Harm Reduction Policies, Settings and Challenges

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Contents

Abstract

Harm reduction has become an increasingly important dimension of drug policy over the past three decades. This chapter describes what harm reduction is and how harm reduction policies take account both of individual risk behaviors and of risky settings in order to promote improvements in individual and public health and societal well-being. Another chapter in this textbook, ▶ Chap. 83, "Harm Reduction Interventions", gives an overview of specific interventions.

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This chapter covers the following: what harm reduction is, its history and current status from an international perspective, drug-related harms, risk behaviors, risk settings, harm reduction as a combination intervention, implementing an integrated approach at local level, needs assessment in local settings, enabling environments, epidemiological settings, prison settings, law enforcement settings, overcoming barriers, and promoting health and equality of care. It concludes that harm reduction policies and interventions have been successfully implemented in many countries around the world; that over the past two decades, political and professional opinions have increasingly promoted a "comprehensive approach" that includes harm reduction as a central pillar; and that while heroin use and related problems, as well as HIV among drug injectors, are now largely under control in countries that have implemented comprehensive harm reduction policies, challenges remain in those and other countries, including hepatitis C, problems related to stimulant drug use, and continuing sexual transmission of infectious diseases related to drug use. Apart from client-oriented skills, practitioners need an understanding of the community and public health settings within which drug use and drug-related harms arise.

84.1 Introduction

Harm reduction has become an increasingly important dimension of drug policy over the past three decades. The chapter in this textbook, ▶ Chap. 83, "Harm Reduction Interventions," gives an overview of specific harm reduction interventions. This chapter describes what harm reduction is and how harm reduction policies take account both of individual risk behaviors and of risky settings in order to promote improvements in individual and public health. It also stresses harm reduction as a combined response and the importance of a comprehensive, integrated approach.

84.2 Policies, Settings, and Challenges

84.2.1 What Is Harm Reduction?

Harm reduction is a multidimensional response encompassing interventions, programs, and policies that seek to reduce the health, social, and economic harms of drug use to individuals, communities, and societies (Rhodes and Hedrich 2010). Harm reduction policies are also found in related areas of public health and social policy, for example, alcohol policy, safe sex, or nicotine replacement.

Harm reduction is based on the concept of harmful drug use. This is wider than, though includes, the concept of dependence. It does not assume that drug use per se is harmful. It can be seen as a pragmatic approach in which the goal is to reduce the harmful consequences of drug use through a package of evidence-based, targeted interventions tailored to local settings and needs. Harm reduction programs

typically work through a hierarchy of goals in which the most pressing needs are addressed first (IHRA 2010).

Drug-related harm refers both to individual consequences such as dependence, overdoses, or infectious diseases contracted through sharing paraphernalia and to social, economic, and public health harms to the community (public nuisance, crime, health-care costs, high HIV prevalence). The underlying public health paradigm is broader than client-centered treatment and involves balancing individual and societal needs.

A harm reduction policy entails a "combination intervention approach" involving a coordinated response from a variety of agencies and services, including treatment, prevention, public health, law enforcement, community groups, and local authorities (Rhodes and Hedrich 2010; ECDC and EMCDDA 2011; WHO et al. 2013). This approach goes beyond interventions for individuals by stressing enabling environments to enhance protective factors, reduce harms, and promote public health.

Harm reduction incorporates an important ethical dimension concerning human rights, equality of access to health and social services, respect of the right to privacy and confidentiality, and efforts to counteract social exclusion and stigma (IHRA 2010; Jürgens et al. 2010).

It also acknowledges that important unintended negative consequences can arise from reactions to drug use (European Commission 2009; UNODC 2009). These include structural factors such as the wider policy and legislative framework as well as risk environments that increase social exclusion of already marginalized sections of the community, foster reluctance to seek help for fear of arrest, or exacerbate the HIV epidemic among drug users (Rhodes 2009; Wood et al. 2009; Degenhardt et al. 2010).

84.2.2 History and Current Status

Early examples of harm reduction include the so-called British System of opiate maintenance for patients who, while capable of "leading a useful and fairly normal life" on a stable dose of the drug of addiction, were unable to do so when the regular allowance was withdrawn. In the early 1970s, various ad hoc harm reduction responses evolved at grass roots level in some western European cities (street agencies, outreach, user-driven organizations, and information dissemination). Methadone maintenance, which had originated in the USA, was introduced in a handful of European countries.

