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EFFECTS OF POLICE CONFISCATION OF ILLICIT DRUGS AND SYRINGES AMONG INJECTION DRUG USERS IN VANCOUVER

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Abstract

Background—Drug market policing has been associated with various harms among injection drug users (IDU). However, little is known about instances in which drugs and injecting equipment are confiscated from IDU in the absence of a formal arrest.

Methods—We examined factors associated with being stopped, searched, or detained by police among participants in the Vancouver Injection Drug Users Study (VIDUS) using logistic regression. We also examined actions taken by study participants immediately following instances in which drugs or syringes were confiscated by police.

Results—Among 465 active IDU, 130 (28.0%) reported being detained by police in the last six months without being arrested. In multivariate logistic regression analysis, factors associated with being stopped, searched or detained by police included homelessness (Adjusted Odds Ratio [AOR] = 3.96, 95% CI: 1.86 – 8.45), recent incarceration (AOR = 3.52, 95% CI: 1.75 – 7.10), frequent crack use (AOR = 2.24, 95% CI: 1.34 – 3.74), requiring help injecting (AOR = 5.20, 95% CI: 1.21 – 22.39), and lending syringes (AOR = 3.18, 95% CI: 1.09 – 9.30). Of those who reported being detained, 34% participants reported having had drugs confiscated, and 70% of these reported that they immediately acquired more drugs. 51% of participants who reported being detained also reported having had syringes confiscated, and of this group, 6% reported immediately borrowing used syringes.

Conclusions—Our study demonstrates that the IDU most affected by street-level policing tend to possess various characteristics, such as homeless, that place them at heightened risk for various adverse health outcomes. Our findings also suggest that the confiscation of drugs and/or needles and syringes through discretionary policing practices have potential to exacerbate drug market activity or prompt increased syringe borrowing. These findings indicate the need for ongoing evaluation of the public health impacts of discretionary policing approaches.

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INTRODUCTION

In response to large open drug scenes in urban centres, municipal police departments have employed a variety of enforcement techniques meant to disrupt and impede the trafficking and use of illicit drugs (Kerr, Small, & Wood, 2005). In Vancouver, Canada, enforcement represents one aspect of the city's "Four Pillar Approach" to combating illicit drug use (MacPherson, 2000). Aside from enforcement, this strategy also codifies prevention, treatment, and harm reduction as fundamental aspects of the city's response to drug addiction. The most controversial aspect of this strategy has thus far been harm reduction (CBC News, 2006); nevertheless, the city of Vancouver is currently the site of one of North America's largest syringe exchange programs as well as the continent's only legally-sanctioned supervised injection facility (SIF) (Wood et al., 2001), and the possession of sterile syringes is sanctioned by Canadian law (Government of Canada, 1996). While harm reduction strategies enjoy support from many sectors across Vancouver including the Vancouver Police Department (Wiebe, 2005), police officers assigned to policing the large open-air drug market in Vancouver's downtown eastside are not required to complete training in harm reduction techniques (Pivot Legal Society, 2005), and enforcement remains the city's central response to illicit drug use.

Studies have shown, however, that select types of police enforcement approaches – particularly large-scale crackdowns – are associated with adverse public health consequences, including increased HIV risk behaviour, reduced access to HIV prevention services, and human rights violations (Bluthenthal et al., 1999; Cooper, Moore, Gruskin, & Krieger, 2004; Csete & Cohen, 2003; Davis et al., 2005; Dixon & Coffin, 1999; Heimer, Bluthenthal, Singer, & Khoshnood, 1996; Kerr et al., 2005; Maher & Dixon, 1999; Small, Kerr, Charette, Schechter, & Spittal, 2006; Wood et al., 2003). Public health researchers have also identified specific aspects of policing and the judiciary that can affect the health of high-risk populations (Burris, Blankenship, & Donoghoe, 2004; Rhodes, Singer, Bourgois, Friedman, & Strathdee, 2005). The character of policing practices, the beliefs of street-level police officers and the implementation of prohibitive drug laws by the courts have all been shown to affect the health of injection drug using populations, and are in some settings associated with an increased risk of transmission of blood-borne diseases among these populations (Aitken, Moore, Higgs, Kelsall, & Kerger, 2002; Bourgois, Lettiere, & Quesada, 1997; Cooper, Moore, Gruskin, & Krieger, 2005; Friedman et al., 2006; Rhodes et al., 2003; Wood et al., 2003).

