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# Social and Structural Factors Shaping High Rates of Incarceration among Sex Workers in a Canadian Setting

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**ABSTRACT** *In light of the emphasis on enforcement-based approaches towards sex work, and the well-known negative impacts of these approaches on women's health, safety and well-being, we conducted a study to investigate the prevalence and correlates of recent incarceration among a cohort of women sex workers in Vancouver, Canada. Data were obtained from an open prospective community cohort of female and transgender women sex workers, known as An Evaluation of Sex Workers' Health Access (AESHA). Bivariate and multivariable logistic regression analyses, using generalized estimating equations (GEE), were used to model the effect of social and structural factors on the likelihood of incarceration over the 44-month follow-up period (January 2010–August 2013). Among 720 sex workers, 62.5 % (n=450) reported being incarcerated in their lifetime and 23.9 % (n=172) being incarcerated at least once during the study period. Of the 172 participants, about one third (36.6 %) reported multiple episodes of incarceration. In multivariable GEE analyses, younger age (adjusted odds ratio [AOR]=1.04 per year younger, 95 % confidence interval [CI] 1.02–1.06), being of a sexual/gender minority (AOR=1.62, 95 % CI 1.13–2.34), heavy drinking (AOR=1.99, 95 % CI 1.20–3.29), being born in Canada (AOR=3.28, 95 % CI 1.26–8.53), living in unstable housing conditions (AOR=4.32, 95 % CI 2.17–8.62), servicing clients in public spaces (versus formal sex work establishments) (AOR=2.33, 95 % CI 1.05–5.17) and experiencing police harassment without arrest (AOR=1.82, 95 % CI 1.35–2.45) remain independently correlated with incarceration. This prospective study found a very high prevalence and frequency of incarceration among women sex workers in Vancouver, Canada, with the most vulnerable and marginalized women at increased risk of incarceration. Given the well-known social and health harms associated with incarceration, and associations between police harassment and*

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*incarceration in this study, our findings further add to growing calls to move away from criminalized and enforcement-based approaches to sex work in Canada and globally.*

**KEYWORDS** *Sex work, Incarceration, Criminalization, Jail, Sex workers, Women*

## INTRODUCTION

Despite increasing rates of incarceration worldwide and higher burden of infectious diseases such as HIV, hepatitis C (HCV) and tuberculosis, mental health problems and other chronic conditions among prisoners compared to the general population,[1,2] the public health importance of incarceration continues to be underestimated. Although women account for a small proportion of the total prison population, the number of women in custody both globally and in Canada has been increasing.[2,3] Further, female inmates often suffer worse health outcomes than incarcerated men.[2,4,5]

In British Columbia (BC), Canada, women represent approximately 11 % of adults admitted to sentenced custody in 2011/2012,[3,4] with overrepresentation of certain vulnerable populations, including women with lower levels of educational attainment, with a lifetime history of trauma, abuse or violence, or who use drugs.[3,4] In particular, women with Aboriginal/Indigenous ancestry are disproportionally affected by incarceration, accounting for 40 % of the female prison population in the provincial system and 25 % in the federal system,[3,4] even though only 5 % of the British Columbians report Aboriginal/Indigenous ancestry.[6] Consistent with findings in other parts of the world, prevalence of many health conditions including HIV and HCV infection as well as mental health problems are more prevalent among incarcerated women compared to both incarcerated men and the general population.[2,4,5] Importantly, women's specific health needs, especially those related to reproductive health, are often neglected, contributing to gender health disparities within the prison setting.[2] These issues are further exacerbated by the "revolving door" phenomenon of short prison stays coupled with high rates of recidivism, and the lack of continuity of health services between the correctional settings and the community.[1,4,7,8]