Harm reduction as a policy started to gain wider acceptance in Europe with the emergence and rapid spread of HIV/AIDS among drug injectors in the mid-1980s. For example in Britain, the spread of HIV was seen as "a greater danger to individual and public health than drug misuse" (ACMD 1988). The WHO also endorsed the underlying principles of harm reduction (WHO 1986). From 1985, opioid substitution treatment (OST) expanded to more mostly western European countries, and needle and syringe programs (NSPs) were progressively introduced.

Over the 1990s both OST and NSPs extended, albeit unevenly, to most countries including central and eastern Europe (Hedrich et al. 2008).

Beyond Europe, harm reduction approaches emerged in countries such as Australia and Canada (Pates and Riley 2012). Harm reduction interventions also developed in the 1980s in some US cities such as San Francisco (Watters et al. 1994), Chicago (Wiebel 1996), and New York (Des Jarlais et al. 1988) though opposition from federal government and influential lobbies meant that they were not described as such.

Harm reduction is now a major pillar of drug policy in all EU member states (Hedrich et al. 2008) and globally is supported by at least 97 countries (Stoicescu 2012). It is firmly established as a mainstream systemic response promoted in official declarations by the WHO, United Nations, and European Union as a key element of a comprehensive approach (Council of the European Union 2003; WHO et al. 2013).

Within these overall developments, the range of interventions and scale of implementation vary considerably between and within countries (Mathers et al. 2010; Stoicescu 2012). For example, in Europe OST covers over 50 % of opioid-dependent users across most of the continent, though in a few countries coverage is under 20 %. Syringe distribution by NSPs ranges from under 50 per user per year to over 300 (EMCDDA 2012a).

Harm reduction developed mainly in response to public health consequences of heroin use and drug injecting. In many parts of the world, serious problems arise from heavy stimulant use, especially cocaine and methamphetamine. In Europe, the USA, and other countries, an ageing population of chronic users poses new challenges (EMCDDA 2010; ▶ Chap. 128 "Older People and Substance Misuse").

Strong religious, ideological, and political resistance remains in some countries and within some institutions. Sometimes interventions are implemented but not called "harm reduction." In other cases, evidence-based harm reduction interventions have been blocked, with serious consequences. In Russia, for example, methadone was declared illegal, despite urgings to the contrary (UNAIDS 2005). From 1995, injection-related cases of HIV in Russia rose rapidly and since 2002 account for over 80 % of all cases of HIV (Goliusov et al. 2008). Conversely, the role of user groups and advocacy organizations has been changing from opposition to mainstream policies towards recognized and constructive participation in developing evidence-based interventions to reduce drug-related harm (Stoicescu 2012).

84.2.3 Drug-Related Harms

Much drug-related harm occurs in association with heavy or regular consumption of opioids, central nervous system (cns) stimulants, or multiple drug combinations, including alcohol and other cns depressants. There is also a strong relationship between drug injecting and more severe levels of harm, though problems can arise from other routes of administration.

84.2.3.1 Drug-Related Morbidity

Dependence is the most likely consequence of regular drug use seen by professionals in treatment facilities, criminal justice settings, or general practice. Treatment of dependence is covered in other chapters. It should be noted, however, that levels of risk associated with unsafe injecting and with unsafe sexual behaviors increase with higher severity of dependence (Gossop et al. 1993a, b). It is also important to stress that for people who progress from experimental or intermittent drug use to injecting or more intensive patterns of use, there is usually a time lag of several years before they contact treatment services. During these early stages of a drug-using career, individuals may be especially at risk of contracting viral infections such as hepatitis C (Maher et al 2007). This underlines the importance of efforts to reach recent initiates with effective harm reduction and health promotion interventions. By the time they contact treatment services, it may often be too late.

Blood-borne viral infections such as HIV and hepatitis (especially HCV) constitute an important component of injection-related morbidity (see ▶ Chap. 106, "Substance Use and Co-Occuring Infections: An Overview"; ▶ Chap. 102, "Liver Disorders (Incl. Hepatitis) in IVDAs"). Prevalence and incidence of HIV and viral hepatitis among drug injectors varies considerably between sites and over time. For example, HIV prevalence among drug injectors ranges from under 5 % in most northern European countries to over 35 % in parts of eastern Europe and Russia (Mathers et al. 2010; Jolley et al. 2012). Hepatitis C prevalence is considerably higher among drug injectors, reflecting the greater transmissibility of this virus, and ranges from 40 % to over 90 % depending on location and duration of injecting (Hagan et al. 2008). Compared to HIV infection, hepatitis C infection is characterized by relatively high concentrations of virus in the blood, not only during the initial infection phase, but also in the majority who become chronically infected. In the United States, 9–12 % of all new HIV cases and 50 % of all new hepatitis C cases are associated with injecting illicit drugs (CDC 2012a). Given the long-term burden of disease and the high treatment costs associated with hepatitis C, prevention efforts should be given high priority. Coinfections with more than one type of hepatitis or with HIV and HCV present growing challenges (WHO 2012).

