Harm Reduction Programs in the Civilian and Prison Sectors of the Russian Federation

Assessment of Best Practices

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Open Health Institute

Moscow

2007

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Acknowledgement
This report would never have been completed without the exceptional cooperation of many dedicated staff members of Open Health Institute (OHI) and researchers from partner organizations. We would like to single out a few individuals who made the most important contributions. These people include core OHI staff Ksenia Eroshina, Kirill Danishevsky, Alexei Bobrik, Natalia Vasilieva; external experts Svyatoslav Plavinsky, and Elena Kornisheva; several members of the Russian Harm Reduction Network, including Vitaly Djuma and Natalya Korzhaeva; Elena Zemlianova and Alexei Shabashov, who were instrumental in the process of data collection, and many others. Logistical and technical support for the project was provided by the administrative and financial personnel of OHI. OHI also acknowledges the generous contribution of the World Bank for the development of this report.

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List of Abbreviations

AIDS	acquired immune deficiency syndrome
CSW	commercial sex worker
DFID	Department for International Development (UK)
FHI	Family Health International
GFATM	Global Fund to Fight AIDS, TB and Malaria
HCV	hepatitis C virus
HIV	human immunodeficiency virus
HRP	harm reduction program
IDU	intravenous drug user
IHRD	International Harm Reduction Development Program
MDM	Médecins du Monde
MSF	Médecins Sans Frontières
NEP	needle exchange program
NGO	non-governmental organization
OHI	Open Health Institute
OSI	Open Society Institute
RHRN	Russian Harm Reduction Network
STI	sexually transmitted infection
TB	tuberculosis
UNAIDS	Joint United Nations Program on HIV/AIDS
VCT	voluntary counseling and testing
WHO	World Health Organization

Executive Summary

This report is devoted to the study of best practices in prison and civilian harm reduction projects (HRPs) in the Russian Federation. A comprehensive literature review was first conducted in order to determine the available information on preventing HIV associated with injecting drug use. The available literature, including articles in biomedical journals, official documents, and other relevant information sources was reviewed. The literature review was followed by semi-structured interviews and a repertory grids technique that allows for a quantification of the levels of success based on project evaluations by harm reduction experts.

The literature review revealed that a large-scale and comprehensive attempt to study best practices in Russia was undertaken in 2001. It highlighted the importance of understanding the evolution of harm reduction strategies in Russia and the factors that determine success and failure. Based on the information retrieved, a conceptual framework was developed to explore the issue of best practices in harm reduction. It split the context into factors of different degrees of stability ranging from those that can be influenced by the best practices of the HRP to those that cannot be influenced at all. The conceptual framework highlighted that the best-practice harm reduction sites are those that can achieve good results in a hostile environment with hard-to-find funding, are able to improve the context variables that can be changed, while also achieving the objectives of being effective, collaborative across sectors and sustainable.

An analysis of the interview transcripts included 57 anonymous semi-structured interviews conducted with key subjects in six regions of Russia and seven interviews with decision-makers on the federal level. The repertory grids analysis was based on 36 grids completed by experts in civilian HRPs and 5 repertory grids completed by experts in prison projects. The main results of the semi-structured interviews and the repertory grids analysis showed the importance of external factors. The social environment and sufficient funding, preferably both from regional and local governments and from external donors were viewed as the most important factor in achieving the sustainability of HRPs. The support of the authorities and law enforcement agencies, were emphasized as additional and necessary criteria for success. The problem of opposition by junior street-based police officers was mentioned repeatedly. The issue was hard to overcome with trainings, due to the high turnover rates of these personnel. The internal factors included the presence of experienced staff within the program, a wide range of services provided, as well as ensuring that the target group is informed about the existence of HRPs. The importance of enrolling former injecting drug users (IDUs) into outreach work was emphasized. Given the closed nature of the drug distribution systems today, active IDUs might play an important role in providing a link to clients. There were numerous issues surrounding the involvement of IDUs in outreach work and in managing them, unless the former IDUs had been abstaining for an extended period.

The data on prison projects indicated issues of access to services, coverage, length of the projects and availability for all prisoners. The major problem was related to a relatively narrower range of services provided, compared to those offered in civilian projects. The need to link prison HRPs with external non-governmental organizations (NGOs) and other organizations providing a continuity of care for clients of HR projects was also emphasized. The main distinction of prison projects was a lower exposure to external factors due to the closed nature of the institutions. Influence was mainly limited to the prison administration and the Federal Penitentiary Service.

Introduction

HIV/AIDS is a global public health threat all over the world. HIV prevalence rates in some East European countries are now among the highest worldwide. The countries of the former Soviet Union are experiencing one of the sharpest increases in HIV incidence ever observed. Until the mid-1990s, the number of HIV cases diagnosed annually in Russia was fewer than 200, and the cumulative nationwide total number of cases in 1995 was only about 1000[1]. From 1996 on HIV incidence in Russia started a rapidly accelerating climb. By mid-2001 over 140,000 infections had been officially registered[2] and by April 2006 the number of registered cases has reached over 352,000. The rate of incidence declined from 2001 to 2004; however in 2005 the incidence level exceeded the igure of 2004, possibly marking a possible second wave of the epidemic, which might be possible given that infection has several routes of transmission (Figure 1). Still it is not clear whether this is actually a second wave since some experts claim a decline in testing coverage in the period when there were lower rates in 2002-2004. In addition, we can not clearly state whether the latest increase is due to sexual transmission or via injecting drug use since for over 55% of cases the method of transmission is unknown[3].

However the true number of HIV cases in the Russian Federation is likely to be several times higher then the official figures. The national statistics represent only officially registered cases that are reported from tests by those who are concerned about their HIV status and hrough routine screening procedures. At the same time, the risk of HIV infection is still quite unevenly distributed in the population, that is, those that face the greatest risk are less likely to be tested. According to UNAIDS data, about 860,000 people are currently living with HIV/AIDS in Russia, while other experts estimate the range to be within 420,000 and 1.4 million[4].

HIV tends to spread faster among highly vulnerable groups that often lack routine access to healthcare services and therefore are not likely to be part of a screening or seek testing voluntarily. For instance injecting drug users (IDUs) tend to avoid contact with the formal medical

[1] UNAIDS (1998). HIV infection in Eastern Europe. Geneva, Switzerland: UNAIDS/WHO Joint Program on AIDS.
[2] Pokrovsky V. (2001, January). Report of the Russian Federal Center for the Prevention of AIDS. Moscow, Russia: Russian Federal Center on AIDS.
[3] Federal AIDS centre. 2005 report.
[4] Human Development report 2005 for the Russian Federation, UNDP, 2005.

Figure 1. Number of new HIV cases and total number of cases in the Russian Federation, 1996–2005 (National AIDS Center).

care system. Even though the share of HIV cases associated with IDUs in Russia is estimated to have declined from 90%[5] of all cases in 2003 to approximately 70% of cases in 2004–2005[6], they still represent the majority. In addition the route of transmission is hard to precisely determine, hence this data should be treated with caution.

Assessments of injecting drug use prevalence in Russia are also ambiguous. The Russian Ministry of Interior has reported that the number of IDUs could be between 3 and 4 million, while the National Scientific Center on Addictions in Moscow estimates the number to be around 2 million[7]. A study using the capture-recapture technique conducted in several Russian cities estimated the prevalence of IDUs to be 5.4% of the total population[8].

Given that the size estimates of the risk groups are often unclear, it would be hard to predict the future of the HIV epidemic in Russia. Different forecasts estimated that in the period of 2000-2025, the number of HIV incidences in Russia will reach 4–19 million, while the number of AIDS deaths will be 3–12 million[9]. The US National Intelligence Council projected that by 2010 Russia will have 4–8 million HIV/AIDS cases[10]. The head of the Russian Federal AIDS Center, Professor Vadim Pokrovskiy predicts Russia will reach 100,000 deaths from AIDS by 2010 at the very minimum, even when the estimates are based only on the figures and dynamics of officially registered HIV cases. The forecast model, which is based on the assumptions that the number of IDUs in Russia is about 2.5 million and the HIV epidemic in the next 3–4 years will continue to be concentrated among IDUs, predicts that by 2008 up to 50% of IDUs could be infected with HIV, meaning that number of HIV cases in Russia in 2008 would reach approximately 1.25 million[11].

Other authors have attempted to look beyond the rates of infection. Ruhl et al. have modeled the economic consequences of HIV in Russia[12]. The forecast suggests that in the absence of HIV treatment, the loss of human resources will seriously impact the economy. Even based on an optimistic forecast, AIDS-related deaths in Russia will reach 21,000 persons per month by 2020. The same authors suggested that GDP growth will decrease by 4.15 percentage points by 2010 and 10 percentage points by 2020 if appropriate measures are not taken. Investment growth is expected to fall even more rapidly than GDP – by 5.5 percentage points by 2010 and by 14.5 percentage points by 2020, which could have a devastating effect on economic development.

Given the grim trends of epidemic and the large role that IDUs play, it seems quite important to address the issue of drug use. However the strategies of drug prohibition, which to varying extents exists in all countries, and the "War on Drugs" initiated by the U.S. government to fight the supply and demand of certain drugs facing a number of challenges in the 21st century. On the one hand, drug prohibition appears to be unable to prevent the increased supply and demand of illegal drugs throughout the world[13]. On the other, in the era of HIV/AIDS, drug prohibition policies can greatly increase the risk of fuelling the epidemic[14]. Another factor that calls for measures beyond fighting illegal drug use is related to the problem of overcoming addiction. A study conducted among IDUs in Moscow in 2002 indicated that two-thirds of IDUs in Moscow had tried to stop injecting drugs. In a majority of cases (62.2%), the period of abstinence did not exceed six months. Numerous studies in other countries have shown large failure rates among those attempting to quit using drugs[15]. For instance, the ratio of those who were able to abstain from injecting drugs for over a year in a representative sample of IDUs in St. Petersburg did not exceed 8%[16]. Thus no matter how successful anti-drug policies would be in a given

[5] Federal AIDS Centre. HIV Infection: Informational Bulletin (Number 25). Moscow: Federal AIDS Centre. 2003.
[6] Federal AIDS center of Russian Federation, Annual report. 2005.
[7] Koshkina E. Prevalence of drug addiction diseases in the Russian Federation in 2000 according to official statistics. Voprosy Narkologii [Addiction Problems], 2001, 3, 61–71.
[8] Platt L, Hickman M, Rhodes T The prevalence of injecting drug use in a Russian city: implications for harm reduction and coverage. Addiction. 2004 Nov; 99(11): 1430–8.
[9] Nikolas Eberstadt. AIDS future. Foreign affairs, November/December 2002, Volume 81 Number 6.

[10] National Intelligence Council. The next wave of HIV/AIDS: Nigeria, Ethiopia, Russia, India, and China. ICA 2002-04D, September 2002: 11–12.
[11] V. V. Pokrovskiy HIV infection in Russia: forecast. Issues of virology 3 (2004): 31–34.
[12] C.Ruhl, V.Pokrovskiy, V.Vinogradov. Economic Consequences of HIV in Russia.
[13] Harry G. Levine, Global drug prohibition: its uses and crises. International Journal of Drug Policy 14 (2003): 145–53.
[14] R. N.Bluthenthal, J.Lorvick, A. H.Kral. Collateral damage in the war on drugs: HIV risk behaviors among injection drug users. International Journal of Drug Policy 10 (1999) 25–38.
[15] Amato L., Davoli M., Ferri M., Ali R. Methadone at tapered doses for the management of opioid withdrawal. Cochrane Database Syst Rev. 2004 Oct 18;(4): CD003409.
[16] Musatov V. A. Abstinence from drugs vs. reducing harm. Presentation at the Sixth School for Journalists Writing on Health Issues. Pushkino, 24.05.06.

country, the majority of existing drug users would probably not be able to overcome their addictions. This calls for additional policies to allow for work with IDUs in order to prevent the spread of HIV among and beyond this population, to provide basic human rights protections and to ultimately try to improve the quality of life for IDUs by promoting their integration in society. Such approaches are based on the principles of harm reduction.

Methods

During the initial phase of the study a literature review was conducted in order to determine the available information on HIV prevention among injecting drug users. A literature search and analysis included articles in biomedical journals, official documents, and other relevant information sources. The literature review has been structured with the following chapters: an overall introduction, a description of the HIV epidemic and drug use; an introduction to the harm reduction concept; the history of harm reduction and HIV prevention programs in the penitentiary system; the evidence of the effectiveness of harm reduction, including within the penal system; an economic assessment of harm reduction; and the concept of best practices and its relation to harm reduction. The review concludes with a conceptual framework that guides the study.

Stakeholders met twice in Moscow to discuss and approve the methodology of the study, conceptual framework, and toolkits. The selection of the regions for the study was also done during the meetings. Representatives of the Russian Harm Reduction Network, the St. Petersburg School of Public Health, the Federal Service for Surveillance of the Protection of Consumer Rights and Human Welfare, and the Central Public Health Research Institute participated in the meetings.

The following regions were selected for the study: Pskov, Kazan, Vologda, Tver, Voronezh, and Balakovo.

Pskov and Kazan were selected as they were recognized as among the most successful in implementing harm reduction activities in both the civilian and prison sectors in Russia. Vologda and Tver, where harm reduction activities are also implemented in both sectors, were chosen for comparison. An additional two regions, Voronezh and Balakovo, with civilian HRPs were included into the study with additional support provided by the Russian Harm Reduction Network (RHRN).

The study methodology and toolkits were sent via e-mail to the key persons that were unable to attend the meetings with a request to provide comments and suggestions. Feedback was received from the representatives of the Research Institute on Drug Addiction of the Russian Ministry of Health and Social Development, and representatives of the International Harm Reduction Development Program (IHRD). All of the comments received were taken into consideration and reflected in the final version of the study toolkits.

A questionnaire was used by the interviewers during semi-structured interviews with key stakeholders.

In each region, the following groups of respondents were interviewed:

- providers of harm reduction services (both the civilian and prison sectors): heads of the civilian HRPs and HIV/AIDS prevention projects in prisons, medical consultants of such projects, managers of outreach work, heads of medical departments in prisons, and peer-educators ;
- regional policy-makers: representatives of the State Drug Control Service, AIDS Centers, and narcological dispensaries;
- users of harm reduction / HIV prevention services: drug users and inmates.

The standard list of respondents in each region included:

- representatives of regional AIDS centers;
- representatives of State Drug Control Service;
- heads of harm reduction projects (civilian and prison);
- medical consultants of the HR projects;
- managers of outreach workers and outreach workers;
- IDUs, CSWs;
- representatives of narcological dispensaries;
- peer educators (prison projects);
- heads of medical departments (prison projects).

The number of respondents varied in the regions depending on desire, interest, time availability, and finally the consent of potential respondents to participate in the survey (Table 1). The number of respondents by group is presented in Table 2.

Table 1. Number of interviews per region

City	Number of interviews
Kazan	14
Vologda	7
Pskov	11
Tver	5
Voronezh	11
Balakovo	9
Total	57

Table 2. Number or respondents from six regions by group

Group	Number of respondents
State Drug Control Service	3
HRP leaders	6 (two of them were leaders of HRPs and chief doctors of AIDS centers at the same time)
HRPs managers and outreach workers	18
Trusted doctors of HRPs (medical consultants)	5
AIDS Center	2 (plus two that were counted under "HRP leaders")
Narcological dispensaries	4
HRP clients	8
Peer educators in prison projects	3
Leaders of prison projects	4
Heads of medical departments of prisons	4
Total	57

Study toolkits include questionnaire (Appendix 1) and repertory grids (Appendixes 2 and 3). Both toolkits were pre-tested in Moscow and Mytichi before implementation in other selected regions and then used to explore the factors determining the effectiveness of civilian HRPs and HIV prevention programs in prisons. Pre-tested interviews were also included for further analysis.

The average number of respondents in each of the key regions selected for the study was 10. Besides the interviews conducted in the key regions, several additional interviews were conducted in Mytichi with the outreach manager of the local HRP and the head of the narcological dispensary. In Moscow additional interviews were held with representatives of the Research Institute on Drug Addiction of the Russian Ministry of Health and Social Development, the Federal Service for Surveillance of the Protection of Consumer Rights and Human Welfare, and NGOs.

Interviews provided information on major achievements, challenges and barriers of harm reduction activities in both the civilian and prison sectors, main strategies used in the development and expansion of HRPs; main factors influencing the development and daily work of the programs, attitudes toward harm reduction strategies from various stakeholders, and other topics. Each interview lasted about 40 minutes and all interviews were recorded with a dictaphone, transcribed, and analyzed.

The majority of the respondents interviewed also filled in the repertory grids. The most important advantage of the repertory grid is that it combines an open interview structure with the quantitative data of a questionnaire. Using this approach it is possible to conduct content-analysis from the interviews and then compare the importance of the criteria.

Among the disadvantages it should be noted that the repertory grid technique is very time-consuming (compared to other questionnaire-based methods) and require a type of analysis that is frequently unavailable in standard statistical software packages.

In addition, the repertory grid is an idiosyncratic method and is difficult to use for the analysis of several grids, which frequently limits its applicability outside of treatment applications in clinical psychology. It should be noted, however, that the situation is changing and contemporary textbooks on repertory grids include chapters on the summary analysis of several grids[17].

The repertory grids were completed by experts on harm reduction. This could include representatives of harm reduction teams or external experts who periodically visit harm reduction sites for monitoring or technical assistance. There were two types of repertory grids used in the study. The first type was designed for the experts familiar with one specific HRP, either civilian or prison, for a long period of time. The second type was designed for the experts familiar with three different HRPs, either civilian or prison. All repertory grids were completed by experts in the presence of interviewers in order to avoid possible mistakes during the completion. In total 36 repertory grids on civilian HRPs were completed by the experts and five repertory grids were completed by the experts on prison HRPs. The lower number of repertory grids completed for prison projects is explained by relatively short history of HIV/AIDS prevention projects in the Russian penal system and an insufficient number of experts sufficiently familiar with these programs.

[17] Jankowicz D., The easy guide to repertory grids. – John Wiley and Sons, 2004.

Literature Review

Introduction to the harm reduction concept

Before discussing the best practices by those attempting to prevent HIV among IDUs, it is necessary to properly define harm reduction. The concept of harm reduction is often poorly understood by policymakers in Russia and many other countries. Placing the term in an operational context is important in order to enable constructive discussion. The concept of harm reduction is rather broad and does not concern only injected drugs. The narrow definition says that harm reduction is "any policy or program designed to reduce drug-related harm without requiring the cessation of drug use. Interventions may be targeted at the individual, the family, community or society." Examples of broader harm reduction interventions outside of HIV/AIDS and illegal drug use area include server intervention programs, such as decreasing public drunkenness; environmental controls on tobacco smoking to minimize the harm both to smokers and through exposure to second-hand smoke, the use of safety belts to reduce the risk of serious injuries in car accidents, etc[18].

Thus, in public health practice, the harm reduction approach is used very often to prevent or reduce negative health consequences associated with certain behaviors when we cannot completely stop these behaviors. In relation to drug injecting, "harm reduction" components of comprehensive interventions mainly aim to prevent the transmission of HIV and other systemic infections that are transmitted through the sharing of non-sterile injecting equipment and drug preparations. They also address other negative consequences of drug use such as overdose, bacterial infections of soft tissues, social marginalization, etc. In relation to prisons, harm reduction is often described as a concept aiming to prevent or reduce the negative health effects associated with certain types of behavior (such as drug injecting, tattooing, etc.), with imprisonment and overcrowding, as well as with the adverse effects on mental health[19]. It should be noted that the specific understanding of harm reduction varies widely among those involved in HIV prevention today.

The National Campaign Against Drug Abuse in Australia in 1989 defined harm reduction as a range of strategies, which, while not necessarily doing anything to decrease drug use, do decrease the likelihood of harm resulting from that use[20]. In 1993 the Ministerial Council on Drug Strategy defined harm reduction

[18] http://www.doctordeluca.com/Library/AbstinenceHR/CAMH&HR03.htm
[19] WHO Regional Office for Europe. Status Paper on Prisons, Drugs and Harm Reduction, May 2005.
[20] National Campaign against Drug Abuse. The national campaign against drug abuse 1985-1988. In: Evaluation and future directions. In: National Campaign Against Drug Abuse, vol. 12. Canberra: Australian Government Publishing service, 1989, p.37.

(minimization) as an approach that aims to reduce the adverse health, social and economic consequences of alcohol and other drugs by minimizing or limiting the harms and hazards of drug use for both the community and the individual without necessarily eliminating use[21].