Given the criminalized nature of sex work in Canada, women in sex work face frequent interactions with police, including police harassment and incarceration.[9–15] Overlap between sex work and drug use environments, alongside the criminalized approach to drug use in Canada, can further expose street-based sex workers to these enforcement-related harms.[16–19] Despite a large and growing body of literature pointing to the negative impacts of punitive policies on the health and well-being of women sex workers, criminalization continues to be the dominant legal approach to sex work in many parts of the world.[20] Past research has consistently showed that within criminalized environments, policing practices (e.g. displacement, confiscation of condoms and drug use paraphernalia) and sexual and physical violence in the workplace are key determinants of HIV and other health risks among sex workers.[10–13,18,21,22] However, less is known about specific factors, including characteristics of the broader risk environment, associated with incarceration among sex workers. In light of the emphasis on enforcement-based approaches towards sex work, and the well-known negative impacts of these approaches on women's health, safety and well-being,[2,4,5] we conducted this study to explore the

prevalence and correlates of recent incarceration among a cohort of sex workers in Vancouver, Canada.

## METHODS

### Participants and Study Design

Data for this study were drawn from An Evaluation of Sex Workers' Health Access (AESHA), an ongoing open prospective cohort of sex workers in Metro Vancouver that began recruitment in 2010. In brief, individuals aged 14 years and older, who self-identify as women (including transgender women), have exchanged sex for money in the previous 30 days, and provide written informed consent, are eligible for inclusion. Given the challenges associated with recruiting hidden populations, time-location sampling[23,24] was used to recruit participants through outreach to outdoor/public (e.g. streets, alleys), indoor (e.g. massage parlours, micro-brothels, in-call locations) and off-street (e.g. online and newspapers advertisements) sex work venues across Metro Vancouver. Sampling and recruitment procedures have been described in detail elsewhere.[25]

At baseline, and on a bi-annual basis thereafter, participants complete an interview-administered questionnaire that collects socio-demographic data, sex work patterns, sexual health and intimate partners, violence and trauma, drug use patterns, health care services access and utilization, and physical, social and structural characteristics of the working and living environment. At each visit, and following pre-test counselling, participants provide blood and urine samples for HIV, HCV and other sexually transmitted infection (STI) testing. INSTI™ rapid tests (Biolytical, Canada) are used for HIV screening, and all reactive tests are confirmed by western blot. HCV screening is based on HCV antibody testing, and participants with positive results are referred for further evaluation of their infection (e.g. HCV RNA). Nurses also provide basic treatment for STIs onsite as well as referrals to appropriate healthcare services. Participants receive an honorarium of $40CAD for their time and expertise. The study has been approved by the Providence Health Care/University of British Columbia Research Ethics Board. All participants who completed at least one study visit between January 2010 and August 2013 were eligible for inclusion in this analysis.

### Incarceration Outcome

The outcome of interest was a time-updated variable at each semi-annual visit of self-reported recent incarceration (using the last 6 months as a reference point), defined as responding "yes" to the following question: "In the last 6 months, have you been in detention, prison or jail overnight or longer?"

### Explanatory Variables

To be consistent with our prior work, a range of exposure variables (risks/events) were selected to reflect both individual-level and contextual-level factors within a structural determinant framework.[22,26] Time-fixed variables of interest at baseline included the following: socio-demographic characteristics such as age, Aboriginal/Indigenous ancestry (inclusive of First Nations, Metis, Inuit, yes versus no), sexual/gender identity (lesbian, gay, bisexual, transgender* or two-spirit, —LGBT*2S—versus cis-gender) and international migration status (Canadian-born versus immigrant/migrant).

