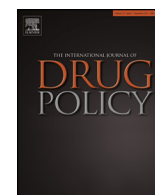




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Contents lists available at ScienceDirect

International Journal of Drug Policy

journal homepage: www.elsevier.com/locate/drugpo

Research paper

Health-damaging policing practices among persons who inject drugs in Mexico: Are deported migrants at greater risk?

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ARTICLE INFO

Article history:

Received 27 January 2017

Received in revised form 12 April 2017

Accepted 5 May 2017

Available online xxx

Keywords:

Police victimization

Policing practices

Injection drug use

Deportation

Migrant

HIV risk

Mexico

ABSTRACT

Background: Evidence-based public health and criminal justice policies aimed at addressing the structurally vulnerable population of persons who inject drugs (PWID) and who are involved in the immigrant enforcement and deportation system are lacking. Policing practices are critical structural determinants of HIV among PWID. PWID in Mexico who have been deported from the US are at elevated risk of HIV.

Methods: From 2011 to 2013, 733 PWID were recruited to complete structured questionnaires, including past 6-month experiences with police. Eligible PWID were 18 years or older, had injected in the past month, and resided in Tijuana, Mexico with no intentions of moving. To determine if deportation status was associated with experiences of arrests and problematic policing practices, we conducted separate multivariate logistic regression models for independent policing variables.

Results: In multivariate analyses, deportation status was independently associated with higher odds of being arrested (Adjusted Odds Ratio (AOR): 1.45; 95% Confidence Interval (CI): 1.02–2.05), being asked for a bribe (AOR: 1.39; 95% CI: 1.05–2.04), and being forced to leave a place of residence (AOR: 2.00; 95% CI: 1.08–3.70) in the past 6 months.

Conclusion: Results highlight a previously poorly understood elements of the US-deportation experience: migrants' experiences with law enforcement post-deportation and the role of deportation policies and practices as structural drivers of public health risk in destination countries. We provide policy recommendations for Mexico and the US based on our findings, which have potential application in other countries seeking to improve enforcement and related policing practices from a public health perspective.

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Introduction

On the Mexican side of the US–Mexico border, people who inject drugs (PWID) and interact with law enforcement experience systematic victimization (Beletsky et al., 2012; Ojeda et al., 2011; Pinedo, Burgos, Vargas-Ojeda, FitzGerald, & Ojeda, 2015; Pinedo, Burgos, and Ojeda, 2014; Pinedo, Burgos, Robertson et al., 2014; Pinedo, Burgos, Ojeda, FitzGerald, & Ojeda, 2015; Pinedo, Burgos, Zúñiga et al., 2015; Rhodes, Singer, Bourgois, Friedman, & Strathdee, 2005). Policing policies and problematic practices can

indirectly influence PWID's behaviour and health outcomes via the collateral health risk resulting from experiences of arrest, extortion, extra-legal syringe confiscation (i.e., confiscating syringes when legally possessed), and physical/sexual violence (Beletsky et al., 2013; Rhodes et al., 2005; Strathdee et al., 2010). Even before coming into contact with law enforcement, PWID may engage in behaviours aimed at limiting their exposure to police that also increase their risk of HIV infection and other blood-borne infectious diseases. For instance, PWID with past adverse experiences with police are more likely to inject in high-risk environments (e.g. shooting galleries, public spaces), seek out injection assistance, engage in other well-documented risk behaviours, and avoid accessing harm reduction and substance abuse services (Beletsky et al., 2013, 2012; Cooper, Moore, Gruskin,

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& Krieger, 2005; Rhodes et al., 2005; Strathdee et al., 2010). In the US-bordering city of Tijuana, copious research has documented associations of adverse policing behaviours with HIV infection and high-risk behaviours among PWID (Beletsky et al., 2013; Beletsky et al., 2012; Miller et al., 2008; Pinedo, Burgos, Ojeda et al., 2015; Pinedo, Burgos, Zúñiga et al., 2015). These data underscore the importance of problematic policing practices as social-structural drivers of HIV infection among PWID.

