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The Impact of Childhood Emotional Abuse on Violence among People Who Inject Drugs

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Abstract

Introduction and Aims—Childhood emotional abuse is a known risk factor for various poor social and health outcomes. While people who inject drugs (IDU) report high levels of violence, in addition to high rates of childhood maltreatment, the relationship between childhood emotional abuse and later life violence within this population has not been examined.

Design and Methods—Cross-sectional data were derived from an open prospective cohort of IDU in Vancouver, Canada. Childhood emotional abuse was measured using the Childhood Trauma Questionnaire. We used multivariate logistic regression to examine potential associations between childhood emotional abuse and being a recent victim or perpetrator of violence.

Results—Between December 2005 and May 2013, 1437 IDU were eligible for inclusion in this analysis, including 465 (32.4%) women. In total, 689 (48.0%) reported moderate to severe history of childhood emotional abuse, while 333 (23.2%) reported being a recent victim of violence and 173 (12.0%) reported being a recent perpetrator of violence. In multivariate analysis, being a victim of violence (adjusted odds ratio = 1.49, 95% confidence interval 1.15–1.94) and being a perpetrator of violence (adjusted odds ratio = 1.58, 95% confidence interval 1.12–2.24) remained independently associated with childhood emotional abuse.

Discussion and Conclusions—We found high rates of childhood emotional abuse and subsequent adult violence among this sample of IDU. Emotional abuse was associated with both victimisation and perpetration of violence. These findings highlight the need for policies and programs that address both child abuse and historical emotional abuse among adult IDU.

Keywords

emotional abuse; trauma; violence; injection drug use

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INTRODUCTION

The long-term effects of childhood trauma are vast and well documented. They comprise an array of poor health outcomes including depression [1–3], personality disorders [4, 5], anxiety [1,2,5], eating disorders [6, 7], post-traumatic stress disorder [5, 8], and suicide attempt [9, 10]. In addition, survivors of childhood trauma are known to engage in risk behaviours and practices associated with HIV infection, including substance misuse [2, 11], injection drug use [12–14], unsafe sex [11, 15] and sex work [10, 16].

There is a growing body of evidence to suggest emotional abuse may be a stronger predictor than the more commonly studied physical and sexual abuse with respect to the development of certain poor health and social outcomes, including intimate partner violence [8,17,18]. To our knowledge, intimate partner violence is the only form of adult violence that has been examined in relation to childhood trauma. Further, this research has focused primarily on younger at risk populations and college students [8, 17].

Illicit drug users are at an increased risk of interpersonal violence; a study of people who inject drugs (IDU) in Vancouver reported that 68.3% of participants experienced physical violence within a 10-year study period [19]. IDU also report high rates of childhood trauma [10,16,20,21]. While emotional abuse has been previously linked to intimate partner violence, this exposure, as well as other forms of violence, have not been extensively studied within high-risk populations who frequently experience violence, such as illicit drug users. Further, few studies have examined the impact of emotional abuse on being both a victim and perpetrator of violence.

Given the high risk of violence among illicit drug users, accompanied with high rates of childhood trauma, the present study was conducted to investigate whether childhood emotional abuse was associated with being a victim or perpetrator of violence among IDU participating in an open prospective cohort study of IDU in Vancouver, Canada.

METHODS

Study population

The sample for this cross-sectional study was drawn from two open prospective cohorts: The Vancouver Injection Drug User Study (enrolling HIV-negative participants) and the AIDS Care Cohort to Evaluate Access to Survival Services (enrolling HIV-positive participants). Participants are eligible to participate if they are aged at least 14 years, reside in the greater Vancouver region and report injection drug use within the past six months. The instruments and all other follow-up procedures for each study are identical to allow for combined analyses. Described in detail in previous research [22–24], participants were recruited through extensive outreach methods and snowball sampling. At baseline and during semi-annual follow-up visits, participants complete an interviewer-administered questionnaire. Participants provide blood samples for HIV and Hepatitis C (HCV) testing, as well as HIV disease monitoring if HIV positive, and participants are referred to relevant health services as needed. Pre- and post-test HIV counselling and referral to health services are provided as

part of the study. Individuals receive a \$20 honorarium upon completion of their study visits. The University of British Columbia's Research Ethics Board provided ethical approval for the study.

