Chapter 4
Perspectives on harm reduction — what experts have to say

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Harm reduction is usually used as an umbrella term to define interventions, programmes and policies that seek to reduce the health, social and economic harms of substance use to individuals, communities and societies. But definitions of harm reduction are also contested. At the same time, a variety of challenges face the development and implementation of harm reduction policies in Europe and elsewhere. We invited nine international experts to reflect upon harm reduction. Between them, they reflect expertise in international public health policy and development (including representatives of the World Health Organization and Global Fund), the health and social sciences, medical ethics and user involvement. Their topics focus on challenges regarding:

- strengthening the concept and evidence-base (Rehm and Fischer);
- preventing hepatitis C (Hickman);
- broadening the scope of interventions (Ball);
- scaling up coverage (Atun and Kazatchkine);
- generating genuine user involvement (Southwell);
- the ethics of policy decision-making (Fry); and
- how best to think about and define what we mean by harm (Room).

Harm reduction in an open and experimenting society

Jürgen Rehm and Benedikt Fischer

Over the past 25 years 'harm reduction' has played an increasingly prominent and explicit role in substance use policy and interventions, especially in Western Europe and Australia, but also in North America to some extent. Although people have struggled with the concept in terms of its clarity, and there has been ideological opposition to it since its inception, its fundamental significance is that it departs from the traditionally dominant approach by which the severity of substance use problems is principally defined by the extent, quantity or frequency of substance use by an individual or within a population. The implied logic of this conventional approach to substance use suggested that abstinence, and thus reducing the prevalence of use ought to be main goals of substance use, interventions or policy.

Although the principles of harm reduction stretch back several decades, harm reduction practice was symbolically re-invented during the early phase of the HIV/AIDS epidemic among injecting drug users (IDUs) in the 1980s. This was a time when health workers started providing clean syringes to IDUs — rather than seeking to achieve their abstinence from drug use — in order to halt the spread of HIV. Since then, harm reduction initiatives and

frameworks have been established for all areas of substance use, albeit not without substantial difficulty or opposition.

Critics of harm reduction have claimed that the concept of 'harm' is not objectively defined, and therefore does not provide a strong empirical basis for the implementation and evaluation of harm reduction measures (Rehm and Fischer, 1997; Leshner, 2008; Hall, 2007). Further, it has been suggested that harm reduction approaches appear to sanction or even enable substance use, and therefore may facilitate the 'legalisation' of illicit substances, and thus may send out 'the wrong message' (DuPont, 1996). Finally, an often-cited argument is that harm reduction measures for illicit drugs contravene international drug control treaties, although such criticisms have been rejected both in theory and in practice (Room, 2003). For each of the main substantive substance use arenas (alcohol, tobacco, illicit drugs), there are distinct harm reduction debates and initiatives. We summarise some of these below, before sketching out an evidence- and experimental-based approach to implementing interventions based on harm reduction principles.

Harm reduction in different fields of substance use: commonalities and differences

The term harm reduction has somewhat distinct connotations in different fields of substance use.

Alcohol

In the alcohol field there has been recognition for some time now that abstinence may not be the ideal or most feasible outcome of policy or therapeutic interventions, as consistent light to moderate alcohol use without heavy drinking occasions has been shown to confer health benefits (Pearl, 1926; Rehm et al., 2004b; Rehm et al., 2003). Even though abstinence for everybody is not the main goal of alcohol policy in Western societies anymore, approaches to reduce consumption in a given country or region are still presented as harm reduction (Room, 2004). However, the current use of the term has evolved, and in the debates at the World Health Assembly towards establishing a global strategy to reduce alcohol-attributable harm, harm reduction has been framed in different ways by many players.

Despite differences of emphasis, there is an emerging consensus among alcohol experts:

- that abstinence may not necessarily be the only goal of a public health approach for the population and not even necessarily the goal of treatment for individuals who enter the treatment system (see 'controlled drinking' approaches as one kind of therapy, or so-called 'wet hostels' as one form of intervention, Podymov et al., 2006);
- that patterns and practices of drinking predominantly influence the alcohol-related harm experienced (Rehm et al., 2003);
- and that this harm from drinking is to a substantial extent also influenced by the environment and the context of drinking (Rehm et al., 2004a).

Following this perspective, the risk behaviour of so-called 'binge drinking' (Gmel et al., 2003) has become the focus of many preventive and therapeutic interventions. Here, the advice might be to replace the consumption of two bottles of wine in one setting on a Friday with drinking one glass of wine daily in conjunction with a meal. This change of drinking patterns results in about the same amount of alcohol being consumed, but typically leads to much less health and social harm.

However, closer examination shows that despite changes of language and examples, the interventions proposed are often still the same as 40 years ago within a supposedly different paradigm. As some of the accepted truths of the field (that is, that higher availability of alcohol leads to more harm under all circumstances) have been empirically challenged (example: Sweden has experienced much higher availability of alcohol in the past years, but not necessarily higher consumption or alcohol-attributable harm), the global strategy will need a much closer examination of what interventions produce which effects under what circumstances, and less debate on how we label the successful interventions.

Tobacco

Many have argued that harm reduction cannot be applied to tobacco smoking, since smoking even small quantities of tobacco is associated with significant health risks (Institute of Medicine, 2001). However, changing realities have led to a new focus on harm reduction and smoking, at least in high-income countries (Shiffman et al., 2002; Hatsukami et al., 2004; Hughes, 1995). In many Western countries, smoking is now increasingly concentrated in a population of 'hard-core' smokers who often have symptoms of depression (Fergusson et al., 2003) and/or are economically disadvantaged (Barbeau et al., 2004). Such people may not be able to quit their tobacco consumption entirely, but may be good candidates for harm reduction measures — for example, practices of controlled smoking supported by alternative nicotine delivery mechanisms — that lower the risks associated with their smoking. In addition, harm reduction may offer alternative interventions for smokers that are less punitive or stigmatising in an increasingly harsh 'anti-smoking' climate (Poland, 2000).

Some attention has been given in this context to alternative or 'safer' nicotine delivery models that eliminate the highly carcinogenic effects of smoked tobacco inhalation by means of 'cleaner' forms of nicotine intake (Ferrence et al., 2000). These range from various culture-specific forms of chewed tobacco products (e.g. 'snus') to nicotine gum or patches. Some have pointed out that 'controlled' or 'reduced' smoking for certain users would at least reduce exposure to harmful tobacco smoke and its consequences (Drinkmann, 2002; Hughes, 2000), if it is not compensated by more harmful ways of inhaling. Studies have yet to demonstrate whether such approaches are really showing an overall benefit for the target groups. Again, an extensive ideological debate will not reduce any of the harms associated with smoking. Rather, well-designed and executed scientific experiments testing the benefits of different types of 'harm reduction' interventions for smokers resistant to quitting may inform the best mix of interventions for different target groups (Rehm and Strack, 1994).

Illicit drugs

Until recently, the harm reduction approach has been equally controversial in the field of illicit drugs (that is, drugs whose consumption is prohibited by law). Although depending on the type of illegal drug, an accumulation of evidence over the past couple of decades points to the substantial risks of death and disease associated with illicit drug use and specifically underlines the crucial role that behavioural, social and environmental factors play in aggravating or mitigating those risks (EMCDDA, 2003). Various harm reduction measures have been used to pragmatically reduce drug-related risks especially in the area of IDU, including needle exchange programmes that are known to reduce transmission risk behaviours for both HIV and hepatitis B and C among IDUs (Vlahov et al., 2001; Kimber et al., 2010). Supervised injection facilities — including many such operations in Europe and Australia, and one facility in North America ('Insite' in Vancouver) — have become a main intervention for IDUs and aim to reduce overdose, infectious disease and public order problems among IDUs by offering a protected and medically supervised drug injecting environment. Overall, the empirical evidence shows some success (Kimber et al., 2003; Hedrich, 2004; Hedrich et al., 2010), but the interpretation is limited by the weak designs applied in many evaluations, often represented by the lack of adequate control groups. This leaves the door open for alternative interpretations of data produced and subsequent ideological debate.