Other morbidity includes vein damage, abscesses, and cellulitis (ECDC and EMCDDA 2011). Rates of tuberculosis (TB) and sexually transmitted diseases (STDs) are also often substantially higher in drug-using populations (CDC 2012a).

84.2.3.2 Drug-Related Mortality

Reviews of studies in different countries on mortality among problem drug-using populations (mostly opioid dependent) suggest that all-cause mortality is between 1 % and 2 % per annum, 10–20 times higher than among the general population of the same age and gender (Degenhardt et al. 2011; EMCDDA 2011). Drug overdoses, often involving opioid-cns depressant combinations, are the most common cause of death, accounting for about one third to a half of all deaths. In some countries, cocaine is commonly reported in fatal overdoses, often in combination with opioids. Disease, suicide, and trauma are the other main causes of death.

Risk of death is several times higher among injectors than non-injectors. Specific contexts associated with dramatic increases in overdose mortality are the weeks immediately following release from prison, discharge from inpatient detoxification, and dropout from OST (Davoli et al. 2007; Merrall et al. 2010). In the USA, drug overdose deaths more than doubled from 16,849 in 1999 to 38,329 in 2010 (Jones et al. 2013). Prescription opioids in particular, as well as cocaine and heroin, were a major component of this (CDC 2013). Among older, chronic users, comorbidities, including alcohol and liver and cardiovascular diseases, become more important (EMCDDA 2010).

84.2.3.3 Drug-Related Crime

Drugs and crime are related in different ways, including offenses against drug laws (possession, production, trafficking), crimes committed under the influence of drugs (violence, driving), revenue raising crimes to finance drug use (theft, drug dealing), "systemic" crimes related to the illicit drug market (corruption of officials, turf war violence, money laundering), and public order offenses related to street drug scenes and public drug use. Studies have attempted to quantify the social and economic costs of drug-related crime (Godfrey et al. 2002). Harm reduction interventions have mainly focused on drug-related crime that harms local communities, in particular revenue raising crime (drug dealing and theft) and public nuisance arising from visible street drug scenes and markets. Crimes committed under the influence of drugs overwhelmingly involve alcohol, which is not covered in this chapter.

Other social and economic harms include impact on families, employment prospects, community well-being, or local economy. While important, these aspects have been less systematically studied and there is no space to cover them here.

84.2.4 Risk Behaviors

Serious health risks (infections, overdoses) are associated with drug injecting. HIV and especially HCV are efficiently transmitted via the sharing of injecting equipment. Risks arise not only through sharing syringes and needles but also through other materials used to prepare drugs for injection, for example, water, spoons, drug solutions, or filters (ECDC and EMCDDA 2011). Measures sufficient to prevent HIV transmission may not be enough to prevent HCV transmission. Risks also accompany non-injecting use, including bridging between injecting and non-injecting drug use populations, transmission through sharing non-injecting materials (pipes, straws), or sexual transmission (Strathdee and Stockman 2010; CDC 2012a).

Drug use, whether by injection or not, is strongly correlated with unsafe sexual practices, including unprotected sex, multiple partners, and, in some cases, selling sex for money or drugs (CDC 2012a, b). The sale of sex for money or drugs is most clearly associated with severe dependence on heroin or crack cocaine. Use of

stimulants, for example, methamphetamine, is associated with increased sexual activity, including unprotected sex and number of partners, as well was with increased rates of HIV and other STDs (Colfax and Shoptaw 2005; Scheinmann et al. 2007). The high risks linked to methamphetamine use by men who have sex with men have been emphasized in several studies (e.g., Molitor et al. 1998, 1999). For all groups, STDs (e.g., genital herpes or syphilis) substantially increase the risk of HIV sexual transmission (CDC 2010).