In 1993–1997 the Australian National Drug Strategy evaluation recommended the following definition of harm reduction: "the middle ground where persons with widely differing views on drug policy can agree with one another regarding practical, immediate ways to reduce drug-related harm." The definition also states that "harm minimization should foster meaningful alliances and support for as wide a variety of potentially effective interventions as possible from all who share the goal of reducing drug-related harm, even though they may disagree about major policy approaches to the prevention of drug abuse per se[20]."

The term 'harm minimization' is sometimes used as an alternative to 'harm reduction' but carries the clear implication that attempts are being made to reduce harm to the lowest possible level. It is always difficult to be sure that harm has been minimized but it is easier to establish that harm has been reduced. Also, the term "reduction" implies the inclusion of "minimization." The Ministerial Council on Drug Strategy proposed the latest definition that covered a broader conceptualization of harm minimization in 1998: harm minimization is a set of policies and programs aimed at reducing drug related harm[22].

The United Kingdom Harm Reduction Alliance defines harm reduction as a concept that includes policies, programmes, services, and actions that work to reduce the health, social, and economic harms to individuals, communities, and society[23].

The following definition of harm reduction strategies has been suggested by the Canadian Center on Substance Abuse: "A policy or program directed toward decreasing the adverse health, social, and economic consequences of drug use without requiring abstinence from drug use"[24].

Although the latter definition is somewhat overly broad and all-inclusive, it is the one used predominantly throughout the document.

In this document, however, we will use both the term harm reduction (harm reduction) and harm reduction program (HRP) together with needle exchange program, which represents a specific part of harm reduction work. The choice of the term will depend on the program involved or emphasized. Prior to discussing in-depth harm reduction it is important to describe the history of the harm reduction movement worldwide and particularly in Russia.

[21] Ministerial Council on Drug Strategy. National drug strategic plan 1993–1997. Canberra: Australian Government Publishing Service, 1993, p.20.
[22] Ministerial Council on Drug Strategy. National drug strategic framework 1998–1999 to 2002–2003. In: Building partnerships: A strategy to reduce the harm caused by drugs in our community. Canberra: Commonwealth of Australia, 1998, p.15.
[23] http://www.ukhra.org/harm_reduction_definition.html
[24] http://epe.lac-bac.gc.ca/100/200/300/ccsa-cclat/harm_reduction_plicy/wgharm.htm

There is a hierarchy of risks in harm reduction aimed to avoid HIV infection from drug use:

1. Stop or never start using drugs.
2. If you use, do not inject.
3. If you inject, use new materials and do not share needles, syringes, spoons, water, or drugs.
4. If you need to re-use equipment, clean and use your own.
5. If you must share, clean or disinfect before use.

History of harm reduction

The first harm reduction program (HRP) was introduced in Amsterdam, the Netherlands, in 1984. The program was initiated by a drug-user self organization but then it was adopted by the Municipal Health Department of Amsterdam. Since the middle of 1980s, the global expansion of HRPs has occurred all over the world. By December 2000, there were at least 46 regions, countries, and territories that reported having at least one HRP[25].

In 1995, Lithuania was the first former Soviet state that introduced HIV/AIDS prevention measures among IDUs by adopting practices which have shown evidence of effectiveness in a number of developed and developing countries[26]. Three Lithuanian HIV prevention programs were included into the Joint United Nations Program on HIV/AIDS (UNAIDS) and the United Nations Office on Drugs and Crime collection of best practices.

In addition, an experimental needle exchange program operated in the Russian Republic of Chuvashia, east of Moscow, for several months in 1997, funded by local authorities; and a short-lived needle exchange was started by an individual in Moscow in 1996 assisted by the AIDS Prevention Action Network (USA) and funded by OSI.

[25] Steffanie A. Strathdee, David Vlahov. The effectiveness of needle exchange programs: a review of the science and policy. AIDScience Vol. 1, No. 16, December 13, 2001.
[26] HIV/AIDS Prevention among Injecting Drug Users in Lithuania: Best Practices. Central and Eastern European Harm Reduction Network, October, 2003.

The first documented HRPs in Russia were established in 1996. By the end of 1997, there were four programs specifically attempting to prevent HIV transmission among drug users. These were:

- **the Moscow outreach program**, operated and funded by Médecins Sans Frontière – Holland (MSF);
- **the St. Petersburg syringe exchange bus,** operated by Russian NGO Renaissance and funded by Médecins du Monde of France (MDM);
- **the Yaroslavl syringe exchange and peer-driven intervention**, in which drug users were encouraged through the use of coupons redeemed for cash to participate in education and to educate and recruit their peers, operated by Russian NGO Friends Helping Friends and the University of Connecticut ECHO Project, funded by the International Harm Reduction Development program (IHRD) of the Open Society Institute (OSI).
- **the Penza syringe exchange** and educational activities operated and funded by local authorities.

The projects supported by this program included the following components:

- Needle exchange (fixed and mobile distribution);
- Distribution of condoms and disinfectants;
- Outreach work;
- Informational activities (through individual and group education of IDUs, and printed educational materials);
- Anonymous counseling and testing for HIV and other infectious diseases;
- Referral services;
- Coordination with local authorities (municipal administration, local law enforcement, and local health departments)

While these interventions were significant as pilots, they were not sufficient to prevent or control the HIV epidemics among drug users over a long term because of the short time in which they functioned, their insufficient experience, and inability to reach a sufficient number of IDUs. In late 1997, OSI (the Russian Public Health Program and IHRD) in collaboration with the Russian Federal Ministry of Health, MSF, MDM, German NGO Interactive Drogenhilfe and the University of Connecticut, USA, started the Russian AIDS Prevention Initiative - Drugs to coordinate the expansion of HIV prevention activities among IDUs in the Russian Federation.

This initiative comprised three steps: a) training in harm reduction, b) a rapid situation assessment (RSA) in participating cities with the technical assistance from international project developers - MDM, Interactive Drogenhilfe and the University of Connecticut, and c) the submission of local project proposals to implement harm reduction principles for funding by OSI-Russia.

Between January 1998 and February 2000, MSF ran a training program to ensure that people working on HIV prevention among IDUs had the skills to conduct RSAs to determine the extent of drug use and related HIV risk in their city or region, as well as to plan harm reduction interventions. Over 200 participants from 61 Russian cities completed the training and 62 rapid situation assessments were conducted.

In 1999, in collaboration with the Ministry of Health, OSI-Russia launched a program on "The Prevention of HIV infection among IDUs." The goal of the program was to reduce the spread of HIV/AIDS in the Russian Federation paying particular attention to IDUs. The mechanism to achieve the purpose was by awarding grants to Russian health care organizations, both governmental and NGOs and providing extensive technical assistance to grant recipients.

Of the 61 cities, which participated in the MSF initial training in 1998–2000, 55 sought funding for HRPs from OSI. By the end of 2000, OSI had been supporting 36 needle exchange projects in 32 regions. In addition to administering grants, OSI and other partners provided extensive technical assistance to the service providers: in 2000–2001, each project participated in three international trainings; IHRD/OSI-Russia technical advisers conducted 47 site visits. In 2000, with support from OSI, MSF began a new training program inviting every Russian project to two trainings per year in Moscow, as well as providing short on-site trainings for field workers.

Initially OSI had committed to fund Russian HRPs for a period of three years. It was expected that a five-year World Bank loan to Russian Federation to fight TB/HIV, which had to include a comprehensive harm reduction component, would begin soon. However, negotiations were delayed for technical reasons relating to the procurement of TB drugs. In order to maintain the momentum and ensure the sustainability of the projects on HIV prevention

among IDUs, in 2001 the Department for International Development (DFID) of the United Kingdom granted support to these activities to continue through a three-year Harm Reduction Bridging Project. As was reflected in the name, the project was designed to act as a bridge between OSI activities in harm reduction and the World Bank loan.

Thus by the end of 2002 there were 38 regions implementing 51 HRPs, 25 of them also covered CSWs and six covered prisoners. Innovative HRPs were developing in 11 small towns of Russia, taking into consideration the peculiarities of small integrated communities often with a single pharmacy and limited number of medical providers.

In 2003 Russia accepted a $150 million loan from the World Bank to fight the spread of AIDS and TB, ending a four-year negotiation process. In the same year Open Health Institute (OHI), the successor of the Public Health Program of OSI-Russia and the main implementer of the DFID Harm Reduction Bridging Project became a principal recipient of the Global Fund to Fight AIDS, TB and Malaria (GFATM) grant in the third tender round. This GFATM project (named GLOBUS), implemented by a consortium of five non-governmental organizations, has become one of the largest and most successful HIV/AIDS prevention and treatment projects in Russia. The project aims at stimulating an effective national response to HIV/AIDS in 10 regions of the Russian Federation. One of the major objectives of the project is to support sustainable prevention programs to reduce HIV transmission among vulnerable groups, which include HRPs in the civilian and penal sectors. By 2006 GLOBUS directly supported 25 HRPs in 10 Russian regions and 10 HIV/AIDS prevention programs in the penal system. The GLOBUS project, together with OSI and the Ford Foundation, has also provided support to 20 additional HRPs in 18 regions through the RHRN.

The Harm Reduction Bridging project had five outputs:

1) scaling-up the existing multi-sectoral HRP for IDUs and CSWs;

2) developing capacity for monitoring and evaluation of harm reduction;

3) developing in-country capacity for implementing harm reduction;

4) expanding understanding among policymakers of the role of harm reduction in HIV prevention;

5) developing a sustainable roll-out strategy for harm reduction.

The Country Coordinating Mechanism (CCM) in Russia developed and submitted a proposal for the fourth round tender of the GFATM for a program on "Promoting a Strategic Response to HIV/AIDS Treatment and Care for Vulnerable Populations in the Russian Federation." The proposal for the five-year program was approved and the project started in September 2005. The CCM approved the Rssian Health Care Foundation as the principal recipient of the grant and the executive agency for the program's implementation. Although the program is mainly concentrated on providing ARV treatment, during the five year program 59 HRPs for IDUs and 59 HIV/AIDS prevention programs for sex workers are expected to be supported.

In 2005 the RHRN submitted a proposal for the fifth round tender to the GFATM. The proposal was approved by the GFATM and in the first half of 2006 RHRN expected to complete the procedures necessary before signing the grant agreement. The main purpose of the fifth round project is to expand HRPs in Russia. Up to 33 HRPs are expected to be supported under the GFATM's fifth round.

In addition to internationally supported initiatives, the Ministry of Health and Social Development and the Federal Service for Surveillance of Consumer Rights Protection and Human Welfare also started funding activities on HIV prevention among IDUs. Within the framework of the National Priority Program announced by President Vladimir Putin, in 2006

Table 3. Annual number of HRPs in Russia by sources of funding

Source of funds	1999	2000	2001	2002	2003	2004	2005	2006
Open Society Institute	23	36						
DFID (jointly with OSI)			42	50				
Open Health Institute (in 2003–2004 with the support of DFID/OSI, 2004–2006 with GFATM funding, in 2006 – with funding from the Federal Health Service)					51	45	25	39
Russian Harm Reduction Network (with funding from GLOBUS project, OSI, and the Ford Foundation)							20	15
WHO				3	5	2	2	
MDM	1	1	1					
Russian Health Care Foundation (with World Bank and GFATM funding)								14
Local budgets				10	15	5		
Others		1	1	3	3	3	3	3
TOTAL	24	38	44	66	74	55	46	71

the Federal Service for Surveillance of Consumer Rights Protection and Human Welfare signed a contract with Open Health Institute to implement 15 civilian and 15 prison HRPs.

Thus, the situation with the number of HRPs in Russia is changing very rapidly. An aggregated set of information on the annual number of HRPs in Russia funded by different sources is summarized by the RHRN in Table 3.

Budgets of HRPs range between US $10,000 – 35,000.

Yet a study published by Rhodes et al. in 2006 concluded that an urgent scaling-up of harm reduction for IDUs in Russia is still the highest priority[27]. The study is based on the results of an anonymous cross-sectional survey of IDUs recruited from non-treatment settings in Moscow, Volgograd and Barnaul. The subjects were tested for HIV, HCV antibodies and syphilis by means of oral fluid samples. The conclusion repeats that from an earlier cross-sectional study conducted among IDUs in Togliaty city in 2002, indicating the lack of a comprehensive national strategy to promote harm reduction activities in Russia[28]. A recent revision of the evidence for trends in HIV infection, risk behavior and HIV prevention associated with injecting drug use in the Russian Federation noted the critical importance of policy interventions to maximize syringe/needle exchange coverage among IDU populations[29].

It should be mentioned that in order to fight the HIV/AIDS epidemic in Russia, there should be a sufficient expansion of funding due to the huge size of the country. The average size of donor grants, which is in the majority of cases the only funding source, varies from US $10,000 to $35,000 per HRP. While in small towns this sum is adequate to cover a sufficient number of IDUs with harm reduction activities, in big cities such as St. Petersburg, for example, this amount only allows for an estimated 3% coverage of IDUs, which is obviously not enough to fight the spread of the HIV epidemic. However it should be mentioned that most of the field research was conducted prior to the breakthroughs in 2005–2006 with governmental policies and NGO activities, so the situation might have since improved.

Assuming that the estimates of Russian Ministry of Interior are correct and the number of IDUs is about 3 to 4 million, and given that an average cost per client served by an HRP is $23 per year, then the overall amount needed to ensure full coverage would be just under $100 million per year spent solely on harm reduction. However this amount is based on outdated costs, excludes training and advocacy expenses, as well as the cost of educational materials and new approaches to reaching IDUs in the current situation, which are discussed below. Hence the amount needed to ensure comprehensive coverage in Russia is probably at least twice as large.

[27] Rhodes T, Platt L, Maximova S, Koshkina E, et al. Prevalence of HIV, hepatitis C and syphilis among injecting drug users in Russia: a multi-city study. Addiction. 2006 Feb;101(2): 252–66.
[28] Rhodes T, Lowndesa C, Judd A. Explosive spread and high prevalence of HIV infection among injecting drug users in Togliatti City, Russia. AIDS 2002, 16:F25–F31.
[29] Rhodes T, Sarang A, Bobrik A HIV transmission and HIV prevention associated with injecting drug use in the Russian Federation. International Journal of Drug Policy 15 (2004) 1–16.

HIV/AIDS prevention programs in the Russian penal system

HIV/AIDS prevention programs in the Russian penal system have developed even more recently in comparison with HRPs for IDUs in the civilian sector.

Until the late 1990s the imprisonment rate in Russia was the highest in the world, but in 2000 a major legal reform released 200,000 convicts from the correctional colonies. By 2003, there were 1,014 Ministry of Justice facilities containing 877,000 people, a rate of 670/100,000 population, still very high, but lower then the U.S., which has the highest rate in the world at 702/100,000[30,31].

In most countries of the world, HIV infection rates are much higher among prisoners than among general populations. There are also significant variations in HIV rates among prisoners in different countries. The rates are generally higher in Eastern Europe compared with Western Europe, for example: Estonia (12% in 2002), Ukraine (7% in 200) and Russia (4% in 2002). Drug users are often over-represented in prison populations and often continue using drugs while incarcerated. HIV prevention interventions in prisons have been introduced in various countries since 1990. Prevention measures in prisons include education on HIV/AIDS, voluntary testing and counseling, distribution of condoms, bleach and other disinfectants, needle and syringe exchanges, and substitution therapy[19,32].

The 1993 WHO Guidelines on HIV prevention and management of care in prisons states that "preventive measures for HIV/AIDS in prison should be complementary to and compatible with those in the community. Preventive measures should also be based on risk behaviors actually occurring in prisons, notably needle sharing among injecting drug users and unprotected sexual intercourse"[33]. Several reviews evaluating prison syringe exchange programs indicated that these programs are feasible and do help reduce risky behavior and the transmission of blood-borne infection without any unintended negative consequences[34,35].

The revision of HIV prevention policies of prisons in Moldova, Hungary, Switzerland, Italy and Nizhniy Novgorod Region of the Russian Federation showed that in spite of the availability of international guidelines, HIV prevention and management of care in prison is still unsatisfactory. The 1993 WHO Guidelines were fully

[30] Abramkin V. [Tyuremnoe naselenie Rossii i drugih stran. Problemy I tendencii]. ROO Centr sodeistviya reforme ugolovnogo pravosudiya; 2003:27.
[31] Prestupnost' i pravoporyadok v Rossii. Statisticheskii aspekt. 2003. Stat. sb./Goskomstat Rossii M., 2003;85.
[32] HIV/AIDS Prevention, Treatment and Care among Injecting Drug Users and in Prisons. Ministerial Meeting on "Urgent response to the HIV/AIDS epidemics in the Commonwealth of Independent States", UNAIDS, 2005.
[33] WHO guidelines on HIV infection and AIDS in prisons. WHO Global Program on AIDS. 1993:9.
[34] Dolan K, Rutter S, Wodak AD. Prison-based syringe exchange programmes: a review of international research and development. Addiction. 2003 Feb; 98(2):153–8.
[35] Stover H, Nelles J. Ten years of experience with needle and syringe exchange programs in European prisons. International Journal of Drug Policy. 2003: 14: 437–44.

implemented only in one country (Switzerland) out of four the reviewed, and partially in two (Italy and Hungary). The authors concluded that greater national and international efforts are needed to stimulate the debate and build a consensus on harm reduction activities in prisons[36]. Using Nizhniy Novgorod as an illustration of how HIV prevention and management of care in prisons was unsatisfactory it should be highlighted that the WHO guidelines state that HIV prevention activities in prisons should be just as accessible as they are outside prisons.

Even though HRPs for IDUs are implemented in many regions of Russia, they are not available at the rate as in the penal system. Needle/syringe exchange is prohibited in Russian prisons and HIV/AIDS prevention activities usually include training of prisoners and prison staff in order to increase their knowledge about HIV infection and how it is transmitted and prevented, to support peer education techniques in order to reach all prisoners with educational programs; and to provide prisoners with condoms and disinfectants.

A study conducted in a Siberian prison for drug dependent males indicated a significant increase in the knowledge of HIV transmission routes after the prisoners' exposure to peer education. At the same time the study indicated no difference in use of bleach to clean tattooing or injecting equipment before and after the exposure of prisoners to peer education. Authors highlighted that the Ministry of Justice should consider implementing additional harm reduction strategies in prisons, such as methadone treatment and syringe exchanges[37].

International non-governmental organization AIDS Foundation East-West has been implementing HIV/AIDS prevention programs in the Russian penal system since 1999. A five-year project (1999-2003) was supported by Social Transformation Program (MATRA) of the Netherlands Ministry of Foreign Affairs, the Elton John AIDS Foundation and the Swedish International Development Agency. The project's aim was to establish sustainable HIV/AIDS prevention and health promotion programs in the prisons of four regions of Russia: Penza, Omsk, Krasnodar and Moscow. Over 600 inmates from four prisons were trained as outreach workers; 500 medical professionals and psychologists were trained on pre- and post-HIV test counseling; 560 security, disciplinary and custodial staff received training on the reduction of risk in the workplace; 100 representatives of the regional prison system administrations, heads of various institutions within the Directorate of Corrections, and heads and administrators from the colonies received training on health promotion in prison facilities. Information materials for inmates and prison staff were distributed in the targeted prison facilities, while inmates received access to supplies of bleach and condoms[38].

In 2001 when OSI-Russia received the above mentioned Harm Reduction Bridging grant from DFID for continuing and expanding activities on HIV prevention in 2001 - 2004 it also included a prison component. Open Society Institute, and since 2003 as Open Health Institute, provided support to eight HIV/AIDS prevention programs in prisons from 2001 to 2004 as part of the Bridging project. Since 2004 most of these programs continued to develop with the support of the GLOBUS project.

A cross-sectional study was conducted in two Russian prisons (with and without HIV prevention programs) in 2003. A total of 500 randomly selected inmates in each prison filled out an anonymous self-administered questionnaire aimed to determine risky behaviors and to describe the knowledge about HIV/AIDS. Given that all offenders are routinely tested for HIV and some other infections on admission, during the study inmates in both prisons, who had been HIV-negative on admission, were offered to proceed through confidential HIV blood testing. All prisoners were also offered confidential syphilis blood tests and anonymous opiate urine tests. The results indicated a higher level of knowledge about HIV among inmates in the prison with an HIV prevention program. The prevalence of such risky behaviors as unprotected sex, use of non-sterile injecting equipment and failure to appropriately use disinfectants was significantly lower in the prison with an HIV prevention program. In prison with the HRP one new HIV case was revealed, which is more likely to be explained by the window period between contracting HIV prior to incarceration and achieving a positive test result for HIV antibodies. In both prisons a large quantity of new syphilis cases were revealed, which is likely to be explained by high levels of transmission within prisons. In the prison with an HIV prevention program there were no positive opiate test results detected, while in the prison without an HIV prevention program

Table 4. Risky behaviors, knowledge and incidence cases in inmates from prison with and without harm reduction activities

	Prison with HRP	Prison without HRP
Use of injecting drugs	Equal	
Sex		
Tattooing		
Level of knowledge on HIV/AIDS	>	
Needle disinfection	>	
Use of condoms	>	
New HIV cases	1	–
New syphilis cases	7	14
Positive opiate test	–	5

[36] Bollini P, Laporte JD, Harding TW. HIV prevention in prisons. Do international guidelines matter? Eur J Public Health. 2002 Jun;12(2):83–9.
[37] Dolan KA, Bijl M, White B. HIV education in a Siberian prison colony for drug dependent males. Int J Equity Health. 2004 Jun 21;3(1):7.
[38] http://www.afew.org/

there were five positive test results (Table 4). It showed that HIV prevention programs in prisons likely do not promote drug use in this setting[39].

