Analysis

Policy resistance to harm reduction for drug users and potential effect of change

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Despite good evidence for its effectiveness in HIV prevention, countries such as Russia remain resistant to harm reduction. **Tim Rhodes and colleagues** show the obstacles to and potential benefits of changing policy on opiate substitution treatment

The health harms of injecting drug use include HIV, hepatitis C, bacterial infections, overdose, and substantial excess mortality. An estimated 16 million people inject drugs worldwide, 3 million of whom live in eastern Europe.**1** Around 1.5 million people are infected with HIV in eastern Europe, with most infected through injecting drug use.**2** The largest European epidemics are those in the Russian Federation and Ukraine, where over a third of injecting drug users are thought to be HIV positive.**1 2** One contributing factor is policy resistance to harm reduction.

Harm reduction

Harm reduction encompasses interventions and policies that seek primarily to reduce the harms of drug use without necessarily requiring abstinence from drug use. The Council of the European Union, World Health Organization, and United Nations Joint Programme on HIV/AIDS recommend a comprehensive package of harm reduction services for people who inject drugs, including programmes providing easy access to clean needles and syringes, opioid substitution treatment, and antiretroviral drugs for HIV.**3** Access to opioid substitutes and syringe distribution programmes can reduce risky injecting practices and incidence of HIV.**4 5 6** Opioid substitution also reduces deaths from overdose, drug related mortality, and offending. Access to antiretroviral HIV treatment improves mortality and morbidity among injecting drug users.**7**

A critical factor determining the effect of interventions is their coverage among target populations.**8** Intervention coverage varies widely globally but is especially low in eastern Europe, where only around

10% of injecting drug users have access to syringe exchange programmes and, at best, 1% have access to opioid substitutes.[9] The UN made providing "near universal access" to harm reduction services for those who need them by 2010 a global priority.[3] However, the availability and accessibility of interventions depends on environmental and policy factors, and sufficient coverage is unlikely without policy, legal, or social change.[10] [11]

Moreover, harm reduction interventions are more effective when they are combined.[10] For example, a cohort study in Amsterdam showed that "full participation" in combined syringe exchange and opioid substitution programmes reduced incidence of HIV by two thirds, whereas participation in syringe exchange alone was not associated with a reduction in HIV incidence.[12] Initiation and adherence to antiretroviral HIV treatment also improves when access to opioid substitutes is good.[13] The enhanced effects of combining opioid substitution with syringe distribution and antiretroviral HIV treatment are particularly relevant for countries with large HIV outbreaks.

Policy resistance

Although harm reduction is central to European Union policies, some countries are resistant to this approach. The United States, for instance, has long acted as a force of resistance to harm reduction on the global stage and nationally. It has emphasised a "war on drugs" policy, which, until recently, promoted federal or state restrictions on the funding and evaluation of syringe distribution programmes.[14] In Russia, there is also strong resistance to harm reduction. The use of methadone and buprenorphine in treating opioid dependence is legally prohibited, syringe distribution programmes lack adequate coverage and political support, and the primary emphasis on law enforcement and the criminalisation of drug use create an environment that can exacerbate HIV risk and other harms.

The record of a recent meeting of the Security Council of the Russian Federation, attended by the president (Dmitry Medvedev), prime minister (Vladimir Putin), minister of health (Tatyana Golikova), director of the Serbsky National Research Centre for Social and Forensic Psychiatry (Tatyana Dmitrieva), and director of the Federal Drug Control Service (Viktor Ivanov), captures Russia's policy resistance to harm reduction.[15] Tatyana Dmitrieva, speaking in her role as the deputy chair of the International Narcotic Control Board, said: "Russia is against the introduction of harm reduction policy. This is a really very difficult topic because we are facing very powerful pressure which undoubtedly has political implications . . . We are not for harm reduction, we are for supply reduction."

At the same meeting, the minister of health said Russia is "categorically against" providing "substitution treatment for drug addicts" and that "the distribution of sterile needles and syringes stimulates social tolerance of drug addicts and violates the Criminal Code of the Russian Federation. Unfortunately, purchasing sterile needles and syringes is not a problem in the Russian Federation. Today, the price for sterile syringes is much lower than the price for the cheapest narcotic drugs available."

Russia prohibits the use of methadone and buprenorphine (or other opiates) to treat opioid dependence, despite international pressure and good evidence supporting opioid substitution treatment.[4] [5] WHO defines it as an "essential medicine," and substitutes are prescribed to over 650?000 people in Europe. Treatments for opioid users in Russia are instead modelled on alcohol detoxification, oriented to alleviating short term symptoms of withdrawal, and have high relapse rates.[16] [17] With heroin more accessible than substitution treatment, opportunities for preventing HIV infection are reduced.