All other variables were time-updated variables at baseline and each semi-annual follow-up using the last 6 months as a reference point including individual medical comorbidities (HIV and HCV serostatus based on biological testing and self-reported diagnosis of mental health illness, including depression, post-traumatic stress disorder, anxiety, schizophrenia, and borderline personality, attention deficit and bipolar disorders), individual behavioural factors of heavy alcohol drinking (i.e. ≥4 drinks per day, yes versus no) and any non-injection or injection drug use (yes versus no), contextual factors of unstable housing (yes versus no) and physical and social features of the work environment such as primary place of servicing clients (formal sex work establishment/in-call venue, i.e. massage/beauty parlours, health enhancement centres, micro-brothels; informal indoor/out-call venues, i.e. sauna, bar/clubs, hotel/hourly rental, clients' house; or outdoor/public space, i.e. street, public washroom, car) and self-reported police harassment without arrest (i.e. held against will, property confiscated, police raid, verbally harassed, yes versus no). Unstable housing was defined as any one night or longer stay in a single-room occupancy hotel, shelter, hostel, hotel, treatment/recovery house, couch surfing, staying with friends or family, staying in a vehicle, on the street/alley/park or squatting.

### Statistical Analyses

As a first step, we compared individual and contextual characteristics at baseline between participants who reported or did not report recent incarceration at some point during the study period. The Pearson's chi-squared test (or Fisher's exact test in the presence of small cell counts) was used to analyse categorical variables, and the Wilcoxon rank sum test was used to analyse continuous variables. We then performed bivariate and multivariable logistic regression using generalized estimated equation (GEE) analyses with a logit link for the dichotomous outcome to investigate the correlates of incarceration over the 44-month study period. The GEE method provides standard errors adjusted for the repeated measurements from the same participant using an exchangeable correlation structure. Variables found to be correlated with incarceration at $p<0.10$ level in bivariate analyses were considered for inclusion into the multivariable model. As in previous research,[27,28] the multivariable model was constructed using a backward stepwise selection approach. Quasi-likelihood under the independence model criterion (QIC) was used to identify the model with the best overall fit as indicated by the lowest QIC value.[29] All statistical analyses were performed using SAS software version 9.3 (SAS Institute, Cary, NC, USA).

## RESULTS

A total of 720 sex workers from the AESHA cohort were included in this analysis, contributing to a total of 2430 observations for the period between January 2010 and August 2013. The majority of participants (62.5 %, $n=450$) reported having been incarcerated at least once in their lifetime. Over the 44-month study period, there were 268 incarceration events (11.0 %) out of the 2430 observations, with 172 participants (23.9 %) reporting at least one incarceration episode (range 1–6). About one third (36.6 %) of participants who were recently incarcerated reported two or more incarceration episodes. Baseline characteristics of the study participants, stratified by whether or not they experienced one or more episodes of incarceration over the study period, are presented in Table 1. Overall, the

**TABLE 1 Baseline individual and contextual factors correlated with recent incarceration among a prospective community cohort of sex workers in Vancouver, Canada ($N=720$)**