Tijuana has one of the highest levels of HIV infection in Mexico, which is highly concentrated among PWID. This border city is also the primary deportee-receiving community for Mexican migrants being repatriated from the US, many of which are substance-involved (e.g. PWID) since deportation policies prioritize individuals with history of drug possession offences (Pinedo, Burgos, Vargas-Ojeda et al., 2014). This selection mechanism, compounded by enormous stress and destabilization of the deportation process, can help explain the over-representation of deportees among PWID in Tijuana (40% or more, by some estimates) (Strathdee et al., 2008). Some studies also suggest that deported migrants who inject drugs may be targeted more often by Tijuana police, compared to PWID without a history of deportation. For instance, Pollini et al. (2009) found that among 898 male PWID in Tijuana, deportees were over-represented among incarcerated persons. In qualitative interviews, deported PWID describe police targeting, frequent arrests, and victimization (Ojeda et al., 2011; Robertson, Lozada et al., 2012; Robertson, Rangel, Lozada, Vera, & Ojeda, 2012). Deported PWID may serve as easy targets for police, given their high rates of homelessness and increased visibility in the city, especially given police motivations to meet arrest quotas and conduct police sweeps of public places where drug users and deportees congregate (Pinedo, Burgos, Ojeda et al., 2015; Pinedo, Burgos, Zúñiga et al., 2015). Markers for being 'Americanized' (e.g., tattoos, style of dress, colloquialisms, Spanish language proficiency) may render deported PWID easily distinguishable from 'locals'. Targeting and victimization by police may be particularly detrimental to the health of deported PWID because many lack the formal and informal resources that facilitate protective behaviours and access to prevention and health care services. Such targeting may also drive deported PWIDs' to engage high-risk drug use, such as injecting in hidden environments and rush injections, and increase risk to HIV (Pinedo, Burgos, Vargas-Ojeda et al., 2014). Thus, Tijuana is a setting where deportation policies and policing practices intersect and yield avoidable individual and public health consequences for this vulnerable population (Pinedo, Burgos, Vargas-Ojeda et al., 2014; Pinedo, Burgos, and Ojeda, 2014; Pinedo, Burgos, Robertson et al., 2014).

Deported PWID in Tijuana are at high-risk for HIV infection. Among male PWID in Tijuana, deportation has been independently associated with a fourfold increase in odds of HIV infection (Strathdee et al., 2008). Deported PWID (vs. non-deported PWID) are more likely to partake in riskier injection practices and behaviours (e.g., try new drugs, inject at higher frequencies), as compared to their non-deported counterparts (Pinedo, Burgos, Robertson, 2014; Pinedo et al., 2016; Robertson, Rangel et al., 2012). This existing disparity in HIV and HIV risk among deported and non-deported PWID in Tijuana has piqued scholarly interest in understanding the elements of the post-deportation risk environment that lead to increased vulnerability (see Pinedo, Burgos, Vargas-Ojeda et al., 2014 for a review). Police targeting and victimization may be a critical element of the post-deportation risk environment of deported PWID. However, prior research has yet to assess whether police interact (e.g., arrests, problematic practices) differently with deported and non-deported PWID. Thus, it is unknown whether deported PWID (vs. non-deported PWID) are more vulnerable to being police targets and experiencing ensuing arrests and victimization. This represents a critical gap in the

scientific literature and is greatly needed to inform immigration, deportation, and law enforcement policies, both in the US and Mexico, to protect the health of deportees.

Methods

Study design and participants

Our study uses data from *Proyecto El Cuete IV*, a longitudinal observational study, which recruited a cohort of 733 adult PWID residing in Tijuana between 2011 and 2013 using targeted sampling techniques. Detailed methodology regarding participant recruitment, screening, informed consent, and procedures to ensure confidentiality have been extensively delineated previously (see Robertson et al., 2014 for study protocol details). Study participants completed questionnaires at baseline and at 6-month follow-ups in a private setting. The Institutional Review Board of the University of California, San Diego and the Ethics Board of the *Colegio de la Frontera Norte*, Tijuana approved study protocols.