In the framework of the GLOBUS project HIV/AIDS prevention programs in penal system were supported in 10 regions of Russia. Over 700 medical and non-medical prison staff members were trained on HIV/AIDS prevention methods. Disinfectants, vitamins, and condoms for prisoners are being procured and supplied to penitentiary institutions in 10 regions of Russia under these programs. Several other projects are supposed to start working in prisons soon, including the projects implemented by the Russian Health Care Foundation within a framework of the World Bank loan and the fourth round grant from the GFATM. For instance, the latter is expected to provide trainings on voluntary counseling and testing (VCT) for prison staff in 59 regions of Russia.

The effectiveness of harm reduction

There are various approaches to evaluating the effectiveness of public health interventions, including HRPs and other methods of HIV prevention. These can be based on more short-term results that are easy to measure and long-term results that are harder to measure. As some expected outcomes of harm reduction (such as reduction of new HIV cases, etc.) are very hard to measure, the reduction of risk behaviors is most often monitored as a main indicator of the effectiveness of HRPs. Even though most of the studies conducted have shown the reduction of risky behaviors to be of interest, there are still debates related to the effectiveness of harm reduction activities.

Non-longitudinal studies measuring only reported behavioral change and conducted by non-independent researchers can hardly yield firm epidemiological evidence and require cautious interpretation; yet these constitute a paramount of research on the issue of harm reduction in Central and Eastern Europe. For instance a cross-sectional study conducted in Central/East European cities: Prague, Budapest, Skopje, Krakow, and Poltava, as well as five Russian cities: Nizhniy Novgorod, Pskov, Rostov-on-Don, St. Petersburg, and Volgograd aimed to assess HIV risk behaviors among participants in syringe exchanges[40]. Interviews with IDUs recruited from syringe exchange programs included questions on risky injection behavior for the 30 days prior to the first use of the syringe exchange program and for the 30 days prior to the interview (while using the syringe exchange program). The results suggested that IDUs participating in the exchanges appeared to be responding very positively to reducing the level of needle and syringe sharing.

[39] Bobrik A. Assessment of prevalence of HIV, syphilis and risk factors of its transmission in penal jurisdiction. Medico-social problems of socially conditioned diseases. Scientific works, Ministry of Health, Central Public Health Research Institute, Russia, Moscow, 2004.

[40] Don C. Des Jarlais, P. Friedmann, Jean-Paul Grund, et al. HIV risk behavior among participants of syringe exchange programs in central/eastern Europe and Russia. International Journal of Drug Policy, Vol. 13, Issue 3, NEPtember 2002: 165–70.

Harm reduction evaluation in Nizhniy Novgorod showed a reduction in the level of needle sharing from 54% to 24%, a fall in container sharing from 59% to 22%, while flushing syringes with a used solution fell from 47% to 20%[41].

In Sverdlovsk Oblast a cross-sectional study was conducted to compare behavior change among three groups of IDUs: one month before HRPs were established, IDUs attending an HRP after its establishment, and those not attending[42]. The results showed that those attending an HRP were more likely to report less HIV-related risk behavior than those not attending.

In Svetlogorsk, Belarus, a deterministic epidemiological model was used to estimate that between 1997 and 2000 the needle/syringe exchange intervention averted 414 HIV infections in Svetlogorsk (95% CI, 180–690) and caused a 6.5% decrease in IDU HIV prevalence compared to a hypothetical case with no intervention[43].

Similarly there were behavioral studies aimed at evaluating harm reduction effectiveness elsewhere. For instance the study by Des Jarlais, et al. in New York city showed that needle exchange programs (NEPs) decreased risky injection behavior by up to 73%, and IDUs using NEPs were two-thirds less likely to contract HIV[44]. In Oakland IDUs attending NEPs were 2.5 times more likely than other IDUs to stop sharing needles after six months[45]. Data combined from four cities in the U.S. suggest that among NEP participants the number of injections per syringe was decreased by 44-85% and the likelihood that syringes were used only once was significantly raised[46].

Cluster studies, which tried to measure the effect of harm reduction policies on HIV incidence, have produced additional evidence, albeit not strong evidence by strict epidemiological standards. For example, an international comparison showed that in 29 cities with established NEPs, HIV prevalence decreased on average by 5.8% per year, but it increased on average by the same percentage in 51 cities without NEPs[47]. A before-and-after study with an less robust epidemiological design in Hawaii, where a NEP was established in 1990, reported that HIV infection rates fell from 5% in 1989 to 1.1% in 1996[48].

Several larger scale reviews have attempted to summarize the evidence available so far on

[41] G. F. Moshkovich, Realization of Harm Reduction Project in Nigegorodskaya Oblast. The report on the first Russian science conference on HIV infection, AIDS and hepatitis B, C. 13–15 November 2001, Suzdal.

[42] R. Power, N. Nozhkina. The value of process evaluation in sustaining HIV harm reduction in the Russian Federation. AIDS 2002, 16: 303–4.

[43] P. Vickerman, C. Watts. The impact of an HIV prevention intervention for injecting drug users in Svetlogorsk, Belarus: model predictions. International Journal of Drug Policy, Vol.13, Issue 3, NEPtember 2002: 149–64.

[44] Des Jarlais, D. C., M. Marmor, D. Paone. HIV Incidence Among Injecting Drug Users in New York City Syringe Exchange Programmes." Lancet, 1996, 348, 987–991.

[45] Blumenthak R. N., A.H. Kral, L. Gee, E. A. Erringer, B. Edlin The effects of syringe exchange use on high-risk injection drug users. A cohort study. AIDS, 2000, 14: 605–11.

[46] Heimer R., Khoshnood K., Bigg D., Guydish J., Junge B. Syringe use and reuse: effects of syringe exchange programs in four cities. J Acquir Immune Defic Syndr Hum Retrovirol. 1998;18 Suppl 1:S 37–44.

[47] S. Hurley, D. Jolley, J. Kaldor, Effectiveness of needle-exchange programs for prevention of HIV infection. Lancet 349 (1997).

[48] Vogt, R. L., M. C. Breda, and D. C. Des Jarlais. "Hawaii's Statewide Syringe Exchange Program." American Journal of Public Health. 1998, 88, 1403–04.

the issue of the effectiveness of harm reduction. A review of 42 studies on the effectiveness of syringe exchange programs in reducing HIV risk behavior and HIV seroconversion among IDUs that was conducted by Gibson, et al.,[49] has shown that 28 of the reviewed studies found positive effects associated with use of syringe exchanges, two found negative associations, and 14 found either no association or a mix of positive and negative effects. The main disadvantages of the reviewed studies marked by authors are a disregard for the source of syringes, described in only one of the 42 studies, and of biological outcomes that were used only in five studies. There were also few systematic attempts to identify and control for confounders, while the secondary use of NEPs was not measured in any of the studies. While it seems relatively easy to control for such confounders as age and gender and the type and dose of drugs used, this was seldom done in the studies. Additionally it is very hard to control for such confounders as different attitudes to one's own health and the "degree of marginalization" of IDUs. The main disadvantage with studies based only on self-reports of HRP attendance is that a differential misreporting of HRP attendance could bias risk estimates[50,51].

J. M. MacNeil and J. Hogle conducted a review of over 400 abstracts of social, behavioral and evaluation research studies conducted in 45 Latin American, African and Asian countries over a six-year period[52]. They also marked a failure to track biological outcomes in these studies. Only three of the studies actually measured HIV incidence and other STIs.

Thus most of the reviews conducted marked the following major disadvantages: a scarcity of research that includes biological outcomes, a disregard for the alternate source of syringes and participation in secondary exchanges, and an insufficient control for confounding factors. They also noted that longitudinal studies are ideal to conduct such investigations.

A multi-sectoral cohort study that was conducted in three cities of Russia and aimed to assess effectiveness of HRPs indicated a statistically significant difference in the rates of risky behaviors, HIV prevalence, and incidence among IDUs in Russian cities with different levels of harm reduction activities as well as between harm reduction participants and non-participants. Thus, HIV prevalence among IDUs in the city without harm reduction activities was 14.7% which was 5 times higher than in the city where the HRP was two years old (2.1%) and 15 times higher than in the city where the HRP has been operating since 1998 (0.3%) ($p \leqslant 0.001$). By the end of the one-year follow-up period, incidence rates were 13.2%, 2.5% and 0%, respectively, and the difference was

[49] David R. Gibson, Neil M. Flynn, Daniel Perales. Effectiveness of syringe exchange programs in reducing HIV risk behavior and HIV seroconversion among injecting drug users. AIDS 2001, 15: 1329–341.

[50] M. Safaeian, R. Brookmeyer, D. Vlahov et.al Validity of Self-reported Needle Exchange Attendance among Injection Drug Users: Implications for Program Evaluation. American Journal of Epidemiology Vol. 155, No. 2: 169–75.

[51] L. Greenfield, G. E. Bigelow, R. K. Brooner Validity of intravenous drug abusers' self-reported changes in HIV high-risk drug use behaviors. Drug and Alcohol Dependence 39 (1995) 91–98.

[52] J. M. MacNeil, J. Hogle. Applying social, behavioral and evaluation research to developing country HIV prevention programs. AIDS 1998, 12 (suppl 2): 99–108

statistically significant. All new HIV infections were detected among non-participants of the HRPs. Rates of such risky behavior as using non-sterile syringe varied from 19% to 31% among non-clients of HRPs and from 6% to 8% among clients[53]. There were no statistically significant differences in age, gender, addition, and socio-economic characteristics between the HRP clients and non-clients.

One of the difficulties in making conclusions about the effectiveness of HRPs is that in many countries there is a non-prescription availability of syringes from pharmacies. For example, a study conducted in New Haven showed that 41% of IDUs reported syringes were obtained from pharmacies, 13% from NEPs, 34% from both pharmacies and NEPs, and 27% reported neither as their usual source of syringes in the past six months. Nevertheless those IDUs that attended NEPs were significantly less likely to throw away used syringes[54]. In countries where syringes are not sold on over the counter, basic HRPs provide the only source of injecting equipment; hence their role is even more important.

A study conducted in Baltimore, USA, aimed at examining the effects of an NEP on the quantity and geographic distribution of discarded needles on the streets suggested that the initiation of NEPs does not result in decrease in the number of discarded needles on the street[55].

A possible adverse effect of NEPs was shown in a cohort study conducted in Montreal, Canada[56]. The cohort study showed that NEP users appear to have higher seroconversion rates then NEP non-users. One of the possible explanations of the findings relates to confounding, while NEPs tend to attract higher-risk IDUs, who engage in riskier behaviors, compared to IDUs who tend to obtain syringes from other sources[57,58,49].

As for the impact of HRPs on hepatitis C virus (HCV) the effectiveness is even more controversial. For example, a random-mixing epidemiological model was used to examine the potential impact of harm reduction interventions on HCV[59]. The results suggested that HRPs are predicted to have little impact on HCV incidence and prevalence within IDU populations.

[53] K. Eroshina, et al. Cohort study on the effectiveness of Russian needle exchange programs. Handbook of the 16th Conference on the reduction of drug related harm. March. Belfast, Northern Ireland. 2005.

[54] Khoshhood K. et al. Syringe source, use, and discard among injection-drug users in New Haven, Connecticut. AIDS & Public Policy Journal. 15(3–4): 88–94, 2000 Fall-Winter.

[55] M. C. Doherty, RS Garfein, D Vlahov et al. Discarded needles do not increase soon after the opening of a needle exchange program. American Journal of Epidemiology, Vol 145, Issue 8: 730–37.

[56] J. Bruneau, F. Lamothe, E. Franco High rates of HIV infection among injection drug users participating in needle exchange programs in Montreal: results of a cohort study. American Journal of Epidemiology, Vol. 146, Issue 2: 12994–1002.

[57] M. T. Schechter et al., Do needle exchange programmes increase the spread of HIV among injection drug users? An investigation of the Vancouver outbreak. AIDS 13, F45–F51 (1999).

[58] F. I. Bastos, S. A. Strathdee, Evaluating effectiveness of syringe exchange programmes: Current issues and future prospects. Soc. Sci. Medicine 51, 1771–1782 (2000).

[59] Pollack HA, Cost-effectiveness of harm reduction in preventing hepatitis C among injection drug users. Med Decis Making. 2001 NEP-Oct; 21(5):357–67.

In contrast a series of cross-sectional surveys conducted in Glasgow in 1990–1996 showed some results, albeit unsteady, indicating that HRPs might have decreased the spread of HCV[60].

The ambiguity of the results of evaluations of the effectiveness of HRPs may arise from the complexity of the questions of interest; however it may also result from the variability of what HRP means in the particular context of each study. For countries with a long history of communitarian values it seems quite important that HRPs serve the needs of not only drug users, but they are for the benefit of on non-users. Research into what works in HIV prevention among IDUs or what makes an effective HRP therefore is needed to complement the debate about the policies to combat the AIDS epidemic.

Economic assessment of harm reduction

The main elements of the cost of HRPs are syringe exchanges, outreach work, distribution of prevention (condoms, bleach kits, clean syringes) and educational (literature and instructions on HIV prevention and safer injection techniques) materials, and HIV counseling and testing. The cost effectiveness analysis of HRPs is a very important issue that contributes to future HRPs advocacy. Therefore, many studies have concentrated on the economic analysis of HRP interventions. All studies have found that HRPs are rather cost effective when compared with other lifesaving interventions.

For example, a cost-effectiveness analysis of approved syringe exchange programs and an estimation of the cost-saving potential of these programs were conducted in the U.S. state of New York. Based on an estimated 87 HIV infections averted across the seven programs and a total program cost of $1.82 million, the cost effectiveness ratio became US $20,947 per HIV infection averted[61]. Thus the research concluded that syringe exchanges are a cost-effective and even cost-saving intervention when compared to the costs of AIDS treatment strategy for reducing HIV transmission.

As the program coverage increases, the marginal cost per HIV infection averted also increases. Although viewed by many experts as arbitrary, UNAIDS suggests that 60% coverage is required in order to stop HIV transmission among IDUs. The study conducted by Holtgar, et al.,[62] showed that at a very high coverage (more than 88%), the marginal cost-effectiveness of increased program coverage becomes less favorable but anyway even at coverage level more than 88%, such funding would save society money, i.e. the costs of the program will still be lower than the expenditures needed to provide treatment to incremental numbers of people with HIV.

[60] Taylor A, Goldberg D, Hutchinson S et al. Prevalence of hepatitis C virus infection among injecting drug users in Glasgow 1990-1996: are current harm reduction strategies working? J Infect. 2000 Mar; 40(2): 176–83.

[61] Franklin N. Laufer. Cost-Effectiveness of Syringe Exchange as an HIV Prevention Strategy. JAIDS 2001, 28: 273–78.

[62] D.R.Holtgrave, S.D.Pinkerton, T.S. Jones et al. Cost and cost-effectiveness of increasing access to sterile syringes and needles as an HIV prevention intervention in the United States. Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology. 1998, 18 (Suppl 1): 133–38.

The outcomes of the study, which was conducted in Edmonton, Canada, based on street-level IDU interviews and HIV saliva tests among HRP participants, were used in a cost-effectiveness model[63]. The research estimated that the HRP prevented 20.3 new infections. The cost-effectiveness estimate was $9,537 per HIV infection delayed by one year. Even if HRP activity were to continue for 17 years, which is the remaining life expectancy for a person with AIDS the value of $9,537 would increase to $116,024, which is still less than the value used for a case of HIV/AIDS ($150,000).

A study aimed to determine whether providing NEPs would cost less than the health care consequences of not having such a program was conducted in Hamilton, Canada[64]. The results predicted that an NEP would prevent 24 cases of HIV over five years, thereby providing cost savings of $1.3 million and a savings to cost ratio of 4:1.

A study on the effectiveness of 16 HRPs was conducted in Russia. The results of the research showed that the total average costs were $40,662 per HRP per year. The financial unit costs were $23.40 per client served and $0.36 per syringe exchanged. A cost-effectiveness ratio of $564 per HIV infection delayed by one year was calculated based on an average program cost and an estimated 72.1 HIV infections averted per project[65]. It might seem relatively costly but in comparison with medical treatment of HIV ($3,000–$7,000 per year) it proves to be a considerable savings.

In summary it can be stated that the studies conducted in various places by different groups of authors, including those undertaken in Russia, have arrived to the unanimous conclusion that the harm reduction approach is rather cost effective, and that the savings related to averting HIV cases are greater then the costs of running the programs. The studies reviewed in this section have arrived to different costs of preventing a single case of HIV and to different cost-benefit ratios. While the costs are relatively easy to estimate, the major methodological problem is obviously related to the different estimates of the effectiveness of programs in different settings. The degree of effectiveness and even the cost parameter however would be related to the best practice issue, as good management can reduce the expenses related to running the program, and the coverage and ability to reach the most marginalized parts of the IDU community will be incremental to raising the effectiveness.

[63] P. Jacobs, P. Calder, M. Taylor et al. Cost effectiveness of Streetworks' needle exchange program of Edmonton. Canadian Journal of Public Health. May-June 1999, Vol.90, 3: 168–71

[64] M. Gold, A. Gafni, P. Nelligan et.al., Needle exchange programs: an economic evaluation of a local experience. Canadian Medical Association Journal. 1997; 157: 255–62.

[65] A. V. Bobrik. Cost and cost-effectiveness of HIV prevention among drug users in Russia. Russian Family Doctor, 2002,Vol. 6; 4: 30–36.

The concept of best practice

Before exploring what can be considered best practice in harm reduction it is important to understand the meaning of the concept more generally. Thus the United Nations (UN) and the international community have defined best practices at large as successful initiatives that:

- have a demonstrable and tangible impact on improving quality of life;
- are the result of effective partnerships between the public, private, and civic sectors of society;
- are socially, culturally, economically, and environmentally sustainable.

Best practices are promoted by the UN and the international community as means of:

– improving public policy based on what works;

– raising awareness of decision-makers at all levels and of the public about the potential solutions to common social, economic, and environmental problems;

– sharing and transferring knowledge, expertise, and experience through networking and peer-to-peer learning[66].

Although it is very general, the UN definition allows us to concentrate on three issues when approaching the purpose of the current study, which are effectiveness, sustainability and multi-sectoral involvement (mainly as a means of achieving effectiveness, but it can also be a target in itself). The latter directly relates to such issues as involvement of civil society, good governance and coordination, as well as the "Three Ones" principle promoted by UN agencies.

[66] http://www.bestpractices.org/bp2004/guide_en.pdf

Best practice in the field of HIV/AIDS prevention

In recognition of the vital role of HIV prevention, the Joint United Nations Program on HIV/AIDS (UNAIDS) and Family Health International (FHI) have published the FHI/UNAIDS Best Practices in HIV/AIDS Prevention Collection[67]. Encompassing a broad body of knowledge and expertise, the book is centered on HIV/AIDS prevention in the non-industrialized world. This collection is based on the six years of work performed by FHI's international and local partners in the world's largest single international HIV prevention initiative to date: the AIDS Control and Prevention Project. It offers a substantial number of models that may be replicated around the world.

A total of 20 initiatives were chosen from more than 800 HIV/AIDS and sexually transmitted infection (STI) prevention programs in 50 countries that are considered to be of global importance for dissemination through a case study approach. These initiatives covered different population groups, the most vulnerable to HIV infection and were devoted to the successive implementation of different preventive strategies such as education, mass media campaigns, monitoring trends in HIV-risk behaviors, services for vulnerable women, HIV counseling and testing, national HIV/AIDS programs, etc. The selected initiatives were considered to be the most innovative, effective and comprehensive approaches to HIV prevention to be implemented in non-industrialized countries to date.

The "Bridging the Gap" conference that took place in 2001 with the support of the San Francisco Department of Public Health aimed to improve standards of care, develop best practice principles for integrating harm reduction approaches into traditional substance abuse services, and increase the accessibility of quality services to people in need of drug- and alcohol-dependency treatment. One of the conclusions was that harm reduction offers the greatest hope to expand the availability of substance abuse services to people that have not benefited from traditional abstinence-based treatment models[68].