Towards a more evidence-based and experimental approach

Although the term 'harm reduction' has different meanings within and across different fields of substance use, there are some clear conceptual underpinnings. First, the primary emphasis within this paradigm is on the outcomes of substance use rather than on use itself. Second, the major objective of intervention measures is to reduce negative outcomes, regardless of whether or not use is reduced.

As such, harm reduction can be construed as an alternative — welcome or not — to the conventional paradigm underlying substance use interventions or policy, which has been concerned principally with use *per se*. Clearly, all fields of substance use are starkly shaped by an abundance of ideology. Harm reduction is and will remain controversial in this climate, as it challenges or deviates from conventional approaches and norms to substance use, some of which signal that any form of substance use is bad or should not be accepted or 'aided'. Thus, simply renaming the approach may incur some short-lived gains on the rhetorical level, but may not resolve these substantive conceptual dilemmas in the long run. Rather, the use of 'harm reduction' terminology should be avoided at the philosophical or abstract level, and instead should be specified concretely in each instance with regard to what is meant by 'harms', and how 'the reduction of harm' is supposed to occur and to be measured. Thus, harm reduction efforts in practice should be clear in their conception, based on evidence and implemented in a way that allows their effectiveness to be evaluated. This, in consequence, also means that harm reduction measures should be revised or suspended, if they do not deliver the intended or otherwise beneficial outcomes.

In the field of substance use, ideology is a strong current, and a simple label (such as 'harm reduction') can suffice to render certain interventions or measures as unacceptable. We must therefore find ways to move towards a more experimental and evidence-based approach to substance use policy and interventions (Campbell, 1969; Rehm, 2009). Measures such as supervised injection sites should be implemented with clear outcome objectives on a time-limited basis; the progress towards these objectives should be monitored, and if not reached, the available — and typically scarce — resources should be invested in other interventions. Furthermore, experiments on programming options should be construed and implemented *a priori* with control groups, such as the Saturday opening hours for alcohol in Sweden, where the policy was implemented in one part of the country, with another part of the country serving as the control group (Norström and Skog, 2003). Such control groups are very valuable in distinguishing effects of interventions from secular trends or concomitant events. Another example in this direction would be the proposal for alcohol outlets in Canada to open on Sunday mornings in certain areas to avoid the use of surrogate alcohol by marginalised or poor alcohol addicts (e.g. homeless people) who do not have enough funds to stock their required alcohol supply over the weekend.

It is unlikely that the fundamental philosophical controversy regarding 'harm reduction' will ever diminish or disappear. The only basis for a meaningful continued existence of harm reduction concepts will be a firm linkage with concrete definitions and operationalisations, and evidence-based assessments of whether the respective measures deliver on their objectives or not. These principles should also become a consistent standard for all policy frameworks relying on the harm reduction concept.

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HCV prevention — a challenge for evidence-based harm reduction

Matthew Hickman

Harm reduction applied to substance use, such as injecting, is a form of secondary prevention. Harm reduction aims to prevent the consequence of drug use, that is, to reduce the burden of disease and improve the health of the population (Lenton and Single, 1998). Clearly when onset of drug use or progression to dependence cannot be prevented then it is logical to intervene in order to reduce the potential consequences of drug use, in the same way that once people have developed diabetes, obesity or high blood pressure primary prevention is replaced by other strategies that aim to reduce potential health problems associated with these conditions. In some chronic health problems the natural history requires life-long treatment (such as diabetes) whereas in others the disease or adverse condition can be reversed. The latter is true of substance use, which is often described as a 'chronic relapsing condition' — that is, it may be of long duration with multiple periods of recovery and relapse before final cessation (O'Brien and McLellan, 1996). Harm reduction, therefore, aims to reduce premature mortality and long-term health and social problems during periods of substance use. Replacing the term 'harm reduction' with 'secondary prevention' may please some or annoy others (Hall, 2007; Weatherburn, 2009). But any name change is less important than recognising that harm reduction is like any other public health intervention (Institute of Medicine, 2007).

Evidence is required that a specific harm reduction activity is effective; that harm is reduced in order to justify ongoing support and investment; and that like any public health intervention the evidence is assessed in standard ways and compiled from study designs that can properly test whether exposure to the harm reduction intervention has reduced harm. In the hierarchy of study designs randomised control trials give the strongest evidence — if the research question and exposure lends itself to a trial. Next in the hierarchy come cohort studies and case control designs, which separate and attempt to clarify clearly the relationship between exposure and outcome. Cross-sectional or ecological study designs may corroborate or raise hypotheses — but cannot by themselves test them. Nonetheless it should be possible to generate good-quality evidence (even without a trial), especially by considering consistency of evidence across different studies, different study designs and settings (Rutter, 2007).

Harm reduction or drug harms are collective nouns and cannot be reviewed as a whole. They encompass many forms of harm reduction (encompassing psychological and pharmacological therapies, provision of sterile drug taking equipment, and changes to the risk environment) and multiple harms (from neurocognitive deficit, psychological and psychiatric impairment, crime, family and social problems, and acute and chronic ill-health) (Horne, 2007).

So let us consider a specific area — harm reduction and injecting drug use — associated with marked levels of harm, a range of interventions, and novel intervention development. There is good evidence from trials and well-conducted observational cohort studies that methadone reduces the risk of overdose, and can have a role in reducing HIV infection among injectors (Institute of Medicine, 2007). There is weaker direct evidence but good evidence from cost-effectiveness models that needle and syringe programmes reduce HIV transmission. More challenging for harm reduction, and what I want to focus on, is its role in preventing hepatitis C virus (HCV).

HCV is a comparatively common blood-borne infection that may lead to liver cirrhosis, cancer and death. In the United Kingdom — and many other countries in Europe — 80 % of infections are due to injecting drug use and nearly 0.5 to 1 % of the adult population maybe infected with HCV (De Angelis et al., 2008). The risk of becoming infected with HCV increases with injecting duration, and in many cities in Europe one in two active IDU will be infected with HCV (Hickman et al., 2007). Two key harm reduction interventions that may reduce HCV transmission are: (i) needle and syringe programmes (NSPs), which aim to reduce the use and sharing of injecting equipment that maybe infected with HCV; and (ii) opioid substitution treatment (OST), which in the context of HCV aims to reduce injecting frequency and thereby reduce the probability of sharing and increase coverage of NSPs.

The first challenge and obvious policy question is — what evidence is there that harm reduction reduces HCV transmission? Unfortunately there is very little direct evidence (ACMD, 2009). For example, Jo Kimber, Norah Palmateer and colleagues report overwhelming evidence from reviews and individual studies that NSP and OST reduce self-reported injecting risk (Kimber et al., 2010; Palmateer et al., 2010). However, there is insufficient review-level evidence that NSP or OST are associated with a reduction in HCV incidence.