Measures

Survey domains included socio-demographics, migration history, and encounters with police. This study focused on socio-demographic measures including gender, age, Tijuana-native (i.e., born in Tijuana), marital status (married/having a common law partner vs. single), education (completed secondary school or higher), and homelessness (past 6 months). We also considered measures related to drug using behaviours that have been previously associated with adverse experiences with police (Gaines et al., 2014; Miller et al., 2008; Pinedo, Burgos, Ojeda et al., 2015; Pinedo, Burgos, Zúñiga et al., 2015). Participants were asked to report their age of injection drug use initiation, types of drugs they had injected in the past six months (i.e., heroin, cocaine, heroin & cocaine together, methamphetamine, and methamphetamine and heroin together), and if they had used a 'hit doctor' to inject drugs in the past six months. Hit doctors are persons who are sought out for their injection skills, commonly operate in hidden environments (i.e., alleyways), and for exchange of goods (e.g., money, drugs). Participants were characterized as deportees if they reported ever being deported from the US.

Based on prior research, our dependent outcomes included 10 individual variables related to arrests and problematic contact with law enforcement in Tijuana in the past 6 months, including: having been arrested, having been asked for a bribe, having money or valuables confiscated, having legal identification documents confiscated, having syringes confiscated (note: carrying syringes in Mexico is legal and no prescription is required), having been physically beaten, having belongings burned or destroyed, having been forced to leave a place of residency, and having been asked for a sexual favour to avoid arrest (Ojeda et al., 2011; Pinedo, Burgos, Ojeda et al., 2015; Pinedo, Burgos, Zúñiga et al., 2015; Robertson, Lozada et al., 2012; Robertson, Rangel et al., 2012). Using these variables, we created our tenth dependent outcome to capture if participants experienced more than one type of problematic police encounters (not including arrest). Given the distribution of responses, we dichotomized this variable as having experienced ≥ 2 or more types of adverse encounters with police (vs. ≤ 1).

Analyses

We characterized our sample by generating descriptive characteristics for socio-demographic variables stratifying by deportation status. Associations between independent variables and deportation status were conducted using Pearson Chi square (bivariate variables) and Wilcoxon rank sum (continuous

variables) tests. Proportions of arrest and experiences with each policing variable were also generated. To determine if deportation status was associated with experiences of arrests and problematic policing practices, we conducted separate multivariate logistic regression models running each policing variable independently while controlling for socio-demographic characteristics and drug-using behaviours. Given that variables for types of drugs injected in the past six months were highly correlated with each other, we tested every variable separately in each model and found no substantive differences. Based on prior evidence that has documented independent associations between police victimization and age of first injection drug use, injecting methamphetamine, and using a 'hit doctor' (Pinedo, Burgos, Ojeda et al., 2015; Pinedo, Burgos, Zúñiga et al., 2015; Pollini et al., 2009), we controlled for these variables in our final models.

Results

Sample characteristics

The majority of PWID in our sample were male (62%) with an average age of 37 years, and more than one-third were Tijuana natives (36%) (Table 1). A total of 299 PWID (41%) had been previously deported from the US. Compared to non-deportees, deported PWID were more likely to be male (78% vs. 51%; $p \leq 0.001$), older (mean age 40 vs. 35; $p \leq 0.001$), and to be married or have a common law partner (41% vs. 49%; $p = 0.032$).

Prevalence of arrests and problematic policing practices

More than half (56%) of PWID reported being arrested in the past 6 months (Table 1). Overall, the most commonly experienced problematic policing practices reported were: being asked a bribe (40%), having money or valuables confiscated (33%), and being

physically beaten (21%). Compared to non-deported PWID, deportees were more likely to have been arrested (66% vs. 50%; $p \leq 0.001$), asked for a bribe (46% vs. 36%; $p = 0.008$), and forced to leave their residence (11% vs. 6%; $p = 0.009$).

