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Sexual Relationship Power and Intimate Partner Violence Among Sex Workers with Non-Commercial Intimate Partners in a Canadian Setting

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Abstract

There is little information on the private lives of women engaged in sex work, particularly how power dynamics within intimate relationships may affect intimate partner violence (IPV). Using baseline data of sex workers enrolled in a longitudinal cohort, 'AESHA' (An Evaluation of Sex Workers' Health Access), the present study examined the association between sexual relationship power and IPV among sex workers in non-commercial partnerships in Vancouver, Canada. Pulweritz's Sexual Relationship Power Scale (SRPS) and The World Health Organization (WHO) Intimate Partner Violence Against Women scale (Version9.9) were used. Bivariate and multivariate logistic regression techniques were used to investigate the potential confounding effect of sexual relationship power on IPV among sex workers. Adjusted odds ratios (AOR) and 95% confidence intervals (CIs) were reported. Of 510 sex workers, 257 (50.4%) reported having an non-commercial intimate partner and were included in this analysis. In the past 6 months, 84 (32.7%) sex workers reported IPV (physical, sexual or emotional). The median age was 32 years, 39.3% were of Aboriginal ancestry, and 27.6% were migrants. After controlling for known confounders (e.g., age, Aboriginal ancestry, migrant status, childhood trauma, non-injection drug use), low relationship power was independently associated with 4.19 increased odds (95% CI: 1.93-9.10) and medium relationship power was associated 1.95 increased odds (95% CI:0.89-4.25) of IPV. This analysis highlights how reduced control over sexual-decision making is plays a critical role in IPV among sex workers, and calls for gender-focused and coupled-based interventions tailored to noncommercial intimate partnerships of sex workers.

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Keywords

Intimate partner violence; sex work; sexual decision-making; sexual relationship power

Introduction

Gender-based violence continues to be one of the most widespread human rights abuses, and remains a major cause of death and disability for women between the ages of 16-44 years (UN Women, 2012). Globally, it is estimated that up to six out of every ten women will experience physical and/or sexual violence in their lifetime, and 30.0% (95% CI: 27.8%-32.2%) will experience intimate partner violence (IPV) (World Health Organization, 2013). IPV includes ‘a range of sexually, psychologically and physically coercive acts used against adult and adolescent women by a current or former intimate partner’ (Nelson, Bougatsos, & Blazina, 2012).

Despite advancements in women's rights within Western and High Income Countries, the burden of IPV remains unacceptably high. In 2010, it was estimated that there were over 102,500 women who experienced IPV in Canada, translating to 363 per 100,000 women (Sinha, 2012). A review of 11 Canadian studies (population and clinic-based samples) of IPV against women found annual prevalence figures ranging from 0.4% to 23.0% with women who were younger, single or divorced, with low household income, and with children being at highest risk (Clark & Du Mont, 2003). Although population-based studies that examine IPV among women have strong external generalizability, they often miss key populations of women with heightened vulnerability to violence. An important group that continues to be under-represented in the assessment and reporting of IPV are women involved in sex work, despite a high burden of physical and sexual violence experienced over their lifetime (Decker, Pearson, Illangasekare, Clark, & Sherman, 2013; Kate Shannon et al., 2008). The goal of this analysis is to fill this gap on violence among sex workers in non-commercial intimate partners.

World-wide, there is limited information on the proportion of sex workers with noncommercial intimate partners (Ulibarri et al., 2010). Sex workers constitute a key population within HIV epidemiology, with a disproportionately high burden of HIV worldwide (Baral et al., 2012), and yet little research has focused on non-commercial pathways to HIV risk. The dynamics of HIV prevention through condom-use, coital frequency, and concurrency are complex sexual patterns that may place sex workers and their commercial and non-commercial partners at risk (Argento, Muldoon, Duff, Nguyen, & Shannon, 2014). In many higher income settings, HIV acquisition and transmission among sex workers is further perpetuated through overlap with drug use and clients and non-commercial partners who inject drugs (Deering et al., 2013)

The majority of research on sex workers has focused on work place violence including violence from clients, police and other community members (Decker et al., 2010; K Shannon, Kerr, Bright, Gibson, & Tyndall, 2008; K. Shannon et al., 2009; K Shannon, Rusch, et al., 2008; Kate Shannon et al., 2008). Qualitative studies in India have identified/ suggested that IPV may be an important factor related sex workers vulnerability to HIV,

including reduced ability to negotiate condom use or opportunity to abstain from unwanted sex (Panchanadeswaran et al., 2008).A recent study in Vancouver, Canada, estimated that 21.5% of sex workers in intimate relationships had recently experienced physical or sexual violence (Argento et al., 2014)..This high documented prevalence of IPV among sex workers in Vancouver has lead to an interest to understand power dynamics within the non-commercial intimate partnerships of sex workers and their influence on violence.