Comorbidity of drug dependence and mental disorders is common among problem drug users (see ▶ Chap. 117, "Co-Occuring Mood and Substance Use Disorders", ▶ Chap. 119, "Comorbid Anxiety and Alcohol or Substance Use Disorders: An Overview", ▶ Chap. 124, "Personality Disorders and Addiction Disorders"). There is consistent evidence that depression in particular is associated with increased risk behaviors such as sharing injecting equipment (Stein et al. 2003).

84.2.5 Risk Settings

Individual risk behaviors occur within a wider social context. A variety of environmental factors give rise to structural and situational settings that influence differentially not only harms associated with drug use but also access to health and social care (Poundstone et al. 2004; CDC 2012a). The diversity of settings implies a diversity of risks and responses (Hartnoll et al. 2010). Social exclusion and stigma are potent factors linked to a mix of poverty, unemployment, lack of health care, low life expectations, and discrimination. Racial and ethnic disparities persist regarding drug-related harms and utilization of health care and treatment (CDC 2012a). Criminalization and law enforcement policies often disproportionally target marginalized groups and communities. These structural factors can lead to environments that encourage high rates of risk behaviors and infection among drug users (Rhodes et al. 2005; Rhodes 2009; Strathdee et al. 2010). For example, a policy of arresting drug users with syringes can create situations in which there is a high risk of hasty injecting in unhygienic conditions with shared syringes (Werb et al. 2008). Fear of arrest or of children being taken into care can act as powerful deterrents to contacting treatment or social services among communities who already lack equal access to services. Legislation restricting syringe provision or availability of specific treatments can increase risk behaviors, morbidity, and mortality (Wood et al. 2009).

Given the high rates of arrest and incarceration found among heavy drug users, prison and other institutional settings constitute important risk environments. Although the frequency of drug use and injecting usually diminishes during imprisonment, when it does occur it is often under more risky circumstances than in the community, due to a shortage of syringes, need for secrecy, and the higher prevalence of infectious diseases in prison populations (Darke et al. 1998). Other high-risk situations include interruptions to treatment due to short periods of

imprisonment (Dolan et al. 2005) and release from prison or discharge from drug-free treatment (see 63.2.3.1 above).

Women who use drugs are often at higher risk than men due to various factors related to gender, power relations, and sexual risk. Female injecting drug users are doubly at risk for HIV infection via unprotected sex and unsafe injections and have needs that are often not adequately addressed in HIV-prevention strategies (El-Bassel et al. 2010). In some studies, unsafe sex is a more significant risk factor for women than drug use (Strathdee et al. 2001). Women who inject drugs are more likely to require assistance injecting and to engage in sex trading and unsafe sex. They are also more likely than men to have a regular partner who injects or is HIV positive. Intimate partner violence is much more common for female drug users than non-drug users. Women who have experienced such violence are less able to negotiate safe sex, less likely to use condoms, and more likely to share needles, to have more sexual partners, and to trade sex for money or drugs, including unprotected sex with dealers (Shannon et al. 2008; Folch et al. 2013). Higher levels of psychiatric comorbidity contribute to heightened HIV risk (Gilchrist et al. 2011).

Other contextual risk factors include the prevalence of infectious diseases in local drug-using populations (see later), historical or cultural patterns of drug use including routes of administration and risk behaviors pertaining in given communities (Des Jarlais et al. 1988; Grund et al. 1996), and local drug market conditions regarding what products are available, in what form and with what variability in content (de la Fuente 1996; Topp et al. 2003).

84.2.6 Harm Reduction as a Combination Intervention

A recurrent theme in the overview of single interventions in ▶ Chap. 83, "Harm Reduction Interventions" is the importance of combined or multiple intervention approaches as central to the effectiveness of individual responses (van den Berg et al. 2007; Degenhardt et al. 2010; Turner et al. 2011; Kidorf et al. 2011; Hagan et al. 2011). For example, analysis of data pooled from six cities in the UK suggested that exposure to OST or high NSP coverage approximately halved the risk of HCV infection, while the combination of OST and high NSP coverage could reduce HCV incidence by up to 80 % (Turner et al. 2011). Adherence to antiretroviral treatment (ART) or hepatitis C treatment is facilitated by OST together with psychosocial support (ECDC and EMCDDA 2011). Reductions in sexual and drug-related risks among highly marginalized groups are best approached through intensive community outreach backed up by syringe and condom distribution and improved access to health services, treatment, and social support. The central elements of a multiple-intervention approach recommended by international and national guidelines include the interventions described in ▶ Chap. 83, "Harm Reduction Interventions" (ECDC and EMCDDA 2011; CDC 2012a; WHO et al. 2013), though only the European guidelines mention drug consumption rooms (DCRs), which have more localized relevance and are still controversial in some countries.