Does this matter? It might simply be because the studies are too small or underpowered to detect a difference in HCV incidence; if the outcomes are combined (reported sharing and HCV incidence) then the evidence is positive. However, it does matter. Reported injecting risk behaviour change is not a good enough marker of reduced HCV transmission. There are many cross-sectional surveys and longitudinal surveys of IDU that find reported sharing to be a poor predictor of HCV infection — with high rates of HCV among people who report 'never sharing', and comparatively small increased rates of infection among people who report sharing. Reported injecting risk may be misclassified or may be under- or over-reported due to social desirability or other reasons. More importantly, even if a reduction in sharing occurred, without information on HCV incidence we cannot be certain that the reduction was sufficient to reduce HCV transmission. We cannot rule out the possibility that NSP or OST are having no effect on HCV transmission.

However, we know that OST and NSP are beneficial for other health outcomes. So the challenge and policy question should really be — what level of harm reduction is required to reduce HCV transmission? How much extra may be required? We know that in many other European countries HCV prevalence among IDU remains persistently high. In the United Kingdom, HCV prevalence has doubled among recent injectors in the last 10 years — evidence that current interventions and coverage are insufficient (Sweeting et al., 2009). In contrast, there is some evidence that HCV incidence has fallen in Amsterdam (van den Berg et al., 2007a). Indeed there is emerging evidence from the Amsterdam Addiction Cohort (AAC) of a positive intervention effect of harm reduction against HCV incidence (van den Berg et al. 2007b). IDU who were on 'full' harm reduction' (that is, on OST and high coverage NSP — receiving a sufficient number of syringes for the reported number of injections) had an HCV incidence approximately one-third lower than those receiving either OST or NSP. HCV incidence among IDU-receiving 'partial or incomplete harm reduction' was no different from IDU receiving no harm reduction; and there was no evidence of an intervention effect for NSP or OST alone.

The implication of the evidence from AAC is stark and far-reaching. If true, and we observe a similar picture in the United Kingdom (unpublished), then HCV incidence can be reduced, but providing a small amount of harm reduction is insufficient — partial harm reduction will not have an impact on HCV transmission. Further, only the combination of interventions seemed to have an effect. Perhaps the reason why there is no review-level evidence of an intervention effect in the literature is because studies have been investigating a single intervention (e.g. NSP vs. no NSP), and not assessing sites and subjects in OST with high levels of NSP coverage. It is not difficult to see why partial harm reduction may not be enough. If you live in a site where one in two IDU are infected with HCV, and the probability of HCV transmission after sharing an infected syringe is, say, 3.5 %, then you only need to share about 40 times to have a 50:50 chance of being infected with HCV. If you inject 500 times a year then even if you are safe 95 % or more of the time, it does not take many years for your chance of being HCV positive to become very high.

This evidence leads to two further challenges. We need to strengthen the evidence base on what level and combination of harm reduction interventions reduce HCV transmission (Hickman, 2009). This is not trivial. Randomised control trials, at least for OST and NSP,

cannot be used, as it would be unethical to randomise interventions that have proven benefit on other health outcomes. This may not be the case for other interventions, which, therefore, could be randomised alongside OST and NSP. Equally, longitudinal studies are expensive and difficult to conduct well and achieve high rates of follow-up. Instead, innovative methods may be required that make use of different serological markers of HCV infection to identify incident infections — and compare HCV incidence against different harm reduction exposures. A further complication is that these studies need to investigate and measure the impact of different combinations of harm reduction intervention.

Finally, the challenge of HCV prevention to harm reduction providers and advocates is that services need to interact and combine. Providing sterile equipment or offering OST may not be enough; but the two need to work together. Reducing injecting frequency and achieving injecting cessation must become prominent goals of HCV harm reduction in order for the reduction in injecting risk and the scale of behaviour change required to prevent HCV to be sustainable.

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Broadening the scope and impact of harm reduction for HIV prevention, treatment and care among injecting drug users

Andrew Ball

Drug use is associated with multiple and changing health risks and harms, requiring increasingly diversified and complex responses. There is an emerging consensus that harm reduction programmes need to be comprehensive and flexible if they are to achieve significant public health outcomes. The example of HIV prevention, treatment and care among injecting drug users illustrates the importance of adopting a broader rather than a more restrictive definition of harm reduction (Ball, 2007a). Harm reduction programmes on the ground need to move beyond single interventions (such as needle exchange programmes and opioid substitution treatment) delivered in isolation, to a comprehensive set of interventions linked in with broader health and social services.

How broad should the harm reduction net be cast? Within the context of HIV and injecting drug use there are multiple intervention points where HIV risk and harm can be reduced, including by decreasing HIV vulnerability and risk, preventing HIV transmission, treating those who are infected and mitigating the impact of HIV on communities. Considering a hierarchy of harm reduction goals, first, interventions can focus on those individuals and populations who are most vulnerable to adopting HIV risk behaviours (such as moving from non-injecting to injecting drug use) or are exposed to HIV risk settings (such as incarceration), but have yet to engage in risk behaviours. The aim of such interventions is to reduce vulnerability by addressing such factors as stigma and discrimination, marginalisation, gender inequity and criminalisation (UNAIDS, 2008). Second, for those who are already engaged in HIV risk behaviours interventions should target those behaviours to reduce risk, such as the use of opioid substitution treatment and needle and syringe programmes to reduce sharing of injecting equipment (Institute of Medicine, 2007). Some injecting drug users are more vulnerable than others, such as female drug users, prisoners and those in rural areas, because their situations prevent them from adopting safer behaviours or accessing prevention services. Third, where individuals are exposed to HIV, interventions for preventing or reducing HIV transmission may be considered, such as the use of antiretroviral drugs for post-exposure prophylaxis and the potential use of HIV vaccines and pre-exposure prophylaxis when they become available (Smith et al., 2005). Fourth, where transmission has

already occurred interventions (including antiretroviral treatment) can aim to protect the health of those drug users living with HIV and to prevent onward transmission of HIV to their sexual and drug-using partners and to infants, including via 'positive prevention' interventions (WHO, 2008). Fifth, for those who become ill, treatment and care can reduce HIV-related morbidity and mortality and prevent and manage co-infections and co-morbidities (Ball, 2007b). And finally, interventions can focus on mitigating the social and economic impact of HIV on drug users, their families and communities, such as through social health insurance schemes and care for HIV orphans (Souteyrand et al., 2008; UNICEF, 2007).

Despite multiple opportunities for reducing HIV-related harm among injecting drug users, most harm reduction programmes still focus on a limited number of interventions, particularly those that target specific HIV risk behaviours. Since the mid-1980s, the 'big three' interventions have been risk reduction communication (particularly through community-based outreach), needle and syringe programmes and drug dependence treatment (notably opioid substitution treatment for opioid users). For these interventions the evidence of effectiveness is strong and the feasibility of implementation has been demonstrated in some of the poorest and most difficult settings (Institute of Medicine, 2007; Needle et al., 2005; Wodak and Cooney, 2005; Farrell et al., 2005). In recent years, HIV treatment has been added to the list, with increasing evidence that people living with HIV who use drugs can achieve good outcomes with antiretroviral therapy (Lert and Kazatchkine, 2007). The World Health Organization (WHO), the United Nations Office on Drugs and Crime (UNODC) and the Joint United Nations Programme on HIV/AIDS (UNAIDS) have defined a broader package of interventions for HIV prevention, treatment and care among injecting drug users, adding five interventions to make nine 'priority interventions' (WHO et al., 2009b):

- needle and syringe programmes;
- drug dependence treatment;
- behaviour change communication;
- HIV testing and counselling (WHO and UNODC, 2009);
- HIV treatment and care;
- condom promotion;
- prevention and treatment of sexually transmitted infections (Aral et al., 2005; Coffin et al., 2009);
- prevention and treatment of viral hepatitis (Bottecchia et al., 2007; Hellard et al., 2009; WHO Regional Office for Europe, 2006);
- and tuberculosis prevention, diagnosis and treatment (WHO et al., 2008).