Relationship power has shown to be inversely associated with IPV (Pulerwitz, Gortmaker, & Dejong, 2000). Women's subordinate position within relationships, and society in general, have been identified as risk factors for IPV, but also factors that increase HIV infection and transmission (Harrison et al. 2006; Jewkes et al. 2012; Pinchevsky and Wright 2012). Consistent condom use is an important component of HIV prevention, however physical and sexual IPV reduces women's power within relationships and their ability to refuse and negotiate safe sex (Pulerwitz et al., 2000). This contributes to elevated odds of sexually transmitted infections, HIV, unintended pregnancies, psychological distress, injuries and death from physical assault (McFarlane et al., 2005). A powerful demonstration of the association between sexual relationship power and HIV risk was documented in a cohort in South Africa where it was found that approximately one in seven new HIV infections were attributed to either IPV or women's lack of negotiating power within their sexual relationship (R. K. Jewkes, Dunkle, Nduna, & Shai, 2010). These investigations of relationship power have been critical in understanding dynamics that contribute to IPV and risk of HIV infection, however there is a need for more information in Western settings, and among sex workers and their non-commercial intimate partners.

The UN has declared an urgent need to strengthen the knowledge base on all forms of violence against women to inform policy and strategy development (UN Women, 2012). This includes marginalized populations such as sex workers who continue to be underrepresented in global and national statistics. Using data drawn from a sample of sex workers in Vancouver, Canada, the current analysis aimed to examine the association between sexual relationship power and intimate partner violence while controlling for other potential confounding variables that might explain the association between power and IPV. We hypothesize that sex workers with higher degrees of power in their sexual relationships will report less IPV.

Methods

Study sample

This analysis draws on baseline data (2010-2012) from a longitudinal community-based cohort of female and transgender women street and off-street sex workers in the Greater Vancouver Area known as AESHA (An Evaluation of Sex Workers Health Access). Sex workers are invited through time-location sampling and outreach to street and off-street sex work venues (indoors, online) through our community outreach team. The study is based on substantial community collaborations since 2005 and continues to be monitored by a Community Advisory Board of over 15 agencies. Participants receive an honoraria of $40 at baseline and each semi-annual visit to compensate for their time, expertise and travel. Eligibility includes aged 14 years of age or older, and exchanging sex for money in the last

month. The current analysis is restricted to sex workers with an noncommercial intimate partner, defined as having an intimate sexual, non-commercial partner in the last 6 months at baseline.

Following informed consent, baseline and semi-annual follow-up visits include two components: i) an interview-administered questionnaire by a trained community interviewer (both sex workers and non-sex workers); and ii) a pre-testing counselling questionnaire asked by the project nurse that elicits questions on overall health, HIV/STI testing and care experiences, and access to health and support access, so as facilitate education and referral. The questionnaire elicits responses related to socio-demographics (e.g. age, sexual identity, ethnicity, education, housing, etc.), sex industry work (e.g. places of service and solicit, violence and safety, number of one-time and regular clients etc.), sexual and non-commercial intimate partner history, trauma and violence (both past and current violence experiences), drug use (e.g. injection, non-injection).

Measures

Intimate partner violence (IPV) was the main outcome of interest and was measured with the abridged version of the World Health Organization (WHO) Intimate Partner Violence Against Women Scale Version 9.9 (UN Women, 2008). The scale is a list of 13 binary questions, restricted to experiences of violence in the last six months. Two items in the scale measured moderate physical violence: slapped, pushed/shoved. Four items measure severe physical violence: hit, kicked or beaten up, choked or burnt, threatened or used a gun or other weapon. Three items measured sexual violence: forced to have a sex against their will, having sex when frightened of consequences, forced to perform something sexually degrading. Four items measured emotional abuse: being insulted, humiliated in front of other people, scared or intimidated by partner, or if a partner threatened to hurt a loved one. Those who reported experiencing any of these forms of IPV in the previous 6 months were compared with those who had not. Four sub-analyses were conducted investigating each type of IPV including moderate physical violence, severe physical violence, sexual violence, and emotional violence.