Prevalence of past six month drug use behaviours

On average, participant's age of injection drug use initiation occurred at age 14.7 (Standard Deviation (SD): 0.16). Compared to non-deported PWID, deportees were more likely to have injected cocaine (55% vs. 39%; $p \leq 0.001$), heroin and cocaine together (65% vs. 45%; $p \leq 0.001$), methamphetamine (61% vs. 52%; $p = 0.018$), and methamphetamine and heroin together (74% vs. 67%; $p = 0.027$).

Factors independently associated with arrests and problematic policing practices

In multivariate analyses (Table 2), which controlled for socio-demographic factors and drug-using behaviours, being a deported migrant was independently associated with having been arrested (Adjusted Odds Ratio (AOR): 1.45; 95% Confidence Interval (CI): 1.02–2.05), having been asked for a bribe (AOR: 1.39; 95% CI: 1.05–2.04), and having been forced to leave a place of residence (AOR: 2.00; 95% CI: 1.08–3.70) in the past 6 months.

Several demographic factors were associated with arrest or problematic policing practices. Male gender was independently associated with having been arrested (AOR: 3.58; 95% CI: 2.47–5.19), having been physically beaten (AOR: 6.55; 95% CI: 3.74–11.49), and having belongings burned or destroyed (AOR: 1.99; 95% CI: 1.04–3.79) in the past 6 months. Male gender was inversely associated with being asked for a sexual favour to avoid arrest (AOR: 0.08; 95% CI: 0.01–0.76) in the past 6 months. Lastly, homelessness was independently associated with having been arrested (AOR: 1.88; 95% CI: 1.35–2.62), having belongings burned

Table 1

Socio-demographic characteristics and past 6 month interactions with police among persons who inject drugs (PWID) in Tijuana, Mexico by deportation status, N = 733, 2013.

Variable	Total sample 733 (%)	Non-deported PWID 434 (59%)	Deported PWID 299 (41%)	P-value
Socio-demographics				
Gender (male)	456 (62%)	222 (51%)	234 (78%)	≤ 0.001
Mean age (SD)	37 (8.91)	35 (8.79)	40 (8.01)	≤ 0.001
Tijuana native	266 (36%)	169 (39%)	97 (32%)	0.072
Married/common law partner	333 (45%)	211 (49%)	122 (41%)	0.037
Completed Secondary school or higher	291 (40%)	160 (37%)	131 (44%)	0.059
Homeless in the past 6 months	307 (42%)	171 (39%)	136 (45%)	0.101
Past 6 month interactions with police				
Arrested	411 (56%)	215 (50%)	196 (66%)	≤ 0.001
Asked for a bribe	296 (40%)	158 (36%)	138 (46%)	0.008
Forced to leave a place of residence	60 (8%)	26 (6%)	34 (11%)	0.009
Money or valuables confiscated	243 (33%)	138 (32%)	105 (35%)	0.348
Legal identification documents confiscated	104 (14%)	64 (15%)	40 (13%)	0.602
Syringes were confiscated	84 (11%)	56 (13%)	28 (9%)	0.139
Physically beaten	149 (21%)	87 (20%)	62 (21%)	0.785
Belongings burned or destroyed	70 (10%)	37 (9%)	33 (11%)	0.243
Asked for a sexual favour to avoid arrest	11 (2%)	8 (2%)	3 (1%)	0.358
≥ 2 or more types of adverse experiences with police	286 (40%)	160 (37%)	126 (43%)	0.130
Past 6 month drug use behaviours				
Mean age of first injection drug use (SD)	14.7 (0.16)	14.9 (0.20)	14.4 (0.26)	0.142
Types of drugs injected				
Heroin	697 (95%)	408 (94%)	288 (96%)	0.160
Cocaine	334 (46%)	169 (39%)	165 (55%)	≤ 0.001
Heroin & cocaine together	390 (53%)	196 (45%)	194 (65%)	≤ 0.001
Methamphetamine	408 (56%)	226 (52%)	182 (61%)	0.018
Methamphetamine & heroin together	510 (70%)	289 (67%)	222 (74%)	0.027
Used a 'hit doctor'	149 (20%)	87 (20%)	62 (21%)	0.820

Table 2

Past 6 month police arrests and problematic policing practices independently associated with deportation among persons who inject drugs in Tijuana, Mexico, N = 733, 2013.

