Prevalence of hepatitis C virus is even higher than between 20% and 40% in five countries, and exceeds 40% in 148 countries, almost all in low-income and middle-income countries. HIV prevalence in people who inject drugs is widespread abuses of human rights, which increase vulnerability to HIV infection and negatively affect delivery of HIV programmes. These abuses include denial of harm-reduction services, discriminatory access to antiretroviral therapy, abusive law enforcement practices, and coercion in the guise of treatment for drug dependence. Protection of the human rights of people who use drugs therefore is important not only because their rights must be respected, protected, and fulfilled, but also because it is an essential precondition to improving the health of people who use drugs. Rights-based responses to HIV and drug use have had good outcomes where they have been implemented, and they should be replicated in other countries.

**Introduction**

An estimated 15.9 million people inject drugs in 148 countries, almost all in low-income and middle-income countries. HIV prevalence in people who inject drugs is between 20% and 40% in five countries, and exceeds 40% in nine. Prevalence of hepatitis C virus is even higher than that of HIV. Non-injecting drug use is much more common than is injecting drug use and can also put people at risk of HIV and hepatitis C virus infections. Much evidence suggests that interventions to prevent HIV transmission and reduce other harms associated with drug use are feasible, effective as public health measures, and support human rights. These interventions are also cost effective. Accordingly, UN agencies recommend a comprehensive set of measures for people who use drugs (webappendix p 1 provides an explanation of why the term injecting drug user is not used in this report), including needle and syringe programmes (NSPs), opioid substitution therapy (OST), and methadone. There are no provisions of international human rights law that name people who inject drugs which increase HIV vulnerability and negatively affect delivery of HIV programmes. Abuses include denial of harm-reduction services, discriminatory access to antiretroviral therapy, abusive law enforcement practices, and coercion in the guise of drug-dependence treatment. Women and young people who use drugs face additional, specific abuses. Protection of the human rights of people who use drugs is important not only because the rights of these people must be respected, protected, and fulfilled, but also because it is an essential precondition to improving their health.

**Search strategy and selection criteria**

We used systematic methodologies to search databases including PubMed, Embase, EBSCO, and the Cochrane Database of Systematic Reviews from 1985 to Jan 28, 2010, with focus given to articles published in the past 3 years. Medical subject headings (MeSH) were used in addition to key words. Secondary searches were completed by manually reviewing the bibliographies of retrieved articles for further relevant documents. MeSH terms used were “criminal law” or “crime”; “substance abuse, intravenous”; “human rights” or “human rights abuses”; “antiretroviral therapy, highly active”; “prisons”; and “methadone”. There are no MeSH terms for stigma and discrimination; thus these were used as key words in the searches. Because not all articles relating to people who inject drugs are indexed by the MeSH term “substance abuse, intravenous”, “IDU” and “injecting drug use” were used as key words. MeSH terms were also used as key words in internet-based search engines. We also searched databases, including Scopus and Web of Science, with key words. MeSH, or key words, for people who inject drugs were searched in combinations with the above MeSH terms linked to criminal law and human rights abuses. In addition to the use of search engines, non-peer reviewed published work was obtained. Finally, key informants were contacted to establish whether the search strategies and results were sensitive and whether further data were available. For more details about the results of some of the search strategies used, see webappendix p 1. We did not attempt to grade the evidence from this systematic search since a grading system based on hierarchies of evidence or on relative strengths of methods would not reflect the wide diversity of objectives of the research.

**Key messages**

- There are no provisions of international human rights law that name people who inject drugs as people needing particular protection of their human rights or mention them at all. However, human rights law applies to everyone, including people who use drugs and those in state custody.
- The right to health requires all countries to have an effective, national, comprehensive harm-reduction policy and plan, delivering essential services. High-income countries are expected to provide more than the essential services.
- Published work documents widespread human rights abuses against people who use drugs which increase HIV vulnerability and negatively affect delivery of HIV programmes. Abuses include denial of harm-reduction services, discriminatory access to antiretroviral therapy, abusive law enforcement practices, and coercion in the guise of drug-dependence treatment. Women and young people who use drugs face additional, specific abuses.
- Protection of the human rights of people who use drugs is important not only because the rights of these people must be respected, protected, and fulfilled, but also because it is an essential precondition to improving their health.
- Joining human rights law with public health evidence should help to shift global responses to drug control away from the failed emphasis on prohibition to a more rational, health-promotion framework that is both pragmatic and principled.
- Rights-based responses to HIV and drug use, such as providing legal services to people who use drugs, have achieved good outcomes. Funding needs to be provided that would allow these interventions to be scaled up, assessed rigorously, and replicated in other countries.

**People who use drugs, HIV, and human rights**

Ralf Jürgens, Joanne Csete, Joseph J Amon, Stefan Baral, Chris Beyrer

We reviewed evidence from more than 900 studies and reports on the link between human rights abuses experienced by people who use drugs and vulnerability to HIV infection and access to services. Published work documents widespread abuses of human rights, which increase vulnerability to HIV infection and negatively affect delivery of HIV programmes. These abuses include denial of harm-reduction services, discriminatory access to antiretroviral therapy, abusive law enforcement practices, and coercion in the guise of treatment for drug dependence. Protection of the human rights of people who use drugs therefore is important not only because their rights must be respected, protected, and fulfilled, but also because it is an essential precondition to improving the health of people who use drugs. Rights-based responses to HIV and drug use have had good outcomes where they have been implemented, and they should be replicated in other countries.