However it should be emphasized that the analysis was undertaken in 2000-2001, when HRPs in Russia were generally very young, with the majority of them operating for less than two years. Few attempts have since been made to understand the evolution of harm reduction strategies in Russia and to further explore the factors determining successes and failures. Thus, the results of the current project supported by the World Bank may contribute to the issue of best practice in HIV prevention in the Russian context.

[67] http://www2.unescobkk.org/hivaids/FullTextDB/aspUploadFiles/FHIUNAIDSBestPracticesredux.pdf

[68] Marlatt GA, Blume AW, Parks GA. Integrating harm reduction therapy and traditional substance abuse treatment. J Psychoactive Drugs. 2001 Jan-Mar;33(1):13–21.

The issue of best practice in harm reduction in the community and in prisons in Russia was addressed by Burrows in 2001[69]. The following factors that determine a best practice in harm reduction in Russia were highlighted:

- attitudes of HRPs themselves toward harm reduction strategies (willingness to do something about the HIV problem, activism, enthusiasm, etc.);
- support of local authorities and institutions;
- international funding and technical support;
- rapid situation assessments made with advocacy goals;
- increasing secondary exchanges and peer education.

In addition, the following weaknesses of HRPs were highlighted:

- low coverage of IDUs by harm reduction services;
- absence of sufficient funds for HRPs to do the work required;
- low level of management partly caused by the general underdevelopment of the NGO sector in Russia;
- reliance on doctors as HRP workers rather then on IDUs and ex-IDUs;
- lack of democratic structure in HRPs (autocracy and rigid hierarchy);
- patchy quality of services, depending on individual managers of HRPs;
- confusion about the aims of the HRP in some cases with abstinence ideology sometimes hindering HIV prevention objectives;
- little interest in investing time and money in educating volunteers and outreach workers;
- lack of understanding about the need for long-term responses to HIV epidemic;
- poor understanding/experience of monitoring and evaluation;
- poor networking (cooperation of HRP managers with colleagues in other cities).

[69] Burrows D. A Best Practice Model of Harm Reduction in the Community and in Prisons in Russian Federation. IBRD/ The World Bank, Washington, DC, 2001.

Conceptual framework

As we have demonstrated in our literature review, 'best practice' is a slippery concept. Often when the characteristics of a harm reduction best practice are listed, the ways to achieve them vary. For the purposes of this study we shall view best practice as combination of the achieved characteristics of the HRP and activities, procedures, rules, and interventions which can help reach good results: process, input, and outcome indicators. Since HRPs depend on their environmental context, it is important to split the environmental variables into factors of different degree of stability ranging from those fully determined by the best practices of the HRP to those completely unchangeable.

The results of the work as mentioned above can be measured by a process (well-trained and motivated staff that perform all their duties well, an evaluation and responsive adaptation system is in place, resources are spent wisely, there is a large and cost-effective coverage of IDUs in absolute and relative terms), by effects on behavior or surrogate outcomes (that includes sharing syringes and sexual practices) and outcomes (incidence of HIV, blood-borne hepatitis, STIs and overdoses). Finally the overall impact can be defined (but hardly measured) in terms of the extent that HIV, other infections, and drug use are kept under control.

Figure 2. Conceptual framework.

Hence the harm reduction sites with the very best practices are those that are able to achieve good results in a hostile context with hard-to-find funding, are able to improve the context variables that can be changed, while also achieving the objectives of being effective, collaborative across sectors and sustainable.

Results:

Semi-Structured Interviews

The best practice review below is based on content-analysis of 57 interviews with HRP staff, clients and other key informants in six regions of the Russian Federation (Kazan, Pskov, Tver, Vologda, Balakovo, Voronezh). Additionally seven interviews conducted with the federal level decision-makers: with representatives of the Research Institute on Drug Addiction of the Russian Ministry of Health and Social Development, Federal Service for Surveillance of the Protection of Consumer Rights and Human Welfare were also included, as well as seven interviews conducted while piloting the questionnaire in Mytichi, Moscow Region, with staff members of the local HRP and the head of the narcological dispensary.

This chapter a section devoted to the conceptualization of harm reduction, including substitution therapy and its evolution, as well as sections that look at achievements and failures, as well as the success factors and barriers for the civilian and prison HRPs.

Understanding the harm reduction concept

Although generally there was a common understanding of the harm reduction concept, when going into greater detail, various peculiarities in thinking about harm reduction among the respondents became quite clear. The most widespread was a "public-health oriented" vision of harm reduction which could be split, depending on the focus, in two: one aiming at IDU behavior change in order to prevent HIV transmission within the drug user community (29 out of 67 respondents) and a second aiming at keeping the HIV epidemic inside this community and not allowing it to spill out to other vulnerable groups or the general population (25 out of 67). As stated by one of the managers of an outreach team, who obviously took the second broad vision of harm reduction:

> *"It means that harm reduction works for the benefit of the total population but unfortunately the general population often does not understand this."*

The majority of the respondents from HRPs (12 out of 18) said that main goal of harm reduction is to control the HIV epidemic among IDUs and to decrease HIV, hepatitis, and STI rates. They also mentioned that:

> *"Although harm reduction started as an HIV prevention activity, or even narrower as needle exchange, this should be seen as only the first step of a general 'health-oriented strategy.'"*

There were other perceptions about harm reduction that went beyond the traditional "public health orientation." Some of the HRP activists believed that the role of harm reduction is to be *"the medium between government-run services and the 'street', which allows the 'street' to get information and care'* was more important. It was an unexpected finding for us that the majority of outreach workers (10 out of 18) consider the harm reduction concept mainly as *"an overall health-oriented"* strategy not emphasizing any specific services. During some of the interviews the words "HIV" and "syringe" appeared only after 20 minutes of conversation. The respondents highlighted that these programs teach IDUs an appropriate attitude to their health in general. To prove this position they indicated that among the clients of HRPs there are more people applying for addiction treatment. This point of view was also supported by all four respondents from narcological dispensaries.

A broader philosophical understanding of the harm reduction strategy was given by a representative of one of the first Russian HRPs. It was pointed out that harm reduction is an example of a humanitarian mission, giving a righteous message to people. It is a human protection movement as it is an example of an approach targeted at people – IDUs, who are totally unprotected and of a low social stature in the Russian Federation.

To support this position the representatives of all HRPs pointed out, at least to some extent, that currently the government makes all its decisions based on two polar opposing considerations: first assuming that all people are healthy and not taking drugs and second believing that any person who has had anything to do with drugs is a potential or present criminal. There seems to be no place for official views that could be placed in between the two. However such a position is crucial in order to provide relevant support to various groups. Ensuring financial and political support is impossible without shifting away from such radicalism in the perceptions of population health among decision makers.

An idea raised by at least half of the respondents was very well formulated by one: *"Harm reduction must be incorporated into the overall prevention structure, it should not be considered as an independent component, and it must be a coherent part of the overall HIV prevention strategy."* There was unanimous agreement that unfortunately, current harm reduction efforts remain an isolated and "foreign" service, which can hardly be sustained without external donor support.

Several respondents, who were among the first to start needle exchange programs in Russia, said that harm reduction should have clear and specifically outlined objectives, while many of the broader goals should be addressed by governmental institutions. These broad objectives include improving access to medical services, social support, and legal aid. All of these services should be official, properly organized and not delivered as exceptions based on personal links and patchy donor funding. In this situation, HRPs should specifically concentrate on maintaining and improving good contacts with target groups.

Most harm reduction managers (10 out of 18) agreed that the current design of HRPs in Russia is imperfect, and that they should be primarily (if not totally) considered as "outreach projects" while syringe exchanges should be organized and financed by governmental institutions. They believed that HRPs should widely involve IDUs themselves and improve links with existing services. There is a need for proper management of outreach workers by qualified management staff, adequate resources for mobile services, transport, and sufficient premises for psychological support and communication. However most of the medical care, such as tests or safe injections, should be a function of the existing medical system.

Besides specific harm reduction activities program teams in parallel often claimed to provide primary prevention of drug use. Psychologists, teachers, medical professionals, and centers for prevention in all six regions received at least some training by harm reduction teams on primary prevention of HIV and drug use. It was mentioned that narcological services are currently oriented only towards addiction treatment and cannot provide the comprehensive set of services required for drug users. According to the opinion of one of the HRP managers, narcological services should be more involved in harm reduction strategies and work in tight collaboration with HRPs, accept patients as individuals, and address their complex health issues:

> *"'Classic' HRPs as they were at the onset of the movement lacked active involvement by state medical structures such as narcological and STI services and therefore were less successful."*

At the same time three out of four representatives of narcological services expressed the opinion that *"HRPs are the only way of communicating with these closed groups. There is no other way to reach them and it works."* Representatives of narcological services were convinced that patients coming for treatment through HRPs were more motivated and more oriented towards success. They also consider harm reduction as a strategy that helps to place IDUs into social frameworks:

"While continuing limited consumption of drugs, many IDUs are still able to perform most social functions. They are able to control themselves and do not commit any crimes. They are also able to control their sexual life. Harm reduction contributes to quitting or minimizing the use of drugs. It means that it also motivates IDUs toward rehabilitation."

Three out of six leaders of HRPs expressed a view pointing out the need for wider approaches to harm reduction:

"Unfortunately, we have to accept that many HRPs in Russia mostly concentrate on just one element of the whole comprehensive strategy-syringe exchange. And even that not to the fullest extent. At the same time other important elements would be something like social centers for IDUs, where they can receive meals, clothes, social interaction, social and psychological support, and legal assistance. The main goal of a harm reduction strategy should be achieved through the respect of a drug-user as a person."

The views of drug users were relatively unanimous in mainly emphasizing the following three aspects of HRPs as a place where you can *"come without fear of persecution and get medical support," "exchange needles" and "get information"*.

In conclusion it should be mentioned that every group of respondents had an emphasis on the type of service they were providing, e.g., the narcologists believed that harm reduction should make greater efforts to refer users to addiction treatment. The understanding of the role of harm reduction in protecting non-drug users from the HIV epidemic was not universal among respondents. The concept of an ideal project often diverged from the realities of harm reduction in Russia today, with most important difference concerning an increased emphasis on needle exchanges at the project sites, while believing that the harm reduction should mainly be the "linking and supporting activity". The existing state-run healthcare system should take on all the services once the links are there.

The project leaders also were convinced that civilian HRPs should be implemented in conjunction with other social projects, such as human rights and prison projects:

"Civilian HRPs should be oriented at helping solve conflicts with law-enforcement bodies, which will always exist in spite of any success of harm reduction activities. The reason for integrating civil and prison HRPs is that the population of IDUs is constantly exchanging and mixing civilian and prison subpopulations of IDUs, (according to some estimates about 25% annually) and the outbreaks of HIV epidemics in prisons are rather possible."

Attitudes toward substitution therapy

The issue of substitution therapy was not raised by majority of the respondents. When probed most interviewees stressed that it is absolutely prohibited as methadone is included in the list of "hard drugs." The attitude toward substitution therapy was rather controversial among different groups. Some of the heads of the HRPs and harm reduction staff (18 out of 24) consider substitution therapy to be a necessary element of harm reduction strategy: "There is no future for harm reduction without substitution therapy." Approximately half of the respondents not working in the field of harm reduction stated that it is an unacceptable strategy.

Thus, all three representative of State Drug Control Service interviewed considered methadone substitution therapy to be absolutely unacceptable: *"We unambiguously against methadone substitution therapy and will never change our attitude toward it. Our point of view is also supported by the government."* A somewhat less radical opposition to harm reduction largely seems to be partially related to their point of view that harm reduction can be implemented instead of methadone substitution therapy.

In contrast, some representatives of narcological services stated that substitution therapy could be very helpful in specific cases: *"First of all, methadone substitution therapy is very helpful for IDUs with a long history of drug addiction, who are not able to quit using drugs. Secondly, in cases when IDUs are hospitalized for any other reason not directly related to drug use, they are exposed to the withdrawal syndrome and doctors are not able to help them at all. Methadone could be very helpful in this case."*

In one of the regions a respondent from an HRP stated that they have succeeded in convincing the narcological dispensary to provide Tramadol as a substitution therapy agent for IDUs. The leader of the program considered this to be a big victory and a great advantage in their region. However to the best of our knowledge this is the only case of semi-legal use of substitution therapy after it was banned in the 1970s in the USSR.

In the prison sector the project staff quite explicitly pointed out that substitution therapy is beyond the boundaries of HIV prevention. They were concerned about the implications of meeting overall sanitary and epidemiological regulations and also dealing with reconciliation and decreasing aggressiveness.

In summary the attitudes to substitution therapy, even among those directly involved in HIV prevention, ranged from cautious to negative, aside from a few activists and outreach staff. It is not clear why this concept seems so hard to promote, however it needs to be understood that even the discussions about methadone can be considered an illegal "popularization of drug use" according to current legislation.

Harm reduction: An evolution of thinking

Prior to the discussion of achievements and failures of harm reduction it is important to track the evolution of views of various respondents toward harm reduction. While many of the respondents had a positive attitude toward harm reduction from the very beginning, the attitudes of others have been significantly adjusted from negative at the beginning to positive.

At the beginning HRPs in all regions experienced opposition from law enforcement bodies, administration, medical institutes, the media and the general population. In the majority of cases such attitudes have changed at least to some extent. In several regions, harm reduction activities went as far as being included into the agenda of the regional multi-sectoral Commissions on HIV/AIDS and the Regional Target Programs, "Anti-HIV/AIDS."

At the federal level the views seemed to have changed from negative to "idealistic," and then to "realistic" while the issues of implementation became clearer. Indeed at least five decision makers interviewed stated that while being bluntly opposed to harm reduction when they first heard of the concept, they later thought that it would be the easy solution to the HIV epidemic in Russia. As time went on they realized however that only the best-practice programs would produce an impact, while most of the projects would be far from ideal and no single approach would completely solve the issue.

The reconsideration of views toward harm reduction by former IDUs who now work in outreach services is rather interesting. One of them indicated that at first he was stunned by the idea of syringe exchanges: *"This is like giving disposable caps to alcoholics."* Another former IDU shared her evolving understanding of harm reduction by first saying, *"Harm reduction promotes the use of drugs by creating comfortable conditions for drug users,"* and later saying, *"If a person wants to inject he will do it anyway."* This reconsideration took place after quitting drug use. Another outreach worker just pointed out that HRPs *"attract the worst users, those that inject in such awful ways, with very bad equipment!"* The outreach worker said that the contact with harm reduction clients helped him realize that *"such marginalized IDUs need help and information more than ever."*

One of the interviewed outreach workers, whose introduction to harm reduction began when she became client of this program, said that in the beginning she had only a consumer interest in harm reduction, *"just the possibility to take something for free."* Then the outreach worker that contacted her told her about the possibilities of ARV treatment and that it would be possible to live with HIV. ARV access seemed to have produced stunning effect on many people who need harm reduction services and some of them actually began to work as outreach workers themselves. The same person described changes of attitudes of the current harm reduction clients. *"In the beginning people met me and simultaneously got into my bag and the only interest they had was just 'give us syringes.' I still use my bag now but when I come people first of all want to talk with me and want me to answer their questions about HIV and related issues."*

The changing of attitudes toward harm reduction from harm reduction clients is also interesting: *"Many myths about drug use were discredited." "People are changing their attitudes. Usually people see IDUs as dirt, outcast that should be isolated from 'normal' people. And it leads to closing off contact with society. And here we [IDUs] see that we are treated differently and that the environment is becoming friendlier."*

A changing attitude among harm reduction clients was also described by one of the medical consultants of an HRP: *"People started to change... I was very surprised to learn that a stationary NEP has been visited by IDUs from other districts. The money they spend on transportation is enough to buy syringes. But they came to have some social contact; they wanted to see that they are accepted. It was important for them to see that they are not outlaws."* Some of the respondents mentioned that that harm reduction is the only *"air supply"* for IDUs.

As mentioned by outreach workers and managers in one of the regions: *"The quality of life and social status of clients is improving"* and they are starting to pay society in-kind. Considering other members of society, *"IDUs start to understand what to do with needles, that you should not throw away syringe as somebody could prick himself with needle."* This view is supported by a narcologist who said: *"Several years ago it was impossible to look into mailboxes or into an electric meter because everything was full of used syringes. Under the snow there were also a large number of syringes."*

One of the current leaders of an HRP at the end of the 1990s when HRPs were introduced in Russia, had a negative attitude toward these programs and was even more shocked by the idea of harm reduction. *"While working as a psychologist implementing a rehabilitation approach for IDUs, I considered the idea of a syringe exchange as shocking, something incredible. I was sure that it was not the approach we needed. I worked as family psychologist and provided counseling for families who faced the problem of drug use. I saw adolescents that were the best pupils in school, practicing music, sports, etc, and suddenly turned into distracted and disinterested people during a very short time period because of drug use. It was awful. And idea of harm reduction sounded just blasphemous. But I have been a sensible person and decided to first investigate this issue, especially taking into account that this approach has been used in developed countries... Thus, on the one hand there was high degree of distrust from my side, on the other hand I saw well-known people from developed countries promoting the idea of harm reduction. I saw the competence of these people*

and realized that they sincerely wanted to do something effective in order to fight the HIV epidemic. I had an internal struggle. This struggle came to an end when we conducted a rapid situation assessment showing that 98% of the 232 interviewed IDUs reported risky behavior that would facilitate the easy transmission of HIV. At that moment I realized that HRPs had to be implemented in order to change the behavior of IDUs and prevent the further spread of HIV."

In summary it seems that almost no one but drug users were ready to accept the idea of harm reduction from the very start. However many sometimes turned into activist for the approach or sometimes blindly worshiping the harm reduction concept. Only some respondents have however come to an understanding of the implementation issues and to a realization that best practices are needed in order to make HRPs highly effective.

Advantages and disadvantages of harm reduction: client perspectives

Although in the original questionnaire there were questions concerning "advantages" and "achievements" separately, while analyzing the transcripts it became clear that in the majority of cases the two terms were confused with each other. The advantages were more clearly identified by the clients as direct beneficiaries of HRPs. At the same time all of the advantages mentioned by IDUs were mentioned as the main achievements by those involved in providing harm reduction services, particularly highlighting the advantage of providing IDUs with blood tests and counseling. Thus it was decided to limit this section only to the advantages as they were viewed by harm reduction clients.

The majority of interviewed IDUs noted the following advantages of harm reduction:

- access to medical services;
- referrals to narcological dispensaries;
- access to anonymous blood tests and treatment (confidentiality was crucial for IDUs: "Why would I not trust an HRP, if they do not even write down my name?");
- a possibility to get free syringes that prevent the use of non-sterile equipment;
- a reduction in the risk of HIV transmission;
- an unprejudiced attitude of harm reduction staff toward IDUs .

CSWs, aside from those listed above, also mentioned the possibility of getting consultations, condoms, and useful information materials.

While ranking and prioritizing the advantages of HRPs, a majority of the harm reduction clients (IDUs and CSWs) spoke about the availability of information materials, social support, and access to medical services, as well as the supply of syringes and condoms.

Among the disadvantages, IDUs in some regions listed a poor quality of materials being distributed and a fear of persecution by the police. Indeed in some regions there were cases of leaky syringes mentioned by IDUs, so they preferred to inject with a used syringes in order to not lose any of the drug. CSWs sometimes complained of the poor quality of condoms, which tear, slide, decrease satisfaction for their clients or cause allergies. Besides the poor quality of materials, the issue of relevance also was raised by harm reduction users, for instance in some cases a change in the drug used required a different size of syringe (e.g., home made opiates require a 5 ml syringe, whereas for heroin use diabetic insulin syringes are used).

In the prison sector, among the disadvantages, inmates mentioned an absence of lubricants and syringes and a lack of sufficiently detailed information on HIV issues.

Achievements and failures of HRPs

The description of achievements and failures of HRPs was divided into sections devoted to different aspects: to outcome measures such as epidemiological and behavioral measures, to access issues, attitudes of decision-makers and law enforcement bodies, and finally to integration into the healthcare system.

Epidemiological and behavioral change

This section is devoted to achievements related to epidemiological and behavioral issues. All the respondents believed that harm reduction helped keep the HIV/AIDS epidemic under control. Some of the respondents stated that the achievement was not the reduction in numbers of new HIV cases but holding it stable. Others highlighted the reduction of HIV incidence among IDUs as a main achievement. *"In 2001 there were more than 300 new cases of HIV among IDUs, then in 2005 there were 112 new HIV cases and only 29 of them among IDUs, all other HIV cases were detected in the general population."* Both outreach workers and harm reduction managers believed that *"Rates of HIV transmission through blood went down and now there is an increase in sexual transmission of HIV"*, *"Before 70-80% of HIV cases were among IDUs, now its share is only 20%."* An outreach worker was convinced that the sexual route of HIV transmission is not necessarily related to commercial sex work, *"It could be explained by the fact that many people facing HIV do not want to bear the diagnosis and try to behave as usual."*

Although there is lack of solid epidemiological data on the effectiveness of HRPs in the cities included in this survey, the respondents provided routine statistics on HIV incidence in comparable cities of the same territory with and

without HRPs to indicate their achievements. This data suggested lower incidence rates in the cities with harm reduction activities, although the interpretation of such epidemiological data should be done with caution.