Measures

The current analysis includes participants who were enrolled between December 2005 and May 2013, and had reported any injection drug use in the previous six months. The outcome of interest was experiencing moderate to severe emotional abuse as measured during the baseline interview by the Childhood Trauma Questionnaire (CTQ) [25]. The CTQ is a 28-item validated instrument used to retrospectively assess three forms of childhood abuse (sexual, physical, and emotional abuse) and two forms of childhood neglect (physical and emotional neglect). The CTQ provides score for five subscales that correspond to each type of abuse and neglect, based on responses to five items. Using a five-point Likert scale from “never true” (1) to “very often true” (5), participants respond to statements such as “When I was growing up I had to wear dirty clothes” (physical neglect) and “People in my family called me things like ‘stupid,’ ‘lazy,’ or ‘ugly’” (emotional abuse). All questions refer only to events that occurred during childhood. Each subscale produces scores ranging from 5 to 25. We used recommended and pre-determined cut-off scores to translate the emotional abuse subscale score into one of four levels of childhood trauma [25]: none or minimal (5–8), low to moderate (9–12), moderate to severe (13–15), and severe to extreme (>15). For this analysis, we chose to collapse these four trauma levels into two: none/low and moderate/severe. We selected to take this approach in light of previous studies that have successfully used this approach, as well as studies involving drug-using populations that have shown dichotomising abuse into ‘abuse’ vs. ‘no abuse’ produces few significant findings [20]. The reliability of validity of the CTQ has been demonstrated previously [26, 27], and the instrument has been used successfully in several studies of illicit drug-using populations [21, 25, 28].

Experiences of violence were also measured at baseline and pertain to violence experienced in the previous six months. Victimization was assessed with a survey item asking: “Have you been attacked or assaulted (including sexual assault), or suffered any kind of violence in the last six months?” Perpetration of violence was measured through a survey item asking: “Have you physically attacked or assaulted someone in the last six months?” Factors that were included as potential confounders due to their known or *a priori* hypothesised relationship with both emotional abuse and violence included: age, gender (female vs. male), Ethnicity (Caucasian vs. other), homelessness (yes vs. no), frequent cocaine injection (daily vs. < daily), frequent heroin injection (daily vs. < daily), frequent crack smoking (daily vs. < daily), heavy alcohol use (Defined as > 14 drinks per week or > 4 drinks on one occasion for men, and > 7 drinks per week or > 3 drinks on one occasion for women) (yes vs. no), binge drug use (yes vs. no), syringe sharing (yes vs. no) incarceration (yes vs. no), sex work (yes vs. no), HIV serostatus (positive vs. negative), drug or alcohol addiction treatment enrollment (yes vs. no), non-fatal overdose (yes vs. no), sexual orientation (heterosexual vs. other), and requiring help injecting (yes vs. no). Unless otherwise specified, all variables refer to behaviours/exposures in the previous six months.

Analysis

In bivariate analyses, those who did and did not report a history of emotional abuse were compared using Pearson's chi-square test. We used multivariate logistic regression to determine whether experiencing violence (through either being a victim or being a perpetrator) was independently associated with emotional abuse after adjustment for confounders. To fit the model, we employed a conservative stepwise variable selection approach [29]. We included all variables (where $P < 0.10$ in bivariate analyses) in a multivariate model and used a stepwise approach to fit a series of reduced models. After comparing the coefficient value associated with the main outcome of interest in the full model to the coefficient value in each of the reduced models, we dropped the secondary variable associated with the smallest relative change. We continued this iterative process until the minimum change exceeded 5%. Remaining variables considered as confounders in the final multivariate analysis were age, gender, assisted injecting, violence victim, and violence perpetrator. All statistical analyses were performed using SAS software version 9.3 (SAS Institute, Inc., Cary, NC). All P -values are two sided.

RESULTS

A total of 1437 IDU participated in the study, including 465 (32.4%) women. The median age was 41.7 years (interquartile range: 12.3 years). Six hundred and eighty-nine (48.0%) of the participants reported history of moderate to severe emotional abuse, while 173 (12.0%) reported being a recent perpetrator of violence and 333 (23.2%) reported being a recent victim of violence. Victimization and perpetration were not mutually exclusive; in our sample, 86 (6.00%) participants reported recently being both a victim and perpetrator of violence. Table 1 presents the bivariate analysis of factors associated with childhood emotional abuse.

Table 2 shows the results of the multivariate logistic regression analyses. As shown here, childhood emotional abuse remained independently associated with both being a recent victim of violence (Adjusted odds ratio [AOR] = 1.49, 95% confidence interval [CI] 1.15–1.94) and perpetrator of violence (AOR = 1.58, 95% CI 1.12–2.24). Emotional abuse was also positively associated with being female (AOR = 1.69, 95% CI 1.33–2.15). The reliability of the CTQ was good (Cronbach's Alpha = 0.88).