**Search strategy and selection criteria**

We used systematic methodologies to search databases including PubMed, Embase, EBSCO, and the Cochrane Database of Systematic Reviews from 1985 to Jan 28, 2010, with focus given to articles published in the past 3 years. Medical subject headings (MeSH) were used in addition to key words. Secondary searches were completed by manually reviewing the bibliographies of retrieved articles for further relevant documents. MeSH terms used were “criminal law” or “crime”; “substance abuse, intravenous”; “human rights” or “human rights abuses”; “antiretroviral therapy, highly active”; “prisons”; and “methadone”. There are no MeSH terms for stigma and discrimination; thus these were used as key words in the searches. Because not all articles relating to people who inject drugs are indexed by the MeSH term “substance abuse, intravenous”, “IDU” and “injecting drug use” were used as key words. MeSH terms were also used as key words in internet-based search engines. We also searched databases, including Scopus and Web of Science, with key words. MeSH, or key words, for people who inject drugs were searched in combinations with the above MeSH terms linked to criminal law and human rights abuses. In addition to the use of search engines, non-peer reviewed published work was obtained. Finally, key informants were contacted to establish whether the search strategies and results were sensitive and whether further data were available. For more details about the results of some of the search strategies used, see webappendix p 1. We did not attempt to grade the evidence from this systematic search since a grading system based on hierarchies of evidence or on relative strengths of methods would not reflect the wide diversity of objectives of the research.

**Key messages**

- There are no provisions of international human rights law that name people who inject drugs as people needing particular protection of their human rights or mention them at all. However, human rights law applies to everyone, including people who use drugs and those in state custody.
- The right to health requires all countries to have an effective, national, comprehensive harm-reduction policy and plan, delivering essential services. High-income countries are expected to provide more than the essential services.
- Published work documents widespread human rights abuses against people who use drugs which increase HIV vulnerability and negatively affect delivery of HIV programmes. Abuses include denial of harm-reduction services, discriminatory access to antiretroviral therapy, abusive law enforcement practices, and coercion in the guise of drug-dependence treatment. Women and young people who use drugs face additional, specific abuses.
- Protection of the human rights of people who use drugs is important not only because the rights of these people must be respected, protected, and fulfilled, but also because it is an essential precondition to improving their health.
- Joining human rights law with public health evidence should help to shift global responses to drug control away from the failed emphasis on prohibition to a more rational, health-promotion framework that is both pragmatic and principled.
- Rights-based responses to HIV and drug use, such as providing legal services to people who use drugs, have achieved good outcomes. Funding needs to be provided that would allow these interventions to be scaled up, assessed rigorously, and replicated in other countries.
and antiretroviral therapy (ART). Implementation of these measures could substantially reduce new HIV infections in people who use drugs.\textsuperscript{44}

Millions of people who use drugs do not have access to NSPs, OST, or ART because of legal and social barriers. The response to HIV in people who inject drugs has been especially poor in many of the countries in which harm-reduction measures are needed most. Globally, less than 10% of those in need have access to harm-reduction services.\textsuperscript{4} Access to ART for people who use drugs living with HIV is also low.\textsuperscript{9}

In the early days of HIV in people who inject drugs, until the mid-1990s, human rights were rarely mentioned or accounted for in policy or research, and drug use was rarely mentioned in the human rights domain.\textsuperscript{10} In most countries, drug policy and legislation are rarely informed by international human rights obligations, and issues related to drug use rarely inform decisions by human rights mechanisms and monitors.\textsuperscript{11,12} In most countries, approaches to drug use focus overwhelmingly on criminalisation and the imposition of harsh penalties rather than on public health measures. No provisions of international human rights law name people who inject drugs, let alone identify them as needing particular protection.\textsuperscript{13} However, existing human rights law applies to all people.

The right to the highest attainable standard of physical and mental health includes the right to obtain health services without fear of punishment.\textsuperscript{14} Policies that are likely to result in unnecessary morbidity and preventable mortality are breaches of governments’ obligation to respect the right to health. The right to health—as any other right—is inherently guaranteed in a non-discriminatory way.\textsuperscript{15,16}

People who use drugs also have the rights to life, liberty, bodily integrity, privacy, education, equality before the law, freedom of movement, assembly and association, and information.\textsuperscript{11,17} All people are also protected from arbitrary arrest or detention under the International Covenant on Civil and Political Rights (ICCPR). Article 9 of the ICCPR also ensures that anyone arrested or detained under the law be informed of the charges against him or her and ensured of prompt judicial proceedings. Article 10 covers humane treatment of people being detained. Standards of detention are further elaborated in the Standard Minimum Rules for the Treatment of Prisoners. The Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment enjoins all states to prohibit all acts of torture in their criminal law codes (article 4).

Under human rights law, governments are obliged to respect, protect, and fulfil rights, meaning that they are required to refrain from directly violating rights and to prevent violations by third parties, and to provide a means of redress when they fail to do so. Finally, they have to take positive steps to ensure the full realisation of rights. Human rights law recognises that in case of emergencies, states might reasonably have to limit human rights, although some rights, such as protection from torture or enslavement, are never to be limited.\textsuperscript{9} When restrictions are permissible, they must, among other things, have a legitimate aim, be necessary for the achievement of the stated aim, and be proportionate to the problem.\textsuperscript{15}

To improve understanding of the health and human rights implications of approaches to drug use and HIV, we reviewed the published work on human rights problems affecting people who use drugs (especially but not only people who inject drugs, recognising that there are also important concerns for people who use non-injecting drugs), and on human rights and HIV. Specifically, we examined whether drug laws, policies, or practices violate the human rights of people who use drugs, increase vulnerability to HIV or HIV-related risk behaviours, or otherwise compromise the health of people who use drugs or of the communities in which they live. Finally, we examined initiatives to support the effectiveness of HIV services and other health services for people who use drugs and to reduce abuses of their human rights.