Variable	Model 1: Arrested AOR (95% CI)	Model 2: Asked for bribe AOR (95% CI)	Model 3: Money or valuables confiscated AOR (95% CI)	Model 4: Legal identification documents confiscated AOR (95% CI)	Model 5 Syringes were confiscated AOR (95% CI)	Model 6: Physically beaten AOR (95% CI)	Model 7: Belongings burned or destroyed AOR (95% CI)	Model 8: Forced to leave a place of residence AOR (95% CI)	Model 9: Asked for a sexual favour to avoid arrest AOR (95% CI)	Model 10: ≥ 2 or more types of adverse experiences with police AOR (95% CI)
Deported Migrant	1.45 (1.02– 2.05) [*]	1.39 (1.05– 2.04) [*]	0.98 (0.69– 1.40)	0.72 (0.45– 1.16)	0.81 (0.48– 1.39)	0.82 (0.54– 1.25)	1.05 (0.60– 1.84)	2.00 (1.08– 3.70) [*]	1.27 (0.28– 5.69)	1.14 (0.81–1.69)
Gender (Male)	3.58 (2.47– 5.19) ^{***}	1.35 (0.93– 1.96) [*]	1.22 (0.83– 1.78)	1.69 (1.01– 2.82)	0.73 (0.43– 1.26)	6.55 (3.74– 11.49) ^{***}	1.99 (1.04– 3.79) [*]	1.00 (0.51– 1.93)	0.08 (0.01– 0.76) [*]	1.29 (0.89–0.87)
Age	0.98 (0.96– 1.00)	0.99 (0.97– 1.01)	0.99 (0.97– 1.01)	0.99 (0.97– 1.02)	0.97 (0.94– 1.00)	0.96 (0.94– 0.98) ^{***}	0.99 (0.65– 1.02)	0.99 (0.95– 1.02)	0.95 (0.87– 1.39)	0.98 (0.96–1.00)
Tijuana Native	0.86 (0.62– 1.19)	0.80 (0.57– 1.11)	0.69 (0.49– 0.97) [*]	0.82 (0.52– 1.28)	0.75 (0.45– 1.24)	1.02 (0.68– 1.52)	1.16 (0.68– 1.98)	0.84 (0.46– 1.54)	1.06 (0.29– 3.86)	0.80 (0.57–1.11)
Married/Common law partner	1.17 (0.85– 1.61)	1.37 (1.00– 1.90) [*]	1.10 (0.79– 1.53)	1.22 (0.79– 1.89)	0.79 (0.49– 1.28)	0.82 (0.55– 1.21)	0.87 (0.51– 1.48)	1.17 (0.66– 2.08)	2.02 (0.51– 8.01)	1.24 (0.90–1.71)
Completed Secondary school or higher	1.12 (0.81– 1.55)	1.41 (1.02– 1.94) [*]	1.03 (0.74– 1.42)	1.35 (0.88– 2.08)	0.70 (0.43– 1.15)	1.02 (0.86– 1.91)	0.79 (0.46– 1.35)	0.82 (0.46– 1.46)	0.78 (0.21– 2.87)	1.10 (0.80–1.52)
Homeless	1.88 (1.35– 2.62) ^{***}	1.33 (0.97– 1.84)	1.33 (0.96– 1.85)	1.18 (0.76– 1.83)	1.25 (0.77– 2.01)	1.28 (0.86– 1.91)	2.51 (1.47– 4.28) ^{***}	4.77 (2.53– 9.01) ^{***}	1.75 (0.47– 6.40)	1.47 (1.07–2.03) [*]
Age of first injection drug use	0.98 (0.95– 1.02)	0.91 (0.87– 0.95) ^{***}	0.91 (0.87– 0.96) ^{***}	0.98 (0.93– 1.03)	1.13 (0.70– 1.83)	0.96 (0.91– 1.01)	0.94 (0.87– 1.01)	0.94 (0.87– 1.02)	1.04 (0.91– 1.19)	0.90 (0.86– 0.94) ^{***}
Injected methamphetamine ^a	1.60 (1.16– 2.20) ^{**}	1.78 (1.20– 2.46) ^{***}	1.49 (1.07– 2.86) [*]	1.41 (0.91– 2.21)	1.13 (0.70– 1.83)	0.88 (0.59– 1.30)	1.17 (0.68– 2.01)	0.82 (0.46– 1.46)	2.08 (0.51– 8.38)	1.55 (1.12–2.13) ^{**}
Used a 'hit doctor' ^a	1.07 (0.71– 1.60)	1.85 (1.24– 2.74) ^{**}	1.66 (1.12– 2.46) [*]	1.78 (1.08– 2.92) [*]	1.04 (0.58– 1.87)	1.52 (0.92– 2.50)	1.66 (0.91– 3.02)	1.30 (0.68– 2.49)	1.25 (0.34– 4.63)	1.50 (1.01–2.23) [*]

