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Commentary

HIV, drugs and the legal environment

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ABSTRACT

A large body of scientific evidence indicates that policies based solely on law enforcement without taking into account public health and human rights considerations increase the health risks of people who inject drugs (PWIDs) and their communities. Although formal laws are an important component of the legal environment supporting harm reduction, it is the enforcement of the law that affects PWIDs' behavior and attitudes most acutely. This commentary focuses primarily on drug policies and policing practices that increase PWIDs' risk of acquiring HIV and viral hepatitis, and avenues for intervention. Policy and legal reforms that promote public health over the criminalization of drug use and PWID are urgently needed. This should include alternative regulatory frameworks for illicit drug possession and use. Changing legal norms and improving law enforcement responses to drug-related harms requires partnerships that are broader than the necessary bridges between criminal justice and public health sectors. HIV prevention efforts must partner with wider initiatives that seek to improve police professionalism, accountability, and transparency and boost the rule of law. Public health and criminal justice professionals can work synergistically to shift the legal environment away from one that exacerbates HIV risks to one that promotes safe and healthy communities.

Introduction

When asked why they shared a syringe, a common response from people who inject drugs (PWIDs) is "I had no choice." Sharing syringes and other injection paraphernalia, which increase the risk of acquiring HIV and viral hepatitis are behaviors that do not occur in a vacuum. These and other risk behaviors are shaped by factors at macro, meso and micro level of the physical, social, legal and policy environment (Rhodes, Singer, Bourgois, Friedman, & Strathdee, 2005) that affect PWIDs' access to syringes and addiction treatment. In this commentary, we discuss factors in the macro and micro-legal environment that are known to increase transmission of HIV and viral hepatitis among PWIDs, as well as structural interventions that can be used to prevent these infections.

There is now a large body of empirical evidence demonstrating that formal laws and policies are critical aspects of the environment influencing HIV risks among PWID. At the macro-level, most countries have laws and policies that dictate whether drug possession and use are punishable by law and to what extent. In response to numerous and consistent indicators that the 'war on drugs' is ineffective (Beyrer et al., 2010; Reuter, 2009; Wood et al., 2010; Wood, Werb, Marshall, Montaner, & Kerr, 2009), including unchanging availability and use of drugs and various severe health-related harms (Werb et al., 2013), at least 30 countries are reforming drug policies to align them more closely with public health goals (Cozac, 2009; Hughes & Stevens, 2007; Moreno, Licea, & Ajenjo, 2010), and even some U.S. states. On the other hand, harsh penalty-based drug policies remain in place in many other countries, and in some cases have been strengthened of late. In twelve countries, legislation allows judicial corporal punishment for drug and alcohol offences (e.g., death penalty), which is a violation of international law (IHRA, 2011). Some countries maintain compulsory 'drug detention' programmes (Global Commission on Drugs, 2012; HIV and the Law, 2012) which often operate as forced labor or military training camps, and where evidence-based addiction treatment is entirely absent. These punitive policies have been associated with elevated risk behaviors and detrimental health outcomes among PWID (Degenhardt et al., 2010). Human rights elements of these policies (Wolfe & Cohen, 2010) are addressed in the thematic paper by Kamarulzaman and colleagues in this issue.

In 2009, the World Health Organization, UNODC and UNAIDS identified nine HIV interventions as scientifically proven, essential components of a combination package to prevent HIV among PWID. These include provision of sterile syringe access through

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needle and syringe programmes (NSPs), opioid substitution treatment (OST; i.e., methadone and buprenorphine maintenance), HIV counseling and testing, ART, prevention and treatment of sexually transmitted infections (STIs), condom distribution programmes, information and education campaigns, vaccination and treatment of viral hepatitis, and prevention and treatment of tuberculosis (World Health Organization, 2009). NSP and OST can also reduce the risk of acquiring viral hepatitis (i.e., Hepatitis B and C). Yet at the meso- or community level, laws and policies exist surrounding syringe purchase and possession, including over-the-counter sales and authorization of needle/syringe programmes (NSPs). Laws and policies also govern access to addiction treatment, including OST and treatment diversion. Such laws vary by country, state and sometimes between or even within cities. For example, despite a plethora of evidence demonstrating effectiveness and cost-effectiveness, and the fact that methadone is on the WHO Essential Drugs List, OST is widely unavailable in most Eastern European countries. At least due in part to these kinds of laws and policies, coverage of NSP and OST worldwide is exceedingly low (Mathers et al., 2010). The UNODC has explicitly clarified that harm reduction policies, including OST are fully consistent with international drug control conventions (UNODC, 2014a). Yet, despite an established international consensus about best practices, some policy decisions about harm reduction interventions to PWID continue to be driven by moral concerns rather than empirical evidence (Strathdee, Shoptaw, Dyer, Quan, & Aramrattena, 2012).