| Characteristic | Total, *n* (%) ($N=720$) | Recent incarceration† Yes, *n* (%) $n=172$ | No, *n* (%) $n=548$ | *p* value |
|---|---|---|---|---|
| Individual-level factors | | | | |
| Age, median (IQR) | 34.5 (28–42) | 32 (26–40) | 35 (29–42) | 0.001 |
| Sexual/gender minority | | | | |
| Yes | 184 (25.6) | 64 (37.2) | 120 (21.9) | <0.001 |
| No | 536 (74.4) | 108 (62.8) | 428 (78.1) | |
| Aboriginal ancestry | | | | |
| Yes | 259 (36.0) | 87 (50.6) | 172 (31.4) | <0.001 |
| No | 461 (64.0) | 85 (49.4) | 376 (68.6) | |
| HIV-infected* | | | | |
| Yes | 81 (11.3) | 27 (15.7) | 54 (9.9) | 0.035 |
| No | 630 (87.5) | 143 (83.1) | 487 (88.9) | |
| HCV-infected* | | | | |
| Yes | 302 (41.9) | 98 (57.0) | 204 (37.2) | <0.001 |
| No | 401 (55.7) | 67 (39.0) | 334 (61.0) | |
| Mental health illness* | | | | |
| Yes | 344 (47.8) | 106 (61.6) | 238 (43.4) | <0.001 |
| No/unknown | 368 (51.1) | 66 (38.4) | 302 (55.1) | |
| Heavy drinking* | | | | |
| Yes | 20 (2.8) | 8 (4.7) | 12 (2.2) | 0.108 |
| No | 691 (96.0) | 162 (94.2) | 529 (96.5) | |
| Non-injection drug use* | | | | |
| Yes | 498 (69.2) | 163 (94.8) | 335 (61.1) | <0.001 |
| No | 222 (30.8) | 9 (5.2) | 213 (38.9) | |
| Injection drug use* | | | | |
| Yes | 284 (39.4) | 108 (62.8) | 176 (32.1) | <0.001 |
| No | 436 (60.6) | 64 (37.2) | 372 (67.9) | |
| Contextual factors | | | | |
| Born in Canada | | | | |
| Yes | 523 (72.6) | 166 (96.5) | 357 (65.2) | <0.001 |
| No | 196 (27.2) | 6 (3.5) | 190 (34.7) | |
| Unstable housing* | | | | |
| Yes | 586 (81.4) | 167 (97.1) | 419 (76.5) | <0.001 |
| No | 134 (18.6) | 5 (2.9) | 129 (23.5) | |
| Primary place of servicing clients* | | | | <0.001 |
| Formal sex work establishment ("in-call") | 220 (30.6) | 12 (7.0) | 208 (38.0) | |
| Informal indoor venue (e.g., bar, hotel) | 187 (26.0) | 54 (31.4) | 133 (24.3) | |
| Outdoor/public space | 311 (43.2) | 105 (61.1) | 206 (37.6) | |
| Police harassment without arrest* | | | | |
| Yes | 272 (37.8) | 87 (50.6) | 185 (33.8) | <0.001 |
| No | 448 (62.2) | 85 (49.4) | 363 (66.2) | |

Percentages may not necessarily sum to 100 % due to missing data or rounding error

†Recent incarceration reported at some point in the study period

*Time-updated variable using the last 6 months as a reference point

median age of participants at baseline was 34.5 years old (interquartile range [IQR]=28–42), approximately one third were of Aboriginal ancestry (36 %) and one quarter belonged to a gender/sexual minority group (25.6 %). At baseline, nearly one out of ten women were living with HIV (11.3 %) and 41.9 % with HCV. In addition, the majority reported living in unstable housing conditions (81.4 %), 69.2 % reported recent use of non-injection drugs and 39.4 % reported recent use of injection drugs. Only a minority (2.8 %) reported recent heavy alcohol drinking.

The results of the bivariate and multivariable GEE logistic regression analyses are presented in Table 2. In bivariate analysis, younger age, being of a sexual/gender minority, Aboriginal/Indigenous ancestry, HCV infection, ever diagnosed with a mental health illness, heavy drinking, non-injection and injection drug use, Canadian-born status, living in unstable housing conditions, servicing clients in public spaces or informal off-street venues and self-reported police harassment without arrest were correlated with recent incarceration ($p<0.05$).

As indicated in Table 2, in the final multivariable GEE model, younger age (adjusted odds ratio [AOR]=1.04 per year younger, 95 % confidence interval [CI] 1.02–1.06), sexual/gender minority status (AOR=1.62, 95 % CI 1.13–2.34), heavy drinking (AOR=1.99, 95 % CI 1.20–3.29), Canadian-born status (AOR=3.28, 95 % CI 1.26–8.53), living in unstable housing conditions (AOR=4.32, 95 % CI 2.17–8.62), servicing clients in public spaces (versus servicing in formal indoor establishments, AOR=2.33, 95 % CI 1.05–5.17) and self-reported police harass-