^a Refers to past 6 months.^{*} $p \leq 0.05$.^{**} $p \leq 0.01$.^{***} $p \leq 0.001$.

or destroyed (AOR: 2.51; 95% CI: 1.47–4.28), having been forced to leave a place of residence (AOR: 4.77; 95% CI: 2.53–9.01) and experiencing ≥ 2 types of adverse experiences with police (AOR: 1.47; 95% CI: 1.07–2.03) in the past 6 months.

Drug-using behaviours also increased odds of experiencing adverse police encounters. Younger age of drug injection initiation was independently associated with having been asked for a bribe (AOR: 0.91; 95% CI: 0.87–0.95), having money or valuables confiscated (AOR: 0.91; 95% CI: 0.87–0.96), and having experienced ≥ 2 or more types of adverse experiences with police (AOR: 0.90; 95% CI: 0.86–0.94) in the past 6 months. Having injected methamphetamine in the past 6 months independently increased the odds of having been arrested (AOR: 1.60; 95% CI: 1.16–2.20), asked for a bribe (AOR: 1.78; 95% CI: 1.20–2.46), having money or valuables confiscated (AOR: 1.49; 95% CI: 1.07–2.86), and experiencing ≥ 2 types of adverse experiences with police (AOR: 1.55; 95% CI: 1.12–2.13) in the past 6 months. Lastly, having a used a 'hit doctor' to inject drugs in the past six months was associated increased odds of having been asked for a bribe (AOR: 1.85; 95% CI: 1.24–2.74), having money or valuables confiscated (AOR: 1.66; 95% CI: 1.12–2.46), having legal identification documents confiscated (AOR: 1.78; 95% CI: 1.08–2.92), and experiencing ≥ 2 types of adverse experiences with police (AOR: 1.50; 95% CI: 1.01–2.23) in the past 6 months.

Discussion

Deportation is extremely disruptive to families, communities, and individuals (Pinedo et al., 2015; Pinedo, Burgos, and Ojeda,

2014; Pinedo, Burgos, Robertson et al., 2014). In the context of unprecedented levels of deportations from the US, this study investigates a formerly not well-understood factor of the deportation experience: migrants' experiences with law enforcement post-deportation and the role of deportation policies and practices as structural drivers of public health risk in destination countries. We found that PWID have differential experiences with police according to deportation status. Given how easily it is to distinguish deportees from local community members, their increased vulnerability stemming from the lack of social and other sources of support, and the high stigma they face may ultimately contribute to systematic targeting by police and subsequent arrests and victimization (Pinedo, Burgos, Ojeda et al., 2015). Our findings can inform policies and programmes in Tijuana and other communities receiving large numbers of displaced migrants, as well as immigration enforcement and deportation policy reform in the US and in other countries with high rates of immigration.