Sexual Relationship Power is the main independent variable and was measured using the relationship control sub-scale of the Sexual Relationship Power Scale (SRPS) (Pulerwitz et al., 2002). Items on the relationship control sub-scale measure the degree to which women feel they have control over sexual aspects of their relationship (e.g. ‘If I asked my partner to use a condom, he would think I'm having sex with other people’), and non-sexual aspects of their relationship (e.g. ‘My partner tells me who I can spend time with’). Each of the fifteen items is scored on a 4-point likert scale where 1=‘*strongly agree’* and 4=‘*strongly disagree’*. Scores were summed and divided into tertiles to represent relative low, medium and high levels of relationship power within the sample. A higher score represents a higher degree of relationship power.

Potential Confounders—Age has been shown to influence women's relationship power and exposure to IPV (Clark & Du Mont, 2003), and was treated as a continuous variable. Participants of Aboriginal ancestry have been shown to experience heightened violence, and

as such were included in the model *a priori*. A binary variable was developed to control for migration by comparing those born in Canada to new migrants(Goldenberg, Liu, Nguyen, Chettiar, & Shannon, 2014). To account for experiencing violence at multiple points along the lifespan (Ulibarri et al., 2010), childhood trauma was included as a confounder and defined as experiencing emotional, physical or sexual trauma before the age of 18 years. Illicit drug use was measured by comparing those who used injection or non-injection illicit drugs compared to those who did not (Stockman, Lucea, & Campbell, 2012).

Analysis and Statistical Modelling

Statistical analyses were performed using SAS (version 9.2). Descriptive statistics display frequencies and proportions for categorical variables and medians (med) and interquartile ranges (IQR) for continuous variables. Chi-square tests for dichomous variables and t-tests for continuous variables were used to assess statistical differences. Non-normality among continuous variables was assessed using the Hosmer-Lemeshow Goodness-of-Fit test. Bivariable logistic regressions were run to investigate the strength of association between relationship power and IPV. A multivariable logistic confounder model was used to establish the association between relationship power and IPV, while controlling for confounding variables. Unadjusted (OR) and adjusted (AOR) odds ratios and 95% confidence intervals (95% CIs) are presented. The confounding variables were included a priori based on the literature. Only answers with valid responses were included in the final logistic regressions.

The study holds ethical approval from the University of British Columbia/ Providence Health Care.

Results

Descriptive results

Of 510 total participants at baseline, there were 257 (50.4%) sex workers with an non-commercial intimate partner at baseline (last six months) who were included in this analysis (see Table 1). Among sex workers in relationships, 84 (32.7%) reported experiencing IPV in last 6 months. The most common forms of IPV were emotional violence (29.1%), moderate physical violence (21.4%), severe physical violence (18.2%), and sexual violence (8.2%)

The median age for participants was 32 years (IQR: 26.0-41), 101 (39.3%) were of Aboriginal ancestry, and 71 (27.6%) were migrants. Approximately half of participants primarily solicited for clients in the street/outdoor settings (52.1%), with just under half (47.9%) soliciting off-street (32.3% indoor venues, 15.6% self-advertising/online). The majority of the sample had experienced childhood emotional, physical and/or sexual trauma (65.0%), and 170 (66.2%) had used injection/non-injection illicit drugs in the last 6 months. The SRPS revealed that 30.7% of participants reported low, 42.4% reported medium, and 21.8% reported high sexual relationship power.

Bivariable and Multivariable Logistic Regression Models

Table 3a displays the OR and AORs for the association between sexual relationship power and any type of IPV. Compared to those who reported high sexual relationship power, those with low power had the highest odds of IPV (OR: 11.62, 95% CI: 4.46-30.26), followed by those with medium power (OR: 2.74, 95% CI: 1.06-7.11) of IPV. After adjusting for age, aboriginal ethnicity, migrant status, childhood trauma and drug use, sex workers with low relationship power had an AOR=8.36 (95% CI: 3.01-23.20) for any IPV, and medium relationship power was associated with had AOR=2.27 (95% CI: 0.83-6.26) of IPV compared to high relationship power.