In addition, a programmatic framework is required to take these interventions to scale, including strategies to establish supportive policy and community environments, better engage civil society and other partners, build robust systems for service delivery, and strengthen strategic information to guide responses.

The situation is dynamic, with new developments having implications for how harm reduction programmes might be structured in the future. Research on new HIV prevention interventions

needs to be monitored closely to determine their relevance for harm reduction programmes. For example, there is a widening discourse on the role of antiretroviral drugs in the prevention of HIV transmission. A pre-exposure prophylaxis trial in Thailand, involving 2 400 HIV-negative injecting drug users, is studying the safety and efficacy of oral tenofovir for reducing HIV transmission among injecting drug users (CDC, 2009). Whereas the use of antiretroviral post-exposure prophylaxis has become routine practice in many occupational settings, consideration needs to be given to its wider use in non-occupational settings, including for injecting drug users (WHO and ILO, 2007). Recent studies suggest that suppression of viral load through antiretroviral therapy decreases the risk of HIV transmission between HIV-discordant couples (Reynolds et al., 2009). Several modelling exercises have considered the role of antiretroviral therapy in preventing the sexual transmission of HIV (Montaner et al., 2006; Granich et al., 2009), and in controlling HIV epidemics among injecting drug users (Bastani et al., 2010).

Harm reduction programmes should benefit from new developments in HIV/AIDS treatment, care and support. New evidence is emerging that earlier initiation of antiretroviral therapy is associated with better treatment outcomes (NIAID, 2009). This has significant implications for prioritising HIV testing and counselling in harm reduction programmes, to ensure that the HIV status of drug users is determined early so that treatment initiation and prevention efforts may be optimised. The majority of injecting drug users in low- and middle-income countries are unaware of their HIV status. In a survey of 44 low- and middle-income countries in 2008, some 25 countries reported on the percentage of injecting drug users who had received an HIV test and test result in the past 12 months, with a median of only 23 % of injecting drug users knowing their HIV status (WHO et al., 2009a). The promotion of provider-initiated HIV testing and counselling (PITC) and the use of rapid HIV testing technologies is particularly relevant for harm reduction programmes, given that follow-up of individuals may be difficult (WHO and UNODC, 2009). In 2006, out of 44 European countries surveyed, 32 provided PITC specifically for injecting drug users (EuroHIV, 2007). The emergence of simpler, better tolerated and more robust antiretroviral therapy regimens offer opportunities for better treatment outcomes in drug-using populations where treatment adherence and toxicity continue to pose major challenges (Lert and Kazatchkine, 2007). Female drug users should benefit from new approaches to the prevention of mother-to-child transmission of HIV (WHO, 2009) and interventions for addressing gender-based violence (WHO, 2007). There is also increasing recognition that harm reduction programmes should address the broader health care needs of drug users living with HIV, including the prevention and management of common opportunistic infections (notably tuberculosis) (WHO et al., 2008), co-infections (including viral hepatitis and sexually transmitted infections) and co-morbidities (such as mental health disorders), in addition to addressing their sexual and reproductive health needs and rights (GNP+ et al., 2009).

While much attention is given to specific HIV prevention technologies and treatment approaches let us not forget about the broader range of interventions that make for a truly comprehensive response, such as structural interventions for reducing HIV vulnerability and social protection for affected families and communities (Rhodes and Simić, 2005; UNAIDS, 2008). Furthermore, little consideration has been given to the potential role within harm reduction programmes of new or promising biomedical technologies for the prevention of sexual transmission of HIV, such as male circumcision and topical microbicides (Padian et al.,

2008). Today, with the global economic downturn and competing public health and development priorities, we can anticipate ever-louder calls for prioritisation of investments and definition of essential packages of interventions. While this may be an opportunity to bring greater focus to our harm reduction work, we need to ensure that in doing so our public health goals of universal access, health equity and social health protection are not compromised. Certainly, priority must be given to protecting investments in already proven high-impact interventions, such as needle and syringe programmes and opioid substitution treatment. In austere times, can we justify expanding the harm reduction package to include new interventions when coverage of the 'core' harm reduction interventions remains abysmally low in most countries? Decisions will need to be guided by solid evidence. More efficient and effective models of service delivery are required, including the integration of harm reduction interventions into other relevant health services, such as primary health care, sexual and reproductive health, mental health and tuberculosis services. To garner broad support, we need to demonstrate that harm reduction programmes and services contribute to, and are part of, broader health and community systems that strengthen and contribute to broader health and development outcomes — that harm reduction is a public good worth investing in.

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Translating evidence into action — challenges to scaling up harm reduction programmes in Europe and Central Asia

Rifat Atun and Michel Kazatchkine

The exceptionality of the HIV/AIDS epidemic has long been acknowledged: it is shaped by and yet also impacts on socio-economic, political, cultural and legal environments, as well as individual beliefs and norms (Rhodes, 2002). This complex interplay of factors influencing the epidemic is particularly evident in concentrated epidemics driven by injecting drug use, as drug use is strongly influenced by macro-environmental factors such as political and economic changes, as well as socio-cultural and legal norms in particular settings. In many cases this leads to stigmatisation, marginalisation and isolation of injecting drug users (IDUs). Whilst evidence strongly suggests that HIV transmission driven by injecting drug use can be halted and reversed through effective multi-component harm reduction programmes (Ball et al., 1998; Institute of Medicine, 2007), this evidence has been overlooked or disregarded by policymakers in many countries. Consequently, in many parts of the world, injecting drug use is still fuelling HIV epidemics. Europe, a setting with contrasting policies to control HIV epidemics amongst IDUs and various levels of success with these policies, provides valuable evidence and a learning example to inform policy decisions on harm reduction programmes.

The countries of western Europe ([1]), through wide-scale implementation of needle and syringe programmes (NSPs), opioid substitution treatment (OST), outreach, and education

([1]) These include Albania, Andorra, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania Luxembourg, Malta, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, San Marino, Serbia, Slovenia, Slovakia, Romania, Spain, Sweden, Switzerland and United Kingdom.

programmes implemented in the late 1980s and 1990s, were able to halt (such as the United Kingdom) or control (such as France, Italy, Spain) IDU-driven HIV epidemics (Stimson, 1995; Matic et al., 2008; Atun et al., 2008). Similarly, the central European countries of the Czech Republic, Poland, Slovakia, and Slovenia, which experienced rapid socio-economic, political and cultural transitions, were also able to stabilise their HIV epidemics at low prevalence by responding early through the implementation of effective control measures and comprehensive harm reduction (Donoghoe, 2006). Consequently, in western and central Europe, as of 2008, the reported number of new cases of HIV amongst injecting drug users had declined: accounting for a smaller proportion of the HIV burden than previously (UNAIDS and WHO, 2008). By contrast, former Soviet Union countries in eastern Europe and central Asia ([2]), which, following the dissolution of the Soviet Union in the early 1990s, were subject to rapid socio-economic, political and cultural transitions, experienced IDU-driven HIV epidemics (Rhodes et al., 1999), which today are persisting and worsening. In eastern European countries, the response to the IDU HIV transmission was slow and compromised by health systems unequipped to handle the rapid increase in the burden of HIV (Rhodes and Simic, 2005). Even now, though harm reduction programmes are being implemented in all countries of eastern Europe, coverage is woefully inadequate to have any impact on the epidemics these countries face (Donoghoe, 2006). This is evidenced by the current trend of rising HIV incidence amongst injecting drug users in eastern Europe (Wiessing et al., 2008). Of particular concern are the persistent inequities in access to prevention and treatment services and access to antiretroviral therapy (Atun et al., 2008; Donoghoe et al., 2007).