84.2.7 Implementing an Integrated Approach at Local Level

While comprehensive national drug policies exist in most countries, it is at local level that the interface between drug use, policies, and responses takes place. Responding to a diversity of issues, from public concentrations of heroin and cocaine use and drug markets in specific urban areas to less visible patterns of problematic drug use distributed across different groups in different sections of the population, is a complex task. Coordination of local policies and interventions is essential due to the range of agencies involved, including health, social services, education, housing, police and criminal justice system, politicians, as well as civil society including nongovernmental organizations, community groups, and user organizations.

Optimizing the benefits obtained from combined interventions implies implementing at local level a coherent package of harm reduction approaches to problem drug use. This poses many challenges. It involves achieving understanding and cooperation between different sectors and organizations operating at different levels and with different agendas. Broader issues of health system organization are beyond the scope of this chapter. The remainder of this chapter focuses on practical questions concerning implementation of multiple harm reduction interventions in different settings.

84.2.8 Needs Assessment in Local Settings

There can be large differences between settings in terms of drug use patterns, risk behaviors, HIV or HCV prevalence, health and social consequences, community characteristics, and public and professional perceptions. How does one decide what interventions are needed in a given setting?

Assessment of the local situation and identification of needs, followed by monitoring and evaluation, is essential for providing effective responses. Assessment should cover the following areas:

- Epidemiological situation and trends (problem drug use prevalence, user profiles, patterns of drug use, routes of administration, mortality and morbidity including HIV/HCV prevalence and incidence, risk groups and behaviors, other health and social problems, drug-related crime)
- Response situation (existence of enabling policy environment including coordination strategies and support for harm reduction, services available including criminal justice settings, service policies and practices, geographical coverage, referral pathways, service uptake and utilization, client profiles, services provided)
- Needs assessment (coverage of target populations, gaps in responses, unmet needs, contextual risk factors, barriers to services, professional and community perceptions, drug users' perceptions, engagement of stake holders)
- Recommendations (priorities for action, policy environment development, coordination needs and mechanisms, service development and delivery targets, outcome targets, key indicators for monitoring)

Conducting an assessment involves a combination of methods which can include prevalence estimation, key indicators based on administrative or service data, surveys, ethnographic research, and key informant interviews with professionals, community members, and drug users, including through the internet.

Monitoring should cover trends in the epidemiological situation based on public health surveillance and other key indicators of problem drug use and related harms, as well as trends in service provision, uptake, and utilization based on surveys or routine data from services. There are many aspects of evaluation that are useful including process, outcome, and cost-effectiveness.

Differences between settings often imply different priorities and configurations for local responses. Selected aspects of harm reduction policy in practice are discussed below.

84.2.9 Enabling Environments

Harm reduction is about fostering protective "enabling environments" as well as improving services for individuals. This involves seeking to minimize negative dimensions of risk settings while developing alternative approaches that enable safer and healthier environments for both drug users and the local community.

Early examples of local harm reduction policies are the responses of European cities such as Frankfurt, Liverpool, or Zurich to heroin epidemics and public drug scenes in the 1980s. In Frankfurt, a significant heroin market developed in the city center, attracting drug users from the city and surrounding region. Initial policy was based on strong police intervention and coercive drug free treatment, set within the wider context of a repressive and stigmatizing national policy including strict restrictions on methadone and syringe availability. This policy had the effect of chasing the drug scene around the city. Not only did it fail to solve the problem of public drug use, but it created even riskier conditions for drug injecting, and HIV and overdoses increased. Pressure for an alternative approach led to the adoption of a harm reduction policy, "To live with drug addicts," coordinated through weekly meetings of all key actors and supported by a newly created drug policy division within the municipal council (Hartnoll and Hedrich 1996). In addition to developing a wide network of harm reduction, treatment, and rehabilitation services, the policy aimed to involve public discourse on stigma and marginalization and to promote possibilities for social reintegration. While the police did not renounce responsibility for maintaining public order, they largely stopped confiscating syringes and took part in consultations over strategies to reduce the public drug scene and influx of drug users from neighboring cities. Despite continuing tensions, over time the policy environment shifted significantly, public drug use diminished, and overdoses and new cases of HIV declined.