At the micro-level (within communities), policing practices directly influence the behavior, perceptions, and health outcomes among PWIDs. Such practices include arrests for drug/syringe possession, confiscation of syringes, conducting surveillance at NSPs and OST clinics (Hayashi, Small, Csete, Hattirat, & Kerr, 2013), and random urine drug screening (Beletsky, Lozada, et al., 2013; Bluthenthal, Lorvick, Kral, Erringer, & Kahn, 1999; Hammett, Bartlett, & Chen, 2005; Pollini et al., 2008; Shannon et al., 2008; Small, Kerr, Charette, Schechter, & Spittal, 2006; Strathdee et al., 2011). While police sometimes engage in these behaviors in accordance with formal laws, research indicates that 'laws on the books' do not necessarily correspond to 'laws on the streets' (Burris et al., 2004). In other words, police conduct within community settings are often not consistent with established laws and policy, and often undermine health and human rights. Drug policy reforms can create even wider gaps if police are not informed about public health reforms authorizing harm reduction programmes, and/or if they oppose them (Banta-Green, Beletsky, Schoeppe, Coffin, & Kuszler, 2013; Beletsky, Macalino, & Burris, 2005). Although formal laws are an important component of the legal environment supporting harm reduction, it is the enforcement of the law that affects PWIDs' behavior and attitudes most acutely. This paper will focus primarily on drug policies and policing practices that increase PWIDs' risk of acquiring HIV and viral hepatitis, and avenues for intervention. We also refer briefly to policing practices that influence HIV risk among sex workers that inject drugs who are an especially vulnerable subgroup (Rusakova, Rakhmetova, & Strathdee, 2014).

Drug-related laws and policies that influence HIV risk behaviors

The harms flowing from current legal and policy frameworks that criminalize drug use and drug users have been well described, and include various direct and indirect health-related harms, mass incarceration of drug users, stigma against drug users within society, and human rights violations (Global Commission on Drugs, 2012; HIV and the Law, 2012). A growing body of evidence has also revealed that the dominant approach to drug control, which focuses on reducing the supply and use of drugs, has failed to achieve its basic objectives (Beyrer et al., 2010; Werb et al., 2013; Wood et al., 2010). Importantly, in many settings that have employed aggressive drug control measures, the availability and purity of drugs has increased, while the price of drugs has remained stable or declined (Werb et al., 2013). These dynamics have often been accompanied by high rates of continued drug use. In contrast, drug use is lower in some settings that have employed alternative regulatory frameworks for responding to drug-related harms. A recent review of evidence derived from the WHO World Mental Health Survey concluded that "(t)he US, which has been driving much of the world's drug research and drug policy agenda, stands out with higher levels of use of alcohol, cocaine, and cannabis, despite punitive illegal drug policies... The Netherlands, with a less criminally punitive approach to cannabis use than the US, has experienced lower levels of use, particularly among younger adults" (Degenhardt et al., 2008).

Given the known harms and limitations associated with conventional drug control laws, a growing number of countries have begun experimenting with alternative regulatory frameworks. In most instances this has involved the de-penalization of drug possession for personal use, use of fines for possessing small amounts of drugs, legalization of some illicit drugs, and the use of referral to treatment instead of arrest and incarceration (Cozac, 2009; Hughes & Stevens, 2007; Moreno et al., 2010). To clarify the status of these reforms under international law, UNODC has recently restated its position that de-penalization and harm reduction policies are fully consistent with the Single Convention and its progeny (UNODC, 2014a). While some evidence of benefit of such reforms has been documented, there is still a need for ongoing evaluation of such approaches, given their potential to offset the harms associated with conventional drug control measures.