To stem the HIV epidemics in eastern Europe, and to address the unacceptable inequities in access to antiretroviral therapy, it is essential to establish and scale-up comprehensive harm reduction programmes that incorporate NSPs and OST and ensure they are implemented in prisons in both western and eastern Europe. However, in many countries this expansion is hindered by inadequate provision in the legislation that protects the human rights of IDUs and by laws that criminalise injecting drug use and harm reduction programmes. This contributes to deep stigmatisation, and further isolation of this particularly at-risk group. However, in addition to legislative and regulatory barriers, other factors influence the scale-up of harm reduction programmes. We consider here the published literature to identify 'barriers' and 'enablers' to scaling up harm reduction programmes in Europe in order to better understand the challenges that need to be addressed to translate evidence into action.

Health system organisation

Many countries in eastern Europe have inherited vertically organised health systems, with parallel subsystems for HIV prevention and care, and substance use. These services are delivered by highly specialised providers, with little structural and operational integration of the services provided. This leads to fragmentation of services, prevents continuity of care and creates barriers for IDUs, a marginalised group who have poor access to services (Atun, 2006).

([2]) These include Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russian Federation, Ukraine, while central Asian countries include Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan.

This structural anomaly, which served well in the past, is not suited to the rapid implementation and scale-up of integrated responses to the IDU-driven HIV (and hepatitis) epidemics faced by these countries. Consequently, services that offer a suitable package of prevention, treatment and care are very limited in number, and when available they are largely inaccessible (Bobrova et al., 2007). For example, in Ukraine, the policy that permits only narcologists to prescribe OST has hindered scale-up of integrated harm reduction services (Bruce et al., 2006). As a result, only 0.1 % of IDUs are reached by this effective treatment (Matic et al., 2008).

Ukraine is not alone in this practice; limiting the prescribing of OST to narcologists is common in most east European health systems — a feature that deters IDUs from seeking and adhering to effective treatment (Donoghoe, 2006). However, experience suggests that with appropriate service design these structural barriers can be overcome. In the Russian Federation, where similar structural rigidities exist and where consequently only 1–4 % of IDUs are reached by NSPs (Wiessing et al., 2009), decentralisation of these activities by including peer network and pharmacy distribution has boosted service coverage in areas where new service delivery models have been adopted (Sarang et al., 2008; Sharma et al., 2007). In contrast, evidence from transition countries such as Croatia, Lithuania, Poland and Slovenia, which soon after transition in the 1990s adopted integrated models of treatment and care for HIV positive IDUs, suggests increased service accessibility for patients (Sarang et al., 2007). In countries such as Ireland, the Netherlands, Norway, Sweden, and the United Kingdom, where in addition to specialised community- or hospital-based clinics general practitioners also provide HIV care and treatment services, service coverage and usage are high, with users reporting high satisfaction with services provided in the community and by general practitioners (Atun, 2006).

Political support and leadership

In western Europe, early in the HIV epidemic, support for harm reduction programmes by political leaders created an enabling environment for rapid introduction and scale-up of OST, NSPs and treatment and care programmes for IDUs. For example, in 1993 an initiative that introduced harm reduction in France was followed between 1995 and 2003 by the rapid scale-up of OST services. This led to a reduction in unsafe injection practices and a decline in HIV prevalence from 40 % to 20 % in the same period (Emmanuelli and Desenclos, 2005). In the United Kingdom, the health authorities, which enjoy substantial operational autonomy, were able to provide local leadership to establish service delivery units to quickly implement NSPs, outreach services, and integrated models of OST where a range of doctors could prescribe methadone (Stimson, 1995).

In contrast, experience in eastern Europe is one of lack of leadership and political commitment to harm reduction. In Armenia, Russia, Tajikistan and Turkmenistan lack of obvious political support for harm reduction has meant that critical activities such as needle and syringe provision were not mainstreamed within the national HIV response, while the total prohibition of OST meant a comprehensive programme could not be mounted. A lack of political support and negative perceptions on harm reduction as a 'Western concept' at odds with the culture and norms in Russia has meant limited public funds being allocated to programmes to address the needs of IDUs (Tkatchenko-Schmidt et al., 2007). A strongly

hostile legislative environment and socio-cultural intolerance in many countries to drug use further hindered attempts to develop NSPs and fuelled the practice of syringe sharing amongst IDUs who feared searches by police for injection equipment and possible incarceration (Rhodes et al., 2004). Likewise, Ukraine, one of the first eastern European countries to implement OST pilot projects, has been slow in scaling up these programmes due to resistance amongst the political leadership and some providers coupled with a shortage of financial resources and trained healthcare professionals. To date, there are only high-threshold services in the country (Matic et al., 2008, Schumacher et al., 2007).

Insufficient domestic financing

An important barrier to scaling up harm reduction programmes in eastern Europe relates to limited domestic funding allocated to HIV programmes, especially to prevention activities and targeted interventions for high-risk groups (Matic et al., 2008; Dehne et al., 2000). Though Belarus in its national AIDS programme had plans to set up NSPs nationwide, these could not be established due to financial shortfalls for programme implementation (Sarang et al., 2007).

The Global Fund to Fight AIDS, Tuberculosis and Malaria has provided much-needed funding for programmes targeting injecting drug users and other at-risk groups, such as sex workers and men who have sex with men. Between 2004 and the end of 2008 the Global Fund, the largest donor globally for harm reduction programmes, had invested US $920 million in funding to support HIV programmes that include harm reduction components. Of this $920 million, around $180 million was specifically for harm reduction activities (Atun and Kazatchkine, 2010). In many countries of eastern Europe, the Global Fund is the sole funder of harm reduction programmes. In Ukraine, a Global Fund grant enabled the scale-up of a pilot buprenorphine substitution programme (Matic et al., 2008).

Whilst the much-needed expansion in international funding for harm reduction is a welcome development, domestic investment targeting the needs of IDUs must also be expanded to increase access and service coverage, and to ensure sustainability. There are encouraging signs of increased investment and good coverage levels in some central and eastern European countries. For example, in the Czech Republic, where harm reduction programmes are primarily government funded, a coverage level of 82 % has been reached (Atun, 2006), while Estonia has agreed to continue funding through domestic activities that were initiated with Global Fund investments (Matic et al., 2008).