**TABLE 2 Bivariate and multivariable logistic regression GEE logistic regression analyses of correlates of recent incarceration among a prospective community cohort of sex workers in Vancouver, Canada, 2010–2013**

| | Odds ratio (95 % CI) | |
|---|---|---|
| Characteristic | Unadjusted | Adjusted‡ |
| Individual-level factors | | |
| Age (per year younger)† | 1.05 (1.03–1.07) | 1.04 (1.02–1.06) |
| Sexual/gender minority (yes vs. no)† | 2.19 (1.53–3.12) | 1.62 (1.13–2.34) |
| Aboriginal ancestry (yes vs. no)*† | 1.74 (1.24–2.43) | |
| HIV-infected (yes vs. no)* | 1.26 (0.80–2.00) | |
| HCV-infected (yes vs. no)*† | 1.60 (1.15–2.22) | |
| Mental health illness (yes vs. no)*† | 1.55 (1.12–2.14) | |
| Heavy drinking (yes vs. no)*† | 2.38 (1.50–3.77) | 1.99 (1.20–3.29) |
| Non-injection drug use (yes vs. no)*† | 2.73 (1.79–4.17) | |
| Injection drug use (yes vs. no)*† | 2.06 (1.49–2.85) | |
| Contextual factors | | |
| Born in Canada (yes vs. no)† | 11.10 (4.88–25.28) | 3.28 (1.26–8.53) |
| Unstable housing (yes vs. no)*† | 5.56 (3.39–9.12) | 4.32 (2.17–8.62) |
| Primary place of servicing clients (ref: formal sex work establishment/in-call venue)*† | | |
| Informal indoor venue (e.g., bar, hotel) | 4.53 (2.40–8.58) | 1.91 (0.86–4.26) |
| Outdoor/public space (e.g., street, car) | 6.20 (3.32–11.60) | 2.33 (1.05–5.17) |
| Police harassment without arrest (yes vs. no)† | 2.19 (1.67–2.86) | 1.82 (1.35–2.45) |

*Time-updated variable using the last 6 months as a reference point

†Significant at $p<0.10$ and considered as potential confounders in the multivariable model selection process

‡Only the final list of variables included in the multivariable model after variable selection is included in this column

ment without arrest (AOR=1.82, 95 % CI 1.35–2.45) remained independently correlated with incarceration.

## DISCUSSION

In this prospective study among sex workers in Vancouver, we found a high prevalence and frequency of incarceration, with more than half of women reporting incarceration within their lifetime and almost one quarter reporting incarceration over the 44-month study period. Of those recently incarcerated, one third experienced two or more episodes. These results are concerning given the well-known negative impacts of incarceration on women's health, which extend to the community re-entry period, including barriers to housing, medical care and even increased risk of death.[7,30–32] In line with previous research of female prison inmates in Canada,[3,4] a number of markers of vulnerability were independently correlated with recent incarceration in our analysis, including younger age, heavy drinking, sexual/gender minority, living in unstable housing conditions, servicing clients in public spaces and self-reported police harassment. Of note, we did not find any association between Aboriginal/Indigenous ancestry or use of drugs with recent incarceration.

Consistent with prior research in other settings, in this analysis, unstable housing was strongly associated with recent incarceration.[33,34] Housing is a well-known social determinant of health, and indeed research shows that homeless individuals or those living in poor quality housing are at increased risk of poorer health outcomes including HIV risks, mental health illness and substance use problems,[35–38] all of which are prevalent health issues among female inmates. Further, at community re-entry, many women face barriers to find housing, creating a vicious cycle between unstable housing and incarceration.[4,32,34] In a recent survey among female inmates in British Columbia, Canada, 63 % reported barriers to finding housing upon release from jail and 56 % that homelessness was a main contributor for recidivism mainly related to their unmet basic needs.[39] Sex workers living in unstable housing conditions might also spend more time in public spaces, which could increase their risk of confrontations with police and subsequently the likelihood of being incarcerated. In fact, previous studies have documented how the social and physical contexts associated with homelessness push sex workers to work in street-based or public outdoor environments as well as increase their risk of gender-based and workplace violence and sexual- and drug-related risks.[13,40,41] Accordingly, given these and other well-known health and social harms associated with unstable housing, interventions and policies aimed at increasing the access to safe and affordable housing and indoor workplace options for women in sex work are urgently needed. These might range from low-threshold supportive housing to more innovative models, including women- and sex work-only housing[40,41] as well as safer indoor work environment models with structural supports.[22,42,43]