DISCUSSION

In the present study we found a high prevalence of emotional abuse among IDU in Vancouver, Canada, with approximately half of study participants reporting moderate to severe emotional abuse during childhood. Further, we found that both violence perpetration and violence victimisation remained independently and positively associated with childhood emotional abuse after adjusting for an array of potential confounders. Being female also remained positively associated with childhood emotional abuse.

Our finding of a relationship between emotional abuse and violence in a cohort of IDU is somewhat consistent with two previous studies that identified associations between emotional abuse and intimate partner violence [8, 17]. These studies examined victim and

perpetrator roles; however, they focused on college students and vulnerable youth, and used dating violence scales that included an emotional abuse component to obtain the outcome measurement.

Although not measured in the present study, there has been substantial research into the interpersonal schemas [30] that mediate the transition from experiencing childhood emotional abuse to becoming a victim of intimate partner violence and perpetrating intimate partner violence in adulthood [17]. It is likely that some of these schemas might carry over into acts of violence outside of intimate partner relationships. Holding one or more schemas of mistrust, self-sacrifice, or emotional inhibition have been shown to mediate the relationship between emotional abuse and intimate partner victimisation [17]. Similarly within the IDU community, individuals who expect others to respond to them abusively (i.e. mistrust), place others' needs before their own (i.e. self-sacrifice), or attempt to repress feelings associated with experiences of emotional abuse (i.e. emotional inhibition) might also place themselves at a higher risk of physical or verbal abuse during conflict situations. Previous studies focusing on the inherent betrayal component of childhood abuse have recorded high rates of trauma revictimisation among survivors [31,32]. Notably, those re-victimised were more reluctant to trust others and exhibited higher levels of traumatic symptoms and dissociation [32]. Arguably, these are some of the processes by which an IDU childhood emotional abuse survivor is rendered more susceptible to re-victimisation by partners, peers or authority figures.

Moreover, fostering one or more schemas of mistrust, emotional inhibition, poor self-control or entitlement have also been shown to mediate the relationship between emotional abuse and perpetration of intimate partner violence [17]. In addition to mistrust and emotional inhibition (described above), individuals who hold a sense of entitlement and/or have trouble regulating their emotions during emotionally arousing situations (i.e. poor self-control) might in turn become the aggressor in conflict situations. Such schemas may be exacerbated by the ongoing criminalisation of drug use in most settings, which results in frequent violent interactions among drug users and dealers, and drug users and police [19]. The need for IDU-focused policies and programs that take into account personal experiences of emotional abuse in relation to violence is highlighted by these findings.

We also found a higher prevalence of emotional abuse among women. This trend has been noted in previous studies that used the CTQ in studying the experiences of youth in child-protective services [8] and adult illicit drug users [20]. The total prevalence rate observed in our study was much higher than identified in a sample of women in a primary care clinic (22.4%; [5]), as well as one reported from a community sample (13.2%; [33]), but consistent with a similar cohort of people who abuse drugs (49.3%; [20]), as well as a Vancouver cohort of at-risk youth (49.6%; [14]). Our finding of a gender effect on association between emotional abuse and violence is concerning, given that women in the IDU community are already known to be vulnerable to male-perpetrated violence - due in large part to well-described gender-power relations within illicit drug markets [34, 35]. Further, female IDU are also known to engage in high-risk income-generating activities that elevate risk for extreme violence, including drug dealing and sex work [36, 37]. These additional findings

outline the importance of considering gender issues when assessing and responding to childhood trauma and violence among adult IDU.

There are limitations associated with this study that should be noted. First, the cross-sectional nature of the study does not allow for causal inference, and – like all observational studies – there may exist some unmeasured confounders that were not captured and considered in this analysis. Despite using extensive street-based outreach efforts and snowball sampling to recruit study participants, the sample may not be representative of IDU in Vancouver and elsewhere. Our study relied on self-reported data, and therefore our findings may be susceptible to response biases, including socially desirable responding and recall bias. In particular, we note that childhood trauma is susceptible to under-reporting in adulthood [38, 39]. If present, these biases would likely lead to an underestimation of both violence and childhood emotional abuse. Furthermore, we cannot rule out the possibility of recall or reporting differences between men and women leading to the association between being female and experiencing emotional abuse. Finally, the present study did not measure the psychological processes at play in emotional abuse survivors who engage in violence; thus, discussion points are hypothesised from relevant psychological literature, and therefore should be considered in future studies of emotional abuse and violence. In summary, we observed high rates of childhood emotional abuse and violence among this population of adult IDU, and found that emotional abuse remained independently associated with being a perpetrator and a victim of violence in adulthood after controlling for all other measured confounders. We also found that being female was positively associated with emotional abuse within this population. In addition to highlighting the importance of preventing child abuse, these findings emphasise the value of interventions that assess and respond to emotional abuse among IDU.

