

Opioid Use Among Those Who Have Criminal Justice Experience: Harm Reduction Strategies to Lessen HIV Risk

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Abstract

Purpose of Review We reviewed the HIV and opioid literature relevant to harm reduction strategies for those with criminal justice experience.

Recent Findings Opioid use in the United States has risen at an alarming rate recently. This has led to increased numbers of people who inject drugs, placing new populations at risk for HIV, including those who have criminal justice experience. In recent years, there has been a gradual decrease in the number of individuals under the supervision of the criminal justice system. However, concurrently, there has been a rise in the number of individuals incarcerated in jails in rural counties that are at the center of the current opioid epidemic.

Summary We provide a number of harm reduction strategies that could be implemented in correctional settings such as access and linkage to medication-assisted treatment, connection to syringe exchange programs and safe injection facilities (where available), and the repackaging of pre-exposure prophylaxis as a harm reduction tool.

Keywords Harm reduction · HIV · Opioid use · Criminal justice experience · Safe injection facilities · Syringe exchange programs

Introduction

The United States (US) criminal justice (CJ) system is the largest in the world, with a greater number of individuals incarcerated or under surveillance than any other nation [1]. The CJ system includes prisons that, in general, house individuals who have sentences that are greater than one year in length; jails that include pre-trial detainees or individuals who

are typically serving sentences less than one year in length; and community supervision which includes people who are on probation or parole. A little over 6.7 million individuals or one in 37 adults was involved in the criminal justice system at year-end 2015 [1]. In recent years, there has been a gradual decrease in the number of individuals involved in the CJ system. However, concurrently, there has been a rise in the number of individuals incarcerated in jails in rural counties that are at the center of the current opioid epidemic [2].

Opioid use in the US has risen at an alarming rate in recent years. This epidemic of opioid misuse and abuse has led to increased numbers of people who inject drugs (PWID), placing new populations at increased risk for HIV [3]. Average rates of heroin use increased from 1.6 per 1000 persons over the age of 12 in 2002 to 2004 to 2.6 in 2011 to 2013 [4]. In addition, this increase in heroin use is associated with a corresponding rise in opioid-related overdose deaths. Those who have CJ experience have a higher incidence of both injection drug use (IDU) and HIV. Individuals who are CJ involved have a rate of HIV that is three times higher than the general population and more than half of all people who are incarcerated meet the diagnostic criteria for substance use disorder [5, 6]. This is, due, in large part, to the fact that 13% of all arrests are due to drug-related crime.

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The number of individuals with opioid use disorder (OUD) is also exaggerated among those who are incarcerated [6]. Just over 23% of state prisoners report ever using heroin or other opiates, and 13% report regular use prior to incarceration [6]. In addition, people who have recently been incarcerated are at extreme risk of overdose during community re-entry [7, 8]. A recent study investigating all causes of mortality of people who were formerly incarcerated in Washington state found that overdose was the number one cause of death [8].

After release, individuals are also at increased risk of HIV transmission and contraction, as many HIV-negative individuals return to substance use in the community [9]. Research has shown that among people who inject drugs, incarceration impacts post-release HIV risk behaviors, including the sharing of used needles [10]. For those who are HIV positive, incarceration can result in HIV treatment disruption and non-adherence to antiretroviral medications [11–13]. In fact, a recent systematic review of HIV care continuum among those with criminal justice experience demonstrated that rates of viral suppression are even worse post-incarceration than before arrest [14].

However, jails and prisons have been slow to embrace harm reduction strategies. The remainder of this paper will, thus, focus on harm reduction techniques that can be deployed in CJ settings to lessen the risk of HIV transmission and contraction targeted toward opioid users.

Harm Reduction Strategies for Opioid Users with Current or Recent Incarceration

Much of the HIV harm reduction efforts among people who inject drugs have focused primarily on provision of and linkage to medication-assisted treatment (MAT), syringe exchange programs (SEPs) and related community services that often include overdose prevention, and, in a more limited capacity (in terms of geographic distribution), safe injection facilities (SIFs). In addition, herein, we propose including pre-exposure prophylaxis (PrEP) as a tool of harm reduction among injection drug users.

Screening for Opioid Use Disorder and Risky Injecting Behaviors

Screening and assessment tools have been developed to specifically identify those who have OUD in correctional settings. This is a necessary and crucial step in addressing OUD and subsequent HIV risk among those who are incarcerated. However, few estimates of OUD disorder among those involved in the CJ system exist mainly due to the fact that screening for OUD is not a routine practice in most correctional facilities. We recommend the inclusion of an OUD

screening tool such as the Rapid Opioid Dependence Screen [15] or the Texas Christian University (TCU) drug screen-opioid supplement [16] be used as a part of the intake process in concert with mandated screening tools and HIV risk assessments.