Involvement of the civil society

Evidence points to a critically important role played by civil society and grassroots organisations in the establishment of harm reduction activities (Sharma et al., 2008). In western Europe, early in the epidemic, the engagement of civil society positively influenced the national policies on HIV control and enabled the development of a multisectoral response to IDU-driven HIV epidemics. A multisectoral response, which was instrumental in the control

of the HIV epidemic, also resulted in the design of community-driven user-friendly services (Atun et al., 2008). In France, non-governmental organisations (NGOs) played a central role in persuading the government to develop policies that enabled the establishment of harm reduction programmes for IDUs (Emmanuelli and Desenclos, 2005). In contrast, when the IDU-driven epidemics began in eastern Europe few NGOs were working there, particularly in the field of drug-use, and those that were had little or no government support (Sarang et al., 2007). In these countries a lack of civil society involvement in the response has severely handicapped efforts aimed at scaling up prevention and harm reduction services to reach high-risk populations (Atun et al., 2008). In spite of a lack of political support, networks advocating for harm reduction, such as the Open Society Institute and the Eurasian Harm Reduction Network, have played an instrumental role in advocacy, raising awareness about the problems faced by injecting drug users and disseminating and developing vital information to key stakeholders (Sarang et al., 2007). And in recent years, the World Health Organization Regional Office for Europe has appointed both a harm reduction adviser and a communicable diseases advocacy and community relations adviser, two positions unique in WHO and which have facilitated UN work on these issues across Europe.

Conclusion

The evidence shows a variable and generally weak response to IDU-driven HIV epidemics in eastern Europe. This contrasts with the successful responses mounted in western European countries. While the evidence for a positive impact of harm reduction programmes in controlling IDU-driven HIV epidemics is strong, in Europe the introduction and scaling up of harm reduction programmes has been driven less by the evidence and more by the socio-cultural and political context prevailing in different countries. Evidence from published studies clearly demonstrates that success in the scaling up of harm reduction activities is shaped by political leadership, the legal environment, health system organisation, the availability of domestic financing and the engagement of civil society.

Countries in western Europe that have implemented integrated, multisectoral and multi-component interventions, supported by legal and social policies, have succeeded in controlling IDU-driven HIV epidemics. By contrast, in much of eastern Europe a lack of enabling socio-cultural and political environment and weak civil society has hindered the development of policies to translate evidence into action, in spite of the obvious need to rapidly scale-up harm reduction programmes to curb the HIV epidemic amongst IDUs.

In eastern Europe, as well as Central Asia, evidence alone is not enough to influence the development of policies that will enable the scaling up of comprehensive harm reduction programmes. Translating evidence into action will depend not on the strength of the evidence on the effectiveness of harm reduction but on addressing many of the complex factors that interact to create a receptive or, in the case of some eastern European countries, a hostile context for its adoption.

In eastern European countries successful scaling up and effective service coverage will depend on strong political leadership, a reform of the legal and regulatory norms to create

a more enabling environment and respect the human rights of IDUs, sustained domestic funding, the strengthening of civil society and their robust engagement in advocacy and service provision, the planning and delivery of harm reduction programmes, as well as the organisation of vertically structured health systems to create client-centred services. Most critically, in eastern Europe, harm reduction interventions must be rooted in an understanding of the social and economic factors that lead to the initiation of drug use and that increase drug users' vulnerability. This, in turn, demands the greater engagement of drug users in programme design to provide insights on how best to address and serve their needs. But first, this marginalised group must be given the opportunity to enjoy human rights — like any other citizen. However, in many European settings we are far from achieving this objective.

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People who use drugs and their role in harm reduction

Mat Southwell

Drug taking is in part about an engagement with risk and it is therefore unsurprising to find that people who use drugs tend to be 'risk takers' (Measham et al., 2001). People come to drug taking with an understanding that drug use involves risk, and that this may be attractive in and of itself. Most people who use drugs engage in drug use with an understanding that they are managing the interplay between the positive effects of a drug (pleasure maximisation) and the risks associated with administering or taking a drug (harm reduction).

As such, people who use drugs can be defined as calculated risk takers. This challenges the orthodox addiction archetypes that describe people who use drugs as victims either of substances with some type of pseudo-magical quality or of the 'evil drug dealers' who peddle these drugs (Booth, 1997). Those of us who choose and defend the right to take mind-altering substances are not denying or minimising the actual risks involved in taking drugs. However, risk does not automatically result in harm and the factors informing harm are complex, multifaceted, and influenced by both internal and external factors. Too often drug policies seek simple and universal solutions to the complex world of drug taking. This results in a mismatch between political and policy discourses and the reality of drug taking on the ground, which serves to distance people who use drugs, resulting in a general distrust of official guidance.

It is important to understand that the term 'risk' normally defines the likelihood of specific eventualities, which may have either beneficial or adverse consequences. For the person using drugs, the risk or potential of pleasure maximisation is judged against the risk that harm may arise from drug taking. This assessment of comparative risk is best undertaken in a value-free context, which allows people to make hopefully informed decisions about whether to use drugs or not, and, for some, to make informed decisions about which drugs to use, by which routes and in what amounts.

Such a value-free environment may be desirable but it clearly does not exist. Drugs prevention measures are driven by a moralistic opposition to intoxication, which has its roots in the temperance movement. Drug prevention sets out to persuade young people in particular not to take drugs, by ignoring the pleasure features of these drugs and by playing up risks.

Learning to live with drugs

In fact, anti-drugs campaigns are arguably primarily about a discourse between politicians and adult voters, designed to show that a particular political party is 'tough on crime'. This abuse of drugs prevention is unethical and can have dangerous, if unintended, consequences. Drugs prevention is usually pharmacocentric, focusing on drug-related risks in isolation from an understanding of youth culture or the individual lives of young people. Historically, drug use has been part of an 'outsider' identity and some come to drug use in

search of belonging and community (Fleming, 2001). The United Kingdom Government's anti-heroin campaign of the 1980s, 'Heroin screws you up' (http://drugtrain.net/drugs/heroin/heroin_screws_you_up.html), was shown in post-campaign testing to have attracted young people to adopt heroin use, as they identified with the alienated and isolated young people portrayed in the campaign's gritty black and white posters (Hastings et al., 2004). When this information entered the public domain, government responded by condemning the researcher and excluding him from undertaking further official research. This hardly reflects a commitment to science but effectively illustrates the value-laden nature of this field.

The harm reduction movement has been ambivalent about its engagement with drugs prevention, fearing that opposition might lead to further accusations of being 'pro-drugs'. However, the harm reduction movement needs to lobby for value-free drugs education that provides young people with objective information about different drugs, their effects and risk profiles. If governments are serious about reducing young people's engagement in drug taking and, particularly, in harmful drug use, then it is likely that addressing young people's motivation, education, and social circumstances will have a greater impact than pushing simplistic anti-drugs messages.

The need for harm reduction is becoming ever more pressing as young people gain access to a diverse range of drugs. Significantly, these drugs are increasingly taken outside the cultural and social settings that often hold community knowledge and learning. In archaic societies, Shamans acted as the guardians of the oral history of a community, gathering and disseminating learning between groups and generations. The demonisation of drugs, and the people who take them, creates a huge disincentive for peer leaders to stand up and model this function within modern-day communities. As such, young people often operate as if they are the first group ever to take drugs (Jay, 2000). This maximises risk by forcing new generations to engage in drug taking without the benefit of the knowledge and learning of previous generations.

User involvement in harm reduction

Harm reduction is most comfortably and effectively delivered with people who have chosen to have a sustained relationship with drug taking. However, even in this setting there are tensions about the role and contribution of people who use drugs. It is important to recognise that while many harm reduction services are delivered by professionals, much harm reduction innovation emerges from within drug using communities. Let us not forget that a drug user group established the world's first needle exchange back in 1984 (Buning et al., 1990; Stimson, 2007), in response to hepatitis B.