Drug laws, policies, and enforcement and their effect on drug supply and demand

The dominant approach to drug use is the attempt to reduce or prevent the supply and use of controlled substances by prohibiting cultivation, production, transportation, distribution, and possession. However, evidence suggests that this approach has not produced the purported benefits.\textsuperscript{20} Street-level drug policing has had little, if any, sustained effect on the price of illicit drugs, their availability, or the frequency of their use.\textsuperscript{21,22} Public order gains are generally short lived, and often simply displace drug markets and people who use drugs away from HIV prevention services.\textsuperscript{21,22} Such ineffective use of policing budgets means lost investments in other police work or in health programmes for people who use drugs.\textsuperscript{21}

Drug laws, policies, and practices and their effect on health and human rights

Many human rights abuses experienced by people who use drugs go unreported because of fears of reprisal and other harmful consequences, and investigations by government into violations of rights against people who use drugs remain rare. Nevertheless, this review identified many studies and reports of human rights abuses against people who use drugs, many of which draw attention to the health effects of these abuses.

Imposition of the death penalty for drug offences

Countries vary in the harshness of their drug laws and law enforcement practices. In western Europe, for example, possession of quantities of illicit drugs appropriate for personal use is usually an administrative infraction rather than a crime.\textsuperscript{23} In other countries, possession of small quantities of drugs can be punishable by death.

International human rights law does not ban the death penalty outright, but it allows for capital punishment...
only for the most serious crimes of clear intentionality, lethality, and gravity. Of the estimated 64 countries that retain the death penalty, half apply it to drug offences, including many that are non-lethal—e.g., simple possession of drugs. Hundreds of people have been executed for drug-related offences in several countries. The amount of illicit drugs possessed, produced, or sold to constitute a capital crime varies from 2 g to 25 kg, indicating an arbitrariness that defies human rights norms on the death penalty.

**Incarceration and treatment in prisons and other places of detention**

The incarceration of many drug-dependent people—often for lengthy periods of time and for minor offences such as possession of very small amounts of drugs—also raises human rights and health concerns. In many countries, a substantial proportion of prisoners are drug dependent. For people who inject drugs, imprisonment is a common event, with reported incarceration rates of 56–90% in this population.

People who used drugs before imprisonment often continue to use them while imprisoned. Others start drug use in prison, often as a means to cope with being in overcrowded and violent environments. Prisoners who inject drugs are more likely to share injecting equipment than are people who inject drugs in the community. Sexual activity, including forms of sexual violence, also occurs in prisons and can result in transmission of HIV and other sexually transmitted infections.

Many studies have reported seroconversion of HIV or hepatitis C virus in prisons or have shown that a history of imprisonment is associated with prevalent and incident HIV and hepatitis C or hepatitis B virus infection in people who inject drugs. The strongest evidence of extensive HIV transmission through injecting drug use in prisons is from documented outbreaks in several prisons. Use of non-sterile injecting equipment in prisons is the most important independent determinant of HIV infection.

Although NSPs and OST are effective at reducing HIV risk behaviours in a wide range of prison environments, without resulting in negative health consequences for prison staff or prisoners, only a few prisoners have access to them. Many prisoners are also denied access to drug-dependence treatment. Research from Russia and China has emphasised both community-level effects and increased HIV-related risks due to the scarcity of prevention services in detention settings.

Imprisonment also poses a substantial barrier to ART. When provided with care and access to medications, prisoners respond well to ART; adherence rates can be as high or higher than those outside prison. But access to ART in prisons in many low-income and middle-income countries remains poor. Even when ART is available, treatment interruptions are frequent because systems fail to ensure continuity of treatment upon arrest, pretrial detention, transfer to prison and within the prison system, and upon release. Pretrial detention can last for years, and many detainees face physical abuse and severe overcrowding without medical attention, adequate food, or meaningful activity. Panel 1 provides examples of successful interventions in penal institutions in Moldova and Spain.

**Police harassment, arbitrary detention, ill-treatment, and torture**

Intensification of street-level policing is the main strategy to address drug use in many cities and towns. In the worst cases, police crackdowns lead to extrajudicial executions, as in the 2003 so-called war on drugs in Thailand. Ostensibly targeting drug traffickers, it resulted in the deaths of more than 2200 people, many of whom were later confirmed not to be drug traffickers or even people who use drugs. The crackdown does not seem to have reduced drug use in Thailand, and barriers to access to methadone and ART for people who use drugs persist.

Police have great latitude to search, arrest, and detain people who use drugs and to treat them in detention without regard to due process. Human rights organisations have recorded many instances of people who use drugs being held without formal charges or the possibility of a court appearance, and of extortion by police or jailers. Police have used detainees’ addictions against them, interrogating them when they are in withdrawal or using drugs to coerce them into confessions. This form of torture has been recognised by the UN Special Rapporteur on Torture, who called for it to end.

Drug paraphernalia laws in many countries force people who use drugs to resort to hasty or unsafe storage and disposal of syringes. In some cases, police have destroyed injecting equipment or forced people who use drugs to destroy it. Findings from a study in Mexico noted that 48% of participants had been arrested for carrying unused syringes, even though syringe possession was legal. Arrest for possession of unused syringes was associated independently with syringe sharing. Impeding access to syringes undermines the right of people who use drugs to one of the most effective HIV prevention methods available. Police in some settings have arrested people simply because their arms show the marks of past injection. People who inject drugs are commonly viewed as easy targets to fill arrest quotas and for supplementation of police salaries through extortion.