The category of outcome-related achievements also includes an increase in safer injecting practices. The head of one of HRP said, *"In 2000 unsafe practices were prevalent in 72% of users [sharing equipment], now it is only 18%."* This claim was repeated by other respondents: *"Last time we had a survey in 2005 and 87% of clients practiced safe injecting behaviors."* Others also claimed that the project had significantly influenced the behavior of drug users. *"I know that people that had a package of used syringes under their bed do not have it anymore." "In the past, five people were injecting with a single syringe, but not anymore."*

At the same time at least twelve respondents explicitly said that it is difficult to directly link harm reduction activities with a change of HIV incidence and in behavior, as many factors could have had an influence. It is not known how the behaviors changed in places where no HRPs were operating.

Access to target groups

A majority of respondents representing harm reduction staff (19 out of 24), epidemiological surveillance service (all four), narcological dispensaries (all four) mentioned as one of the main achievements the ability of HRPs to gain access and to work with the most closed groups of society. Finding ways to provide social support to these groups through the programs was deemed very important by them. The links to closed societies proved to be one of the main factors that motivated the staff of the official medical system to collaborate with HRPs.

The main achievement marked by three out of six HRP leaders is the trust of both IDUs and general population, who are probably even more important. However even in regions where there is minor opposition to harm reduction the head of the project mentioned, *"Still there is a small portion of the population that denies the idea of harm reduction while the majority, including authorities, medical specialists, and police, began to understand the purposes of harm reduction and openly spoke about it."*

One of the program directors put it as, *"Our program was recognized by the target groups: IDUs, CSWs and prisoners,"* claiming that *"all target groups know about the work of the program."* For the majority of the respondents the notion that no one but them were able to gain the trust of people in marginalized groups was very important: *"The program can reach those circles where they [authorities] cannot reach... and we can see how the situation in the city is changing."* The same achievement was also marked by narcological dispensary and law enforcement representatives, medical specialists, and many other respondents.

The representative of State Drug Control service in one of regions expressed his rather positive attitude toward harm reduction in comparison to other respondents from the service, emphasizing high coverage levels of IDUs by HRPs as a main achievement.

The cessation of drug use among broader groups of IDUs thorough increased information coverage was emphasized as one of the major achievements by representatives of narcological services and AIDS centers in several regions. *"If a person who became a harm reduction client quit using drugs after a certain period of time and was able to maintain abstinence after a long period of time, than it is a great advantage of HRPs. Even if there will be 2-3 such people per year, it still would be a great achievement."*

In a number of regions a concern was expressed that targeting risk-behavior groups was lately becoming more difficult. The important factor contributing to the issues of maintaining contact is the constantly changing *"narcotics scene"* due to the drug regulation legislation changes combined with other economic and social reasons. The *"narco-scene"* as it is referred to by respondents became "closed" in Russia, meaning that stricter legislation led to a change in distribution routes, namely by an increased number of *"running sellers."* The drugs are supplied via *"personal contacts"* and *"home deliveries"* rather than through *"street or apartment-based drug dealing."* In order to reach IDUs more resources and efforts are now needed, while the outreach management is much harder to organize. This makes the financing issue even more important as the required increase in mobile outreach workers is associated with greater expenditures.

In some sites where drug control services have achieved greater success, the shooting galleries (so called haunts) previously visited by outreach workers are no longer in place (or not known to harm reduction staff). Now the gathering places do not exist for more than 2-3 days and then move, which requires greater flexibility and closer links between HRPs outreach workers in order to adjust to these conditions. While an *"open narco-scene"* is easier to work in, as the target groups are easier to reach, a *"closed narco-scene"* requires increased secondary exchanges, as well as other creative organizational solutions.

Attitudes of politicians and decision makers toward harm reduction

In the cities where political support was hard-won the respondents placed it ahead of other achievements and considered it to result from their advocacy work, which also was mentioned as a program major success. In other sites where political support and governmental co-funding were in place almost from the very beginning of the projects, harm reduction staff were satisfied with the sustainability of the support despite some staff changes with regional authorities. They consider the sustainability of the political environment as their success, although they agree that it requires constant and thoughtful advocacy work by harm reduction leadership: *"Advocacy and promotion in harm reduction requires professionalism no less than any other component."*

It is interesting to mention that an unofficially expressed point of view that HRPs helped authorities for the first time to recognize the real situation with IDUs, e.g. the number of IDUs, their practices, etc.

The representatives of another region, which was recognized as successful, mentioned the unification of efforts of different bodies (medical specialists, authorities, etc.) in addressing

HIV prevention among their major achievements. *"Such a global task as fighting HIV can be solved only with united resources from different agencies. Even though harm reduction plays one of the leading roles in this task, without the support of other structures, harm reduction will not work effectively."*

Such an achievement as a low level of HIV among IDUs can very much contribute toward the support of harm reduction at the governmental level. Thus, the vice governor of one of the regions expressed a negative attitude toward harm reduction at a personal level, but said that *"based on the low rates of HIV in his region he agrees that harm reduction is needed to control the HIV epidemic and that is why, as representative of the executive branch of government, he supports harm reduction."*

The respondent of one of the regions mentioned the development of inter-sectoral cooperation. *"There was a time when police took away harm reduction client cards and clean syringes and then dirtied the syringes. There was opposition from medical staff because of a misunderstanding of harm reduction purposes. The most prevalent opinion was that HRPs distribute syringes and teach people how inject drugs. There are no such cases anymore. Six years have past and the situation in 2001, 2002, and 2003 was very much different from 2006. Inter-sectoral cooperation has been established."* Several respondents expressed the view that interdepartmental collaboration had external effects by improving the efficiency of other activities outside harm reduction, e.g. better collaboration between law enforcement bodies and healthcare systems helped to improve access to narcotic analgesics for patients suffering from chronic pain.

Relations with law enforcement structures

Good relations with the government and advocacy work in many regions led to better interactions with law enforcement bodies: *"There is better collaboration now with both state institutions and the police, and more recently drug control agencies became crucial in this dialog."* Some claimed that such relations had only started (implying that there is significant room for improvement); whereas other respondents claimed that *"the program is in tight collaboration with police and other law enforcement structures."* The latter view is supported by others, explaining the nature of this collaboration: *"We have written handbooks for police, conducted trainings and seminars with police, for those who are working with IDUs."* The same respondent signified that it was very important to work with low-level law enforcement officers, who do the ground-level work on the street. They can do more for HRPs and their clients, for instance, by providing security for harm reduction personnel.

It was often mentioned that relations with private security officers and junior officers are not easy. In spite of a number of trainings for law enforcement officers they still in some regions use any opportunity to persecute outreach workers and harm reduction clients, extracting money or working to further their career. It is the grim reality that sometimes harm reduction staff are not experienced enough to withstand this pressure. One of the examples provided by an outreach worker was that often police only formally support harm reduction through letters and high-level informal discussions, but *"when a policeman, knowing who I am, asks me where I have just been, in order to get there and establish haunts... how does it look?"*

On the other hand there are high turnover rates of police and additional training of newcomers constantly remains a high priority. It was emphasized by harm reduction representatives of one of the regions that even though common language with the Ministry of Internal Affairs and the Federal Penitentiary Service was always found, it was rather hard to push these structures to accept the harm reduction strategy.

Another important key player in the field of harm reduction is the State Drug Control Service. Improvements in collaboration with it were also considered by many respondents as a big achievement in the work of harm reduction. While the agency was established just in 2003, relations with it are still rather complicated in the majority of cities. As it was marked by one of the harm reduction regional leaders, *"Collaboration with the State Drug Control Service is always very hard and complicated. I will never believe those who tell that they have no problems with them and that everything is fine."* Interestingly in one of the regions, a representative of State Drug Control Service expressed an absolutely positive attitude toward harm reduction: *"I think that this is a needed direction for our population...The most positive aspect of harm reduction is providing IDUs with preventive and educational measure."* The respondent went on to say that HRPs have to be expanded all over the region. But the same respondent recognized that collaboration with authorities on harm reduction is not very easy. *"The administration does not provide any financial support but during meetings they raise this issue and ask why you did not do this or that, and never ask about the difficulties and never express a desire to help."*

A very prevalent point of view toward the State Drug Control Service, as well as toward the police, is that at least they stopped obstructing the work of HRPs. *"These structures just have to not be obstructive. They could be indifferent or interested in an HRP's work but more importantly they just must not be our enemies."* Often the position of the State Drug Control Service and the police was described by the following statement of an HRP head, *"If you work and nothing happens - you are simply ignored, but once something goes wrong then it is your fault."*

In some regions the State Drug Control Service generally supports harm reduction, but still avoids public announcements of their position. In only one region did they make positive statements in the media. In contrast it should be mentioned that in some regions in order to avoid expressing their negative attitudes, participation in this study was refused. Also in some cases there is an impression that sometimes the representatives of the Drug Control Service implicitly misinterpret the meaning of harm reduction, considering it as preventive programs with education and information components for youth or even for the general population. It could serve as an alarming sign, as in the situation of such misunderstanding, while claiming to support the program they might actually be trying to prohibit the expansion of typical harm reduction activities.

Links across health care sector

Building links across the health care system is considered by the majority of respondents as one of the most important factors of success. Some respondents mentioned that as a result of the advocacy efforts the project has started to make inroads into the medical establishment: *"Even the most conservative medical doctors started to doubt their original views."* Many narcologists claimed to have changed their attitude as well. Even though there is still a rather large number of medical specialists and decision makers that obstruct the expansion and sustainability of harm reduction.

It should be noted that the degree of successful cooperation with narcological services is rather different from region to region. Some have achieved a good level of understanding and effective cooperation.

A representative of a narcological service mentioned that one of the positive sides of harm reduction is the absence of an increase in the number of IDUs: *"For the first time there was reduction in IDU numbers in our region. Even if we cannot say that it totally relates to harm reduction's achievement, at least it did not stimulate any increase."* Another respondent mentioned the achievement of HRPs in helping narcological services to reach more patients. Controversially the infectious disease doctor from the same region mentioned an increase in the number of IDUs and the detection of several new HIV cases among IDUs as among the failures of harm reduction.

Narcologists often indicated that the criteria for success of HRPs can be added with *"narcological"* indicators such as the numbers applying for treatment and rehabilitation as well as the duration of remission.

The experience of some respondents was that the health care system has a mostly negative influence on HRPs. It was expressed by one respondent as a *"direct opposition by governmental institutions, e.g. 'AIDS Centers'"* with an explanation that from the health structures it was a *"purely negative and bad attitude toward the program."* Another respondent mentioned the *"negative influence of health care authorities... letters, slander, and accusations of providing methadone."*

Representatives of one of the HRPs said that he believed the reason for misunderstandings often relates to a *"low competency level in health care administration," "a low professional level of health care workers"* and that *"narcology dispensaries are useless."* An outreach manager said, *"You need to understand that unfortunately the era of free health care has passed and now it is a business,"* explaining that narcologists are interested only in drug users that are capable of paying for additional treatment.

This animosity between HRPs and health care structures greatly hampers HRP activities. A head of an HRP stated that in relation to health care structures, *"Frequently there is a feeling that we are begging for something from them."* This problem also arises while arranging gynecological services for CSWs. Harm reduction leaders, even in the more advanced regions, have complained that links with this sector is mostly based on personal relations rather than on routine, systematically organized procedures.

The support for harm reduction is not universal even in the AIDS Centers. In one of the regions the HRP has requested the AIDS Center to provide a letter of support required for a tender application to the National HIV Prevention Project. The AIDS Center replied with a letter stating that participating in these projects is an unlawful activity, which concerns the promotion of illegal drug use among the general population by creating an impression of appeasement, lack of responsibility, and encouraging drug use.

Some respondents pointed out that currently the majority of medical specialists have a stigmatized and preconceived attitude toward IDUs. Very few doctors would like to work with this group. But it was claimed in the interviews that those doctors who work in close cooperation with HRPs have changed their attitudes toward IDUs. A representative of an HRP in one of the regions said that there was pressure from narcological and psychiatric services against harm reduction. They claimed that IDU-related issues are their business, the harm reduction team is not professional, and the whole idea of harm reduction leads to an expansion of drug use and drug addiction. But now many have changed their views and one of the syringe exchange points visited in this study is located on the premises of a narcology center and the chief doctor works as a harm reduction consultant. All of these positive changes contributed to feelings by IDUs that HRP is not simply a syringe exchange; it provides referrals to medical specialists who are ready to provide support and treatment for them without stigma. Still the attitudes of medical specialists toward IDUs, even in HRPs, significantly vary from region to region as well as from case to case.

All of the above points of view show the importance of establishing and maintaining good relations with health care institutions in the region, while the lack of such relations hampers activities and reduces the legitimacy of harm reduction work.

Factors that influence the success and effectiveness of HRPs

Internal factors

Human resources

The following issues were raised during an interview about the role of human resources for the success of harm reduction:

- HRPs should be implemented by professionally-trained people and not in the framework of other daily routine activities. As one of the harm reduction leaders said, *"These people should be professionally enthusiastic."*

- There should be an active and enthusiastic harm reduction team: *"Devotees with their work being highest priority in life."*

- A strong and even charismatic leader of an HRP, who is able to predict local situations with HIV and harm reduction development and deal with them. The role of the leader is important from both internal and external perspectives. Internal role relates to the organization of work and the functioning of the HRP, while the external role relates to the establishment of good relationships with government and other external structures. A harm reduction leader must be personally interested in harm reduction *"If the leader is indifferent or doesn't personally accept the strategy of harm reduction or just makes extra money by working for the project, then the project will never work."* A majority (37 out of 57) of respondents said that all the projects' successes are determined by the personality and enthusiasm of the leader.

- Management is perfect, including the management of outreach work.

- Burn-out syndrome of outreach workers, which is often prevalent in HRPs, reduces their effectiveness and leads to significant turnover.

- Other reasons for turnover is the specificity of outreach workers as a social group, which pose a major risk of leaving because of incarceration, uncontrolled drug use, etc. But according to the opinion of some harm reduction leaders, outreach workers should be adequately trained:*"The highly qualified, well organized work of a sufficient number of outreach workers could be even more important than mobile harm reduction points."*

Organization and regulation

Several comments were related to the organization of work as a potential success factor. They concerned the project length, existence of stationary and mobile NEPs and project ownership.

- Project staff should be aware of the constantly changing type of "narco-scene" and be ready and capable to adjust to these changes. Over-formalization was mentioned by HRP staff as a major obstacle to a quick and flexible response to changing circumstances.

- Project ownership has been discussed in relation to NGOs vs. state-owned institutions and approximately half of the respondents expressed the opinion that *"the best situation is where the NGO is responsible and the state institution is a partner in a project."* The state-run institutions are seen as ineffective and rigid by NGO staff.

- Convenient locations of HRPs for IDUs. There were several different opinions on this issue. The representative of a relatively small city said that when the HRP was situated not far from the city center and near the main railway station, IDUs visited it more often in comparison with the present non-central location. At the same time it was marked by one of the respondents, a harm reduction staff member, that preferably the HRP must be located far from the State Drug Control Service office and have an uncomfortable access road in order to prevent the State Drug Control Service from wanting to make additional visits to the HRP. Another opinion of one of the outreach managers in a small town stated, *"The location of harm reduction site does not influence its work because outreach work is happening all over town, but if we were located closer to the old center we would have more clients and the process of gathering people for training would be also easier."* If the town where an HRP works is rather big, than just one point is not enough. It was suggested that syringe exchanges should exist in each health clinic. Around a half of HRP workers consider the location of an HRP as not a very important factor at all.

- The existence of a secondary exchange is very important. Still in some regions its implementation is hampered by street police.

- The hours of operation of HRPs are the most relevant for IDUs.

- Outreach workers, who have access to IDUs, are an issue. There were several controversial opinions on this topic: (1) outreach workers must be current IDUs or ex-IDUs, (2) an ambiguous attitude toward ex-IDUs doing outreach work because of burn-out syndrome and a high likelihood of returning to drug use, (3) active IDUs must not work in HRPs, even though the attraction of active IDUs as promoters is very important during the program formation because of their access to other IDUs.

- There should be a variety of harm reduction services, not limited to only syringe exchanges. Social and related support services are no less important than syringe exchanges, and social centers were considered by some respondents as an ideal form of a harm reduction organization.

In general the internal success criteria are somewhat limited and are based on project ownership (the best form is a coalition of NGO and state-owned institutions), sustainability (measured by the length of time the project has worked), and the breadth of services combined with accessibility through a combination of mobile and stationary NEPs "located in 'hot' zones" and the existence of an effective, well trained and devoted project team.

External factors

Political support

The recognition of the projects and support by the authorities has been repeatedly claimed as the most important success factor. Co-funding from local budgets is thus crucial. As the head of one of the HRPs said, *"If Russian society will not be involved in the HIV problem than we could consider that war against HIV has already been lost."*

Public opinion and the media

The following factors were mentioned repeatedly by respondents:

– The importance of public opinion and mass media was mostly seen as negative: *"[In terms of public opinion], in the case of HIV/AIDS at best there is separation, at worst - neglect and hostility. Various rumors are circulated. Two days ago I heard that there was a plan by people with HIV to plant infected needles in order to infect children." A police officer explained, "If the mass media is critical, one almost cannot prove anything," and added, "the less discussion of it [harm reduction] the better attitude the population will have toward the projects."*

In contrast, in some places harm reduction staff did not consider the media as an important player at all. They had no examples of negative influence. They also said that they had much to do besides working with the media.

In general, public opinion is viewed as less important for success than the views of authorities or health care providers. For the most part, respondents were concerned about negative public opinion and mass media that could hamper the development of harm reduction. The need for positive changes in public opinion was not emphasized. A success criterion is thus the absence of negative public opinion or an explicitly neutral attitude, rather than a positive attitude by the public.

Financial issues

All the respondents mentioned insufficient financing, especially from governmental structures. That is why role of the donors was highlighted. *"Without donors we will just die because the government is not yet ready to recognize us as professionals."*

The main budget line that urgently needs to be increased is staff salaries for outreach workers and medical specialists. As it was underlined by respondents, the daily work of these people is highly emotional and involves contact with difficult social groups. At the same time, at the beginning of the projects at the end of the 1990s their salary was rather comparable with the average salary. Now it is less than the minimum needed for survival. The respondents even said that if financing issues are not solved, then harm reduction in Russia will be doomed. Sometimes the total budget of the project is sufficient, however redistribution between donor lines is not allowed due to strict donor requirements.

Peculiarities of prison HRPs

• Achievements and failures of prison HRPs

A representative of prison staff of one the prisons where an HIV prevention program was implemented illustrated their program achievements with the following opinion: *"There are two prisons near each other. The prevention program works only in one of them. There is a huge difference in the knowledge levels of both inmates and prison staff between these two prisons with a significantly higher knowledge level in the prison with the program. Before the initiation of the HIV prevention program, the knowledge levels were almost equal in both prisons. It proved that the HIV prevention project in our prison was very effective."* Another respondent mentioned the absence of HIV transmission within the prison as an achievement, as well as the reduction of hepatitis transmission. There were also educational achievements that were reflected in the reduction in the number of disturbances and improvement of inmates' behavior. The psychologists marked an important side effect of the projects, which is that they help to implement and maintain the socialization of prisoners and decrease their aggressiveness.

As the main failure, the majority of the staff and peer educators mentioned an absence of social support after release from the penitentiary system. It was pointed out that the projects succeeded in teaching people healthy attitudes but they were not socially integrated afterwards and became rejected from society. Among the significant failures marked by prison staff was an *"absence of internal documents on a harm reduction strategy, which is reflected only in methodological guidelines."*

• Factors that influence the success and effectiveness of prison HRPs

Internal factors

Volunteers and peer-educators have succeeded in informing the majority of inmates about the ways of HIV prevention and safer sexual practices. The rates of condom use have increased among inmates. The importance of peer education was mentioned by both inmates and prison staff. The representatives of civilian narcological centers and the State Drug Control Services also noted the importance of peer education in prisons.