Tables 3b-3e display stratified analyses on each type of IPV including moderate physical violence, severe physical violence, sexual violence and emotional violence. Within each type of IPV, low relationship power was associated with higher levels of IPV, with an AOR ranging from 7.56 to 10.87 after controlling for confounding variables.

Discussion

The current analysis demonstrates a high burden of IPV within the non-commercial intimate partnerships of sex workers. Low levels of sexual relationship power are independently associated with all types IPV including physical, sexual and emotional violence. For sex workers with noncommercial intimate partnerships, IPV represents an additional source of violence and a potential non-commercial pathway for HIV acquisition and transmission through reduced ability to negotiate sexual risk.

The SRPS scale has been used to investigate relationship power and HIV risk and violence in several settings including the United States among marginalized populations of women (Campbell et al., 2009; Campbell, Tross, Hu, Pavlicova, & Nunes, 2012; Knudsen et al., 2008), South African women (Dunkle et al., 2004; Pettifor, Measham, Rees, & Padian, 2004) and women in Ethiopia and Kenya (Stephenson, Bartel, & Rubardt, 2012). The results from this study contribute to the body of literature investigating IPV using the SRPS scale among sex workers in Vancouver, an under-represented population highly exposed to IPV with their non-commercial intimate partnership. This study has shown that low levels of relationship power increases IPV with non-commercial intimate partners among a population of female sex workers. However, only the lowest categories of relationship power were significantly associated with all forms of IPV suggesting a threshold effect. This study has shown that sex workers experience much of the same gendered relationship power as women in the general population, yet remain under represented in the literature and IPV prevention efforts.

Despite the high prevalence of IPV among the sex workers in this study, there are few studies to inform the development of effective and specialized programs to prevent relationship violence among this marginalized population. Existing evidence shows that sex workers face constant discrimination and stigma when accessing general health services (Lazarus et al., 2011), and the added stigma associated with violence further marginalizes this group in need of on-going support. However, there is evidence from a randomized trial in Mongolia demonstrating the efficacy of a HIV/STI risk reduction intervention with sex

workers in reducing violence from both commercial and non-commercial relationships through relationship-based risk reduction, motivational interviews and wellness promotion (Carlson et al., 2012). While the findings from this study are limited in its generalizability to sex workers in other political and geographic areas, it can potentially contribute to the body of evidence used to inform programming specifically for sex workers with non-commercial intimate partners. Programming that addresses workplace violence and HIV risk with clients, can also extend to address the high burden of IPV and the aspects of relationship power that increase HIV risk including difficulty negotiating condoms (Harrison et al., 2006), being coerced to consent to unwanted sex under duress (Panchanadeswaran et al., 2008), engage in higher risk activities such as anal sex (Campbell et al., 2009) or sex in exchange for drugs (Miller et al., 2012).

The dual burden of violence and HIV risk throughout the life course by sex workers supports the need for programming and policies that integrate violence prevention into HIV prevention strategies. There is an on-going debate regarding recommendations and best practices to prevent and reduce harms associated with IPV. Systematic reviews have shown that screening instruments designed for health care settings can accurately identify women experiencing IPV (Nelson et al., 2012). However, a cluster randomized trial of women who were screened for IPV and offered a brief counselling intervention showed no differences in the quality of life, safety or mental health between women offered and not offered the intervention (Hegarty et al., 2013). The WHO guidelines on IPV discourage universal screening on the basis that it does not produce better outcomes for women (Eggertson, 2013). This study did not explicitly include key populations such as sex workers with non-commercial intimate partners. The findings from this study highlight the high burden of IPV among sex workers with non-commercial intimate partners and the need to evaluate IPV screening among this population (Sohal & James-Hanman, 2013).

The culture of stigma and violence that many sex workers face is in part structurally driven by the criminalized and policed nature of the sex industry in Canada, contributing to the normalization of violence against sex workers, including in their non-commercial intimate relationships. The stigma associated with sex work prevents sex workers from accessing health care services needed for violence treatment and prevention (Lazarus et al., 2011). Anti-discrimination policies and sensitivity training is required to improve sex workers' access to high quality health and social services, including those that are designed to prevent and reduce IPV.

