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ScienceDirect
International Journal of Drug Policy 19 (2008) 17–23
THE INTERNATIONAL JOURNAL OF DRUG POLICY
www.elsevier.com/locate/drugpo

Commentary

Ethical and human rights imperatives to ensure medication-assisted treatment for opioid dependence in prisons and pre-trial detention

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Received 25 June 2007; received in revised form 22 November 2007; accepted 27 November 2007

Abstract

Opioid dependence is a complex medical condition affecting neurocognitive and physical functioning. Forced or abrupt opioid withdrawal may cause profound physical and psychological suffering, including nausea, vomiting, diarrhoea, extreme agitation and/or anxiety. Opioid-dependent individuals are especially vulnerable at the time of arrest or initial detention, when they may, as a result of their chemical dependency, be coerced into providing incriminating testimony, or be driven to engage in risky behaviour (such as sharing needles in detention) in order to avoid painful withdrawal symptoms.

Upon incarceration, many opioid-dependent prisoners are forced to undergo abrupt opioid withdrawal (both from legally prescribed agonist therapy such as methadone as well as illicit opioids). Physical and psychological symptoms attendant to withdrawal may impair capacity to make informed legal decisions, and cause prisoners to risk HIV and other blood-borne diseases by sharing injection equipment. Although prisons must provide at least the standard of care to prisoners that is available in the general population, medication-assisted treatment, endorsed by international health and drug agencies as an integral part of HIV prevention and care strategies for opioid-dependent drug users, is unavailable to most prisoners.

Medication-assisted treatment is a well-studied and validated pharmacological therapy for the medical condition known as opioid dependence. The failure to ensure prisoner access to this medical therapy threatens fundamental human rights protections against cruel, inhuman or degrading treatment and rights to health and to life. It also poses serious ethical problems for health care providers, violating basic principles of beneficence and non-maleficence (i.e., do good/do no harm). Governments must take immediate action to ensure access to opioid substitution to prisoners to ensure fulfilment of ethical and human rights obligations.

Keywords: Prison; Incarceration; Opioid-substitution therapy; Methadone; Buprenorphine; Human rights; Medication-assisted treatment

Introduction

Due to the illicit nature of opioids, the means whereby they are obtained, and many of the associated behaviours of opioid use or acquisition, many opioid-dependent individuals find themselves entangled in the criminal justice and correctional systems (Farrell et al., 2006; Mumola & Beck, 1997). Approximately three quarters of inmates in US state correctional facilities required some form of substance abuse treatment, but less than 20% received any such treatment (Belenko et al., 1998). Almost one in four inmates in US state correctional facilities have a history of heroin abuse and 1 in 12 were using heroin regularly in the month prior to incarceration (Beck et al., 1993). For some inmates, heroin use does not cease upon incarceration (Calzavara et al., 2003; van Haastrecht, Bax, & van den Hoek, 1998). Where heroin use continues via injection, injection equipment is often in short supply because such equipment is prohibited in most correctional facilities (Heimer et al., 2006). Because of the overlap between HIV/hepatitis C and IDU and the high prevalence of IDU within correctional settings, the prevalence of HIV within correctional settings is high (Dolan, Kite, Black, Aceijas, & Stimson, 2006; Small et al., 2005; Wood, Montaner, & Kerr, 2005a; Wood et al., 2005b).

Few prisons in the world offer medication-assisted treatment (MAT) for opioid dependence. Instead, many favour "cold turkey" as "treatment". There are several reasons that

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doi:10.1016/j.drugpo.2007.11.019

explain this preference. First, there is widespread failure in prisons to understand that opioid dependence is a medical disorder resulting from complex neurobiological systems (Volkow & Li, 2005). Second, some facilities think it appropriate to impose extrajudicial punishment of inmates for their societal misdeeds and therefore believe inmates should experience the "natural consequences" of their actions; that is, opioid withdrawal. Third, medications used in medication-assisted treatment (MAT) are illegal in some jurisdictions (see, e.g., Human Rights Watch, 2007). And in the limited number of facilities that would be theoretically open to MAT, they are often fearful of diversion within the prison itself (Fiscella, Moore, Engerman, & Meldrum, 2005).