Sex workers of a sexual/gender minority (e.g. LGBT*2S) are a uniquely marginalized population as they face the double stigma of being not only a sex worker but also belonging to a sexual/gender minority group.[44] The intersection of multiple stigmatized identities has been proposed as a possible explanation of the high rates of substance use among LGBT*2S sex workers.[45–49] This drug dependency, in turn, could further exacerbate LGBT sex workers' risk of incarceration, potentially through police targeting,[27,50] as it was observed in our study. Trans*-sex workers seem to be a particularly vulnerable group within this

already marginalized population. Indeed, previous research consistently shows how institutional and social transphobia shape policing practices in such a way that trans-sex workers are disproportionally targeted by police, including not only arbitrary arrests but also experiences of physical and sexual violence.[12,44,51–53] In addition, once in custody, transwomen are usually placed in male wards, neglecting their needs and rights, and further exposing them to sexual and physical harassment.[51,54] Altogether, these findings suggest a need to develop policies and programmes that are sensitive to gender and sexual identity within the Canadian correctional services system, including comprehensive training to police officers and corrections staff on the unique needs of individuals identifying as gender/sexual minorities as well as appropriate care and housing according to inmate gender identity.

In agreement with previous research examining the links between alcohol use and committing crimes,[55–57] we also found that women who self-reported heavy alcohol drinking had increased odds of being incarcerated. It has been suggested that the relationship between alcohol and crime might be mediated by the dis-inhibitory effects of alcohol, which in turn could help explain why alcohol use has often been associated with crimes involving short-term impulsive or violent behaviours.[55,56,58,59] However, it could also be the case that sex workers in our study turned to heavy alcohol drinking as a way to cope with the stress associated with incarceration or even with release from jail. Further research is needed to better explore the relationship between alcohol, crime offending and incarceration. Regardless, results highlight the importance of prisons having readily accessible addiction treatment programmes as well as an adequate linkage and referral to addiction services in the community following release.

In line with national data stating that almost half of women in federal custody are between 21 and 34 years of age,[3] in this study, younger age was also positively associated with recent incarceration. Thus, most female inmates in Canada are of typical childbearing age. Indeed, it is estimated that at least two thirds of women in custody in Canada are mothers of young children, resulting in approximately 20,000 children separated from their mothers because of incarceration every year.[4,60] This is of particular relevance, since there is growing international consensus that these traumatic separations not only negatively impact women and children's health but also increase the likelihood of re-incarceration.[4,60,61] Women who are pregnant at the time of incarceration face additional challenges, such as a lack of appropriate prenatal services in prisons,[2,62,63] which could potentially lead to poor pregnancy outcomes.[64] Further, under the current policy in British Columbia, shortly after birth, babies are separated from their mothers and placed in governmental care.[65] This separation in turn deprives both the mother and baby of the known benefits of breastfeeding[66,67] and those associated with the establishment of an early, secure and continuous attachment.[68,69] Therefore, it is highly concerning that despite the long history of mother and child programmes in Canada and internationally, and the known social and health harms of breaking the bond between mothers and babies, British Columbia government cancelled the last mother and baby programme in the province in 2008, alleging that infants were not within the mandate of the correctional service.[65]