Limitations

This analysis is cross-sectional in nature, and as a result we are unable to infer the causality of the association between relationship power and IPV. Non-commercial intimate partner status was self-reported based on last six months, and we cannot discount the potential that non-commercial intimate partners may have previously been paying clients introducing the potential for partnership misclassification. IPV is also prone to measurement bias as it continues to be a highly stigmatizing topic, potentially resulting in under-reporting of violence. However, the use of the WHO Standardized IPV Scale Version 9.9 examines diverse experiences of violence, including those forms that can be overlooked (e.g.,

emotional violence). While the study population includes sex workers who work in a variety of indoor and outdoor venues, our findings may not be generalizable to other segments of the sex industry (e.g., escorts, dancers) or those who reside in other geographical settings.

Conclusions

This study has documented that more that 50% of sex workers are in non-commercial intimate partnerships, with a high degree of physical and sexual violence. Sex workers continue to be an invisible population that are hard to reach and are likely to miss opportunities to access programming designed prevent and reduce harms associated with IPV. However, programs that include relationship-based risk reduction including negotiating condom use, motivation interviews and wellness promotion have been shown to reduce IPV among sex workers. In the on-going debate about the best practices to identify and address IPV, there is a need to ensure that key populations, including sex workers, are reached by advances in the reduction of violence against women. With increasing evidence highlighting the role that violence plays in the HIV epidemic, sex workers who are highly exposed to violence and HIV will require innovation and inclusive programming to ensure they are safe and protected.

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Table 1

Characteristics of Street and Off-Street Sex Workers in Intimate Relationships, Stratified by Intimate Partner Violence (IPV)

Variables	IPV (n=84)	No IPV (n=173)	Total (N=257)	p-value
Relationship characteristics				
Sexual Relationship Power Scale				
Low *(n,%)*	46 (54.8)	33 (19.1)	79 (30.7)	>0.001
Medium *(n, %)*	27 (32.1)	82 (47.4)	109 (42.4)	0.038
High *(n,%)*	6 (7.1)	50 (28.9)	56 (21.8)	-
Intimate partner has other sex partners *(n,%)*	23 (27.4)	25 (14.5)	48 (18.7)	0.013
Demographic characteristics				
Age *(med, IQR)*	30.5 (25.0-40.5)	33(28.0-41.0)	32 (26.0-41.0)	0.083
Aboriginal Ancestry *(n,%)*	37 (44.0)	64(37.0)	101 (39.3)	>0.001
Migrant vs. Born in Canada *(n,%)*	12 (14.3)	59 (34.1)	71 (27.6)	0.001
Education: High School Completed *(n,%)*	37 (44.0)	99 (57.2)	121(47.1)	0.047
Have Dependent Children *(n,%)*	11 (13.1)	44(25.5)	55 (21.4)	0.024
Childhood Abuse *(n,%)*	71 (84.5)	96 (55.5)	167 (65.0)	>0.001
Age at first sex *(med, IQR)*	14.0 (13.0-16.0)	16.0 (13.0-19.0)	15 (13.0-18.0)	0.006
Contextual Factors				
Primary Place of Solicit				
Independent/ Self-Advertizing *(n, %)*	13 (15.5)	27 (15.6)	40 (15.6)	0.148
Indoor Venues *(n,%)*	11 (13.1)	72 (41.6)	83 (32.3)	>0.001
Street/Public *(n,%)*	60 (71.4)	74 (42.8)	134 (52.1)	-
Inconsistent condom use with clients *(n,%)*	17 (20.2)	21 (12.1)	38 (14.8)	0.086
Homeless in last 6 months *(n, %)*	44 (52.4)	46 (26.6)	90 (35.0)	>0.001
Non-injection drug use in last 6 months *(n,%)*	73 (86.9)	97 (56.1)	170 (66.2)	>0.001

Table 2

Percentage of Sex Workers (n=257) in intimate partnerships that report each item from the World Health Organization (WHO) Intimate Partner Violence Scale