Neurobiology of addiction

Opioid dependence is a chronic, relapsing disorder requiring longitudinal therapy to reduce recidivism (Fiellin & O'Connor, 2002). Extensive research over the past 50 years has mapped the neurobiology of the brain related to substance dependence and the neurobiological adaptations resulting from the chronic use of these substances (Chao & Nestler, 2004; Di Chiara & North, 1992; Nestler & Aghajanian, 1997; Stimmel & Kreek, 2000). Neurobiological adaptations are wide ranging and complex, involving perturbations of brain signalling pathways resulting from repeated opioid use (Nestler, Alreja, & Aghajanian, 1994; Nestler, Berhow, & Brodkin, 1996; Nestler, Hopem, & Widnell, 1993). Whereas some brain pathways will be more susceptible to adaptation, some will be more resistant due to their genetic composition (Nestler, 2001a,b). These adaptations can be long lasting in their effects. Indeed, some data have suggested that at least 2 years of opioid agonist therapy may be required to stabilize neuronal changes acquired while using short-acting opioids such as heroin (Kaufman et al., 1999).

In essence, the overwhelming physical and psychological reward that comes from heroin derails a neurobiological system designed to preserve the individual. For example, opioids are a better neurobiological reward than food and so opioid-dependent patients will "ingest" heroin to "feed" this neurobiological pathway rather than eating actual food to preserve the body. Hence, opioid-dependent individuals are often underweight and malnourished. This neurobiology assists in framing why individuals will place themselves at risk for infectious diseases, physical and psychological trauma, and incarceration. The individual's brain has been primed to expect an exogenous opioid such as heroin and the brain will do all it can to move the individual to obtaining and using the opioid (Nestler, 2004). This neurobiology, which explains some of the individual's behaviour, is in tension with the very real possibility of the individual making informed choices that go against this neurobiological programming (otherwise sobriety could never occur). Some choices, however, become more difficult because of the neurobiological effect of opioid dependence. It is in this context, complicated by many social factors, mental illness, and infectious diseases, that the refusal to provide evidence-based pharmacological therapy simply because someone is located within a correctional system must be addressed.

Opioid-dependent individuals often suffer a host of maladies that further complicate the physical and psychological consequences of dependency and withdrawal and, in turn, craving and relapse to opioid use. These include social factors, psychological stress, and co-morbid mental illness, which can interact in varying ways and to varying degrees to negatively affect cognitive function (Kresina, Bruce, Litwin, & Sylvestre, 2005; Rollins, O'Neill, Davis, & Devitt, 2005). In addition, both HIV and hepatitis C can cause neurocognitive dysfunction making drug treatments based on neurocognitive ability more difficult (e.g., alcoholics anonymous, cognitive behavioural therapy) (Cysique, Maruff, & Brew, 2006; Forton et al., 2005; Laskus et al., 2005; Parsons et al., 2006; Shaham, Erb, & Stewart, 2000; The Hemophilia Growth Development Study, 2006; Waldrop-Valverde et al., 2006). Individuals with the stressors and neurocognitive impairment as detailed above are more in need of MAT to reduce risk-taking behaviour and assist in the stabilization of their other medical and psychiatric diseases.

Medication-assisted treatment with methadone or buprenorphine

Medication-assisted treatment (MAT) for opioid dependence with methadone or buprenorphine prevents opioid withdrawal, decreases opiate craving, and diminishes the effects of illicit opioid due to its direct action on the neurobiology discussed previously. Often called "opioid-substitution therapy", MAT is one of the most effective and best-researched treatments for opioid dependence. Once a patient is stabilized on an adequate dose, he or she can function normally (WHO et al., 2004).

The World Health Organization (WHO), the United Nations Office on Drugs and Crime (UNODC) and the Joint United Nations Programme on HIV/AIDS (UNAIDS) have each supported the expansion of MAT because it is an evidence-based therapy that has proven effective for HIV prevention, as well as reducing illicit opioid use and deaths due to overdose, improving uptake and adherence to antiretroviral treatment for HIV-positive drug users, and is cost-effective to society (WHO et al., 2004).

In 2005, the WHO added buprenorphine and methadone to the list of essential medicines and in 2006, together with UNODC and UNAIDS, recommended that governments ensure access to MAT free of charge to opioid-dependent prisoners where it is available outside of prison, and that where no MAT is available in the outside community, that "prison authorities add their voice to lobby for changes in policy to make such treatment

nationally available, including within prisons" (UNODC, 2006).