Intensive police presence or the fear of it can lead to displacement of people who use drugs to remote locations far from their usual support networks and from health services. Police presence causes hurried injection, with increased risk of vascular accident and other harms. In Australia, a police crackdown led some people who smoked heroin to switch to injection because of its quicker, more powerful, and more invisible effect—a decision with potentially terrible health consequences.
reform has reduced the number of prisoners and pretrial detainees from 10,591 in 2004, has, in recent years, been accompanied by broader prison-reform initiatives. Prison staff and prisoners alike, which has helped to reduce HIV-related discrimination and stigma.

Importantly, the introduction of a comprehensive package of harm-reduction measures and free-of-charge ART and treatment of opportunistic infections.55

The experience with harm-reduction services in prisons in Moldova has been overwhelmingly positive. Needles have never been used as weapons against prison staff or fellow prisoners, drug use has not increased, and data suggest a positive effect on incidence of HIV and hepatitis C virus infection.56,57 Because of the training that has preceded and accompanied service delivery, awareness about HIV and risk behaviours is now nearly universal in prison staff and prisoners alike, which has helped to reduce HIV-related discrimination and stigma.15

Importantly, the introduction of a comprehensive package of harm-reduction measures has, in recent years, been accomplished by broader prison-reform initiatives. Prison reform has reduced the number of prisoners and pretrial detainees from 10,591 in 2004, to 6,335 on Jan 1, 2010,60 and improved conditions for prisoners and staff. Such measures, including reduction of overcrowding, increased work activities for prisoners, improved food, and better pay for prison staff, are essential, although often neglected, components of the overall effort to reduce the spread of infectious diseases in places of detention and to improve the health and human rights of prisoners and pretrial detainees.59,60

Results from Spain

In Spain, both OST and NSPs have been available in the prison system for more than a decade. In the mid-2000s, 82% of people with problematic drug use in prison (18% of all prisoners), were in the prison methadone maintenance programme.61 Since then, numbers in the programme have decreased slightly, indicating changing drug use patterns in Spain, but coverage remains at a similarly high level. To complement the OST programme, an NSP pilot project started in August, 1997. An assessment undertaken after 22 months showed positive results.62 As a result, in June, 2001, the Directorate General for Prisons ordered that the OST programme started in August, 1997. An assessment undertaken after 22 months showed positive results.62 As a result, in June, 2001, the Directorate General for Prisons ordered that the

Panel 1: Promotion of health and human rights in penal institutions

Human rights abuses leading to HIV transmission and other negative health outcomes have been documented in prisons worldwide, but some prison systems, both in high-income and low-income settings, have shown that comprehensive interventions to address HIV can be successfully introduced and scaled up in penal institutions.

The Moldova model

In Moldova, the Department of Penitentiary Institutions has, since 1999, authorised local non-governmental organisations to provide HIV/AIDS education and a wide range of harm-reduction services inside prison, including psychological support, counselling, and distribution of injecting equipment. In 2005, the range of prevention programmes in prisons was expanded to include opioid substitution therapy (OST). The number of prisoners benefiting from the OST programme remains small, but more than two-thirds of adult prisoners sentenced in Moldova are incarcerated in facilities in which they have access to the other harm-reduction services and antiretroviral therapy (ART). In 2007, a Law on HIV/AIDS Infection Prevention was adopted, explicitly stipulating that the Ministry of Justice must ensure education and training of staff and prisoners and provide access to voluntary HIV testing with counselling, harm-reduction programmes, including provision of bleach, needle and syringe programmes (NSPs), and condom distribution in all prisons; and free-of-charge ART and treatment of opportunistic infections.15

The experience with harm-reduction services in prisons in Moldova has been overwhelmingly positive. Needles have never been used as weapons against prison staff or fellow prisoners, drug use has not increased, and data suggest a positive effect on incidence of HIV and hepatitis C virus infection.56,57 Because of the training that has preceded and accompanied service delivery, awareness about HIV and risk behaviours is now nearly universal in prison staff and prisoners alike, which has helped to reduce HIV-related discrimination and stigma.15

Importantly, the introduction of a comprehensive package of harm-reduction measures has, in recent years, been accomplished by broader prison-reform initiatives. Prison reform has reduced the number of prisoners and pretrial detainees from 10,591 in 2004, to 6,335 on Jan 1, 2010,60 and improved conditions for prisoners and staff. Such measures, including reduction of overcrowding, increased work activities for prisoners, improved food, and better pay for prison staff, are essential, although often neglected, components of the overall effort to reduce the spread of infectious diseases in places of detention and to improve the health and human rights of prisoners and pretrial detainees.59,60

Results from Spain

In Spain, both OST and NSPs have been available in the prison system for more than a decade. In the mid-2000s, 82% of people with problematic drug use in prison (18% of all prisoners), were in the prison methadone maintenance programme.61 Since then, numbers in the programme have decreased slightly, indicating changing drug use patterns in Spain, but coverage remains at a similarly high level. To complement the OST programme, an NSP pilot project started in August, 1997. An assessment undertaken after 22 months showed positive results.62 As a result, in June, 2001, the Directorate General for Prisons ordered that the OST programme started in August, 1997. An assessment undertaken after 22 months showed positive results.62 As a result, in June, 2001, the Directorate General for Prisons ordered that the

Results from Spain

In Spain, both OST and NSPs have been available in the prison system for more than a decade. In the mid-2000s, 82% of people with problematic drug use in prison (18% of all prisoners), were in the prison methadone maintenance programme.61 Since then, numbers in the programme have decreased slightly, indicating changing drug use patterns in Spain, but coverage remains at a similarly high level. To complement the OST programme, an NSP pilot project started in August, 1997. An assessment undertaken after 22 months showed positive results.62 As a result, in June, 2001, the Directorate General for Prisons ordered that the OST programme started in August, 1997. An assessment undertaken after 22 months showed positive results.62 As a result, in June, 2001, the Directorate General for Prisons ordered that the