– The availability of condoms and alcohol swabs was emphasized by a peer educator as an important factor. The importance of condom availability was also mentioned by a prison project coordinator. *"The first trial with condom distribution in the prison began in 2001. It was a very interesting experience; some inmates even used condoms as a currency. After that the decision was made to increase the quantity of condoms distributed in prisons."*

– The availability of magazines in significant amounts devoted to HIV/AIDS issues in prisons was also highlighted as a priority by peer educators.

– Trainings were mentioned as an important factor by both prisoners and prison staff. Trainings have contributed to changes in risky behavior and an increased level of knowledge. The trainings provided by external trainers were given a higher priority because inmates would more willingly interact with them.

In addition the following key success factors were emphasized by respondents:

– A positive attitude of Federal Penitentiary Service leaders.

– The presence of professional psychologists.

– Education and information for prisoners should be combined with staff education.

– Inmates involved in peer education activities highlighted that prisons that separate HIV positive prisoners do not contribute to the development of tolerance toward HIV positive people.

– The education of the prison administration (both through internal trainings and educational trips) proved to be very important for changing their attitude toward harm reduction and the implementation of HIV prevention programs in prisons. One of the respondents responsible for coordinating such a program said, *"In the beginning I had doubts about the efficiency of HRPs. I did not completely understand this strategy and had some moral dilemmas. But after I learned more about it I have changed my attitude and now I am a supporter of harm reduction."*

– A coordinator of one of the programs also added that prevention programs must be implemented steadily: *"If the program were implemented over two years and then stopped, it would not be effective. A permanent program is needed."*

External factors

A discussion of the role of external factors affecting prison HRPs is not fully appropriate because both the system and the prisoners are isolated from the outside world. Numerous external factors, which were mentioned by the respondents, were mainly related to the prison administration and the Federal Penitentiary Service as the main decision makers. The following quote from a prison staff member confirmed this conclusion: *"In our system people are isolated and we do not have serious external influences. Our administration has the ultimate power."*

Also the main problem is an absence of interdepartmental cooperation on harm reduction issues in Russia. *"Police arrest IDUs, in the prison sector syringes are prohibited, and at the same time locally we have to somehow provide IDUs with clean syringes. Legislation is needed in order to resolve this contradiction."*

Results:

Repertory Grid Techniques

As there are no clearly defined success factors, the opinion of experts on this matter is important. The experts themselves may clearly realize which are success factors are and which are not. They may consider one HRP as more successful than another, but believe that the factors of success are different from what really caused the differences. The evaluation of success factors for HRPs should then rely on the comparison of the different projects, some of which are more successful than others. To perform this task, first it is necessary to know which factors experts use for evaluating projects and which factors are responsible for the different ratings given to projects.

Materials and methods: the repertory grids analysis

One of the methods used for obtaining a deeper understanding of how a person (an expert) perceives external objects, such as HRPs is the repertory grids technique described in Appendix 4. This technique is akin to a self-generated questionnaire and consists of two stages. At the first stage the expert is asked to specify three HRPs and then identify which two are similar and differ from the third. Afterwards the expert is asked to specify which criteria were used to distinguish the two projects from the third. These criteria are noted and later referred to as effectiveness criteria. At the final stage the expert is asked to rate each of the projects on a scale from one to five based on the formulated criteria.

For the present study each expert was asked to think about three HRPs familiar to him for further evaluation. In order to have information on whether the rating was positive or negative, each expert was asked to imagine two hypothetical HRPs: the most successful project (indicated as IP - ideal project) and a project unable to fulfill its tasks and goals (indicated as BP - bad project). Both ideal and bad projects were virtual projects. The experts were asked to complete a table reflecting triads of three different projects to be compared. The table consisted of eight different triads including real HRPs and hypothetical projects. In the results section they analyzed eight groups and generated eight criteria for each. (Appendix 2).

If an expert was familiar with fewer than three projects, he was asked to select one project familiar to him over a long period of time. Then the expert was asked to recall the project in its initial phase or during the first six months after the expert became acquainted with the project. This state of the project was indicated as P0 (project, time 0). Then the expert was asked to think about the current state of the project. This state of the project was indicated as PP (project, present time). Afterwards the expert was asked to forecast what would happen with the project within 1.5 - 2 years. This vision of the expert was indicated as PF (project, future). The expert was asked to think about each of the abovementioned states of the project independently, as if they were separate projects. Then the comparison of the triads was based on the same logic that was used for the analysis of the three different projects (Appendix 3).

Analysis of repertory grids

Table 5. City of the HRPs selected by the experts in repertory grids

City where the HRP is implemented	# of times program was selected for comparison	% of all selections
Balakovo	11	18,97
Kazan	7	12,07
St. Petersburg	7	12,07
Vologda	5	8,62
Pskov	5	62
Voronezh	4	6,90
Tver	3	5,17
Tomsk	3	5,17
Volgograd	2	3,45
Nizhniy Novgorod	2	3,45
Barnaul	1	1,72
Novgorod Velykij	1	1,72
Irkutsk	1	1,72
Krasnoyarsk	1	1,72
Lipetsk	1	1,72
Mytishi	1	1,72
Omsk	1	1,72
Orenburg	1	1,72
Khabarovsk	1	1,72

The experts completed 36 grids on civilian HRPs. The identification of the factors determining the effectiveness of civilian HRPs with the use of repertory grids was based on 19 different HRPs. Among the most frequently cited programs were those in Balakovo, Kazan, St. Petersburg, Vologda and Pskov (Table 5)

Of the 36 repertory grids completed, 25 (69%) were based on a comparison of one project in three different states (repertory grid type two) and 11 grids (31%) were based on a comparison of three different projects (repertory grid type one). All experts except one generated eight comparison criteria in each grid, giving 287 criteria for the effectiveness evaluation. It should be mentioned that that the more prevalent use by the experts of the repertory grid type two did not affect the results of the study. Theoretically the more frequent use of repertory grid type two might limit the number of elicited constructs and increase the "fused" nature of the grid. In order to check this assumption, the average coefficient of the grid intensity for grids type one and type two were calculated. The results indicated no significant differences between the two groups. That is why they may be used

together and have no implications for the interpretation of the results.

To analyze the criteria that the experts used when completing the repertory grids, a bootstrap content analysis was used. At the initial stage, a theory-based seed classification was used, which divided all criteria by process and outcome criteria. The process criteria were further subdivided into criteria that were internal and external for the project. All criteria were first divided by those three groups. Then they were grouped more finely. If a criterion was similar to the previous one, they were put into the same category. If they differed, a new category was created. All subsequent criteria were compared with those categories, and if necessary, further criteria were created. If a category held several criteria, more attempts were made at creating additional categories. If the meaning of a criterion was not entirely clear, it was compared with other criteria from the same repertory grid and the projects ratings (especially of the hypotheticals) were taken into account.

After the complete classification was created, the criteria were reviewed once again to ensure that they were placed in the appropriate categories.

The analysis of the criteria started with the identification of the dominant criteria in the grid. A dominant criterion was defined as a criterion that had the highest overall correlation with other criteria in a given grid. The dominance was measured with a Bannister coefficient. The criterion with the highest Bannister coefficient was considered as dominant. The analysis was appended with a calculation of a summary Bannister coefficient. In order to avoid confusion and differentiate the Summary Bannister coefficient from the constructed Bannister coefficient, it was decided to use the term "grid intensity," which has the same meaning as a summary Bannister coefficient. This coefficient shows how 'fused' is the evaluation system of a given expert in a given grid. The closer intensity of the grid coefficient to the maximum, the more 'fused' is the evaluation system of a given expert (i.e., a lower number of widely differing evaluation criteria the expert used internally, would mean that all of the named criteria are just synonyms). This issue could be further clarified by simple example. If the intensity coefficient is 5054, that would reflect 90% of the maximum possible value of 5600 (see Table 7 notes) than almost all of the constructs would have the same meaning. Conversely, if the intensity coefficient is 1703 that would reflect 30% of the maximum possible value so that the constructed system would contain different sets of criteria for the project evaluation. In the present analysis only six grids contained systems with more than 70% 'fused' and only two had a 'fused' rating of more than 80%, meaning that the majority of experts used different sets of criteria for the project evaluation.

If two criteria had the same Bannister coefficient, they were included into the analysis. If more than three such criteria existed, it meant that no dominant criteria existed. In the present analysis, four grids had no dominant criteria.

A further analysis was based on the experts' evaluation of the quality of an HRP or project states. To make the different grids comparable, the HRPs'/project states' distances from the ideal project were scaled so that zero was the worst (hypothetical) project and one was the ideal project.

Each grid contained information on three different HRPs rated under eight criteria. This formed 861 individual values that were used for the evaluation of the significance of the criteria categories. For this purpose a Spearman correlation coefficient was calculated for ratings of different criteria and assessed the value of the project. If a criterion was negative (i.e., lacking an important characteristic) the sign of the rating was reversed.

The different categories contained different numbers for the individual criteria and thus a direct comparison of the correlation coefficients was unreliable. To overcome this problem the categories were compared based on a p-value associated with the correlation coefficient. The p-value was dependent on both the number of criteria (sample size) and the absolute value of the correlation coefficient. If the p-values were similar (or were less than 0.0001) the absolute value of the correlation coefficient was used to compare criteria. The lower confidence interval of the correlation criteria by the z-method was calculated and used in evaluating the criteria. The analysis was done for four levels of aggregation of the criteria.

All calculations were made in SAS version 8.2 (SAS Institutes, Inc., Cary, NC), according to algorithms described in Plavinski (2006). The distance calculations were made with the DISTANCE macro (SAS Institutes).

Results

The bootstrap content analysis of 287 criteria made by experts during the completion of 36 grids led to 36 categories being combined into nine internal and seven external groups of process variables. The outcome variables were not divided into categories. Two criteria were not classified. A detailed presentation of the criteria according to the major classification categories is presented in Table 6.

The majority (96.8%) of the criteria used by the experts were process indicators showing that experts do not see outcome indicators as a main factor of an HRP's effectiveness. It probably could be explained by many factors external from HRPs can influence outcomes. Nevertheless six of the abovementioned outcome indicators included a decrease in the number of new HIV cases among clients of HRPs and a decrease in the number of viral hepatitis cases. In one case, the outcome variable appeared as the dominant criterion for evaluation. In total, the external variables were used by the experts in 19.2% of all cases, whereas internal variables were used in 78.1%.

The external variables that have a maximum number of individual criteria were financing (4.5%) from central and local governments and governmental support (4.9%). Usually those criteria were named as 'support from local government' or 'project recognized on a local and state level.' It is possible that the reason that "financing" did not receive the top rating by experts completing repertory grids is that the sample of HRPs primarily included those which that had

Table 6. Categories of criteria used for evaluating the effectiveness of HRPs

	N criteria	% of all criteria
1. Outcome variables*	**6**	**2,1%**
2. Process variables	**279**	**97,2%**
2.1. Internal processes of the project	**224**	**78,1%**
2.1.1. Clients	34	11,9%
2.1.1.1. Project factors influencing contacts	1	0,4%
2.1.1.2. Client factors influencing contacts	2	0,7%
2.1.1.3. Access to target groups	15	5,2%
2.1.1.4. Trusting relations with members of target groups	6	2,1%
2.1.1.5. Knowledge about HRPs among members of target groups	4	1,4%
2.1.1.6. Other	6	2,1%
2.1.2. Employees	47	16,4%
2.1.2.1. Drug users among employees	6	2,1%
2.1.2.2. Experienced staff	2	0,7%
2.1.2.3. Professionalism of the staff	13	4,5%
2.1.2.4. Number of personnel in the project	5	1,7%
2.1.2.5. Training of the staff	5	1,7%
2.1.2.6. Burn-out syndrome among staff	5	1,7%
2.1.2.7. Other	11	3,8%
2.1.3 Organizational climate	41	14,3%
2.1.3.1. Salary of the staff	4	1,4%
2.1.3.2. Motivation of the staff	10	3,5%
2.1.3.3. Other	27	9,4%
2.1.4. Structural and logistical issues	21	7,3%
2.1.4.1. Existence and activity of mobile needle exchange points	8	2,8%
2.1.4.2. Existence and activity of stationary needle exchange points	4	1,4%
2.1.4.3. Existence and quality of printed materials	5	1,7%
2.1.4.4. Other	4	1,4%
2.1.5. Additional services provided	42	14,6%
2.1.5.1. Social services	3	1,0%
2.1.5.2. Medical services	23	8,0%
2.1.5.3. Other	16	5,6%
2.1.6. Coverage	23	8,0%
2.1.7. Communication and reporting	2	0,7%
2.1.8. Management and governance	14	4,9%
2.1.8.1. Planning according to stages of the epidemic	2	0,7%
2.1.8.2. Strong leadership	8	2,8%
2.1.8.3. Other	4	1,4%
2.2. External environment	**55**	**19,2%**
2.2.1. External factors influencing access to services	2	0,7%
2.2.2. Social environment (opinions of the public and administrative authorities)	11	3,8%
2.2.3. Financing	13	4,5%
2.2.3.1. Governmental/budgetary financial support	6	2,1%
2.2.3.2. Source of financing unspecified	7	2,4%
2.2.4. Support from government (local and federal)	14	4,9%
2.2.5. Relationships with police	6	2,1%
2.2.6. Relationships with healthcare institutions	7	2,4%
2.2.7. Others	2	0,7%

* Outcome variables: high effectiveness of HIV prevention; moderate effectiveness of HIV prevention; decrease in HIV prevalence among clients of the HRPs, no cases of risky injection that caused transmission of HIV among harm reduction clients; decrease in viral hepatitis cases.

long-term sustainable funding. This criterion was not appropriate in the majority of cases in order to distinguish two HRPs from a third.

The internal variables were divided into variables dealing with interactions with clients (the most important was whether or not the project has access to the target group), the specifics of the employees (whether staff are professional, experienced, and have training opportunities), target group coverage, the quality of communication and reporting, the quality of management, and the atmosphere within the HRP.

Among internal variables most frequently used was the atmosphere inside HRP, which included such factors as the motivation of the project staff, its salary and other characteristics like capability for innovations, flexibility, good teamwork, an organized team, and opportunities for supporting staff. All of these factors contributed to project sustainability.

Among the most crucial factors, the existence of mobile NEPs was noted. The location and number of stationary NEPs was also cited as evaluation criteria.

Much attention was paid by experts to the services provided by HRPs. The most frequently cited criteria were those related to medical services. Among such criteria, diagnostic possibilities, access to ARV therapy, the existence of physicians that IDUs can trust, a wide range of medical services provided to NEP clients and even the existence of substitution therapy were marked as important. On average, almost every one out of seven criteria used by the experts (14.6%) were related to the availability of services. Therefore almost every expert mentioned access to services in the repertory grid.

It is interesting that project management and governance were given less attention, despite the prevalent opinion on the importance of this factor. Strong leadership was selected only in 2.8% of all cases, less than one-fourth of the grids. Some experts mentioned an interesting criterion that the planning of an HRP should depend on the stage of the HIV epidemic.

At the same time, because of the large number of criteria used by the experts it was important to identify those that are most important for the evaluation of HRPs. It was achieved by two approaches: (1) identifying the dominant criteria for each repertory grid and (2) identifying the correlating criteria categories with the implicit value given to each of the projects by the experts.

As seen in Table 7, there were 41 dominant criteria (four grids had no dominant criteria and nine had two dominant criteria) and only one of which was related to outcomes. A large group of dominant criteria (a quarter of all criteria) were from the client relationship category (2.1.1 subgroup) stressing the importance of good access to IDUs and good relations with the target group. Eight criteria were from the employee-related category (2.1.2 subgroup), stressing the importance of not exposing qualified staff to burn out. Six criteria were related to organizational climate in the project team (2.1.3 subgroup) and the breadth of services provided by the project (2.1.5 subgroup). Other variables such as good relations within the team, support for the staff, openness to innovations, and an organized project team were named as dominant criteria. The experts determined that a wide range of services should be provided, including various diagnostic possibilities and secondary exchanges with a high level of quality. It was also noted that the existence of solely "bare" syringe exchanges should be considered as a poor quality.

Table 7. Dominant criteria for each grid (civil HRPs)

Grid number	Main criteria (Bannister coefficient)	Bannister Coefficient*	Intensity of grid**	Type of criteria
13	No cases of injection-related HIV among NEP clients	543	3572	1.
17	High demand by IDUs	440	2681	2.1.1.2
23	Interactions with target group	537	3830	2.1.1.2
32	Low number of visits to NEP	553	3764	2.1.1.3
31	Good access to IDUs	656	5054	2.1.1.3
27	No contact with target group	370	2325	2.1.1.3
10	Good relations with target group	444	2785	2.1.1.4
24	Good relations with target group	466	2923	2.1.1.4
36	Trust of IDUs to the program	483	3226	2.1.1.4
14	Clients follow safe behavior pattern	475	2896	2.1.1.6
35	Clients flocking to NEPs	444	2720	2.1.1.6
8	High professionalism of employee	581	3974	2.1.2.3
22	Good peer consultants	484	3075	2.1.2.3
31	Sufficient number of outreach workers	656	5054	2.1.2.4
25	Lack of training possibilities	587	4050	2.1.2.5
26	High incidence of burn-out syndrome among employees	533	3476	2.1.2.6
20	Adequate outreach	397	2610	2.1.2.7
27	Low staff turnover	370	2325	2.1.2.7
21	Good relationships with other administrative units	541	3448***	2.1.2.7
6	Idea of harm reduction supported by the staff	578	3978	2.1.3.2
18	Staff motivation	223	1348	2.1.3.2
5	Good relations within the team	523	3430	2.1.3.3
19	Support for the staff	498	3264	2.1.3.3
23	Openness to innovations	537	3830	2.1.3.3
34	Organized project team	284	1879	2.1.3.3
15	No timetable of employee contacts with clients	211	1303	2.1.4.4
1	Wide range of diagnostic procedures available to the clients	518	3332	2.1.5.2
11	Low quality of medical services for target group	560	3740	2.1.5.2
16	Social and medical support system for clients	390	2265	2.1.5.2
3	"Bare" needle exchange	607	4279	2.1.5.3
7	Good secondary exchange	296	1703	2.1.5.3
4	Additional services provided	626	4609	2.1.5.3
17	Wide IDU coverage	440	2681	2.1.7
4	Wide coverage	626	4609	2.1.7
2	Activity of the leader	444	2907	2.1.9.2
28	State financing	394	2777	2.2.3.1
15	Financing corresponds to volume of services	211	1303	2.2.3.2
25	Recognition of project effectiveness at the regional and state levels	587	4050	2.2.4
2	Good contacts with authorities	444	2907	2.2.4
33	Good relations with authorities	378	2103	2.2.4
21	Good outreach work	541	3448***	2.2.7

* The Bannister coefficient is a sum of squared rank correlation coefficients of a given construct with all other constructs multiplied by 100. The higher the Bannister coefficient the closer the given construct is associated with other constructs. The maximum value of a Bannister coefficient for a construct in an eight-construct grid is 700 (seven correlation coefficients with a maximum value of 1*100). Correspondingly, the closer the Bannister coefficient approaches this value the more 'important' it is, in a sense, that knowing the value of this construct allows for the prediction of the value of other constructs and the total value of the elements. The 'important' constructs more likely influence the judgment of the quality of the project.

** The grid intensity shows how well all the constructs correlate with each other and whether there are constructs that have a low level of correlation (showing that they are measuring different aspect of effectiveness). The maximum value of intensity for an eight-construct grid is 5600 (eight constructs with a maximal Bannister coefficient). Such a high value means that knowing values for one construct, the values for other constructs may be predicted precisely, implying that those constructs are, in fact, not different from the first. Such grids are called 'fused' meaning that all elicited constructs are different labels for the same underlying criterion.

*** Only seven criteria instead of the required eight were used by one of the experts.

In general, the list presented in Table 7 reflects the overall structure of criteria used by the experts and the percentage distribution of the different categories that do not significantly differ from Table 6. If all criteria were considered as a full set, then the question would arise whether we could consider dominant criteria as a random sample. In this case the set of these criteria should be included in the 95% confidence interval (Table 8). As seen from Table 8 almost all percentage criteria values were included in the 95% confidence interval. The only exception was subgroup 2.1.1, where this value was not included in the confidence interval. There were 10 subgroups analyzed and it was expected that in two cases this value would be outside the 95% confidence interval by chance alone. For the 2.1.1 subgroup the percentage value was included in the 99% confidence interval (9.7%-45.2%), meaning that the experts did not indicate any subgroup because it contained the most important evaluation criteria.

Because the dominant criteria approach was unable to indicate which category of criteria is the most important for evaluating HRPs, a second approach, aimed at measuring the influence of the criteria categories on the value of the project, was used.