In our sample of PWID in Tijuana, after controlling for important socio-demographic characteristics and drug using behaviours, deportation was independently associated with arrests, extortion (i.e., being asked for a bribe), and forceful removal of a place of residence in the past 6 months. Experiences of arrests have been linked to HIV infection among PWID in Mexico and globally. Engagement in risky injection practices while incarcerated and harmful drug use upon release (e.g., bingeing on drugs, injecting in shooting galleries due to fear of future arrests) is also common, further elevating risk to HIV infection (Gaines et al., 2014; Ojeda

et al., 2011; Pollini et al., 2009; Robertson, Lozada et al., 2012 ; Robertson, Rangel et al., 2012). Moreover, police officers' demands for bribes is a notable and detrimental abusive policing behaviour that may contribute to PWIDs' economic vulnerability and increase their likelihood of syringe sharing, reusing syringes, and not purchasing clean syringes due to lack of financial resources. Lastly, access to safe and long-term housing is a serious issue among deportees who often lack resources and face multiple barriers to securing housing following their forced displacement. Therefore, deportees, including deported PWID, in Tijuana commonly live in public spaces. Following public and legislators' requests for a cleaner and safer city, police forcefully displace homeless deportees and PWID regularly from these spaces, including burning their belongings (Pinedo, Burgos, Vargas-Ojeda et al., 2014; Pinedo, Burgos, and Ojeda, 2014; Pinedo, Burgos, Robertson et al., 2014). These problematic policing behaviours may contribute to fear of police among community members and may indirectly result in deported PWID engaging in high-risk behaviours to avoid law enforcement (Cooper et al., 2005; Maher & Dixon, 1999; Small, Kerr, Charette, Schechter, & Spittal, 2006).

Law enforcement practices in Tijuana can play a critical role in reducing HIV risk and drug-related harms. We provide the following policy recommendations that can help mitigate public health risks among deportees, including deported PWID. Collaborative partnerships between public health agencies and police to promote an environment that aligns law enforcement and HIV prevention are key. Additionally, it is important to build trust-based relationships between law-enforcement and the drug-using community to reduce health-related harms. Police trainings to reduce the stigmatization of drug users and deportees in Tijuana may improve how police interactions with these populations and contribute to an environment of respect, dignity, and human rights. For example, in the 1980s, Frankfurt, Germany introduced the 'Frankfurt Way'—a novel interdisciplinary cooperation between police and diverse health and addiction services (Stover, 2013). This effort emphasized substance use prevention and intervention by connecting drug-dependent individuals to health and social services. These proactive efforts resulted in the decline of drug-related deaths and de-criminalization of vulnerable populations. Cities in other countries, such as India, Kyrgyzstan, Kenya, Ghana, and South Africa have also implemented similar police–public health partnerships with positive results (Wessells et al., 2009; Beletsky et al., 2013; Thomson et al., 2016).

Similarly, a promising police education programme, in collaboration with public health stakeholders, is currently being implemented in Tijuana among all active street-level law enforcement. This programme integrates occupational safety and HIV prevention. In part, this training deconstructs myths regarding drug users (e.g., drug users do not care about their health) using video vignettes and testimonials of former drug users' experiences with police as a means to shift behaviours and attitudes towards drug users (Strathdee, Beletsky, & Kerr, 2015). Incorporating vignettes and testimonials of deported migrants' interactions with police in the city, highlighting differential interactions, may also be beneficial. Gender should also be considered. We found that female PWID are more likely to have experienced sexual extortion than male PWID, which highlights differential sources of vulnerability by gender. Importantly, the success of police education may be dependent on broader policing issues, such as eliminating community sweeps and corruption (e.g., extortion) to discourage the targeting of vulnerable populations.