This structural response follows the natural desire to avoid risk where possible while in search of pleasure maximisation. Friedman identified that people who injected drugs in New York responded to seeing their peers falling sick in the 1980s, with what was later identified as HIV/AIDS, by reducing needle sharing and this led to a leveling off of infection rates (Friedman et al., 1999). Needle exchange subsequently provided injectors with the technology to act on this organic learning, leading to actual reductions in infection rates.

This process of organic harm reduction has been seen among a number of drug using populations. For example, people who smoke crack correctly sought to exclude the cause of 'black lung', cigarette ash and other impurities, by constructing or sourcing ash-free glass pipes while continuing to smoke crack. While such strategies have been known about since the mid-1990s, stimulant pipe distribution schemes have not been widely adopted. There needs to be greater investment in the interface between drug using communities and the professional field. Drug user organisations should be key players in this environment. It is noteworthy that innovation around crack harm reduction has largely come from drug user groups or practitioners with experiential, as well as professional, expertise. Partnerships between academics, practitioners and drug user organisations need to be strengthened to ensure that knowledge in all three domains is considered and where appropriate translated into accessible practice or peer support interventions.

Spontaneous trends away from injecting, towards non-injecting routes of administration, have been identified in a number of European settings and in New York. Research would indicate that such switches in route of administration reflect a commitment to health, a desire to reduce levels of dependency, or a wish to increase self-control. However, these changes have also been shown to be significantly influenced by the type, cost and quality of drugs. As such, route transition changes are only likely to occur when reasonably priced, good quality drugs are available in a suitable form. Strang and colleagues have questioned whether some type of market manipulation might be helpful in supporting such trends (Hunt et al., 1999). However, in reality this conflicts with demand reduction thinking that sees the disruption of the drug supply chain as a positive objective.

Finally, people who use drugs and their organisations can uniquely operate as 'consumer advocates' within illicit drug scenes. These models are still underdeveloped and have yet to be subjected to scientific scrutiny. However, strategies for promoting consumer rights and ethical trading standards offer another positive opportunity for influencing the context within which drug taking takes place. Some suppliers of drugs have shown themselves willing to support harm reduction messages, operating as secondary needle exchange providers and acting as conduits for health education messages to be transmitted to key populations of drugs users (Southwell, 2008).

People who use drugs need to become routine partners in harm reduction, supporting the identification, development and promotion of harm reduction strategies. Resources need to be allocated to properly support the translation and dissemination of peer and academic learning into practice and peer support interventions.

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Harm reduction — an 'ethical' perspective

Craig Fry

In its short history, the harm reduction specialty field of public health has routinely pushed the boundaries of evidence and policy, and tested our moral imagination in relation to the place of drug use and users in society and possible community responses. Each new harm reduction policy and programme proposal has been met with intense and often ongoing public scrutiny (e.g. condom distribution, needle and syringe programmes, maintenance and substitution pharmacotherapy, heroin prescription, supervised injecting).

The unwavering response to this scrutiny from within the harm reduction movement has been to argue that its 'pragmatic' drug policies and interventions are justified because the available evidence shows they work to reduce drug harms (Hunt et al., 2006; Ritter and Cameron, 2006). The reduction of harms associated with the use and misuse of psychoactive substances would appear to be a straightforward goal, and one on which there ought to be widespread agreement. Harm reduction in the most general sense can be considered an ethical project if we accept that harm reduction measures assist in alleviating drug-related harm. Less drug harm is a good thing.

But there is more. Harm reduction has only recently started to grapple critically with the definitional challenges and uncertainties inherent in its core goal (for example, what is drug harm? How can drug harms be measured? How do we balance drug harms and benefits?). Likewise, this field is only now beginning to awaken to the difficult normative questions that come with a focus on drug use harm (for example, what should we do to address drug harms? Whose drug harms matter most? Are some types of drug harm acceptable?).

Harm reduction, at least mainstream harm reduction, has for the most part argued that the best way to address the definitional, measurement and evaluative challenges it faces is through evidence-based scientific approaches. Here, 'facts' are separated from 'values' in the quest for universally valid (and therefore compelling) and value-neutral or 'objective' scientific facts that are untainted by 'subjective' moral evaluations (Weatherburn, 2009).

As this monograph shows, the evidence base in support of harm reduction policies, programmes and interventions has grown in size, complexity and sophistication. Indeed, so successful has harm reduction been judged by its advocates that we are starting to see claims emerge that the scientific debate about the value or positive impact of harm reduction is now over (Wodak, 2007). Harm reduction works.

However, there is still significant government opposition to harm reduction measures in some of the world's most populous countries that arguably need such measures the most. This opposition has been mostly attributed to the moralising by some powerful interests in society about the permissibility of drug misuse and of policy responses that are not abstinence-based. However, the debate has also increasingly been about the authority of science and scientific knowledge as the primary arbiter of what may be regarded as acceptable social policy. Indeed, in the health and drug policy arena we are finally coming to accept the existence of 'blurred boundaries' between science and politics (Gottweis, 2008), and their implications for both the definition of and proposed responses to 'health problems'.

Diverse perspectives exist on drug policy issues and these are informed, for better or worse, by a variety of value and belief systems. 'Evidence' has a social character in terms of the underlying values and beliefs that influence how it is defined, collected, reported and used. Harm reduction today must accommodate uncertainty and diverse values.

When there are disputes and uncertainty about the 'facts' in harm reduction, 'values' cannot be separated from the equation, precisely because value positions are the reason disputes and uncertainty exist in the first place. In the broader context of science and public policy critique there is a growing recognition that disputes on what constitutes 'good evidence' can compromise communication among scientists, policymakers and the public, and in turn constrain the types of public policy questions that are addressed (Kinzig et al., 2003).

We may well ask, then, whether the continued emphasis on evidence-based over values-based approaches is consistent with the 'pragmatism' that has so often been attributed as a harm reduction hallmark. It has been suggested that harm reduction's silence on moral and value issues (in favour of scientific argument) undermines the movement's ability to engage critics who would claim that abstinence and law enforcement are the only morally acceptable solutions to drug problems (Hathaway and Tousaw, 2008).

The time has come for harm reduction to establish its ethical credentials (Irwin and Fry, 2007). I use 'ethical' and 'ethics' here to refer to a critical orientation towards values and normative considerations, and less so to moral philosophy or any particular ethical theory or framework. For me the question 'Is harm reduction ethical?' is first and foremost a query

about whether or not harm reduction is, or perhaps can be, reflexive or 'in touch' with the diverse value perspectives underpinning it.

In the last few years there has been increasing attention to the task of articulating the moral underpinnings of harm reduction. It has been discussed in relation to communitarian ethics (Fry et al., 2005), virtue ethics (Christie et al., 2008), deontology and utilitarianism and more (Kleinig and Einstein, 2006; Kleinig, 2008). Special theme issues in leading journals have appeared on harm reduction ethics (Fry et al., 2008), scholarly monographs (Kleinig and Einstein, 2006) and empirical research on this theme is also emerging (Solai et al., 2006; Phillips and Bourne, 2008).

What is particularly encouraging is that a range of perspectives, both theoretical and applied, are emerging on harm reduction ethics. Contributions are coming from moral philosophy, public health, nursing, anthropology, sociology, human rights and so on. These provide rich and varied sources to draw from, and help to highlight an appropriately pluralistic 'harm reduction ethics'. Values-based approaches such as these are starting to gain recognition as an additional resource that can be employed to guide and evaluate harm reduction initiatives.

Harm reduction as defined in this monograph is a sophisticated evidence-based approach to drug policy, programmes and interventions. For a long time now in harm reduction the goal has been to strive for agreement around what the scientific evidence shows is the impact of harm reduction initiatives. Despite significant achievements in this area, tensions and uncertainties remain about the authority of scientific knowledge here.