Some observers have also identified negative consequences related specifically to the incarceration of injection drug users (IDU), particularly with regards to the increased risk of HIV transmission in prison among this group (Beyrer et al., 2003; Tyndall et al., 2003; Wood et al., 2005) as well as increased risk of fatal overdose among IDU following periods of incarceration (Binswanger et al., 2007). There have also been increasing calls for alternatives to incarceration, as researchers and policy makers have reported on the failure of incarceration as a deterrent to illicit drug use (Spohn & Holleran, 2002). Some suggested alternatives include community treatment programs as well as police approaches that involve greater use of officer discretion in dealing with individuals found to be in possession of drugs (Heed, 2006; Maher & Dixon, 2001). Data from various settings suggest that Canada has one of the highest rates of incarceration for drug-related crimes in the world (Erickson, 1999; Fischer, Ala-Leppilampi, Single, & Robins, 2003; Walmsley, 2003). However, while incarceration rates remain high, most drug offenders given jail time in Canada for trafficking or possession generally serve between fifteen days and four months (Ministry of the Solicitor General and Correctional Services, 2000).

While the effects of police crackdowns on drug markets have been described previously (Kerr et al., 2005), little is known about the potential effects of newer discretionary approaches to

drug market policing. Therefore, the present study was conducted to examine the prevalence of and factors associated with being stopped, searched or detained by police in a setting which has been recognized for innovation in drug policy. We also sought to examine instances in which drugs and injecting equipment were confiscated from IDU in the absence of a formal arrest. Lastly, we examined the potential consequences of these discretionary approaches by identifying the actions IDU undertook immediately following this type of interaction with police.

METHODS

Data for these analyses were collected as part of the Vancouver Injection Drug Users Study (VIDUS), an ongoing cohort that has been described previously (Kerr et al., 2004). Study participants are recruited through street outreach efforts and self-referral, and enrollment is staggered. For the present cross-sectional study, between June 1 2005 and December 1 2005, study participants completed one interviewer-administered questionnaire, which solicited demographic data as well as information concerning participants' drug use and other behavioural and economic data (such as involvement in the sex trade, income sources, housing situation, incarceration experiences, and involvement in the drug trade), much of which is related specifically to experiences in the six months prior to the completion of the questionnaire. While the VIDUS questionnaire is an ongoing prospective study, the VIDUS survey instrument used between June 1 2005 and December 1 2005 included particularly detailed questions concerning participants' interactions with police. We therefore relied on data derived from this specific period in our present cross-sectional analysis of the effects of discretionary policing on IDU in Vancouver. The study has been approved by the University of British Columbia/ Providence Health Care Ethics Review Boards, and all study participants provide written consent prior to enrollment.

For the present analysis, participants were asked if they had been "jacked up" (i.e., stopped, searched or detained) by police in the past six months (i.e., in the six months prior to interviews conducted between July 1 2005 and December 1 2005). The dependent variable of interest therefore differentiates between those individuals who did not have any encounters with police during the previous six months (i.e., the reference category) and those who were stopped, searched and detained by police in the previous six months (with or without an arrest taking place following the encounter). Socio-demographic and drug using characteristics considered in these analyses were selected based on previous investigations of illicit drug use among Vancouver IDU (Kerr et al., 2004; Wood et al., 2001), and included: gender, Aboriginal ethnicity, homelessness, recent incarceration, residency in the downtown eastside, participation in the sex trade, frequent heroin, crack or cocaine use, binge drug use, recent overdose, requiring help with injecting, borrowing or lending syringes, and public injection drug use. Variable definitions were consistent with previous analyses: individuals who reported heroin injection, cocaine injection, or crack use once a day or more were defined as frequent heroin, cocaine, or crack users respectively (Wood et al., 2001). Bingeing was defined as periods in which drugs were used more often than usual (Kerr et al., 2004). All behavioural variables refer to behaviours in the previous six months. Participants who reported having been stopped, searched, or detained by police were also asked if they had had drugs or syringes confiscated in the absence of an arrest. Individuals who reported having had drugs or syringes confiscated by police were then asked to describe their actions immediately following these interactions with police.

Univariate statistics were applied to determine factors associated with having been stopped, searched, or detained by police in the previous six months. Categorical and explanatory variables were analyzed using Pearson's X^2 , normally distributed continuous variables were analyzed using t-tests for independent samples, and skewed continuous variables were

analyzed using Mann-Whitney U tests. Variables found to be associated with the outcome of interest at $p \leq 0.05$ were then considered in a fixed logistic regression model. Descriptive statistics were used to describe actions taken after interactions with police. All statistical analyses were performed using SAS software version 8.0 (SAS, Cary, NC).