Policing practices and HIV risk

Laws and policies can be critical to facilitating harm reduction and public health prevention, but the practices of police and other government actors serve as the critical link to policy implementation on the ground. International research has consistently shown that law enforcement practices have both direct and indirect effects on behaviors that increase PWIDs' risk of acquiring HIV and viral hepatitis (Beletsky, Lozada, et al., 2013; Bluthenthal et al., 1999; Hammett et al., 2005; Pollini et al., 2008; Shannon et al., 2008; Small et al., 2006; Strathdee et al., 2011). Policing practices that *directly* influence PWIDs' risk of acquiring blood borne infection include syringe confiscation and arrests. By confiscating syringes, PWIDs resort to buying, renting or loaning someone else's used syringe, or using discarded syringes. In a variety of settings, police have charged PWIDs participating in harm reduction programmes with drug possession based solely on drug residue in a used syringe, or charged PWIDs for carrying drug paraphernalia. These arrest practices have been reported even in the absence of laws that prohibit syringe purchase and possession. In Mexico, where it is legal to purchase syringes at pharmacies without a prescription and there are no drug paraphernalia laws, over half of PWIDs in Tijuana and Ciudad Juarez reported that police confiscated their sterile and used syringes in the prior 6 months, which was associated with a 3-fold higher risk of syringe sharing (Pollini et al., 2008). Syringe confiscation was independently associated with HIV infection among female sex workers who inject drugs (Strathdee et al., 2011). Fear of police discourages PWIDs from carrying syringes, even for the purpose of syringe exchange, pressures them to inject hurriedly in the street or inject in shooting galleries where needles are rented or sold. In a study undertaken in Bangkok, 67% of PWID had been subjected to random urine testing, and those had been tested in this

way were more likely to report avoiding healthcare and were less likely to access voluntary addiction treatment (Hayashi, Ti, Buxton, et al., 2013). The aforementioned practices further increase the risk of needle sharing and transmission of HIV and other blood borne infections and have been also associated with higher overdose mortality (Bohnert et al., 2011).

Policing can also *indirectly* increase transmission of HIV and blood-borne infections, for example by conducting 'police sweeps/'crackdowns' and random urine drug screens or by conducting surveillance and arresting PWIDs who attend NSPs or OST programmes, thereby actively discouraging access to such programmes (Bluthenthal et al., 1999; Booth et al., 2013; Burris et al., 2004; Cooper et al., 2012; Friedman et al., 2006; Global Commission on Drugs, 2012; Rhodes et al., 2003; Robertson et al., 2010; Ti et al., 2013; Werb et al., 2008; Wood et al., 2004). A survey of U.S. NSPs reported the following police interactions at least monthly: client harassment: 43%; confiscation of clients' syringes: 31%; client arrest: 12% (Beletsky et al., 2011). These practices can also displace PWID to areas with limited access to NSPs or OST. In Ukraine, HIV-infected PWID experienced frequent police detentions resulting in withdrawal symptoms, confiscation of syringes, and interruptions of essential medications, including ART and OST (Izenberg et al., 2013). In Mexico, the proximity of a TB clinic to the local police station was an important barrier to TB medication adherence since a high proportion of those with active TB were substance users with a criminal history (Guzman-Montes, Ovalles, & Laniado-Laborin, 2009). Ample evidence documents the heightened risks of HIV and other blood-borne and sexually transmitted infections that accompany incarceration, as discussed in a Thematic Paper by Dolan.

Most concerning are cases where police engage in 'extra-legal' behaviors that represent misconduct. This includes extorting bribes, soliciting sexual favors in lieu of arrest, planting drugs, forced withdrawal, or physical and sexual abuse. These behaviors represent human rights violations and are highly prevalent in some settings. In a recent U.S. study of female drug users experiencing police sexual misconduct, Cottler, O'Leary, Nickel, Reingle, and Isom (2013) found that 96% had sex with an officer on duty, 77% had repeated exchanges, 31% reported rape and 54% were offered favors by officers in exchange for sex; only half used condoms. In two Russian cities, 38% of FSWs reported being solicited for sex in the last year (Odinokova, Rusakova, Urada, Silverman, & Raj, 2013). In Thailand, 38% of PWID were beaten by police, which was associated with higher odds of syringe sharing and reduced access to healthcare (Hayashi, Ti, Csete, et al., 2013). In Odessa, Ukraine, HIV-infected PWID were more likely than HIV-uninfected PWID to report that police planted drugs on them or were threatened to inform on other drug users (Booth et al., 2013). It was estimated that if police beatings were eliminated in Odessa, HIV incidence among PWID would decrease by up to 19% due to the reduction in needle sharing that would subsequently occur (Strathdee et al., 2010).

Avenues for intervention

Since PWIDs' risk of needle sharing is largely dictated by factors outside of their personal control, it is insufficient and misguided to expect that the onus of responsibility for safer behaviors should rest solely on their shoulders (Rhodes et al., 2005; Strathdee et al., 2010). Given the evidence that current legal regimes cause more harm than good, it is imperative to reform international, national, and local laws and policies to reflect best practices that are shown to promote both health and safety. These best practices include promoting syringe access through pharmacy sales and NSPs, authorizing and providing free methadone and buprenorphine treatment, and shifting the approach to problematic drug use away from incarceration and towards evidence-based treatment and case management.