Medication-Assisted Treatment as HIV Prevention

MAT has been extensively studied over the past four decades as an effective treatment of OUD. Overall, MAT has been shown to reduce drug use, re-incarceration, and overdose; and increase continuous engagement in long-term treatment among CJ-involved individuals [17–22]. Currently, there are three medications approved by the US Food and Drug Administration (FDA) to treat OUD: the opioid agonist methadone, the opioid partial agonist buprenorphine, and the opioid antagonist naltrexone, which has also been developed in a depot, delayed release formulation for intramuscular injection.

MAT should be deployed in concert with HIV prevention and treatment adherence strategies as recent research has demonstrated that MAT, when delivered with HIV interventions, has been shown to be most effective. For instance, for both criminal justice- and non-criminal justice-involved populations, naltrexone not only effectively lowers rates of opioid use and heavy alcohol consumption but also improves rates of ART adherence in the community [23–29]. Despite the effectiveness of MAT in treating OUD both during incarceration and post-release, most correctional facilities in the US still do not provide access to these medications. We recommend more robust programs that provide MAT in concert with other HIV prevention strategies.

Repackaging Pre-exposure Prophylaxis as Harm Reduction

One of the HIV prevention strategies that could be combined with MAT programs is pre-exposure prophylaxis (PrEP). PrEP is a once daily medication (emtricitabine/tenofovir disoproxil fumarate FTC/TDF) that has demonstrated efficacy in preventing HIV among at risk groups including PWID [30, 31]. In a randomized, double-blind, placebo-controlled trial that included 17 drug treatment clinics in Bangkok, Thailand, there was a 48.9% reduction in HIV incidence with use of PrEP [31]. However, while PrEP has demonstrated efficacy among PWID, in general, less is known about barriers and facilitators of PrEP uptake and adherence among PWID who have been recently incarcerated. Additionally, important opportunities exist to gauge the possible “de-medicalization of PrEP” to increase and ease access to this prevention method and branding of PrEP, similar to syringe exchange, as a harm

reduction tool. This follows the Centers for Disease Control and Prevention's recommendations that PrEP be provided to PWID as part of a comprehensive package of prevention services [32]. Best practices for PrEP provision or linkage for PWID should be investigated, but could take one of the following forms: (1) providing a PrEP prescription just prior to discharge with linkage to a community PrEP provider, (2) solely linking to a PrEP provider during discharge planning [33].

Syringe Exchange Program Linkage

One of the pillars of harm reduction has been SEPs which can be important portals to accessing services for PWID, including overdose prevention assistance. SEPs provide a wide variety of services including condom distribution, referrals for substance use treatment, HIV and hepatitis C virus counseling and testing, and overdose training and prevention [34]. A large body of evidence has clearly demonstrated that SEPs substantially reduce the risk for HIV transmission among PWID [34]. While few studies have explicitly looked at the subset of PWID who report criminal justice involvement, SEPs can provide a range of important services to individuals with OUD upon release from incarceration or who are on community supervision. Linkage efforts could include access to an educational program that introduces the concept of harm reduction and syringe exchange. During this program, individuals could be enrolled in syringe exchange making easier their ability to access clean needles immediately upon release. This is the model that the North Carolina Harm Reduction Coalition is using in jails and prisons across the state of North Carolina (see: www.nchrc.org).

Access to Safe Injection Facilities

Another important harm reduction strategy that has been gaining increasing attention in recent years is safe injection facilities (SIFs). These facilities provide PWID with sterile injecting equipment and a safe space in which to inject under the supervision of nurses and/or other healthcare personnel. SIFs have been well studied and have been shown to reduce overdose mortality [35] and injection-related injuries [35–37]. Importantly, these facilities have not been associated with increases in the number of PWID [37], increased rates of relapse [38], increases in publicly discarded injection equipment [39], or increases in drug-related crime [40]. In addition, SIFs have been shown to increase utilization of detox services [40, 41] and substance use treatment [41–43].

Conclusion

As the number of opioid users in the US continues to rise, multipronged harm reduction strategies must be deployed with diverse groups of people at risk. Individuals who have current or recent CJ involvement are a key population group that is at increased risk of HIV transmission and infection. To lessen this risk, we suggest expansion of MAT programs in correctional settings that are implemented in concert with HIV prevention efforts. In addition, opioid users involved in the CJ system should be linked to SIFs and SEPs prior to release. Finally, PrEP should be offered as a tool of harm reduction alongside syringe exchange, MAT, and SIF linkage.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no competing interests.

Human and Animal Rights and Informed Consent This article does not contain any studies with human or animal subjects performed by any of the authors.

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