RESULTS

Overall, 465 active injection drug users were seen for follow-up during the study period, of whom 130 (28%) reported having been stopped, searched, or detained by police in the last six months. In univariate analyses, factors positively associated with being stopped, searched, or detained by police included: being homeless; recent incarceration; residency in the downtown eastside; sex trade work; frequent heroin injection; frequent cocaine injection; frequent crack use; binge drug use; requiring help injecting; lending syringes; and public drug use. Age was negatively associated with being stopped by police. The odds ratios, confidence intervals, and p values for all factors in univariate analysis are shown in Table I.

As shown in Table II, in a logistic regression analysis, homelessness (Adjusted Odds Ratio [AOR] = 3.96, 95% CI: 1.86 – 8.45), recent incarceration (AOR = 3.52, 95% CI: 1.75 – 7.10), frequent crack use (AOR = 2.24, 95% CI: 1.34 – 3.74), requiring help injecting (AOR = 5.20, 95% CI: 1.21 – 22.39), and lending syringes (AOR = 3.18, 95% CI: 1.09 – 9.30) were all positively associated with being stopped, searched, or detained by police.

Of those 130 participants who reported having been stopped, searched, or detained by police, 43 individuals (34%) reported having had drugs confiscated despite not having been arrested. In response to the survey question regarding their actions following the confiscation of their drugs by police, 30 respondents (70%) reported immediately acquiring more drugs. Five respondents (12%) also indicated that they engaged in illegal or other dangerous activities such as theft, selling fake drugs, and sex trade work immediately following being stopped, searched or detained by police. The median amount of time it took respondents to buy more drugs after having their drugs confiscated by police was 5 minutes. The vast majority of this sub-group ($n = 28$, 90%) reported that they obtained more drugs within 10 minutes of their reported interaction with police.

Of the 130 respondents who reported being stopped, searched, or detained by police in the last six months, over half (51%) reported having syringes confiscated. The median number of encounters in which syringes were confiscated among this sub-group in the previous six months was 6. The largest number of respondents, 31 (47%), reported obtaining sterile syringes from a syringe exchange immediately following having syringes confiscated by police, while 7 others (11%) bought syringes. Four respondents (6%) stated that they borrowed used syringes immediately after having their syringes confiscated.

DISCUSSION

We found that 28% of IDU participating in this study reported being stopped, searched, or detained by police in the previous six months. Variables independently associated with being stopped, searched or detained included lending syringes, requiring help injecting, homelessness, and having served jail time in the last six months. Among individuals who reported having drugs confiscated by police, 70% reported immediately acquiring more drugs and 12% reported engaging in criminal or dangerous activities immediately following the confiscation. Among those who reported having syringes confiscated, 58% reported immediately acquiring sterile syringes and 6% reported immediately borrowing used syringes.

The individuals most affected by street-level policing in this study are IDU at heightened risk for a variety of adverse health outcomes. For example, homelessness has been shown to be

associated with premature death and a variety of health problems, and homeless people often face barriers to accessing health care (Hwang, 2001; Zolopa et al., 1994). Homeless individuals may also be particularly vulnerable to street-level policing, as they are exposed to elevated levels of scrutiny given that police officers monitor public spaces (Cooper et al., 2005). Further, homeless IDU are more likely to consume their drugs in public settings (Wood et al., 2006) and locally a lack of adequate housing has been associated with an increased likelihood of HIV infection (Cornell et al., 2006). Our finding indicating that recently incarcerated IDU are more likely to be stopped, searched, or detained by police may reflect the fact that these IDU may be known to police due to previous interactions with the criminal justice system. As well, IDU who were the subject of discretionary policing practices were also most likely to lend syringes, require help injecting, be frequent crack users, and to have recently been incarcerated. It is likely that these characteristics reflect greater embeddedness in the open drug scene in our study setting, and that these individuals may be higher intensity injectors. Consequently, they may spend more time on the street and be known to police. It should be noted that assisted injection and crack smoking are not permitted in the local supervised injection facility, and therefore individuals engaging in these behaviours may be more likely to consume drugs in public settings.