Russia has only about 75 needle and syringe programmes for its two million injecting drug users.[1] Such

programmes do not "violate" the national criminal code, as the health minister suggested, but one reason for their poor coverage remains a fear that distribution of syringes may be interpreted as promoting drug use under article 230 of the Criminal Code (1996). In 2003, an amendment to this article exempted the provision of health equipment, subject to the agreement of regional representatives of the Ministry of Health and Federal Drug Control Service. Formal instructions on this agreement have yet to be instituted, even though studies do not show that syringe distribution programmes encourage drug use or "social tolerance" of it.[5] [10] If it was not for the availability of cheap needles and syringes from pharmacies, HIV rates could be worse.

In the absence of national funding for HIV prevention for injecting drug users, the Global Fund has continued its support of 22 pilot programmes. Evaluation of these has estimated that they averted 37?000 HIV cases,[18] with surveys in 2006 and 2008 finding that injecting drug users who participated in the programmes halved their risk of HIV infection compared with those who did not participate.[19]

Roots of resistance

Aside from Russia, only three countries in the European and central Asian region do not provide opioid substitution treatment: Tajikistan, Turkmenistan, and Uzbekistan.[9] [20] Uzbekistan discontinued its programme for about 150 users last year. Tajikistan plans to pilot opioid substitution treatment, partly to prevent jeopardising international health funding.[20] Other programmes in central Asia operate as fragile pilots with little evidence of meaningful expansion. One of the largest is in Kyrgyzstan, providing treatment to about 950 people. The programme was threatened with closure in 2009, and like many others in the region relies heavily on international funding.

Resistance to introducing or scaling-up opioid substitution treatment in former Soviet countries partly stems from concerns about the adverse economic effects of changes to existing drug treatment systems alongside concerns that current systems would be unable to prevent substitute medicines (such as methadone or buprenorphine) entering the illicit market or safely monitor their use.[17] [20] More fundamentally, resistance to substitution treatments is grounded in the history, teaching, and mentality of "narcology," a subdivision of Soviet criminal psychiatry with close links to state law enforcement. Narcology conceives of treatment from addiction in terms of abstinence[17] [21] and is closely linked with the Serbsky Central Research Institute of Social and Forensic Psychiatry, once infamous for using psychiatric medicines for state ordered "treatment" of Soviet dissidents. Narcologists have opposed the use of methadone in opioid treatment as a "vicious practice," as one step removed from "legalising" drug use, as a failing intervention of the West, and, most importantly, as a failure to deal with the criminality of drug users.[17] [22]

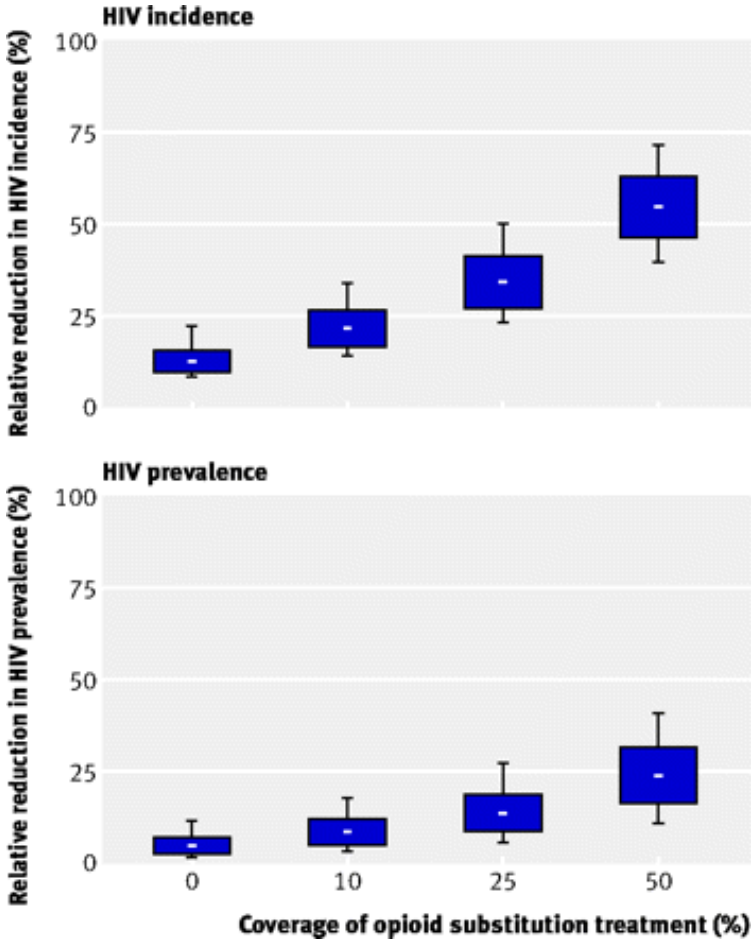
Resistance to opioid substitution thus has a cultural historical context. Nevertheless, change is needed since drug policies that emphasise repressiveness through law enforcement are linked with higher health risks.[14] In Russia, administrative and criminal codes relating to drug use and possession combine with aggressive police surveillance, resulting in the mass imprisonment of drug users and a prison system linked to outbreaks of HIV infection.[23] Intense police surveillance can make drug users reluctant to seek help or carry sterile needles and syringes for fear of arrest, fine, or detention, and studies show that drug users who have contact with the police, from arrest through to assault, may be more likely to share syringes.[11] [24] [25]