Interestingly, this study found that women born in Canada were more likely to report being incarcerated over the study period. As previously documented,[70] most of migrant sex workers in our cohort are from China, and usually provide services to clients in formal indoor establishments, often run by East Asian staff. Cultural

and social norms prevailing in East Asian cultures, as well as other protective factors of safer indoor work environments,[43] could contribute to lower observed drug and sexual risks more common among street-involved sex workers working in informal indoor venues (e.g. bars, hotels) and public spaces. Evidence from both this setting and elsewhere shows that the physical and social environments of formal indoor venues is associated with increased personal safety and confidence, fostering sex workers' ability to control their transactions, reducing their risk of violence, and condom non-use.[9,43,71] These relatively better social and structural workplace conditions could make migrant sex workers less visible to police and consequently less likely to being incarcerated compared to their Canadian peers. That said, while incarceration rates were lower among migrant workers, it is worth noting that, as we have previously documented, police harassment and fear of police are common within this group. This suggests a negative reinforcing interaction between the criminalized nature of sex work in the Canadian setting and concerns of immigration/migrant status.[70,72]

In line with the aforementioned findings, sex workers servicing clients in public spaces had more than twofold higher odds of being incarcerated compared to women working in safer formal indoor working environments. As expected, sex workers who reported being recently harassed by police without arrest were also more likely to be incarcerated, suggesting that this group may be more heavily policed irrespective of work environment. Within a criminalized sex work environment such as the one in Canada, where current legislation highly restricts the establishment of safe indoor work environments, many sex workers have no option but to move outdoor becoming more visible to police or to more hidden indoor venues with reduced safety protections.[18] In addition, recent scaled-up efforts by the Canadian government to further criminalize sex work with the passage of a new law in December 2014 (C-36)[73] suggest a likely scenario with increased policing and incarceration rates among sex workers. This is highly concerning given the well-established body of literature pointing to the multiple harms associated with policing, especially among street-involved sex workers.[10,12,18] Evidence globally shows that laws prohibiting communicating in public spaces have effectively displaced sex workers to more isolated areas away from health and social services as well as made them more vulnerable to violence and exploitation.[13,74]

Collectively, our findings add to the well-established body of literature highlighting the social and health disparities associated with incarceration among women. In particular, our study shows that among sex workers, an already marginalized group, there are also women who face a disproportionate risk of being incarcerated. Indeed, our results align with recent and growing recognition of the importance of social and structural factors as key drivers of health and social risks among sex workers and other vulnerable populations as well as the high priority need to address these factors to improve women's health, safety and well-being.[8,22,44,75] Importantly, the negative consequences of enforcement-based approaches targeting sex work include but go well beyond the harms associated with incarceration. At a global scale, evidence has consistently demonstrated that criminalization of any aspect of sex work significantly undermines sex worker's access to critical health and social, and legal services, rendering them more vulnerable to discrimination and physical and sexual violence as well as HIV and other STIs.[13,17,76–79] Conversely, experiences from settings such as New Zealand, where sex work is fully decriminalized, show how decriminalization has led to improved human rights for sex workers, including better working conditions, and

increased access to safety protections from police as well as health and social support services.[80]

This study has several limitations as well as strengths that should be acknowledged. First, given the challenges associated with recruiting hidden populations, our sample was not randomly selected, and therefore, our results are likely not generalizable to all sex workers. That said, we used time-location sampling,[23,24] a well-established strategy for attaining representative samples of hard-to-reach and mobile populations. Second, although we relied on longitudinal data, causality cannot be determined with GEE analyses and further longitudinal analyses of time-to-incarceration events will help to establish time-related predictors of incident incarceration. Third, we relied on self-reported data, which might be susceptible to social desirability and recall biases. However, we are not aware of any reason why there would be differences in reporting sensitive data between sex workers who reported or not recent incarceration. Additionally, all interviews were conducted in private and safe environments by experienced interviewers with strong community rapport, facilitating accurate responses.

In summary, this longitudinal analysis found alarmingly high prevalence and frequency of incarceration among sex workers in Vancouver, Canada. In particular, most vulnerable and marginalized sex workers were at increased risk of incarceration. Given the well-known social and health harms associated with incarceration, and associations between police harassment and incarceration in this study, our findings further add to growing calls to move away from criminalized and enforcement-based approaches to sex work in Canada and globally.[81]

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