Risk environment created by withholding treatment

Forced or abrupt opioid withdrawal can cause profound mental and physical pain (including severe abdominal cramping, nausea, diarrhoea, anxiety, and convulsions), and can have serious medical consequences for pregnant women and their foetuses, immunocompromised people, and people suffering from comorbid medical disorders (Fiscella et al., 2005). The trauma of imprisonment, coupled with severe opioid withdrawal, can also increase the risk of suicide in opioid-dependent individuals with co-occurring disorders (USDHHS, 2005).

Physical and psychological factors attendant to withdrawal, coupled with structural factors increasing the risk of unsafe injection (the lack of MAT or access to sterile injection equipment), constrain opioid-dependent prisoners to make life-threatening choices. Studies in prisons throughout the world have shown that many prisoners continue injection while incarcerated, often sharing syringes, thus risking HIV and other diseases (Calzavara et al., 2003; Choopanya et al., 2002; Cravioto, Medina-Mora, de la Rosa, Galvan, & Tapia-Conyer, 2003; Beyrer et al., 2003; Boys et al., 2002; Dolan, Wodak, & Hall, 1998; Haig, 2003; Heimer et al., 2005; Shewan, Gemmell, & Davies, 1994; Wood et al., 2005a,b).

Methadone maintenance therapy has been shown to reduce the incidence of injection in prison (Dolan et al., 2006; Dolan, Hall, & Wodak, 1996; Haig, 2003; Heimer et al., 2005). Likewise, stopping methadone on incarceration is associated with the likelihood of sharing injection equipment (Shewan et al., 1994). Indeed, many prisoners who were receiving treatment before incarceration resort to illicit drug use in prison when they are prohibited from receiving methadone (Gore & Bird, 1995; Vormfelde & Poser, 2001). In addition, withdrawal symptoms due to forced abstinence from methadone following incarceration are a major source of negative attitudes towards methadone among injection drug users (Zule & Desmond, 1998).

Legal consequences of withholding treatment

Upon incarceration, many opioid-dependent prisoners are forced to undergo abrupt opioid withdrawal (both from legally prescribed agonist therapy such as methadone as well as illicit opioids). Physical and psychological symptoms attendant to withdrawal may impair capacity to make informed legal decisions, and heighten vulnerability to succumb to police pressure to admit to false charges or confess guilt before having had access to counsel, been before a judge, or been able to digest and understand the potential criminal charges and consequences, in order to avoid detention or to secure release from confinement.

The human rights basis for access to medication-assisted treatment in prison

International human rights law clearly affirms that prisoners retain fundamental rights and freedoms guaranteed under human rights law, except the right to liberty, although they may be subject to restrictions that are commensurate with a closed environment (UNHRC, 1994). However, the conditions of confinement should not aggravate the suffering inherent in imprisonment (UNHRC, 1994). Prisoners, therefore, like all other persons, enjoy the right to life, to the highest attainable standard of health, and the right to be treated with dignity and protection against torture and cruel, inhuman, or degrading treatment and punishment. These rights are enshrined in international human rights treaties that have been signed and ratified by most United Nations member states, including the International Covenant on Civil and Political Rights (ICCPR), the International Covenant on Economic, Social and Cultural Rights (ICESCR), and the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT).

Any restrictions on prisoners' rights that are a consequence of imprisonment must be justified, for example, on well-founded considerations related to security, and states have positive obligations to take measures to ensure conditions of incarceration conform to international human rights norms and standards.

In some cases, state obligations to safeguard the lives and health of people in custody, and to protect them from ill-treatment, including inhuman and degrading treatment may require states to ensure a higher standard of care to prisoners than they may have access to outside prison, where they are not wholly dependent upon the state for protection of their health and welfare (Lines, 2006). The prohibition on inhuman or degrading treatment specifically "compels authorities not only to refrain from provoking such treatment, but also to take the practical preventive measures to protect the physical integrity and the health of persons who have been deprived of their liberty" (ECHR, 2003). Failure to provide adequate medical treatments to a detainee in prison may contribute to conditions amounting to "inhuman or degrading treatment" (CPT, 2002; ECHR, 2006). In the case of opioid-dependent prisoners, states must take positive measures to protect against serious suffering, as well as to protect against HIV, hepatitis C, and other serious diseases attendant to drug dependence.

The right to be free of torture and ill-treatment

International law unequivocally forbids the use of torture and other cruel, inhuman or degrading treatment or punishment (CAT, 1984; ECPHRFF, 1953; ICCPR, 1966). These prohibitions extend to conditions of confinement for prisoners, and apply "not only to acts that cause physical pain but also to acts that cause mental suffering to the victim"

(UNHRC, 1992a,b), including intimidation and other forms of threats (UNGA, 2001, 1988).