Benefits of change

What effect might legalisation of opioid substitution treatment have in Russia? We carried out simulations

What effect might legalisation of opioid substitution treatment have in Russia? We carried out simulations using a dynamic model of HIV transmission in injecting drug users for different types of HIV epidemic in Russia. We estimated the effect of current syringe distribution programmes, optimistically assuming that they reduce the average syringe sharing frequency of all reached participants by 75%.**6** Studies suggest that opioid substitution treatment can reduce risk of HIV infection by 60-84%, and we used this range in our simulations.**4** A full description of the model is available on bmj.com.

The figure shows that the current coverage of syringe distribution programmes in Russia (10%) is unlikely to reduce HIV incidence among injecting drug users by more than 15% over five years. Conversely, increasing the coverage of opioid substitution treatment from 0% to 10%, 25%, or 50% could decrease incidence by 21% (90% confidence interval 14% to 34%), 34% (23% to 51%), or 55% (40% to 71%), respectively. Most of the uncertainty in the projections is due to uncertainty about the effect of opioid substitution and the baseline HIV prevalence of the different epidemics modelled. For example, at a prevalence of 15% (which best fits many Russian cities including Moscow), 25% coverage of opioid substitution could decrease HIV incidence by 44-53% over five years. However, if HIV prevalence is 40% or 60% (similar to that in Russian cities such as Irkutsk or Ekaterinburg), the resulting decrease in HIV incidence is reduced to 33-43% or 24-38%, respectively.



Effect of different coverage of opiate substitution treatment on HIV incidence and prevalence after five years assuming coverage of needle and syringe exchange programmes stays at 10%. Bounds for each scenario show the range of effect estimates for different HIV epidemics modelled (whiskers are 10% and 90% percentiles, box limits are 25% and 75% percentiles, and lines are median estimates)

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Changing HIV prevalence takes longer (figure⇑, bottom). Nevertheless, increasing opioid substitution to 25% or 50% could reduce prevalence by 14% (6% to 28%) or 24% (12% to 41%) after five years. Again, the effect depends on baseline HIV prevalence, with 25% coverage reducing prevalence by 25-31%, 16-21%, and 10-17% for baseline prevalences of 15%, 40%, and 60% respectively (see bmj.com).

Conclusion

Opioid substitution is a critical component of HIV prevention and treatment.[3 4 10 12 13] Our projections suggest that Russia could substantially reduce the incidence of HIV infection if it permitted the use of opioid substitution treatment. The benefits could be even greater than we estimate as the model does not include changes in offending, or antiretroviral HIV treatment. The prohibition, by federal law or otherwise, of opioid substitution treatment limits rights of access to evidence-based health care, as championed by the UN and other international agencies.[3] The roots of resistance to harm reduction in Russia are complex, and show why efforts to bring about structural changes in national laws and policies should be at the forefront of global efforts to scale-up HIV prevention.

Notes

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Footnotes

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- Contributors and sources: The authors are involved in researching and working towards the development of public health approaches in HIV prevention among injecting drug users, including in Russia. TR leads social science studies on HIV prevention and treatment. AS works for a foundation that advocates for improved access to health services for drug users in Russia. PV is a mathematical modeller, and MH a public health epidemiologist. All contributed to the concept, analysis. and writing of this article, with PV and MH leading the modelling. TR is guarantor.

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