite the 2013 guideline change by the VPD intended to increase safety for sex workers, our findings indicate that there was no statistically significant decrease in workplace violence reports after the change. Our findings also indicate that some sub-populations of female sex workers are more likely to report workplace violence, including those suffering from intense substance dependence. Given that full decriminalization of sex work has been recommended to reduce workplace violence and improve safety concerns for sex workers, this study adds further weight to calls for Canada to change federal laws in line with existing evidence.

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