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Table 1

Bivariate analysis of factors associated with emotional abuse among IDU in Vancouver, Canada (n = 1437)

Parameter	Yes 689 (47.95%)	No 748 (52.05%)	Odds ratio (95% CI)	P - value
Age †				
Median (IQR)	40.9 (11.93)	42.7 (12.83)	0.98 (0.97 – 0.99)	0.003
Gender				
Female	264 (38.32)	201 (26.87)	1.69 (1.35 – 2.11)	<0.001
Male	425 (61.68)	547 (73.13)		
Ethnicity				
Caucasian	421 (61.10)	460 (61.50)	0.98 (0.79 – 1.21)	0.853
Other	268 (38.90)	287 (38.37)		
Homeless *				
Yes	256 (37.16)	253 (33.82)	1.16 (0.93 – 1.44)	0.186
No	431 (62.55)	493 (65.91)		
Cocaine injection *				
Daily	70 (10.16)	74 (9.89)	1.03 (0.73 – 1.45)	0.873
< Daily	619 (89.84)	673 (89.97)		
Heroin injection *				
Daily	184 (26.71)	209 (27.94)	0.94 (0.75 – 1.19)	0.600
< Daily	505 (73.29)	539 (72.06)		
Crack smoking *				
Daily	294 (42.67)	285 (38.10)	1.21 (0.98 – 1.49)	0.078
< Daily	395 (57.33)	463 (61.90)		
Heavy alcohol use *				
Yes	111 (16.11)	119 (15.91)	1.02 (0.77 – 1.35)	0.917
No	578 (83.89)	629 (84.09)		
Binge drug use *				
Yes	283 (41.07)	297 (39.71)	1.06 (0.86 – 1.31)	0.597
No	406 (58.93)	451 (60.29)		
Syringe sharing *				
Yes	94 (13.64)	71 (9.49)	1.52 (1.09 – 2.10)	0.013
No	576 (83.60)	659 (88.10)		
Incarceration *				
Yes	125 (18.42)	128 (17.11)	1.08 (0.82 – 1.41)	0.598
No	561 (81.42)	618 (82.62)		
Victim of violence *				
Yes	191 (27.72)	142 (18.98)	1.63 (1.28 – 2.09)	<0.001
No	495 (71.84)	601 (80.35)		
Perpetrator of violence *				
Yes	103 (14.95)	70 (9.36)	1.70 (1.23 – 2.35)	0.001

Parameter	Yes 689 (47.95%)	No 748 (52.05%)	Odds ratio (95% CI)	P - value
No	583 (84.62)	673 (89.97)		
Sex work *				
Yes	132 (19.16)	89 (11.90)	1.75 (1.31 – 2.35)	<0.001
No	555 (80.55)	656 (87.70)		
HIV serostatus				
Positive	249 (36.14)	272 (36.36)	0.99 (0.80 – 1.23)	0.930
Negative	440 (63.86)	476 (63.64)		
Addiction treatment *				
Yes	368 (53.41)	380 (50.80)	1.10 (0.90 – 1.36)	0.361
No	320 (46.44)	364 (48.66)		
Non-fatal overdose *				
Yes	57 (8.27)	47 (6.28)	1.34 (0.90 – 2.01)	0.149
No	631 (91.58)	699 (93.45)		
Sexual orientation				
Heterosexual	576 (83.60)	680 (90.91)	0.49 (0.36 – 0.68)	<.001
Other	110 (15.97)	64 (8.56)		
Require help injecting *				
Yes	186 (27.00)	163 (21.79)	1.34 (1.05 – 1.70)	0.020
No	483 (70.10)	565 (75.53)		

Note: not all cells add up to 1437, as participants may refuse to answer sensitive questions.

CI, confidence interval; IQR, interquartile range; IUD, people who inject drugs.

* Denotes events/activities in the previous 6 months

† Per each additional year

Table 2

Multivariate logistic regression analysis of factors associated with emotional abuse among IDU in Vancouver, Canada (n =1375)

Variable	AOR	95% CI	P - value
Age [†]			
	0.99	(0.98 – 1.00)	0.143
Gender			
(Female vs. Male)	1.69	(1.33 – 2.15)	<0.001
Victim of violence *			
(Yes vs. No)	1.49	(1.15 – 1.94)	0.003
Perpetrator of violence *			
(Yes vs. No)	1.58	(1.12 – 2.24)	0.009
Require help injecting *			
(Yes vs. No)	1.19	(0.93 – 1.54)	0.168

AOR, adjusted odds ratio; CI, confidence interval; IQR, interquartile range; IUD, people who inject drugs.

* Denotes events/activities in the previous 6 months.

[†] Per each additional year.