In this case, the drive for policy change was bottom up and arose from a realization at local level, including the police and public prosecutor, that the prevailing policy was creating social environments that heightened both individual

and community harms. However, it was also important that national policy subsequently changed to include harm reduction as a major pillar of drug policy, including OST, NSPs, DCRs, and increased discretion for public prosecutors over possession of small amounts of drugs for personal use.

More recently, the importance of nurturing enabling environments has been stressed in studies of HIV among people who inject drugs in high-risk environments (Rhodes 2009; Degenhardt et al. 2010; Jolley et al. 2012).

84.2.10 Epidemiological Settings

Scaling up coverage of OST and NSPs to contain the spread of HIV and HCV is recommended in research reports (Tilson et al. 2006; Mehta et al. 2011; Grebely and Dore 2011), drug strategies (e.g., EU drug strategies since 2004), and public health policy guidelines (ECDC and EMCDDA 2011; WHO et al. 2013). What this implies in practice is situation dependent. Some studies have used modelling techniques to project the impact of different levels of coverage in different scenarios (Vickerman et al. 2007, 2012). While this approach has limitations and important margins of uncertainty surround projections, they do support several general conclusions.

The impact of different levels of coverage on incidence and prevalence of HIV and HCV is affected by baseline seroprevalence levels in risk populations as well as by individual and collective patterns of injecting risk behavior (Vickerman and Hickman 2010). Scaling up can have an important impact on containing or reducing HIV incidence and prevalence. However, since HCV transmission probability is much higher than that for HIV, higher levels of coverage and larger changes in risk behavior are needed to make an impact on HCV than HIV. Significant reductions in HIV transmission can be achieved by targeting high-risk drug injectors, while targeting low-risk users brings relatively little additional benefit in terms of HIV prevalence. For HCV, however, failure to cover lower-risk users considerably reduces the potential impact of interventions, so all drug injectors should be covered. In Britain, modelling studies suggest that early scaling up of OST and NSP helped to contain the prevalence of hepatitis C among people who inject drugs to 40 % instead of a projected 65 % that would have occurred without high coverage (Vickerman et al. 2012). In situations where HCV prevalence is already high, long-term reductions in the prevalence of chronic hepatitis C are likely to be modest and require long-term sustained coverage. To achieve large reductions in HCV incidence, it is necessary to target all injecting drug users, to reduce sharing to very low levels, and to reach them within 12 months or so of starting to inject (Vickerman et al. 2007).

In situations with low OST and NSP coverage, which globally is under 20 % in most countries (Mathers et al. 2010), it makes sense to prioritize scaling up of OST and NSPs. This also means relaxing restrictions on syringe distribution and implementing measures to increase recruitment and retention in OST. In situations where high levels of coverage of drug injecting populations have already been

achieved (e.g., 50 % or more), it may not be cost-effective to attempt to increase coverage further. For example, in countries such as the UK, it is estimated that coverage of both interventions would have to increase to 80 % or more in order to halve HCV prevalence over 20 years. It would be very difficult to achieve and sustain such a high level (Vickerman et al. 2012). Additional measures, such as treatment for HCV, may in the longer term have a significant preventive effect (Martin et al. 2011).

84.2.11 Prison Settings

Implementing harm reduction in prison raises particular challenges (see also ▶ Chap. 70, "Treatment in Criminal Justice Settings"). There is tension between the abstinence orientation of penal institutions and harm reduction approaches. Prisons are seen as institutions for punishment for illegal behavior, so interventions such as providing syringes can provoke strong opposition. Prison health services are often part of the prison administration and tend to be detached from community health care. Since security is a priority, service provision for prisoners may be seen as less pressing. As a result, health and other services for prisoners lag behind those for the general population. Further, prison administrations may be reluctant to admit that drug use, same-sex activities, and rape take place. Lack of equivalence of care between prison and community is an important barrier to improving prison-based responses to drug users and others.

Particular health risks in prison compared to the community include higher proportions of problem drug users and levels of comorbidity (psychiatric, HIV, HCV, TB), settings that encourage riskier injecting behavior when it occurs (as well as higher sex-related risks), interruptions to treatment, and post-release risk of overdose deaths.