Denial of harm-reduction services and effective drug-dependence treatment

Access to NSPs and OST is itself a human right, in that everyone has the right to the highest attainable standard of health.33 UN human rights monitors have specifically asserted the provision of harm-reduction interventions as necessary for states to comply with the right to health.34,35 Additionally, prohibiting access to NSPs or OST discriminates against people who use drugs in as much as they represent people with a disorder or disability under antidiscrimination legislation. OST and NSPs are health-care services that people who use drugs need to prevent HIV infection and to stay alive, and are crucial entry points to other health services. Despite much evidence for the effectiveness of NSPs and OST, most people who use drugs worldwide do not have access to these services.3 Some countries have laws that hamper access to clean injecting equipment. In other countries, syringes cannot be obtained at pharmacies without prescription. Methadone and other opioid substitutes continue to be classified as illegal in many countries, making their medical use impossible. In some countries, such as Russia, drug-dependence treatment offered at state clinics is so poor as to constitute a violation of the right to health.35 Registration of people who use drugs (including the reporting of names by health workers to criminal authorities), as required in some countries, also creates disincentives to seeking health services.36

Access to health services is also impeded by severe stigma, which is documented in several reports and studies (webappendix p 2 provides references). People who use drugs are commonly ostracised by their families, communities, and health-care workers, irrespective of HIV status. Drug use and HIV stigma lead to discrimination in health-care settings, employment, education, and social life. Some public campaigns to combat drug use have included stigmatising media coverage, public beatings of people who use drugs, and even public executions. These actions deter people from seeking help and hamper prevention programmes.

Denial of adequate pain relief

Opioid medications are essential not only for drug-dependence treatment but also for pain management. WHO estimates that 5 billion people live in countries with little or no access to controlled medicines that are used to treat moderate to severe pain.37 Up to 80% of the estimated 1 million patients in the end stages of AIDS are in great pain, but very few have access to pain-relieving drugs38 because of insufficient knowledge

Street policing can also lead to decreased use of NSPs and other health services. Deterring people who use drugs from visiting NSPs prompts increased sharing and unsafe disposal of syringes.39–41 Harassment and arrest of workers at NSPs is a further result of prohibitionist approaches and undermines public health efforts42 (webappendix p 1 shows additional results of a systematic review of the recent peer-reviewed published work).

Reduction of police abuse of people who use drugs could not only protect human rights but also improve HIV prevention. Strathdee and colleagues’ model estimated that in Odessa, Ukraine, elimination of police brutality against people who inject drugs could prevent up to 19% of HIV infections between 2010 and 2015.4

Denial of harm-reduction services and effective drug-dependence treatment

Access to NSPs and OST is itself a human right, in that everyone has the right to the highest attainable standard of health.33 UN human rights monitors have specifically asserted the provision of harm-reduction interventions as necessary for states to comply with the right to health.34,35 Additionally, prohibiting access to NSPs or OST discriminates against people who use drugs in as much as they represent people with a disorder or disability under antidiscrimination legislation. OST and NSPs are health-care services that people who use drugs need to prevent HIV infection and to stay alive, and are crucial entry points to other health services. Despite much evidence for the effectiveness of NSPs and OST, most people who use drugs worldwide do not have access to these services.3 Some countries have laws that hamper access to clean injecting equipment. In other countries, syringes cannot be obtained at pharmacies without prescription. Methadone and other opioid substitutes continue to be classified as illegal in many countries, making their medical use impossible. In some countries, such as Russia, drug-dependence treatment offered at state clinics is so poor as to constitute a violation of the right to health.35 Registration of people who use drugs (including the reporting of names by health workers to criminal authorities), as required in some countries, also creates disincentives to seeking health services.36

Access to health services is also impeded by severe stigma, which is documented in several reports and studies (webappendix p 2 provides references). People who use drugs are commonly ostracised by their families, communities, and health-care workers, irrespective of HIV status. Drug use and HIV stigma lead to discrimination in health-care settings, employment, education, and social life. Some public campaigns to combat drug use have included stigmatising media coverage, public beatings of people who use drugs, and even public executions. These actions deter people from seeking help and hamper prevention programmes.

Denial of adequate pain relief

Opioid medications are essential not only for drug-dependence treatment but also for pain management. WHO estimates that 5 billion people live in countries with little or no access to controlled medicines that are used to treat moderate to severe pain.37 Up to 80% of the estimated 1 million patients in the end stages of AIDS are in great pain, but very few have access to pain-relieving drugs38 because of insufficient knowledge

Street policing can also lead to decreased use of NSPs and other health services. Deterring people who use drugs from visiting NSPs prompts increased sharing and unsafe disposal of syringes.39–41 Harassment and arrest of workers at NSPs is a further result of prohibitionist approaches and undermines public health efforts42 (webappendix p 1 shows additional results of a systematic review of the recent peer-reviewed published work).
among physicians, inadequate health systems, fears of addiction, antiquated laws, and unduly strict regulations. This lack of access undermines the right to health and the right to be free from cruel, inhumane, and degrading treatment or punishment for the tens of millions of people who need narcotic drugs to treat pain.

**Discrimination in access to ART**

Available data suggest that in many countries people who use drugs have poor and inequitable access to ART, although assessment of coverage is limited by many factors. People with HIV infection who inject drugs were less likely to receive ART than were other people with HIV infection in each of the six countries that account for about half of HIV-positive people who inject in low-income and middle-income countries. A 2008 review reported rights limitations constituting barriers to AIDS treatment and care, including social marginalisation, fear of criminal sanction, and incarceration. Wolfe and colleagues’ review confirms these findings, documenting systemic and structural barriers amounting to clear infringements of human rights. National laws and HIV policies can, in principle, protect the right to non-discrimination in access to ART; but, in practice, physicians might discriminate against people who use drugs, thinking them to be unreliable patients. In some countries, people who use drugs will not seek treatment at public hospitals because of fear that health workers will report them to the police.