The Human Rights Committee, an expert United Nations body that monitors compliance with the ICCPR and provides authoritative interpretations of its provisions, has explained that states have a "positive obligation towards persons who are particularly vulnerable because of their status as persons deprived of liberty," stating further that "Persons deprived of their liberty enjoy all the rights set forth in the [ICCPR], subject to the restrictions that are unavoidable in a closed environment" (UNHRC, 1992a,b).

The Convention against Torture proscribes acts committed by public officials, as well as acts committed with their "acquiescence." In other words, international human rights law bars the state from tolerating acts or perpetuating conditions that amount to torture or ill-treatment. In prison, where most material conditions of incarceration are directly attributable to the state and where inmates have been deprived of their liberty and means of self-protection, the requirement to protect individuals from the risk of torture and other ill-treatment can give rise to a positive duty of care, which has been interpreted to include effective methods of prevention, screening, and treatment for life-threatening diseases (CPT, 2002; ECHR, 2006).

The failure to provide access to MAT – an effective medical treatment for opioid dependence, as well as critical to preventing HIV – may result in violations of basic obligations to protect prisoners from exposure to inhuman or degrading treatment. Upon incarceration, many opioid-dependent prisoners are forced to undergo abrupt opioid withdrawal. As noted above, forced or abrupt opioid withdrawal can cause profound mental and physical pain, have serious medical consequences, and increase the risk of suicide among opioid-dependent individuals with co-occurring disorders.

The concept of providing MAT for heroin-dependent patients upon incarceration dates back to the beginning of methadone (Dole, 1972). Methadone programs have been successfully created in prisons throughout the world, including New York City (Project KEEP), the Connecticut Department of Corrections York Correctional Institution, Eastern Europe, Iran, Puerto Rico, and Canada (Catania, 2004; Fallon, 2001; Heimer et al., 2006; Kerr & Jurgens, 2004; Sefatian, Alaei, & Alaei, 2005; Tomasino, Swanson, Nolan, & Shuman, 2001). Many correctional settings where medical care is provided have opiates available for the treatment of pain and have security measures in place to prevent the diversion of such controlled substances. Because correctional systems are already well designed to offer the security surrounding storage of opioids, such as methadone, and the supervision regarding dosing, in many respects correctional settings should be the easiest in which to implement methadone maintenance. Indeed, most methadone programs outside correctional settings must create systems that typically already exist within correctional settings. Buprenorphine, which requires much less regulatory oversight compared to methadone, may be a practical solution to the medical necessity of providing agonist therapy within correctional settings in a most expeditious manner as such programs could be started in, at most, a few months. Indeed, the World Health Organization reminds institutions that MAT programs are relatively simple to carry out (WHO et al., 2004). In the face of this evidence, state failure to provide available and necessary medical attention to opioid-dependent prisoners, thus increasing their vulnerability to HIV and other blood-borne diseases, could result in prisoners being subject to inhuman and degrading treatment in violation of basic legal obligations to prevent such occurrence.

The right to the highest attainable standard of health without discrimination; the right to life

The International Covenant on Economic, Social and Cultural Rights (ICESCR) guarantees "the right of everyone to the highest attainable standard of physical and mental health," without discrimination on certain prohibited grounds (including physical or mental disability, health status, and any "other status" that has "the intention or the effect of nullifying or impairing the equal enjoyment or exercise of the right to health"). Article 12 specifically obliges states to take all steps necessary for the "prevention, treatment and control of epidemic... diseases," and the "creation of conditions which would assure to all medical service and medical attention in the event of sickness." This includes "the establishment of prevention and education programmes for behaviour-related health concerns such as sexually-transmitted diseases, in particular HIV/AIDS" (CESCR, 2000). Realization of the highest attainable standard of health requires that states ensure equality of access to a system of health care and, further, to take affirmative steps to promote health and to refrain from conduct that limits people's abilities to safeguard their health (CESCR, 2000). Laws and policies that "are likely to result in... unnecessary morbidity and preventable mortality" constitute specific breaches of the obligation to respect the right to health (CESCR, 2000).

In the face of the scientific consensus supporting its efficacy, state-imposed barriers to MAT for opioid-dependent prisoners constitute interference with the right to health.