Items	n(%)
Moderate Physical Violence	
1. Has he slapped you or thrown something at you that could hurt you?	46 (17.9)
2. Has he pushed or shoved you?	51 (19.8)
Severe Physical Violence	
3. Has he hit you with a fist or with something else that could hurt?	40 (15.6)
4. Has he kicked you, dragged you, or beaten you up?	31 (12.1)
5. Has he choked or burnt you on purpose?	26 (10.1)
6. Has he threatened to use or actually used a gun, knife, or other weapon, against you?	22 (8.6)
Sexual Violence	
7. Has he physically forced you to have sexual intercourse when you did not want to?	8 (3.11)
8. Has he had sexual intercourse when you did not want to because you were afraid?	15 (5.84)
9. Has he forced you to do something sexual that you found degrading or humiliating?	12 (4.67)
Emotional Violence	
10. Has he insulted or made you feel bad about yourself?	64 (24.9)
11. Has he belittled you or humiliated you in front of other people?	61 (23.7)
12. Has he done things to scare or intimidate you on purpose (e.g. by the way he looked at you, by yelling or smashing things?)	51 (19.8)
13. Has he threatened to hurt someone you care about?	22 (8.6)

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Table 3a

Bivariable and Multivariable Confounder Model of Association between Sexual Relationship Power and Intimate Partner Violence among Street and Off-Street Sex Workers

Any IPV (79/257)

Variables	OR	95% CI	p-value	AOR[1]	95% CI	p-value
Sexual Relationship Power Scale						
Low	11.62	4.46-30.27	<0.001	8.36	3.01-23.20	<0.001
Medium	2.74	1.06-7.11	0.038	2.27	0.83-6.26	0.095
High (ref)	-			-		

[1] Adjusted for: age, aboriginal ancestry, migrant status, childhood trauma, non-injection drug use

Table 3b

Bivariable and Multivariable Confounder Model of Association between Sexual Relationship Power and Intimate Partner Violence among Street and Off-Street Sex Workers

Moderate Physical Violence (55/257)

Variables	OR	95% CI	p-value	AOR[1]	95% CI	p-value
Sexual Relationship Power Scale						
Low	11.41	3.28-39.73	<0.001	7.56	2.06-27.74	0.002
Medium	3.04	0.85-10.91	0.088	2.23	0.59-8.38	0.237
High (ref)	-					

[1] Adjusted for: age, aboriginal ancestry, migrant status, childhood trauma, non-injection drug use

Table 3c

Bivariable and Multivariable Confounder Model of Association between Sexual Relationship Power and Intimate Partner Violence among Street and Off-Street Sex Workers

Severe Physical Violence (47/257)

Variables	OR	95% CI	p-value	AOR[1]	95% CI	p-value
Sexual Relationship Power Scale						
Low	14.02	3.17-61.94	<0.001	10.47	2.26-48.57	0.003
Medium	3.66	0.80-16.81	0.096	2.99	0.63-14.32	0.170
High (ref)	-					

[1] Adjusted for: age, aboriginal ancestry, migrant status, childhood trauma, non-injection drug use

Table 3d

Bivariable and Multivariable Confounder Model of Association between Sexual Relationship Power and Intimate Partner Violence among Street and Off-Street Sex Workers

Sexual Violence (n=21/257)

Variables	OR	95% CI	p-value	AOR[1]	95% CI	p-value
Sexual Relationship Power Scale						
Low	13.97	1.79-108.73	0.012	10.87	1.32-89.23	0.026
Medium	1.56	0.16-15.31	0.705	1.36	0.13-13.87	0.797
High (ref)						

[1] Adjusted for: age, aboriginal ancestry, migrant status, non-injection drug use. Unable to control for childhood trauma due to cell size

Table 3e

Bivariable and Multivariable Confounder Model of Association between Sexual Relationship Power and Intimate Partner Violence among Street and Off-Street Sex Workers

Emotional Violence (n=75/257)

Variables	OR	95% CI	p-value	AOR[1]	95% CI	p-value
Sexual Relationship Power Scale						
Low	13.50	4.86-37.47	<0.001	9.87	3.34-29.13	<0.001
Medium	2.43	0.87-6.85	0.092	1.95	0.66-5.83	0.230
High (ref)	-					

[1] Adjusted for: age, aboriginal ancestry, migrant status, childhood trauma, non-injection drug use