Experience shows that it is possible to establish harm reduction interventions in a wide range of prison settings. Prison OST is both feasible and effective and has been implemented in all but a handful of European countries, though coverage varies (Hedrich et al. 2012). Equivalence of OST provision between prison and community has been achieved in some countries like the UK and Spain. In others the gap between offer and need is closing, but in some remains substantial (EMCDDA 2012b). Prison NSPs are less common, but have been successfully implemented in prisons in at least nine countries (Obradovic 2012). Evidence of impact is based on descriptive studies showing reductions in risky injecting and sharing (Dolan et al. 2003; Stöver and Nelles 2003; WHO 2007). Modalities of distribution vary and include dispensing machines (which deliver clean syringes when a used one is inserted), prison medical staff, external health workers, and trained peers (WHO 2007). Experience shows that prison NSPs do not lead to increased injecting, that syringes are not used as weapons against staff or other prisoners, that disposal is uncomplicated, and that confidentiality increases participation. Distribution of bleach to disinfect needles and syringes has been suggested, but this is an unsatisfactory alternative, especially in prison settings (Small et al. 2005). Distribution of

condoms and lubricants is feasible and contributes to reduced risk behaviors in prison (WHO 2007). All harm reduction measures in prison need support from officials, prison governors, and prison guards; otherwise interventions will be undermined, for example, by increased searches and confiscation of materials.

Continuity of care (e.g., OST or ART) between community and prison following arrest and incarceration and between prison and community following release is an important means of reducing possible harms such as relapse, disruption of infectious disease treatment, or overdose. This requires establishing clear protocols for throughcare-procedures between community and prison services.

In conclusion, it is feasible to implement harm reduction in prison settings with benefits similar to those seen in community settings. Integration of prison health care into health care for general population facilitates moves towards equivalence of care.

84.2.12 Law Enforcement Settings

Substantial numbers of problem drug users come into contact with the police. Conversely, drug-related issues can take up a significant proportion of police time and resources. Although law enforcement and health policies are not often closely related, drug use is a field where there is considerable overlap and where both sectors can benefit from partnerships that foster mutual understanding and cooperation regarding reducing harms. Examples include support by police for OST (usually because of crime reduction) and agreements over community policing with regard to syringe distribution programs, the role of DCRs in reducing public nuisance, or the status of participants in peer-based outreach. In addition to these agreements, harm reduction interventions in law enforcement settings can include drug overdose prevention, referral schemes, health interventions in police stations, and diversion into treatment (Monaghan and Bewley-Taylor 2013).

Regarding overdoses, fear of police attendance can deter those present from calling emergency services (Pollini et al. 2006). In Vancouver, police procedures were changed so that they no longer responded routinely to overdose ambulance calls, but only attended if requested by ambulance personnel (Thomas 2005). Some US states have passed "good Samaritan laws" that provide immunity from drug possession charges for overdose victims and witnesses who call emergency services in good faith to save a life. A few have implemented programs to train police officers to administer Naloxone (Monaghan and Bewley-Taylor 2013). In Britain, some police authorities have issued directives that police personnel treat drug swallowing following arrest as a medical emergency that requires immediate hospitalization (Monaghan and Bewley-Taylor 2013). Warnings of contaminated drugs detected in the local drug scene may also be valuable if the information is disseminated through acceptable peer-recognized channels.

Drug referral schemes involve specialized workers based in police stations to assess, counsel, and refer drug users to treatment. Data from a national monitoring program in Britain showed that half of those who voluntarily asked for assistance at arrest had never been in treatment (Sondhi et al. 2002), though uptake and retention

rates following referral are variable. Subsequently, drug intervention programs became more directive, involving testing and assessment orders, and rates of treatment entry and retention improved. Apart from formal referral schemes, police discretion can enable referral to local services without arrest (MacDonald et al. 2008).

Health interventions in police stations include provision of methadone or buprenorphine (by police surgeons or external doctors). In some countries this is limited to clients in OST; in others in can be administered on the basis of withdrawal symptoms. In practice many opioid users in police custody do not receive medical intervention (MacDonald et al. 2008). Some police authorities in Britain provide sterile injecting kits on release from custody (Monaghan and Bewley-Taylor 2013).

Diversion into treatment through special drug courts is widely used in the USA (US Department of Justice 2012) and some other countries. Evidence suggests that they can reduce both recidivism and court costs (Mitchell et al. 2012), but evidence of their impact on post-program drug and alcohol use, employment, social relationships, or health is scarce (Wittouck et al. 2013). There are legitimate questions over the role of coercion in harm reduction responses.