Diverse value perspectives exist in the harm reduction domain, and we might rightly ask what else could harm reduction do in addition to devising ever-more sophisticated models and collecting more precise data? Evidence-based harm reduction has rendered harm reduction/drug policymaking no less a political project.

An appropriate new focus for the future may be to ask, 'What should be the relative places of evidence and ethics in harm reduction/drug policy decision-making?' Considering such a question would require us to adopt the perspective of 'interested participants' rather than 'detached observers'. In doing so we would need to also accept that science alone is insufficient for making the case for harm reduction and achieving a wider consensus on the full range of normative criteria for action in this area.

For example, beyond the usual utilitarian 'cost–benefit' analyses, we might also strive to clarify what competing interests exist in harm reduction (e.g. in the case of funding sources and regulation from different industries) and how these may be reconciled. We might also consider, what are the obligations and responsibilities of harm reduction professionals? What are the justifications (if any) for prioritising the desires and preferences of individuals over the interests of wider groups and collectivities?

'Ethics engagement' in harm reduction does not commit us to a punitive moral stance on drug use or users; rather, it can help to evaluate these perspectives directly (Fry et al., 2005).

One practical form this could take is the development of a harm reduction code of ethics as a way to orientate practitioners, researchers, policymakers and the community towards considering core values in harm reduction work. A harm reduction code of ethics could assist practitioners in balancing diverse value sets and ethical perspectives in relation to the ethical challenges encountered. It could also serve to facilitate debate on topical ethical dilemmas, and the development of applied ethics resources to enhance harm reduction practice (for example, guidelines, professional development, etc).

We are entering a new phase in public health where the central place of values and ethical considerations is gaining greater acknowledgment. A commitment to making harm reduction values explicit requires that we consider 'ethics' as a tool to enhance, rather than restrict, harm reduction practice (in the same way we think of scientific, empirical, clinical and other practice tools). The future focus of harm reduction advocates will be to work towards enhancing intervention coverage and intensity. Evidence-based approaches will of course continue to guide these developments. The harm reduction field could also benefit from applying values-based approaches in order to establish once and for all its ethical credentials.

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The ambiguity of harm reduction — goal or means, and what constitutes harm?

Robin Room

Harm reduction, or harm minimisation, is at the heart of classic approaches to public health, so it is no surprise that the modern use of the terms with reference to illegal drugs has been anticipated in other fields. For instance, in 1970 the sociologist Kettil Bruun wrote a policy piece in Finnish entitled, 'The minimisation of alcohol damage' (Bruun, 1970), and the same formulation and way of thinking was soon picked up in English language discussions (e.g. Room, 1975).

As applied initially in the alcohol field, the focus of the terms was clearly on the intended outcome of the action. The terms identified an overall goal, without specifying the means of achieving it, which could be diverse, including market controls that reduce levels of consumption and interventions to make the drinking environment safer. In the context of the 1970s, the implicit contrast of a 'harm minimisation' approach was not with abstinence as a universal goal, but with an 'alcoholism' approach, which tended to channel all interventions through the gate of clinical care and cure of alcoholism (Room, 1984).

In the alcohol field, 'harm minimisation' was later reinvented as a term imported from the drugs field (e.g. Plant et al., 1997), and with a correspondingly narrower focus on contextual means of reducing harm from heavy use. There are certainly earlier examples of such classic 'harm reduction' approaches in the alcohol field (e.g. Dumont, 1967; Drew, 1980), but there had been no explicit general framing for them.

In the drug field, the meaning in terms of a focus on goals has also been implicit since 'harm reduction' emerged as a term and indeed as a social and professional movement in the 1980s. But the dominant meaning of the term has focused not on goals but on means: harm

reduction, in the context of the AIDS epidemic, was primarily applied to strategies that reduced the risk for heavy injection drug users, by such means as offering a switch to an oral opiate, offering sterile needles, or offering a safe place to inject. The discussion of 'what is harm reduction?' currently on the International Harm Reduction Association's website starts from a definition in terms of approaches that 'aim to reduce the … harms'. But then it implicitly contrasts harm reduction with 'approaches that aim for reductions in … consumption'. However, there is still ambiguity about whether reducing consumption can be a harm reduction goal; the IHRA discussion goes on to backtrack slightly, contrasting an approach requiring abstinence with a harm reduction approach involving 'more pragmatic choices such as limiting … intake' (IHRA, 2009).

For many in the drugs harm reduction movement, the term also includes an ethical component, and should be defined in such a way that punitive abstinence-oriented approaches, even if reducing harm was their goal, would be contrasted to harm reduction rather than included in the term (CCSA, 1996). The IHRA website discussion expresses this in terms of a second 'pillar' of harm reduction, a 'human rights approach' alongside the 'pragmatic public health approach'.

A specific adaptation in the context of Australian politics has been the differentiation of 'harm minimisation' from 'harm reduction'. In the era of a national government that rejected safe injection sites as a strategy, and tended to reject 'harm reduction' as an overall policy, a compromise formulation was reached that drug policies aimed at 'harm minimisation' as a goal, with abstinence-based strategies included as one set of strategies fitting within harm minimisation (Blewett, 2004).

The distinction between 'harm minimisation' and 'harm reduction' served the political needs of a particular time in Australia, but it invites confusion, so that even researchers focused on political rhetoric may miss the distinction (e.g. Bessant, 2008). In general, the meaning of the terms remains somewhat ambiguous, with some wavering over time. Thus in 2004 the 'definitive interpretation' of 'harm reduction' on the website of the International Harm Reduction Association explicitly included an abstinence strategy as a 'special subset of harm reduction' (Room, 2004); now, as we have noted, the discussion of the term on the same website contrasts harm reduction with aiming to reduce consumption. The issue of whether harm reduction refers to goals or to means remains unsettled.

Another issue that is of increasing importance in the context of ideas of harm reduction is what counts as harm. The usual procedure in economic studies of the social costs of drug use is to count up all public expenditures and many private costs that are considered to be attributable to drug use (e.g. Collins and Lapsley, 2008). These costs include many that would not occur if the drug use remained at the same level but the societal response to it changed — for instance, if possession and use are decriminalised. The argument has been put forward for some time that an effort should be made to 'separately take into account the resources expended in social responses to drug use and its control, and the subsidiary harms caused by those responses' (Fischer et al., 1997). As attention increases to measuring specifically the harms from illicit drug use (Melberg, 2009), rather than just the fact of the drug use itself, this issue of separating out the harms arising from the societal response (easy

in principle, not so easy in practice) will take on greater salience. Reducing the two kinds of harm can point policy in very different directions. If the harm arises from heavy use per se, reducing or eliminating use or changing the mode of use are the logical first choices for reducing the harm. But if the harm results from the criminalisation per se, decriminalising is a logical way of reducing the harm.

Few would argue against the proposition that harm reduction or harm minimisation as a goal will have a continuing importance in drug policy. In this context, it is time to get serious about defining what constitutes harm, and to what it can be attributed — whether to the drug use itself and consequent events and behaviours, or to the social and societal reactions to the drug use. Harm reduction as a set of strategies in reducing the problems of heavy drug use will have a continuing place in the overall set of strategies for managing drug use and reducing drug problems. But, as the passions of the era of the 'war on drugs' fade, they are likely to be fitted into place as a routine part of the treatment and other social handling of heavy drug use.

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