There is a concomitant need, however, to ensure that those who are charged with enforcing the law are informed and encouraged to re-align their practices with public health. Mistrust and lack of clarity about syringe possession laws discourages PWID from volunteering syringes during police encounters, which increases risk of needle stick injuries and contributes to occupational stress, anxiety, and staff turnover. In a study of 803 police officers in San Diego, CA, 83% felt that on-duty NSI posed the same magnitude of risk as a gun-shot wound; 29.6% had experienced a NSI, of whom 27.7% had repeat exposures (Lorentz, Hill, & Samimi, 2000).

Police education programmes could serve as a critical structural intervention to harmonize law enforcement and public health in countries with high burdens of drug use and blood-borne infections. Studies by Beletsky et al. conducted in the U.S. and Kyrgyzstan indicate that police are receptive to content on harm reduction programming and changes in drug policies when 'bundled' with occupational safety messages that highlight their own risk of acquiring HIV and viral hepatitis through needle-stick injuries. Pilot training with 600 officers in the U.S. found that officers were generally receptive to the curriculum (Davis & Beletsky, 2009). Training led to better communication and collaboration between NSP and law enforcement. For example, baseline data from officers in Rhode Island confirmed anxiety about NSI, poor legal knowledge, and myths about NSPs. Before training, respondents believed that NSPs promote drug use (51%), *increase* NSI risk (58%), and fail to prevent HIV epidemics (38%). Pre-post evaluation suggested significant shifts in legal and occupational safety knowledge and changes in attitudes toward SEPs were promising (Beletsky et al., 2011).

In Kyrgyzstan, a police officer survey was conducted to assess knowledge and intended practices following legislation that prohibits police interference with harm reduction programmes (Beletsky et al., 2012). Of 319 officers, 79% understood key due process regulations, 71% correctly characterized laws on sex work and 54% understood syringe possession law, but only 44.4% reported familiarity with the new law. Most (73%) expressed positive attitudes toward condom distribution, while only 56% viewed syringe access favorably. Almost half (44%) agreed that police should refer vulnerable groups to harm prevention programmes but only 20% reported doing so. Beletsky, Thomas, Shumskaya, Artamonova, and Smelyanskaya (2013) subsequently offered training covering HIV prevention, policy, and occupational safety to cadets and active-duty police across Kyrgyzstan. Training was associated with greater intent to refer PWID to harm reduction programmes, expressing no intent to extra-judicially confiscate syringes, better understanding sex worker detention procedures and improved occupational safety knowledge (Beletsky, Thomas, et al., 2013).

Ensuring that law enforcement does not undermine the prevention of blood-borne infections is key, but police can also play an active role in promoting harm reduction, by referring PWID to NSP, OST, and supervised injection facilities (DeBeck et al., 2008). In Kyrgyzstan, the "Friendly Policemen" project provides incentives for officers to inform key populations about programmes like NSPs, drug treatment, and healthcare services. Building on empirical evidence that police officers already refer clients to harm reduction services and that many more are contemplating such collaborative efforts, the project also supports internal police champions who promote harm reduction and other public health approaches to their peers (Beletsky et al., 2012).

Despite these promising experiences, few countries have institutionalized harm reduction education as part of training for cadets or active duty police officers who interact with PWID. Efforts are needed to engage donor support and national commitments at multiple levels of criminal justice systems to ensure that education

designed to align policing with harm reduction is integrated into existing training schemes. Best practice guidelines are needed to formulate the international consensus on standards for police education regarding harm reduction policies and programmes, police-public health collaboration, and occupational safety. Efforts are also needed to improve professionalism and shift incentive structures for police to promote acceptance of harm reduction, especially in places where officers are subject to drug arrest quota systems or derive substantial income from extorting criminalized populations.