All partnerships between local health and social services and police have to overcome substantial barriers before they can operate effectively while respecting the professional responsibilities of each agency. They also have to deal with legal constraints. However, it is important to seek such partnerships, since law enforcement activities can increase the risk of harms such as infections or deaths from overdose and can conflict with harm reduction interventions such as NSPs. Arrest can increase risks, for example, through interruption of OST or ART, but it can also offer opportunities for interventions to reduce harm.

84.2.13 Overcoming Barriers

A variety of barriers can inhibit development of effective harm reduction responses. These range from legal or formal professional constraints to informal obstacles such as resistance from other services and professionals, lack of cooperation from the police, and political or community opposition. While it may be difficult at local level to change formal constraints such as laws, it is often possible to reduce resistance through active consultation and sensitivity to the interests involved.

Barriers also discourage drug users from contacting services. These include administrative barriers (registration procedures, appointments, waiting lists), fear of arrest or of children being taken into care, perceptions that services are unfriendly or cannot be trusted, lack of health insurance or costs of treatment, low accessibility due to location or opening hours, and need to contact multiple agencies for different services at different sites. It is possible to minimize some of these barriers by developing strategies to improve access to and utilization of health-care services (CDC 2012a).

Aim for coordinated services that reduce the need for repeated registration at different services. Where possible, offer multiple services at the same site to reduce the need for referral to other services. Review the geographical distribution and

opening hours of contact points and services in consultation with users. Above all, implement user-oriented policies that explicitly enshrine confidentiality and users' rights to care, and strive to create a sympathetic and supportive service.

84.2.14 Promoting Health and Equality of Care

It is essential that practitioners understand the reasons for barriers to help seeking and the primacy of confidentiality and trust. Quality of services is as important as quantity. Commitment to equality of care and basic human rights does matter (Jürgens et al. 2010).

To summarize, the principles underlying a harm reduction approach (ECDC and EMCDDA 2011) are:

- Pragmatic approach to health promotion
- Public health objectives
- Clients' rights perspective
- Based on scientific evidence and expert experience

The principles of service provision are:

- Ensure confidentiality
- Promote service accessibility
- Create a user-friendly atmosphere
- Engage in dialogue with users and promote peer involvement
- Adopt a practical approach to the provision of services
- Refrain from ideological and moral judgment
- Maintain a realistic hierarchy of goals
- Promote an enabling environment as well as caring services for clients

84.3 Conclusion

Harm reduction policies and interventions have been successfully implemented in many parts of the world. HIV among IDUs is now largely under control in countries which have implemented extensive harm reduction policies. Heroin use and related problems are largely contained in many countries where OST has reached high coverage. Other challenges include stimulants and other drugs, ageing populations of dependent users, hepatitis C, and continuing sexual transmission of infections. Harm reduction strategies will need to adapt to changing priorities.

Almost all the evidence presented in this chapter (and also ▶ Chap. 83, "Harm Reduction Interventions") comes from Europe, the USA, Canada, or Australia. Many challenges for the future lie in other regions such as Central and Eastern Asia, Central and South America, and Africa (Mathers et al. 2010; Strathdee and Stockman 2010; Stoicescu 2012). We believe that the lessons learned so far can be adapted and applied to a wide range of settings.

Over the past two decades, political and professional opinions, as reflected in resolutions and policy documents of institutions and bodies at international,

regional, and national level, have increasingly promoted a "comprehensive approach" that includes harm reduction as a central pillar. A more general trend towards viewing health and social policies on illegal drugs, infectious diseases, alcohol, tobacco, and other issues like obesity, high-risk youth, or crime prevention under a much wider umbrella also pushes towards a broader, multi-level paradigm of risk reduction and health promotion.

Discussions continue on whether harm reduction is oppositional or complementary to drug-free approaches. It is not easy to integrate abstinence-oriented and public health and safety paradigms, nor is it simple to achieve a balance between individual and community needs. However, there is clearly space, within the hierarchy of goals of harm reduction, to encourage moves away from drug use and from dependence on services for those who are able while also providing compassionate, long-term care for those who cannot. At the same time, it is important to implement policies and interventions that protect the health and well-being of communities affected by problematic patterns of drug use.

Apart from skills in dealing with individual clients, practitioners need an understanding of the social, community, and public health settings within which drug use and drug-related harms arise, as well as an awareness of how social responses can have unintended consequences. A willingness and ability to cooperate within a local network of agencies and listen to the concerns of drug users themselves is essential. This all involves a broad vision of drug use, harms, and responses and a willingness to think outside of traditional individual psychiatric and social work casework paradigms.

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