**Detention and coercive and abusive drug treatment**

In many countries, including Burma, Cambodia, China, Indonesia, Laos, Malaysia, Thailand, and Vietnam, people who use drugs can face coerced treatment and rehabilitation, resulting in many human rights abuses. In many of these centres the services provided are of poor quality and do not accord with either human rights or scientific principles. Treatment in these facilities takes the form of sanction rather than therapy, and relapse rates are very high.

In Vietnam, tens of thousands of people who use drugs have been incarcerated for years in compulsory treatment centres, whose main method for so-called treatment is forced labour for 10 h or more a day at below-market wages. Despite high prevalence of HIV infection (detainees are tested, although not told the result) and drug use in the centres, ART and sterile injection equipment are almost always unavailable. Similarly, detainees in compulsory detention centres in Cambodia do not have adequate food and drugs to alleviate painful drug withdrawal or to treat common medical disorders. Serious human rights abuses by guards, including severe beatings and sexual assault, have also been reported.

In China, police arrested for drug possession and use can be consigned to forced detoxification centres without trial or any semblance of due process. Once in the centres, detainees are required to do unpaid, forced labour—a human rights violation (webappendix p 2). Detainees are also subject to mandatory testing for HIV and other sexually transmitted infections and are housed in unsanitary and overcrowded conditions. They are not provided with HIV test results or treatment. Investigations have uncovered extreme abuse, such as the administration of electric shocks while viewing pictures of drug use. The rate of relapse is 90–100%. In one study, 9% of 3213 Chinese heroin users had taken extreme steps such as swallowing glass to gain a medical exemption from forced treatment.

**Young people and women**

Women and young people who use drugs face additional human rights abuses. In many countries, young people make up a substantial and growing proportion of people who use drugs, but their right to information is infringed by insufficient evidence-based information and education about drugs and drug use, and young people are excluded from access to harm-reduction services.

Women who use drugs often face discrimination on the basis of both drug use and gender. They are portrayed as so-called fallen or bad women and unfit mothers. Drug use is commonly grounds for denying women custody of their children. Pregnant women who use drugs may be accused of endangering their fetuses and often not given the priority in services that they require. In many settings, women are more likely than men to have been initiated into drug use by a sexual partner, and power dynamics within sexual relationships can limit women’s autonomy in modifying drug-using behaviours. Women are generally more likely than men to need assistance in injecting, which could contribute to their subordination in relationships in which sex and drugs are intertwined.

Drug-dependency treatment is designed for men in many cases and does not address the concerns of women, who are more likely than men to enter therapy with feelings of guilt and low self-esteem.

**Programmes or initiatives that support health services and protect human rights**

Several studies and reports have examined practical programmes or initiatives to support the effectiveness of HIV and other health services for people who use drugs and to reduce abuses of their health and other human rights.

Australia and most western European countries have successfully incorporated harm reduction and disease prevention into national drug strategies. Australia’s National Community Based Approach to Drug Law Enforcement initiative provided harm-reduction training for police recruits. After this training, police showed an overall greater willingness to make decisions that reduced health risks for people who use drugs, and had a broader understanding of the value of harm reduction in their work.

Police can issue warnings and referrals to appropriate health and social services as alternatives to arresting
people who use drugs or confiscating injecting equipment. In Australia, police distributed more than 2000 referral cards during the course of their normal operational activities during a 6-month study. Police reported feeling positive about this experience, and people presenting for services indicated that they had been referred by the police.

In the UK and Australia, drug action teams work with local authorities, social services, and health providers to reduce drug-related crime and stem the supply of drugs while increasing access to drug treatment. These teams provide health-focused training for police officers and give them health and social service referral cards to distribute to people who use drugs. A study noted that such teams are an effective framework to incorporate harm reduction into drug policing.

A small but increasing number of reports document the effect of legal services in ensuring an enabling environment for the health of people who use drugs. Models of legal-service provision include web-based consultations, street-based legal aid, or integration of legal aid into a comprehensive package of care for people who use drugs. Legal aid is sometimes combined with other human rights interventions, such as training people who use drugs to know their rights on arrest or in court, and providing educational workshops for police and prosecutors about harm reduction about drug policing.

Many of the human rights abuses that worsen users' health are amenable to legal solutions. Criminal lawyers can help to reduce incarceration-related health risks by arguing for non-custodial sentences or medical treatment while in custody. Civil lawyers can help police who use drugs to secure stable housing, health insurance, and identity documents that are essential for health care. Lawyers can challenge the unlawful police surveillance of NSPs and methadone sites that deters people who use drugs from seeking these services, and advocate for legalisation of these services. Legal aid can provide a foundation for systemic policy reform when the complaints of individual clients are aggregated into reports and advocacy for other branches of government.

A review of research into the benefits of greater involvement of people who use drugs in development, implementation, and monitoring and evaluation of policies and services concluded that there are public health, ethical, and human rights imperatives for involvement of people who use drugs. People who use drugs themselves are often best able to identify what works in a community that others know little about. They can make valuable contributions to their community, including reaching those at greatest risk with information and services, providing care and support, and advocating for rights. In Australia, where groups of people who use drugs have participated meaningfully in the response to HIV since the 1980s, user groups have had a substantial effect on the country’s success in HIV prevention. In some low-income and middle-income countries, people who use drugs are the only ones providing services to their peers, often in highly dangerous environments and without government support. People have a right to participate in decisions about their health. However, this right is often violated in environments in which registration of an organisation of people who use drugs is difficult or impossible. Panel 2 provides examples of how people who use drugs experience their health and human rights.