Given that difficulty accessing syringes has been identified as the primary driver of syringe sharing in Vancouver (Wood et al., 2002), our finding that many IDU whose syringes were confiscated by police subsequently acquired sterile syringes from a syringe exchange is encouraging, insofar as it demonstrates the generally widespread accessibility of syringe exchange programs in Vancouver. However, of concern is the fact that some IDU nevertheless resorted to borrowing used syringes following police confiscation of syringes. While we observed low rates of used syringe borrowing among those individuals who were 'jacked up' in our study, the possibility exists that discretionary policing practices may inadvertently contribute, albeit in a small way, to the creation of additional pathogenic vectors in our setting. This arises from the fact that the discretionary policing strategy examined in this study does not necessarily include a provision to inform IDU about sterile syringe acquisition. In settings in which sterile syringes are not readily available or in cases in which police officers choose not to inform IDU about ways to safely replace confiscated syringes, this discretionary policing practice may therefore negatively impact the health of IDU populations. This is consistent with findings from other settings (Rhodes et al., 2003).

Previous findings have demonstrated the need to carefully evaluate evolving policing strategies in light of their efficacy in reaching their stated goals and in regards to their potential to negatively impact public health (Maher & Dixon, 1999; Wood et al., 2004). In the case of discretionary policing in Vancouver, the probability exists that the confiscation of drugs may unintentionally promote drug market activity, as the majority of IDU who had illicit drugs confiscated by police without being arrested (70%) reported subsequently making additional purchases of illicit drugs. In the case of police confiscation of syringes, studies conducted in a variety of settings have indicated that enforcement techniques that target IDU for carrying needles or syringes are associated with syringe sharing and other risky drug use behaviours, such as rushed injection, and consequently have the potential to place IDU at greater risk of contracting blood-borne viruses such as HIV/AIDS and hepatitis C (Aitken et al., 2002; Koester, 1994; Strathdee et al., 2003; Wood et al., 2001). Indeed, research from Russia has revealed that situational factors, such as the fear of detainment or arrest, can influence the injecting behaviours of IDU to a greater degree than the availability of sterile syringes (Rhodes et al., 2003). Therefore, concern remains that the policing practices described in the present study may have the potential to exacerbate drug-related harms among local IDU.

Considering that we found that homelessness was a factor associated with being stopped, searched, or detained by police among our study participants, resources should also be

prioritized towards structural and micro-environmental interventions that serve to modify the broader risk environment of IDU (Rhodes et al., 2003; Rhodes et al., 2006), such as supportive housing and supervised injection facilities (Wood et al., 2004). Further, in light of the findings presented in this study and many others (Kerr, Small, & Wood, 2005), the investigation of the potential effects of a broader policy shift away from enforcement as the dominant response to drug-related harm is warranted. In that regard, it is encouraging that the Vancouver Police Department has officially committed itself to a strategy of harm reduction (Wiebe, 2005), though the high rate of confiscation of syringes by police reported in our study underscores the lack of clarity on this issue. Considering the diverse strategies employed in combating the problems associated with drug addiction in Canada and in our study setting in particular, attention should be directed towards devising a comprehensive and coherent federal, provincial, and municipal response to drug addiction.

Our study has several limitations. First, as with most cohort studies involving illicit drug users, VIDUS is not a random sample. Second, the present study is limited by its cross sectional design and dependence on self-report and hence we strongly caution against inferring a causal relationship between police confiscation of drugs and drug paraphernalia and an increase in frequency of drug trade activity and borrowing of used syringes. Similarly, while study participants reported obtaining drugs and syringes immediately following interactions with police, our survey instrument was unable to account for the motivations of study participants and we therefore caution against inferring a causal relationship between self-reported acquisition of drugs and syringes by study participants and the discretionary policing practices described in our study setting. It should also be noted that rates of drug-related crime and utilization of used syringes may have been underestimated due to socially desirable responding. Importantly, we were also unable to determine whether the syringes that police confiscated from our study participants were used or sterile syringes. While it is therefore possible that confiscated syringes were potentially more infectious than replacement syringes, this seems unlikely in a setting where there is widespread access to sterile syringes and where carrying used syringes may actually increase the likelihood of arrest and further police scrutiny; consequently, there is low motivation for IDU to carry used syringes in our study setting, and given previous findings linking syringe confiscation to syringe sharing (Rhodes et al., 2003; Singer, Himmelgreen, Dushay, & Weeks, 1998; Small et al., 2006), any amount of syringe confiscation is therefore of concern. Finally, future prospective research on police confiscation of drugs and paraphernalia is needed to further elucidate the relationship between police enforcement techniques and their effect on open drug markets and public health.