Reducing the risk of HIV and other blood-borne infections requires effective partnerships between law enforcement and program providers. Advocacy efforts are needed locally, nationally and internationally to promote network-building and support of internal champions. In the US city of Seattle, local police participation in the Law Enforcement Assisted Diversion program are helping drug users to identify treatment and other resources in lieu of arrest, with promising results for both health and safety (Banta-Green et al., 2013). In Vancouver, Canada, police cooperation with North America's first supervised injection facility helped reduce public injection and resulted in numerous public health benefits for PWID and the wider community (DeBeck et al., 2008). Nationally, in India, police education and sensitivity training involving sex worker organizations reportedly led to less confiscation of condoms and increased condom uptake. A toll-free hotline implemented by India's Central Reserve Police Force enables police across the country to obtain information on HIV, sexually transmitted infections, drug and substance abuse related issues. Other examples include efforts by the HIV/AIDS Asia Regional Program to support an enabling environment for effective harm reduction policies and build core capacity among national health and law enforcement agencies in Asia (Sharma & Chatterjee, 2012), and a Police Community Partnership Initiative in Cambodia (Thomson et al., 2012). Internationally, the Law Enforcement and HIV Network (LEAHN) promotes awareness and advocacy of harm reduction by fostering leaders within the law enforcement community, recognizing that harm reduction cannot and will not be effective without the active participation of police.

Police who violate human rights must also be held accountable for their actions. This can be facilitated by phone hotlines, or placing in-house lawyers at community venues where extra-legal police activity such as abuse, extortion, and harassment at NSPs and OST can be reported to facilitate effective responses. Re-aligning law enforcement with public health goals requires systematic documentation of both positive and negative police encounters. Such surveillance helps identify trends, inform program design, and track intervention impact over time. Documentation systems can be institutionalized at organizations serving PWID through the creation of standardized incident report forms and databases to store and collate complaints. Key police-related questions can also be added to periodic national behavioral surveillance surveys of PWID (Beletsky, Heller, et al., 2013).

It is critical to underscore that even in settings where human rights violations are pervasive, most drug users remain unwilling to report abuse. In one survey of Kyrgyz harm reduction programme clients, the vast majority of respondents (75%) reported that they did not come forward with information on recent police abuse. Reasons include fear of police retribution (73%), skepticism that anything positive could result from reporting (33%), and fear of community stigma (6%) (Beletsky et al., 2012). Given pervasive concerns about police retribution and privacy, any documentation systems to track human rights abuses must be designed to preserve confidentiality and security of those willing to share their experiences. Public health prevention efforts must partner with wider initiatives that seek to improve governance, police professionalism, and strengthen the rule of law.

Conclusion

A large and growing body of scientific evidence indicates that policies based solely on law enforcement without taking into account public health and human rights considerations increase the health risks of individuals and communities. Policy and legal reforms that promote public health over the criminalization of drug use and PWID are urgently needed. This should include alternative regulatory frameworks for illicit drug possession and use. Changing legal norms and improving law enforcement responses to drug-related harms requires partnerships that are broader than the necessary bridges between criminal justice and public health sectors. HIV prevention efforts must partner with wider initiatives that seek to improve police professionalism, accountability, and transparency and boost the rule of law. Public health and criminal justice professionals can work synergistically to shift the legal environment away from one that exacerbates HIV risks to one that promotes safe and healthy communities. The contents and conclusions of the paper reflect a broad consensus among social and clinical scientists participating in a UNODC Scientific Consultation on HIV/AIDS (UNODC, Scientific Statement, March 11, 2014).

Conclusion Statements:

- Laws and policies that criminalize drug use and possession undermine access to harm reduction, create stigma, and are key drivers of health risks among PWID. Alternative regulatory frameworks have resulted in reductions in drug-related harms and improved access to addiction treatment.
- Laws facilitating syringe access and opioid substitution treatment (OST) are widely considered as effective structural interventions to curb HIV spread among PWID.
- Policing practices are a pervasive barrier to the implementation and effectiveness of harm reduction policies and programmes that reduce transmission of HIV and viral hepatitis. Unauthorized policing practices (e.g., soliciting bribes, physical and sexual abuse) are especially detrimental to PWIDs' public health and undermine human rights.
- Conversely, police can facilitate harm reduction, including by referring drug users to evidence-based services (e.g., NSP, supervised injection sites, addiction treatment).
- Public health and criminal justice professionals can work synergistically to shift the legal environment away from one that exacerbates HIV risks to one that promotes safe and healthy communities.
- Policy and legal reforms that promote public health over the criminalization of drug use and PWID are urgently needed.
- There is an urgent need to re-align harm reduction and law enforcement approaches to support prevention and treatment of HIV and viral hepatitis among PWID. Promising interventions include police education programmes that 'bundle' HIV prevention messages with occupational safety, supporting internal champions of police-public health collaboration, and formulation of best practices of harm reduction-oriented policing.
- Treating human rights abuses as a public health issue, robust surveillance mechanisms are needed to document, address and prevent police activity that undermines harm reduction and the human rights of PWID.

Conflict of interest statement

We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

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