A public health and human rights imperative

Human rights instruments recognise that there are situations in which some rights might be restricted, especially in response to public emergencies. But the measures reported in the published work are entirely disproportionate to the aim of controlling drug production and use. Moreover, as a growing amount of evidence casts doubt on the effectiveness of repressive enforcement measures for drug control, justification by states of such measures on policy or cost-effectiveness grounds is difficult.

The HIV epidemic and other health problems of people who use drugs draw attention to the fact that governments have good public health reasons to ensure that laws, policies, and practices do not contribute to these harms. Strathdee and colleagues estimated the negative effect of existing laws and policies, showing, for example, that elimination of laws prohibiting opioid substitution in Kenya and scaling up services to 80% of people who inject drugs could reduce the number of incident HIV infections by 14%; and that in Odessa, Ukraine, more than 40% of HIV infections in people who inject drugs could be averted through scale-up of OST and NSP and prompt initiation of people who inject drugs on ART.

Governments also have legal obligations to act. The implementation of harm-reduction measures is consistent with, and required by, states’ obligations under international human rights law (webappendix p 2 provides further details). Providing people who use drugs with comprehensive harm-reduction services including OST and NSPs is good for public health, reduces avoidable suffering, and saves lives. An appropriate harm-reduction initiative is also a right-to-health initiative. The right to health requires all countries to have an effective, national, comprehensive harm-reduction policy and plan, delivering essential services. High-income countries are expected to provide more than the essential services.

However, this review shows that simply to initiate services such as NSPs, OST, and HIV treatment is not enough; rather, these services should exist in an environment in which people who use drugs do not risk police abuse and punishment when attempting to obtain them. For such programmes to succeed, efforts to reduce stigma and discrimination and to reaffirm the dignity and full range of human rights of people who...
use drugs, and to engage affected individuals, are crucial, including the enactment of antidiscrimination or protective laws to reduce human rights violations.

**Increasing the evidence base and harmonisation of human rights measures**

Reports on HIV infection risks rarely include consideration of human rights and related barriers to services. Medical research focuses instead on individual behaviour without consideration of the complex risk environment that includes structural factors constraining and shaping individual behaviour. Some studies do investigate policing as part of a risk environment, but generally do not place police abuse within a context of human rights violations. Increasing the amount of evidence of non-medical HIV risk factors should be viewed as a priority for medical researchers working on issues surrounding HIV and injecting drug use, recognising that both public health and human rights concerns need to be addressed to respond effectively. Risk is not limited to the moment of injection with a contaminated needle, but can begin minutes earlier, when a police officer confiscates a sterile syringe from a user and leaves him with withdrawal symptoms. It could have begun when the country where the person dependent on drugs lives banned the use of methadone, or was evicted from her home during a term of imprisonment, leaving her to inject on the street or in a shooting gallery.

If the wider public health community is to apply human-rights-based approaches to HIV in people who use drugs, there has to be greater understanding of rights violations as core features of risk environments, as barriers to care, and as social determinants of poor health and development: and testing and scale-up of a greater array of interventions based on human rights approaches. Although we have some evidence that interventions such as legal services for people who use drugs might be as important as a condom or a clean needle to prevent HIV, funding needs to be provided that would allow these interventions to be scaled up and assessed rigorously. Grading of the evidence for the effect of human rights protections or violations on HIV vulnerability, and of the evidence for rights contexts as social determinants of health, could be an important advance towards wider acceptance of the role that protection of human rights can have in the response to HIV and injecting drug use. Approaches to reduce bias in human rights reporting, such as the use of population-based methods, cluster randomisation, and controlled trials of rights-based interventions could all increase the methodological rigour of the area. At the same time, the value of personal narratives from people who use drugs and their allies on the front lines of human rights struggles has to be recognised, and such narratives must remain a key part of the evidence base. Human rights as part of the risk environment for health outcomes can be usefully studied in many ways and with the instruments of many disciplines. The

---

**Panel 2: People who use drugs speak about health and human rights**

“Most of the responses to drug related overdose, drug related crime, family breakdown, drug treatment, unemployment, etc, have been developed in isolation to people who use illicit drugs. We have been largely left out of responses to these issues because of a mistaken belief that we would be at best, disinterested, and at worst, incapable of participating in a meaningful dialogue on the issues that affect us. While we cannot single-handedly address the issues associated with illicit drug use in the community, our involvement in the response is critical. We are the people who use illicit drugs, access drug treatment services and educate and support our peers—we have direct knowledge and experience to offer.”

**Australian Injecting and Illicit Drug Users League**

“It is our lives. We would like to take them into our hands.”

**Participant in the consultations for Nothing about us without us**

“Police are around this needle exchange point frequently. They have stopped me a few times. They look in my shopping bag... They ask me, ‘Where are you going? Why?’ They gave me warnings: ‘Don’t come around here. We don’t want to see you around here.’”

**Person who injects drugs, Dnipropetrovsk, Ukraine; July 12, 2005**

“I’m afraid to take the first step and go to the [methadone] clinic because I don’t want to be put into drug detention. The police wait near the clinics.”

**Human Rights Watch interview, Yunnan, China; 2009**

“I’m sure I was infected while I was in drug detention. We would all use one needle; this needle would go around the whole place.”

**Human Rights Watch interview, Yunnan, China; 2009**

“ Sometimes I’m afraid I might be sick with AIDS but I’d rather be sick and free than go to get tested, get arrested, and be sick in detox or re-education through labor [RTL].”