In sum, we found that a large proportion of high-risk IDU experienced being stopped, searched, or detained by police and that in many instances these individuals' drugs and syringes were confiscated. Many IDU participating in this study reported immediately engaging in illegal activities and seeking out and buying drugs following this type of interaction. While it is encouraging that many IDU whose syringes were confiscated by police were able to acquire sterile syringes through the comprehensive network of syringe exchange programs found in Vancouver, we caution against basing an enforcement policy on the assumption that IDU who have syringes confiscated will necessarily obtain sterile replacement syringes, as demonstrated by our finding that a minority of IDU replaced their confiscated syringes with used syringes. These findings also indicate that discretionary policing approaches that include the confiscation of syringes and drugs should be re-evaluated in favour of alternative policing and public health strategies that have been shown to modify the broader risk environment of IDU.

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Table I
Characteristics of IDU stratified by being stopped, searched or detained by police in the last six months (*n* = 465)

Characteristic	Stopped, searched or detained by police during study period		Odds Ratio (95% CI)	<i>p</i> value
	NO <i>N</i> = 130	YES <i>N</i> = 335		
Lending Syringes				
No	116 (89.2)	328 (97.9)		
Yes	14 (10.8)	7 (2.1)	5.66 (2.23 – 14.36)	< 0.001
Borrowing Syringes				
No	122 (93.9)	323 (96.4)		
Yes	8 (6.2)	12 (3.6)	1.77 (0.70 – 4.42)	0.220
Requiring help injecting				
No	118 (90.8)	332 (99.1)		
Yes	12 (9.2)	3 (0.9)	11.25 (3.12 – 40.58)	< 0.001
Cocaine injection				
< Daily	101 (77.7)	302 (90.2)		
≥ Daily	29 (22.3)	33 (9.9)	2.63 (1.52 – 4.54)	< 0.001
Heroin injection				
< Daily	75 (57.7)	279 (83.3)		
≥ Daily	55 (42.3)	56 (16.7)	3.65 (2.33 – 5.74)	< 0.001
Crack use				
< Daily	49 (37.7)	227 (67.8)		
≥ Daily	81 (62.3)	108 (32.2)	3.48 (2.28 – 5.30)	< 0.001
Involvement in the sex trade				
No	104 (80.0)	294 (87.8)		
Yes	26 (20.0)	41 (12.2)	1.79 (1.05 – 3.08)	0.033
Residency in the downtown eastside				
No	50 (38.5)	193 (57.6)		
Yes	80 (61.5)	142 (42.4)	2.18 (1.44 – 3.29)	< 0.001
Homelessness				
No	94 (72.3)	316 (94.3)		
Yes	36 (27.7)	19 (5.7)	6.37 (3.49 – 11.63)	< 0.001
Recent incarceration				
No	94 (72.3)	315 (6.0)		
Yes	36 (27.7)	20 (94.0)	6.03 (3.33 – 10.92)	< 0.001
Binge drug use				
No	99 (71.1)	284 (70.1)		
Yes	31 (29.0)	51 (29.9)	1.74 (1.06 – 2.88)	0.029
Public drug use				
No	101 (77.7)	317 (94.6)		
Yes	29 (22.3)	18 (5.4)	5.06 (2.70 – 9.49)	< 0.001
Age				
Median (and IQR)	31.7 (25.3–38.2)	34.1 (25.4–40.9)	0.95 (0.93 – 0.97)	< 0.001

Note: CI = Confidence Interval; IDU = injection drug user (any report of injection drug use at any time during follow-up); IQR = interquartile range.

Table II
Multivariate logistic regression of factors associated with being stopped, searched or detained by police

Characteristic	Adjusted Odds Ratio	95% C.I.	p-value
Syringe lending			
Yes vs No	3.18	(1.09 – 9.30)	0.035
Requiring help injecting			
Yes vs No	5.20	(1.21 – 22.39)	0.027
Frequent crack use			
Yes vs No	2.24	(1.34 – 3.74)	0.002
Homelessness			
Yes vs No	3.96	(1.86 – 8.45)	<0.001
Recent incarceration			
Yes vs No	3.52	(1.75 – 7.10)	<0.001

C.I. = Confidence Interval.

Model was adjusted for all variables found to be associated with being stopped, searched, and detained by police in univariate analyses at $p \geq 0.05$