As described in the material and methods section, this approach is based on the use of a repertory grid as an evaluation instrument. The criteria used by experts in each grid were supposed to be used for the multidimensional evaluation of the projects. The value of each project was calculated as a simple distance between the investigated project and the hypothetical reference project(s). The distances in this case were calculated between the actual projects and the ideal project. All grids except one, the worst (reference) project, were further away from the ideal project. To make the project values comparable they were scaled so that distance between the ideal and worst reference projects was equal to one.

Because there were 25 grids completed by the experts familiar with a single HRP, it was possible to analyze experts' vision of development of future projects. The analysis indicated that all cases except two were rather optimistic. They believed that in the future projects would become better than they are now and that they will even closely approach the ideal project. For all 25 projects the average value for projects in the past was 0.20 (SD = 0.18), indicating that most projects started as relatively poor projects. Now the projects are much better (average value of 0.45, SD = 0.21) and will become even better in the future (average value of 0.77, SD = 0.26). The exclusion of the two pessimistic experts, who believed that a particular HRP is now worse than it was in the past and in the future the situation will not improve, led to slightly higher values for the projects in the present (average value of 0.46, SD = 0.21) and in the future (0.82, SD = 0.21). But the value reflected that it did not change in the past (average value of 0.20, SD = 0.19). One expert believed that now the project is working better than it had been in the past but in the future it will become worse. It is important to mention that such a pessimistic forecast of a project's future was not confirmed by other experts evaluating the same project. Two more experts believed that in the future the project's situation would not change much.

In total 17 experts (68%) believed that the projects are moving from a poor state in the past to a better situation in the present and to an even better situation in the future. Three experts (12%) believed that currently the project works worse now than it had been working in the past, but it will improve in the future. Five experts were more pessimistic about the future: four

Table 8. Percentage distribution of the dominant criteria

Subgroup	% of all dominant criteria (95%CI[70])	% of all criteria[71]
1	2,4% (0,06%–12,9%)	2,1%
2.1.1	24,4% (12,4%–40,3%)	12,1%
2.1.2	19,5% (8,8%–34,9%)	16,7%
2.1.3	14,6% (5,6%–29,2%)	14,6%
2.1.4	2,4% (0,06%–12,9%)	7,5%
2.1.5	14,6% (5,6%–29,2%)	14,9%
2.1.6	4,9% (0,6%–16,5%)	8,2%
2.1.7	0% (0%–8,6%)	0,7%
2.1.8	2,4% (0,06%–12,9%)	5,0%
2.2	14,6% (5,6%–29,2%)	19,6%

believed that in the future the project will remain at the same level or worse despite the fact that now it works better than in the past. While the fifth expert believed that the project has been deteriorating since the very beginning.

For three of the cities included by the experts into the repertory grids it was possible to calculate meaningful average values. It was possible because there were more than two experts evaluating those three cities. For Balakovo HRP (n = 9) the past project state was indicated as poor (average value 0.10, SD = 0.07), in the current state the experts considered it to be much better (average value 0.57, SD = 0.19), and believed it would succeed in the future (average value 0.87, SD = 0.27). The Pskov project, according to the experts, has also been progressing and will do so in the future (three experts, past value 0.30, SD = 0.05, present value 0.56, SD = 0.10, future value 0.94, SD = 0.05). The

[70] 'Exact' confidence interval, published in Documenta Geigy Scientific Tables, sixth edition (Basel, 1962).
[71] Percentage of the sum of all outcome and process variables.

same trend was found for the Voronezh HRP (four experts, past value 0.10, SD = 0.08, present value 0.38, SD = 0.18, future value 0.83, SD = 0.13). It is interesting to note that the current state of the HRP in Voronezh was rated worse in comparison with the Balakovo and Pskov HRPs. The Kazan HRP was rated as having no significant changes (three experts, past value 0.22, SD = 0.06, present value 0.31, SD = 0.15, future value 0.35, SD = 0.24). It is worth mentioning that looking at the values of the Kazan and Balakovo HRPs it seems that Balakovo performed better but a direct comparison made by one of the experts showed that in Kazan the project performed better than in Balakovo (values 0.44 and 0.29 respectively). This stresses that experts have different views of the projects they were familiar with and some are generally more optimistic than others.

In a comparison of different cities, three experts found no differences between the ideal and existing projects (in two cases they were referring to the St. Petersburg project and in one case to the Pskov project) and in one case between worst possible project and the project in Nizhniy Novgorod. In all cases the different experts gave similar comparative ratings to different programs, although the exact values were different because of different attitudes of the experts about the meaning of an ideal project.

Three cities were rated by three or more experts. The highest-rated project was St. Petersburg (seven experts, average value 0.71, SD = 0.24). The Kazan project was rated somewhat worse (three experts, average value 0.46, SD = 0.30) and the Vologda project was rated the worst of the three (three experts, average value 0.17, SD = 0.14). It is interesting to note that the value for the Kazan project was close to that given by experts evaluating the progress of the project during the period. In both cases the project was judged to be halfway between the worst and the best possible project (0.46 and 0.31, respectively).

The large number of individual values and their dispersion made it possible to study the answer to the question on which criteria were the most important predictors of whether the experts would recognize a project as a success or failure. To do so, the correlation between the ratings given by experts for each criterion and the final values for the program were calculated. The correlation coefficients were calculated separately for each category of criteria. The calculations were repeated for both three-level and four-level categories.

There is no strict rule as to which criteria should be named as important or non-important. It is clear, however, that criteria should be based on how well they predict values assigned to a particular project (with the correlation coefficient) and how reliable is the estimate of the correlation coefficient. As it was noted in the Materials and Methods section, the correlation coefficient's p-value is dependent both upon the value of the correlation coefficient and the sample size used. The latter is also an indicator of the reliability of the population estimate for the correlation coefficient. Accordingly the p-value could be used as one of the indicators of the predictive ability of criteria. The challenge appears when the sample size becomes relatively large (more than 30 criterion-value pairs) as the p-value becomes less sensitive to the changes in the correlation coefficient. Therefore a second approach was used, based on the calculation of a lower 95% confidence limit for the correlation coefficient. The width of the confidence interval is also dependent upon the sample size but its location is much more sensitive to the changes in the cor-

Table 9. Analysis of the relative importance of success criteria for civilian HRPs

Criteria Categories	R	LCIR	P	N	Importance p-method	Importance z-method
1. Outcome variables	0,5982	0,1822	0,0087	18		
2.1. Internal processes of the project						
2.1.1. Clients	**0,48619**	**0,3222**	**0,0001**	**102**	**5**	**4**
2.1.2. Employees	**0,50939**	**0,3757**	**0,0001**	**141**	**3**	**2**
2.1.3. Organizational climate	0,44654	0,292	0,0001	122		
2.1.4. Structural and logistical issues	0,45841	0,2376	0,0002	63		
2.15. Additional services provided	**0,49516**	**0,3506**	**0,0001**	**126**	**4**	**3**
2.1.7. Coverage	**0,51696**	**0,3193**	**0,0001**	**69**	**2**	**5**
2.1.8. Communication and reporting	0,37187	-0,63	0,4679	6		
2.1.9. Management and governance	0,38536	0,0922	0,0117	42		
2.2. External environment						
2.2.1. External factors, influencing access to services	-0,08827	-0,84	0,8679	6		
2.2.2. Social environment (opinions of the public and administrative officials)	**0,69353**	**0,4597**	**0,0001**	**33**	**1**	**1**
2.2.3. Financing	0,26054	-0,074	0,1249	36		
2.2.4. Support from the government (local and federal)	0,39542	0,104	0,0095	42		
2.2.5. Relationships with police and narcological services	0,18643	-0,307	0,4589	18		
2.2.6. Relationships with healthcare institutions	0,40371	-0,034	0,0695	21		
2.2.7. Others	0,77621	-0,096	0,0695	6		

relation coefficient and thus should be more informative in cases where there are relatively large numbers of criterion-value pairs. The lower confidence limit was calculated according to Fisher's z method because of the necessity to analyze correlation coefficients that may be close to unity. The results of the analysis by three-level categories are presented in Table 9.

As the table shows, the use of both methods indicated one group of five as the most important for success criteria. At the top under both approaches was subgroup 2.2.2 – good social environment. Thus all experts believed that a good environment with good relations with the mass media, interagency interaction, a lack of social stigmatization of IDUs, and political support are critical for the success of HRPs. At least 25% of the variability in program ratings was explained by those factors.

The second highest rank according to the z-method and third according to the p-method was given to good employees. The employees that are experienced, highly trained, have first-hand knowledge of the IDU scene, in good psychological shape, and exist in sufficient numbers for the needs of the project are key to success.

Table 10. Analysis of relative importance of success criteria for HRPs, detailed categories

Criteria Categories	R	LCIR	P	N	Importance p-method	Importance z-method
1. Outcome variables*	0,598	0,182	0,0087	18		
2.1 Internal processes of the project						
2.1.1. Clients						
2.1.1.1. Project factors influencing contacts	1			3		
2.1.1.2. Client factors influencing contacts	0,794	-0,048	0,059	6		
2.1.1.3. Access to target groups	0,326	0,036	0,0287	45		
2.1.1.4. Trusting relations with members of target groups	0,564	0,131	0,0149	18		
2.1.1.5. Knowledge about HRPs among members of the target groups	**0,764**	**0,339**	**0,0038**	**12**		**5**
2.1.1.6. Other	0,607	0,195	0,0076	18		
2.1.2. Employees						
2.1.2.1. Drug users among employees	0,401	-0,082	0,0996	18		
2.1.2.2. Experienced staff	**0,912**	**0,387**	**0,0112**	**6**		**3**
2.1.2.3. Professionalism of the staff	0,339	0,027	0,0345	39		
2.1.2.4. Number of personnel in the project	0,661	0,225	0,0073	15		
2.1.2.5. Training of the staff	0,618	0,155	0,014	15		
2.1.2.6. Burn-out syndrome among staff	0,505	-0,01	0,0548	15		
2.1.2.7. Other	**0,664**	**0,415**	**0,0001**	**33**	**2**	**2**
2.1.3. Organizational climate						
2.1.3.1. Salary of the staff	0,438	-0,181	0,1541	12		
2.1.3.2. Motivation of the staff	0,502	0,174	0,0047	30		
2.1.3.3. Other	**0,448**	**0,253**	**0,0001**	**80**	**5**	
2.1.4. Structural and logistical issues						
2.1.4.1. Existence and activity of mobile needle exchange point	0,335	-0,079	0,1098	24		
2.1.4.2. Existence and activity of stationary needle exchange point	0,702	0,215	0,0109	12		
2.1.4.3. Existence and quality of printed materials	0,4	-0,142	0,1401	15		
2.1.4.4. Other	0,734	0,276	0,0066	12		
2.1.5. Additional services provided						
2.1.5.1. Social services	0,04	-0,641	0,9183	9		
2.1.5.2. Medical services	**0,559**	**0,372**	**0,0001**	**69**	**3**	**4**
2.1.5.3. Other	0,4	0,131	0,0048	48		
2.1.7. Coverage	**0,517**	**0,319**	**0,0001**	**69**	**4**	
2.1.8. Communication and reporting	0,372	-0,63	0,4679	6		
2.1.9. Management and governance						
2.1.9.1. Planning according to stages of the epidemic	0,647	-0,347	0,165	6		
2.1.9.2. Strong leadership	0,274	-0,145	0,195	24		
2.1.9.3. Other	0,428	-0,193	0,1648	12		
2.2. External environment						
2.2.1. External factors, influencing access to services	-0,09	-0,84	0,8679	6		
2.2.2. Social environment (opinion of the public and administrative officials)	**0,694**	**0,46**	**0,0001**	**33**	**1**	**1**
2.2.3. Financing						
2.2.3.1. Governmental/budgetary financial support	0,229	-0,321	0,4112	15		
2.2.3.2. Source of financing unspecified	0,402	-0,036	0,0712	21		
2.2.4. Support from the government (local and federal)	0,395	0,104	0,0095	42		
2.2.5. Relationships with police and narcological services	0,186	-0,307	0,4589	18		
2.2.6. Relationships with healthcare institutions	0,404	-0,034	0,0695	21		
2.2.7. Others	0,776	-0,096	0,0695	6		

* Outcome variables: high effectiveness of HIV prevention; moderate effectiveness of HIV prevention; decrease in HIV/AIDS and drug use, decrease in HIV prevalence among clients of the HRP, no cases of risky injection that caused HIV among HRP clients; decrease in viral hepatitis incidence

About 11% of the ratings' variability could be ascribed to differences in employee-related factors. The third most important criteria category was the range of services provided by the project.

It is also interesting to note those factors that did not rank as the most important. Pure governmental support and financing were judged to be less important than the social environment, stressing the fact that money alone is not enough for a well-functioning HRP and a massive campaign directed toward changes in the social perception of harm reduction is necessary in order to have a successful project. Relationships with police and health care institutions also were not included among the most important factors. This probably stems from the fact that in cases where the social environment is positive, the project will also have good relations with police and health care, but if public opinion is opposed to harm reduction, successful relations with health providers and the police would be less likely.

Among internal factors, the organizational climate within the project, while being important, did not make it to the top of the list. This was probably because some of the factors related to organizational climate were captured by the employee subcategory. Good management and governance were also not among the factors considered crucial to a project's success. It does not mean that experts believed that good management is not relevant for the success of harm reduction but simply used another approach: 'Ye shall know them by their fruits.[72]' The good managers will organize processes so that the project will have good employees, good relations with clients, and thus its own quality will be measured by the outcome of the managers' work.

It is important to note that good coverage of the target group, although not at the top of the list under either method, still played a significant role in what experts saw as a good project.

A more detailed analysis of the importance of success criteria under four-level categories is presented in Table 10.

As the table demonstrates, a good social environment has retained first place among success criteria under both the p-method and the z-method. Second place went to the "other" subgroup of the employees category. This subgroup included such factors as "team mobility," "active staff," "understanding of the importance of harm reduction among staff," "capability of healthcare workers to work with target groups," "low level of staff turn-over," "good outreach team," and "low outreach team turnover." "Experienced staff" was an important criterion under the z-method, but did not make it to the top of the list under the p-method (although a small number of experts named it, the few that did considered it to be extremely important). The only other criterion that made it to the top of the list under both methods was the availability of medical services for IDUs at the HRP.

Other important criteria (by either method) included knowledge about HRPs by IDU, organizational climate factors such as good relations within the team, clearly organized work, coordinated work, and a positive working climate, in short, all the Hertzberg hygienic factors and the level of coverage of the target group by the project.

[72] Matthew 7:16.

Repertory grid technique: peculiarities of prison HRPs

The prison HRPs were evaluated with the help of a repertory grid by five experts. All of the experts evaluated one project in each of its three states – past, present, and future.

The experts generated 40 success/failure criteria, which with a bootstrapping approach, could be combined into several major categories (Table 11).

As the table indicates, only one expert mentioned the outcome of the project, which was a decrease in recidivism. All other criteria were related to the process of setting up and functioning of the prison HRP. Those criteria were divided into external factors – those that were connected with the environment in which project worked and internal factors – related to project organization, staff, and functioning.

The external factors were further divided into "human" factors – prison administration, prison personnel, and prisoners themselves. Every fifth criterion mentioned the role of prison administration, such as knowledge of HRPs by administrators, their understanding of HIV issues, and a lack of denial about drug problems in prison, which are ultimately necessary for the support of HRPs, which was mentioned by four out of five experts. The positive reaction from prison personnel was mentioned by two experts, one of whom had drawn attention to the necessity of informing prison personnel about safety measures. Three criteria were related to prisoners themselves and stated that for a project's success, prisoners should be informed about HRPs and they should be interested in and support them.

Table 11. Categories of the criteria used for evaluating the effectiveness of prison HRPs

	N criteria	% of all criteria
1.1. Outcome	**1**	**2,50%**
2.1. External factors	**17**	**42,50%**
2.1.1. Personnel and prisoners	13	32,50%
2.1.1.1. Administration	8	20,00%
2.1.1.2. Personnel	2	5,00%
2.1.1.3. Prisoners	3	7,50%
2.1.2. Non-prison organizations	2	5,00%
2.1.3. Financing	2	5,00%
2.2. Internal factors	**22**	**55,00%**
2.2.1. Access to services	3	7,50%
2.2.2. Services provided	7	17,50%
2.2.3. Employee	5	12,50%
2.2.4. Organization	5	12,50%
2.2.5. Other	2	5,00%

Additional external criteria dealt with finance issues (the need to have sufficient funding for HRPs, preferably by the state) and the role of NGOs and non-prison organizations, whose involvement in prison HR efforts was viewed as important by the experts.

At the same time a large number of criteria were related to the functioning of a project itself, namely a wide range of services provided by the project (involvement of various specialists, access of specialists from the civilian sector to the prison population, and social adaptation as a component of harm reduction). In general it should be noted, that although a wide range of available services was an important set of criteria in both civilian and prison HRPs, the experts were more explicit about the nature of

the services in civilian projects comparing to those in prisons. The experts on prison projects were mainly speaking about comprehensiveness and, as it follows from the negative value attached to the isolation of prison population from civilian services, for them a wide range of services meant the same services available to HRP clients outside the prison.

Almost every expert mentioned the importance of employees to the project, who should be motivated and have high qualifications. One expert mentioned that the low educational level of outreach workers is hampering the effectiveness of HRPs.

For the approach to harm reduction to be successful it should be innovative, up to date, and well planned. The logistics of the project should be better organized for the project to be successful.

All those factors may or may not play a significant role in real projects. To answer the question of the relative importance of those criteria, first the dominant constructs in all five grids were calculated (Table 12).

As the table shows, in five grids there were six dominant criteria. There was only one outcome criterion that was dominant in one grid together with positive motivation in the project. One dominant criterion was related to the information provided to prison administrators (in order to be successful, prison administrators should have full information about the nature of HRPs and how they work). One was related to access to services – the project should have sufficient length. Finally, two dominant constructs were related to the organization of the work of the project, which should be based on the full implementation of drug control policies and also should be innovative in order to be successful.

Unfortunately, due to the small number of grids it was impossible to say whether the dominant criteria were really the most important, or if they were just a random sample of the criteria population as was the case for civilian projects' dominant criteria.

Table 12. Dominant criteria for each grid interview on prison HRPs

Grid number	Criterion	Bannister Coefficient	Intensity of grid	Type of criteria
1	No recidivism	223,8	1186	1
2	No information about HRPs among prison administrators	602,8	4303	2.1.1.1
3	Sufficient length	502,8	3203	2.2.1
1	Positive motivation	223,8	1186	2.2.3
4	Major drug control policies implemented	572	3901	2.2.4
5	New forms and methods of work	341,1	1731	2.2.4

To answer this question a second approach was taken to rate the projects and calculate the correlation between project ratings and criteria.

In general, the experts on the prison project were more pessimistic about the future of the prison HRPs compared with civilian projects. Two of the five experts forecast an improvement in project activities in the future, two believed that the situation would worsen, and one thought that it would improve but highlighted the very poor present state.

The median[73] value for the past state of the prison projects was 0.099, meaning that they were on average just a bit better than a total failure. Presently they have a median value of 0.447. In the future, the expert believed that the value would become higher - 0.646 - but still closer to the midpoint between the best and worst projects.

Table 13 shows that the same criteria are in first place by both the p- and z-methods. In first place there is a set of criteria related to access to services, including high coverage, sufficient length, and availability for all prisoners. In general it means that the most important success criteria for a prison project are the demonstration that it is "real," the project is of sufficient length, and provides access to all prisoners that are in need.

The analysis of grid containing access criteria or "wide coverage" was performed via visual focusing and showed that this criterion was tightly associated with such constructs as "support from prison administrators," "support from prisoners," and the "existing legal framework." This means that the expert believed that the existing legal framework leads to an acceptance of HR by prison administrators which, combined with prisoners' motivation, results in a wide coverage of the prisoners by an HRP.

Table 13. Analysis of relative importance of success criteria for HRPs

	R	LCIR	p	N	p-method	z-method
1.1 Outcome	0,866		0,333	3		
2.1 External factors	0,201	0,201	-0,079	0,158		
2.1.1. Personnel and prisoners	0,097	-0,225	0,557	39		
2.1.1.1. Administration	-0,08	-0,469	0,707	24		
2.1.1.2. Personnel	0,393	-0,615	0,441	6		
2.1.1.3. Prisoners	0,656	-0,014	0,055	9	4	4
2.1.2. Non-prison organizations	**0,828**	**0,05**	**0,042**	**6**	**3**	**3**
2.1.3. Financing	**0,414**	**-0,599**	**0,414**	**6**		
2.2. Internal factors	0,317	0,317	0,081	0,01		
2.2.1. Access to services	**0,841**	**0,424**	**0,005**	**9**	**1**	**1**
2.2.2. Services provided	**0,482**	**0,064**	**0,027**	**21**	**2**	**2**
2.2.3. Employee	0,237	-0,313	0,394	15		
2.2.4. Organization	0,21	-0,338	0,452	15		
2.2.5. Other	0,406	-0,605	0,425	6		

[73] Because of small number of values and significant spread of them it was decided to calculate for prison project not the average, but median values.