**Human Rights Watch interview, Guangxi, China; July, 2007**

“I think I might have AIDS but I am too scared to go get tested. I don’t want to get arrested.”

**Human Rights Watch interview, Guangxi, China; July, 2007**

“I had been using drugs and decided to go get tested for HIV. I had just come from having my blood drawn on the CDC compound and police saw that my arm had an open mark and some blood. They stopped me and put me in detox.”

**Human Rights Watch interview, Guangxi, China; July, 2007**

“...The police search my body, they take my money, they also keep my drugs... They know I never have money, they don’t even ask me [for a bribe]. They say, ‘If you don’t have money, why don’t you go for a walk with me? Then I’ll set you free.’ This happened to me once... They [the police] drove me to a guest house.... How can you refuse to give him sex? You must do it. There were two officers, [I had sex with] each one time. After that they let me go home.”

**Human Rights Watch interview, Phnom Penh, Cambodia; May, 2009**

“The doctor said if I use drugs, I can’t have ART.”

**Human Rights Watch interview, Satun province, Thailand; July, 2006**
challenge in public health is to appreciate that traditional clinical and epidemiological investigations are enriched and rendered more useful to inform policy and programmes when the notion of health risk is broadened to include human rights abuses and protections and related factors. This appreciation will need familiarity with the published work that has been built in health and human rights in the social sciences and in the law. The work of Rhodes127 that put forward the idea of the risk environment, and the quantitative embodiment of it—eg, by Strathdee and colleagues8—are examples of studies that begin to lead the way towards transcending simplistic judgments of individual behaviour and decision making.

Conclusions and future directions
This report details a wide range of human rights violations committed in the name of drug control. Reduction of supply of and demand for drugs are clearly elements of health policy wherever drug use poses a serious threat to public health. But care should be taken to ensure that the nature and implementation of policies to reduce supply and demand are consistent with states’ human rights obligations133 and do not result in human rights abuses. These abuses, reported from all regions worldwide, are abhorrent and must be combated for this reason alone. However, many of these violations also have a negative effect on the health of people who use drugs and the communities in which they live. They displace people who use drugs from communities, thus preventing them from seeking and using health and social services. They foster prejudicial attitudes towards people who use drugs, rather than providing understanding and assistance, and deprive them of essential HIV prevention and treatment. For women, they reinforce complex and intertwined subordination on the basis of both gender and status as a person who uses illicit drugs.

Joining human rights law with public health evidence should help to shift global responses to drug control away from the failed emphasis on prohibition to a more rational, health-promotion framework that is both pragmatic and principled.29 Some experts advocate for discussion of drug use mainly in the language and data of public health as an alternative to criminal prohibition.144 Some gains have been achieved through such a strategy; however, the pursuit of human rights along with public health is crucial. Without a fundamental challenge to the barriers blocking humane, rational drug policy, short-term public health advances will not be sustainable in the long term.28

Our understanding of harm reduction must include not only the reduction of harm and risk, but also the reduction of vulnerability.105 WHO makes the same basic point, but without explicit reference to human rights, by saying that “[s]uccessful harm reduction is based on a policy, legislative and social environment that minimizes the vulnerability of injecting drug users”.106 In public health terms, these are among the determinants of health. In legal terms, they are also questions of human rights.

Legal frameworks are important determinants of health in many circumstances. HIV prevention, care, and treatment services operate best within a legal framework that specifically protects the human rights of people who use drugs and enables HIV prevention, care, and treatment measures to function.127 As part of it, decriminalisation or depenalisation of drugs for personal use have been widely recommended and have been implemented in some jurisdictions without negative effects such as increased drug use.127,118 Policies that perpetuate the incarceration of people who use drugs exacerbate the spread of HIV, and development of alternatives to imprisonment should be a priority.

Reform of international drug policy and policy-making processes is needed. The UN human rights mechanisms and the UN drug control mechanisms are so-called parallel universes.139 The human rights of people who use drugs do not feature prominently in either mechanism. The welcome recognition by UN Special Rapporteurs and the UN High Commissioner for Human Rights of the vulnerability of people who use drugs to a wide range of human rights violations should move debates forward.140–142 In 2009, the UN Office on Drugs and Crime called for global attention to the right to health of people dependent on drugs and urged that law enforcement should shift its focus from people who use drugs to drug traffickers.136 If UN resources were directed to building country capacity for action in these areas, the so-called parallel universes might be nudged to intersect around the human rights of people who use drugs.

Contributors
RJ wrote most of the report after doing the literature searches, partly with the help of SB. CB, JC, JJA, and SB wrote or contributed to various sections of the report and contributed to the research.

Steering committee
This article is part of The Lancet Series on HIV in people who use drugs, which was developed and coordinated by Chris Beyrer (Center for Public Health and Human Rights, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA); Steffanie Strathdee (University of California, San Diego, CA, USA); Adeaiba Kamarulzaman (University of Malaya, Kuala Lumpur, Malaysia); and Kasia Malinowska-Semprows (Open Society Institute, Drug Policy Program, Warsaw, Poland).

Conflicts of interest
We declare that we have no conflicts of interest.

Acknowledgments
We thank Nick Crofts and David Stephens for contributing to early discussions about the paper and providing information about several initiatives that support health services and protect the human rights of people who use drugs.

References


9 Wolfe D, Carrieri MP, Shepard D. Treatment and care for injecting drug users with HIV infection: a review of barriers and ways forward. Lancet 2010; published online July 20. DOI:10.1016/S0140-6736(10)60832-X.


45 MacDonald M. A Study of health care provision, existing drug services and strategies operating in prisons in ten countries from central and eastern Europe. Helsinki: Heuni, 2005.


58 King's College London. Prison Brief for Moldova (Republic of).