In its General Comment No. 14 on the Right to Health, the U.N. Committee on Economic, Social and Cultural Rights repeatedly stresses the importance of states' obligations to ensure equality of access to health facilities, goods, and services to all persons, "especially the most vulnerable or marginalized sections of the population" without discrimination on any of the prohibited grounds (CESCR, 2000). The Committee notes in particular government obligations to "refrain from denying or limiting equal access for all persons, including prisoners or detainees... to preventive, curative, and palliative health services," and to abstain from "enforcing discriminatory practices as State policy" (CESCR, 2000).

Many jurisdictions recognize drug addiction as a disability. To the extent that opioid-dependent prisoners suffer from addiction-related disabilities, restricting access to MAT may

constitute prohibited discrimination on the basis of disability (CESCR, 1994, 2000).

All persons enjoy an inherent right to life, which is guaranteed in Article 6 of the International Covenant on Civil and Political Rights (ICCPR, 1966). The U.N. Human Rights Committee has explained that the right to life "should not be interpreted narrowly," and that governments must adopt "positive measures" to increase life expectancy and eliminate epidemics (UNHRC, 1992a,b). The Committee has further stressed that "the State party by arresting and detaining individuals takes the responsibility to care for their life. It is up to the State party by organizing its detention facilities to know about the state of health of the detainees as far as may be reasonably expected. Lack of financial means cannot reduce this responsibility" (UNHRC, 2002). Therefore, according to the Committee, it is "incumbent on States to ensure the right to life of detainees, and not incumbent on the latter to request protection" (UNHRC, 2002).

Withholding MAT increases the risk of sharing injection equipment, and in turn, vulnerability to HIV/AIDS and hepatitis, both incurable and potentially fatal diseases. Unassisted opioid detoxification also increases the risk of fatal overdose due to opioid naïveté if individuals relapse to drug use, as is often the case. Failure to take measures to ensure MAT for prisoners thus threatens the right to life by putting prisoners at risk of premature death by overdose, and of HIV/AIDS and other life-threatening illnesses.

Ethical obligations to ensure access to medication-assisted treatment in prison

International principles of medical ethics require prison medical staff to provide "the best possible health care for those who are incarcerated in prisons for whatever reasons," and that decisions regarding medical care and treatment be based on prisoners' health care needs, which must "take priority over any non-medical matters" (International Council of Prison Medical Services, 1979). International standards further state that "[I]t is a gross contravention of medical ethics, as well as an offence under applicable international instruments, for health personnel, particularly physicians, to engage, actively or passively, in acts which constitute participation in, complicity in, incitement to or attempts to commit torture or other cruel, inhuman or degrading treatment or punishment" (UNGA, 1982).

Physicians practicing in correctional settings are often forced by legal provisions or government policy, as well as prison regulations and practices, to violate this ethical obligation. Physicians are called to improve health outcomes—that is, to do good for patients in their charge and not to do harm. Removing or denying access to a therapy demonstrated to be beneficial for opioid-dependent patients constitutes harm—both direct harm as the individual experiences opioid withdrawal due to the removal of the opioid agonist therapy within the context of corrections, and indirectly in that the removal of the agonist therapy may lead the individual patient to engage in risky practices to placate the symptoms of withdrawal as discussed above. The refusal of correctional systems to allow physicians to provide this evidenced based care violates the commitment to beneficence. This contravention of medical ethics should lead correctional systems to reform their practices around the treatment of opioid dependence.

Conclusion

Opioid dependence is a chronic, relapsing neurobiological disease with known, effective medical treatments, specifically methadone and buprenorphine. The refusal to provide these validated medical treatments within correctional settings leads to increases in risk-taking behaviour among prisoners and unnecessary harm. In a context where access to medication-assisted treatment for opioid dependence may be inadequate for those outside prison, access to treatment for prisoners may rank low on government priorities. But states' failure to meet treatment needs for all drug users does not relieve them of their obligations to protect the lives and well-being of those in its custody by, among other things, ensuring access to evidence-based drug treatment. Just as correctional systems cannot refuse other medical treatments to prisoners (e.g., diabetes, HIV, etc.) because of the harm it could cause, it is incumbent upon correctional systems to immediately reform their policies and procedures to institute the medical treatment of opioid dependence with the evidenced based use of methadone and/or buprenorphine such that opioid-dependent patients can receive the benefits of this well studied and validated medical treatment.

Acknowledgement

R.D. Bruce received funding for this research from the National Institute on Drug Abuse (K23 DA 022143).

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