As for the criterion chosen by the second expert - selected availability - it was less correlation with other criteria, being more connected with a positive motivation for harm reduction and the outcome criterion - the absence of recidivism.

The second place was occupied by a set of criteria related to a wide range of services provided. It is worth mentioning, that in civilian projects an array of services was also rated among the top success criteria. This also adds the "reality" to the project, when it strives to provide the same level of services as in civilian projects.

The final, third place, was given to the links of prison projects with external NGOs and other organizations that provide continuity of care for clients of HRPs.

It is interesting that despite the frequent mention of prison administration support as a success criterion, in the ratings correlation analysis it turned out that that the support of prison administration does not discriminate between a more or less successful project. Probably this stems from the fact that support by prison administrators is necessary to allow HRPs to start in the first place, but after the project starts it does not influence its success.

In addition finance issues and the work atmosphere inside the project seemed to be less important for a project's success than the professional staff of the project.

In summary, a prison HRP is successful if it allows prisoners to have access to the same level of services provided outside prison and that they will have a continuity of care after release.

Conclusions

As we have demonstrated in the literature review, the best practice concept is relatively slippery. It often consists of a mixture of purposes and activities needed to achieve them. The concept of harm reduction itself is still controversial and not a widely-accepted approach. Although the bulk of the literature on the subject suggests that there are epidemiological and human rights grounds for its implementation, cultural acceptability and implementation issues are often of concern. Although there is evidence to support the view that harm reduction in the Russian Federation has had a number of achievements, its implementation is still quite limited in the country. Additionally, HRPs seem to have had varying degrees of success, which directly leads us to the subject of this document - best practices in harm reduction.

As the analysis of the semi-structured interviews showed, the majority of HRPs indicated that initial distrust and misunderstanding toward the approach was largely overcome, at least in the successful regions. The history of harm reduction development in Russia can be viewed as generally successful and public opinion was positively influenced. The decision makers have undergone an evolution with respect to harm reduction, starting from denial or caution, then shifting to an idealistic belief of harm reduction being an absolute solution, and finally with some of the respondents coming to a realistic assessment of the strategy. The latter understood the implementation issues and believed there is a need for further analysis to ensure that these programs are effective.

Funding issues received sufficient attention in both the interviews and in the repertory grid technique. According to the repertory grids it received the second highest rating. Unfortunately even in the cases where external donors decrease their funding there have been alarming trends of HRPs closing down with no adequate support or co-financing available from local sources. At the same time there is a clear understanding among most decision makers who agreed to participate in the study that harm reduction helped to keep the epidemic in the country under control to some extent. The barriers that prevent them from helping to mobilize funding to prevent HIV among vulnerable groups are not always clear.

The influence of the State Drug Control Service and other law enforcement agencies was given quite an important role. For instance, the recent changes in most regions led to what is called a "closed narco-scene," implying that the sales of drugs are no longer street-based, but happen through home deliveries and personal connections, which makes it much harder to enroll drug users into HRPs. While there seems to be no strong opposition at the top level of the police, the junior officers on the

street are often hostile toward IDUs and outreach workers in many of the regions.

There was a consensus among respondents that overregulation presents a threat to the successful implementation of the programs. Harm reduction technologies should be flexible and require constant modification. Harm reduction should not be viewed as a cookbook and routine practices might not work for long. In addition to starting new projects in new places, there should be more flexibility and autonomy given to the existing veteran HRPs. This could allow for some innovative techniques to be tried and for being more flexible in the redistribution of functions and finances. As suggested by the respondents, HRPs should be properly and constantly monitored and evaluated, however it is less clear how to address this. There was a suggestion that it would be useful to elaborate separate sets of criteria for "new" and "old" projects. The indicators for the former group could be primarily based on syringe exchange indicators, while for the latter group they could be measures of success needed to focus mainly on improving the epidemiological situation.

The attitudes of IDUs were quite positive, although it should be acknowledged that only the harm reduction clients were interviewed under the study. They perceived HRPs as nearly the only organizations that were not hostile toward them. There were some issues with the relevance and quality of materials provided to harm reduction clients; however, these were reported to have been addressed relatively rapidly.

While internal factors were mainly concerned with personnel and leadership characteristics, external ones were generally deemed more important. The external factors were mostly concerned with funding, support of authorities and law enforcement agencies, and the regional drugs situation. The placement and routing of the syringe exchanges, as well as the type of implementing organization (i.e., NGO versus state owned), were viewed to be of little importance by the respondents.

The analysis of the repertory grids confirmed that according to the respondents, the success factors for HRPs mainly lie in the social environment. According to the technique, if public opinion is positive or neutral toward the HRP and toward IDUs in general, the project would be more likely to be successful. An explicit lack of such external acceptance would result in difficulties in setting up and maintaining the project. On the contrary, the role of external factors was minimal for prison HRPs as the programs exist in a very isolated and relatively controlled environment with much more power concentrated in the officers' hands.

To be able to involve a significant number of IDUs and be successful, it is very important for the project to provide IDUs with wide range of services, apart from simple syringe exchanges. The services should be first and foremost health related - from wide array of possible diagnostic capabilities to treatment and even substitution therapy. The involvement of IDUs and former IDUs as outreach workers or recruiters was also mentioned as important, despite the issues resulting from personnel themselves living with additions. Prison HRPs had some built-in peculiarities related to the smaller range of services provided (e.g., syringe exchanges are still illegal in the penitentiary system).

Well trained, motivated, and experienced staff was seen as crucial for a project's success, which was confirmed both via semi-structured interviews and repertory grids. The services should be provided by a team of people linked by good working relations. Good working conditions should be established for everybody involved and the members of target group should have information about the existence of HRPs. If this is achieved, the coverage of IDUs by the project and the indicators of the project's success are also likely to be satisfactory. According to the results of the semi-structured interviews, the retention of staff is becoming more and more problematic since recent economic growth had raised average incomes while the salaries of the projects' staff became less attractive.

Key Policy Implications

- The external environment is more important then the internal processes of the organization implementing harm reduction in a civilian setting. Therefore, HRPs should invest more effort in changing the society's perception of harm reduction.

- A wider range of services provided by HRPs, even without affecting the HIV epidemic, attracts clients and motivates the staff, who otherwise can often be emotionally burned out and tired of simple needle exchanges. Programs should provide a wide spectrum of services, including medical care and information for IDUs.

- Certain harm reduction interventions (e.g., syringe exchanges in prisons, substitution therapy, etc) are now extremely controversial in Russia and their implementation does not seem to be feasible in the immediate future, as even most staff members of the HRPs and the majority of decision makers are not ready to consider them.

- Trainings for law enforcement should be given regularly, given the high turnover rates among low-level law enforcement officers and the very strong negative influence caused by their opposition at many sites.

- The closed "narco-scene" poses new challenges for HRPs, which generally require intensified outreach work and the involvement of active IDUs in providing effective and client-friendly harm reduction services.

- The location of the HRP was not viewed as important, and multiple respondents expressed doubts about mobile exchange sites. Outreach work is perceived as the most important.

- There is a need to legalize and formalize the status of outreach workers, as the position, requirements, training, and career path are all unclear and unofficial.

- It is very important to ensure the integration of civilian and prison HRPs with the high level of movement of IDUs between the civil and prison populations.

- More flexibility on the side of funding agencies may be needed to improve the efficiency of harm reduction sites by tailoring the budget to the real needs on the ground, improving the ability to retain the best staff and avoiding the over-formalization of procedures.

- It is very important to continue the efforts aimed at institutionalizing harm reduction in Russia, including strengthening of the overall legal framework for implementation, formalizing the status of outreach workers, and ensuring the integration of civilian and prison HRPs. Harm reduction must become a coherent part of the national HIV prevention strategy.

Appendixes

Appendix 1
Questionnaire

- Good afternoon,

Open Health Institute is conducting research that aims at improving the understanding of the role, place and factors of the harm reduction program's (HRP) success. The research results will allow for improved measures to prevent the HIV epidemic in Russia. We think you may be an important source of information for our research and we would like to have an interview with you. It won't take more than 40 minutes. Your frankness is extremely important for us, therefore the interview is confidential. All received information will be used in the generalized and non-personalized (without indicating names) form. The project staff, who will analyze the data, won't know anything about you. We would like to have your interview recorded with a Dictaphone. The cassette will be sent to Moscow, and then stenographers will prepare shorthand notes of the interview. Thus analysts will not be able to identify you by your voice even if you have met. You have the right to withdraw your participation in the interview now, or at any time during the research, and to give no answer to any question during the interview. Please confirm your consent to the interview. Do you agree to be recorded with a Dictaphone?

- Respondent's sex

- Approximate age

- Position of the interviewed person (department, program officer, or client) and organization he/she represents

- Region

- Tell the story of your interaction with the HRPs

(Fishing questions: have you heard of it, worked for it, been its client; how long, in what way?)

- Has your attitude to the harm reduction strategy changed since the moment of your acquaintance with the idea and until now? In what way?

- In your opinion, does (do) the HRP(s) you are acquainted with work effectively?

- What are the basic achievements of the HRP(s) you are acquainted with?

- What are the basic failures of harm reduction?

- How do you think the efficiency of HRPs could be estimated, and how can a successful program be distinguished from an unsuccessful one?

- How do you think the HRP(s) you are acquainted with has (have) managed to achieve success in preventing an HIV epidemic? (ask for copies of any documents referenced)

- What external factors (state services, population, medical community, drug mafia) influence the work of HRPs? Who and in what way do they exert more influence? Who exerts a negative, and who, in your opinion, a positive influence? Why?
- Has the attitude of different institutions, population, clients, or doctors at the HRP changed? What accounted for it? What was the role of the HRP in forming the public opinion of harm reduction methods and drug users?
- What do you think were the main factors ensuring success in harm reduction work? (external factors, internal factors)
- What were the main factors entailing failures in harm reduction work? (external factors, internal factors)
- What characteristics should an HRP possess in order to achieve success? (Fishing questions: role of a person, active manager, sociable and charming person promoting harm reduction, well-qualified staff, motivated staff, availability of a team, absence of conflicts, availability of funds, spelled-out procedures for activities, good location, long-term work of the program, involvement of users, or ex-users as peer employees, teaching peer consultants in the penal system to work with convicts, based at an AIDS centre, or an NGO).
- What should the external conditions be like to enable the program's work more effectively? (Fishing question: attitude of the Federal Service for Control of Drugs and Psychotropic Substances, mayor or vice mayor, governor, doctors, health care departments, militia, narcologists, AIDS centers, the penal system; availability of a strong NGO movement, various sources of funding)
- How do the situation with drug use and the HIV epidemic in the region influence the success of the HRP's activities?
- Which factors, in your opinion, are more important - external or internal?
- What do you think is the role of the following institutions and communities in the HRP's activities?

NGO	Narcological dispensary
AIDS center	Penal system institutions
Police	Peer consultants (for prison projects)
Donor organizations	Convicts
Drug dealers	Outreach workers (for civil HRPs)
Population, mass media	Drug users (clients of HRPs and other people)
Federal Service for Control of Drugs and Psychotropic Substances Circulation	

- Whom would you recommend we talk to on the issue?

Appendix 2

Repertory grid type 1. Self-administered questionnaire for respondents who have experience with at least three projects

Organization _____
Name (optional) _____

SELF-ADMINISTERED QUESTIONNAIRE

Code (for the interviewer)_____

Purpose of the questionnaire – find out on what basis you assess the quality of harm reduction programs (HRPs) and/or HIV prevention projects in prisons.

Mark off with a tick an HRP or HIV prevention project in prison depending on the field of your expertise.

☐ Harm reduction program ☐ HIV prevention project in prison

This poll is conducted in relation to three HRPs and/or HIV prevention projects in prisons familiar to the expert. These projects are indicated as P1, P2 and P3. The expert is asked to number the programs (1, 2, 3). *If the expert is a leader or a staff member of one of the projects, he is not allowed to evaluate this project using the proposed scheme.*

P1_____ P2_____ P3_____

In addition, the expert is asked to imagine the most successful project (indicated as IP - ideal project) and a project unable to fulfill its tasks and goals (indicated as BP - bad project). *IP and BP are hypothetical projects.*

Furthermore the expert is asked to imagine three project in accordance with the scheme presented below (for the first row of the table the expert is asked to imagine the ideal project and projects with numbers 1 and 2 - P1, P2). Which two projects of the three are similar to each other and differ from the third? Mark off with ticks those that are similar.

Now the expert is asked to specify in what characteristic these two projects are similar and differ from the third. What do they have in common? Indicate the common characteristic in the left-hand column of the table. In the right-hand column indicate the opposite of that characteristic. In other words, how that third project, which does not have such characteristic, can be described.

The expert is asked to complete the whole table in the way described above:

Pole of "ticks"	IP	P1	BP	P2	P3	Pole "without ticks"
	❑	❑		❑		
	❑		❑	❑		
		❑	❑		❑	
	❑		❑		❑	
		❑	❑		❑	
	❑			❑	❑	
		❑		❑	❑	
	❑	❑		❑		

Now the expert is asked to copy to the table below the contents of the left- and right-hand columns of the table he or she has just filled (copy the characteristics of the projects). In the cells marked with ticks write number "5," in the cells with an empty circle write "1."

Remember Remember that "1" does not mean a low grade, nor does "5" mean a high grade. The marks "1" and "5" are just used as an indication of the grade pole.

The expert is asked to imagine those projects that were not used in order to characterize the projects (for example, the first row of the table would be Bad Project and Project number 3 (BP and P3). To what extent does each of these projects show the characteristics described in this row? Evaluate it using a five-point scale and taking into account that one point is related to the project that has an "antipode" characteristic.

Now the expert is asked to complete the whole table in the same way.

Pole of "ticks"	IP	P1	BP	P2	P3	Pole "without ticks"

Thanks for your cooperation!

Appendix 3

Repertory grid type 2. Self-administered questionnaire for respondents who have experience with only one project

Organization _____
Name (optional) _____

SELF-ADMINISTERED QUESTIONNAIRE

Code (for the interviewer)_____

Purpose of the questionnaire – find out on what basis you assess the quality of harm reduction projects and/or HIV prevention projects in prisons.

Mark off with a tick a harm reduction program (HRP) or HIV prevention project in prison depending on the field of you expertise.

❑ Harm reduction program ❑ HIV prevention project in prison

This poll is conducted in relation to the HRP familiar to the expert over a long period of time. The expert is asked to recall the project in its initial phase or during the first six months after the expert became acquainted with the project. This state of the project is indicated as P0 in the table (Project, time 0). Then the expert is asked to think about current state of the project. This state of the project is indicated as PP (project in the present). After that the expert is asked to forecast what will happen with the project within 1.5-2 years. This vision of the expert will be indicated as PF (project in the future). The expert is asked to think about each of the abovementioned states of the project as if they were independent from each other and individual projects. In addition, the expert is asked to imagine the most successful project (indicated as IP - ideal project) and a project unable to fulfill its tasks and goals (indicated as BP – bad project). *IP and BP are hypothetical projects.*

P0, PP, PF (indicate the name of the project and city where it is implemented)_____
_____

Please note that the project in the future (PF) does not reflect how the project MUST look like, it's the expert's evaluation of how the project will most likely look like taking into account changes in the country, in the region, the HIV/AIDS situation, the financing of the project, and the political situation.

Furthermore, the expert is asked to imagine three projects in accordance with the scheme presented below (for the first row of the table the expert is asked to imagine the ideal project, a project in its initial phase and a current project – IP, P0, PP). Which two projects of the three are similar to each other and differ from the third? Mark off with ticks those circles that are similar.

Now the expert is asked to specify in what characteristic these two projects are similar and differ from the third. What do they have in common? Indicate the common characteristic in the left-hand column of the table. In the right-hand column indicate the opposite of that characteristic. In other words, how that third project, which does not have such a characteristic, can be described.

The expert is asked to complete the whole table in the way described above:

Pole of "ticks"	IP	P0	BP	PP	PF	Pole "without ticks"
	❑	❑		❑		
	❑		❑	❑		
		❑	❑		❑	
	❑		❑		❑	
		❑	❑		❑	
	❑			❑	❑	
		❑		❑	❑	
	❑	❑		❑		

Now the expert is asked to copy to the table below the contents of the left- and right-hand columns of the table he has just filled (copy the characteristics of the projects). In the cells marked with ticks write number "5" and in the cells with an empty circle write "1."

Remember that "1" does not mean a low grade, nor does "5" mean a high grade. The marks "1" and "5" are just used as an indication of the grade pole.

The expert is asked to imagine those projects that were not used in order to characterize the projects (for instance, for the first row of the table it would be Bad Project and Project in the Future (BP and PF)). To what extent do each of these projects show the characteristics described in this row? Evaluate it using a five-point scale and taking into account that one point is related to the project that has an "opposite" characteristic.

Now the expert is asked to complete the whole table in the same way.

Pole of "ticks"	IP	P0	BP	PP	PF	Pole "without ticks"

Thanks for your cooperation!

Appendix 4

Description of the repertory grid technique methodology

The repertory grid technique is a methodology developed in the framework of the personal construct theory (PCT). The PCT, in turn, holds that each person organizes his or her perception of the external world according to the number of preset templates that are formed during the life of the person. The repertory grid technique was proposed by George Kelly in 1955. Kelly stated, "The person's processes are psychologically channeled by the ways in which he anticipates events." In other words, the person tries to understand the flood of sensory perceptions by fitting it to the templates, called constructs. *He or she sees what he expects to see. If the results of an action undertaken based on the given construct system does not pass the reality check, the person changes his or her constructs.*

Because the constructs are formed during the whole life of the person, each personal construct system is unique, giving the situation in which every person sees the world differently. This has important consequence for the study of expert opinions with the help of questionnaires and interviews as different experts could describe the same criteria of effectiveness with different wordings and, conversely, use different words as synonyms for the same construct. At the same time, the more similar the backgrounds between two people, the more their construct systems will be alike. Individuality: "Persons differ from each other in their construction of events."

Kelly himself has made distinctions in the understanding of reality by different persons:

Individuality:
"Persons differ from each other in their construction of events."

Communality:
"To the extent that one person employs a construction of experiences, which is similar to that employed by another, his psychological processes are similar to those of the other person."

Society:
"To the extent that one person construes the construction processes of another he may play a role in a social process involving another person."

Thus this existence of a shared reality (communality) allows for the study of expert opinion from a group of experts.

Because we cannot directly observe how different persons construe the world, there is a need for a technique to elicit their constructs. A person is presented with several objects[74] and asked which objects are different and which are alike. Then he or she is asked to name what is different about them. He or she is then asked to identify two poles for the construct, for example 'good-bad' or 'sweet-sour'. This identification of a second pole is important because it helps the interviewer to understand the meaning of the construct. According to the PCT, a person finds differences between objects because some are fit to one template (construct) and the other is not. Through the continual presenting of different combinations of objects of one category one may hope to elicit the entire construct system of the person. This technique is called a repertory grid interview.

At the same time a person could use the same construct to judge different combinations of objects and there is a need to see, whether a person really has a system of different constructs or if there is only one construct (in the case of evaluating different projects - 'a gut feeling') that has different names.

To accomplish this, a person is asked to rate all the objects that were used for the identification of constructs on a scale from one to five according to their closeness to one or the other pole of the construct[75]. Then the completed grid is subjected to variety of manipulations that help to quantify the 'likeness' of the elicited constructs . One approach is to calculate the rank correlation coefficients between all pairs of constructs and then calculate the Bannister coefficient (the sum of squared correlation coefficients) and the intensity coefficient (the sum of all Bannister coefficients). The closer the intensity coefficient is to the maximum for a given grid size, the less variable is his or her construct system and the higher likelihood that he or she is just using different names for one distinct criterion.

The repertory grids technique is still used mainly in clinical and educational psychology but there is an increasing interest in its applications for employee training and development, job analysis, job descriptions, and evaluations. The repertory grid is often used in the qualitative phase of market research in order to identify the ways in which consumers construe products and services. In healthcare the repertory grid is used mostly for eliciting patients' preferences for different treatment regimens and is frequently used in health education.

[74] Referred to as "elements" in the repertory grid technique.

[75] There are several other methods to study a construct system, namely the resistance grid (formed by asking the person to compare two constructs and indicate which one is more important) and the implication grid (formed by asking the person what happened to another construct if one changes its polarity). Those methods were not used in this study because of the heavy time demands (with eight constructs, the resistance grid demands 28 comparisons and implication grid calls for 56 comparisons).