Finally, reforming US immigration and removal policies are needed to ensure migrants' independence and success following repatriation. Currently, deportation procedures displace migrants with little resources to unfamiliar environments where social

supports are unavailable; communities may lack the resources to receive them. These procedures contribute to deportees' vulnerable state, including homelessness, economic marginalization, and unemployment—structural factors which have been linked to police targeting and victimization (Beletsky et al., 2012; Pinedo, Burgos, Zúñiga et al., 2015; Robertson, Lozada et al., 2012). Displacement to cities where drugs are cheap and readily available may also increase deportees' vulnerability to high-risk behaviours (e.g., initiating drug use or injection drug use, drug relapse). Such behaviours have also been associated with problematic policing practices (Pinedo, Burgos, & Ojeda, 2014). Thus, providing basic necessities pre- and post-deportation to assist deportees in re-integrating into Mexican society should be a priority. For instance, providing deportees with a copy of their Mexican birth certificate, which many lack, or returning them to cities where they may have family may mitigate important structural barriers to housing, employment, and health care access. Reducing deportees' structural vulnerabilities may in turn reduce police targeting, victimization, and contribute to improved public health and safety in border communities. Such efforts will require binational cooperation.

Our findings must be interpreted within certain limitations. First, we lacked contextual data regarding police encounters and crime-related activities, which could clarify the context for the events reported and whether arrests were just and warranted. PWID were recruited through non-random sampling procedures, and therefore findings may not be generalizable to all deported PWID in Tijuana, or other communities in or outside of Mexico. Our Findings are based on cross-sectional analyses and cannot infer causal relationships. Analyses of longitudinal data is an important next step in this research area. Despite these limitations, our study generates important data investigating community-based sources of HIV vulnerability among deported migrants who inject drugs, a subpopulation that is severely understudied and at high risk for HIV.

Conclusion

Since 2001, the US has deported more than 4 million migrants, primarily of Mexican-origin (US Department of Homeland Security, 2013). Criminal and drug-related offences commonly contribute to the deportation of Mexican migrants (Pinedo, Burgos, Vargas-Ojeda et al., 2014; Pinedo, Burgos, and Ojeda, 2014; Pinedo, Burgos, Robertson et al., 2014). Thus, deportation policies that target drug-using migrants, an already vulnerable population, may ultimately increase their risk to HIV via unintended consequences of this process. Deportation may add another layer of vulnerability for PWID in Tijuana. Importantly, deported PWID's ties and social networks with persons in the US persist beyond deportation, including engagement in high-risk behaviours with US residing persons (Wagner et al., 2011). Thus, protecting the health of deportees can have positive health benefits for both countries, particularly by mitigating the spread of HIV and other blood-borne infections across borders. Lastly, research on deported migrants' experiences with police in Mexico can also inform research in the global context. For instance, in Germany, immigration has dramatically increased and deportations have reached unprecedented numbers (Pestano, 2015). Similarly, Sweden, as a result of the influx of refugees, has introduced border check points along communities bordering Denmark and currently preparing to pass regulation that will limit asylum seeker's refugee status, permanent residency, and family reunification (Rollins, 2016). In Bulgaria and Kenya, migrants and asylum seekers are routinely jailed for prolonged periods, often times unjustly and in violation of national law (Klama & Likule, 2013; Koleva, 2011). As such, our findings can help inform policies in countries currently experiencing issues of

immigration, deportation, and destabilization of border areas, where rates of criminalization and victimization are prevalent.

Acknowledgements

Research reported in this publication was supported by the Fogarty International Centre of the National Institutes of Health under Award Number R25TW009343; the National Institutes of Health—National Institute on Drug Abuse grants K01DA025504, R37DA019829, R01DA039073, R37DA019829-S, and T32DA023356; the T32AA007240 Graduate Research Training on Alcohol Problems, by the National Institute on Alcohol and Alcoholism; the R25DA026401 Interdisciplinary Research Training Institute on Hispanic Drug Abuse; the University of California Global Health Institute; and a fellowship from the UCSD Center for US–Mexican Studies. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Conflict of interest

The authors of this study have no conflict of interests to declare.

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