



Harm Reduction

EVIDENCE

Harm Reduction
- Drugs

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Harm Reduction - Drugs

Introduction

Marginalised populations including people who inject drugs are more negatively affected by the gap between health needs and available services. Young people at risk of injecting, or those already experimenting with injecting drugs, find themselves isolated from health and prevention services, which increases the risks for health and social harms (Merkinaitė et al, 2010).

The concept of harm reduction means that decreasing drug-related harms is given an even higher priority than reduction of drug consumption (Wodak and McLeod, 2008), meaning that individuals can access needed services, including non-judgmental and low-threshold approaches offered by harm reduction programmes. Rhodes (2009) discusses harm reduction as being contingent upon the social context, comprising interactions between individuals and environments and how this impacts on the production and reduction of drug harms. Wodak and McLeod (2008) maintain that it has been known since the early 1990s that HIV among injecting drug users (IDU) can be effectively, safely and cost-effectively controlled by the early implementation of a comprehensive package of harm reduction strategies. Strategies include: explicit and peer-based education about the risk of HIV from sharing injecting equipment; needle syringe programmes (NSP); drug treatment (including opiate substitution treatment (OST)) and community development.

Caulkins et al (2009) discuss how opponents of harm reduction fear that reducing harmfulness might increase use, while opponents of use reduction fear that efforts to reduce use can increase harmfulness. They propose that both strategies have a role in an intervention approach, but at different points depending on where the individual is on their drug use continuum, the particular drug, the social cost structure, and the stage of the drug epidemic.

Harm reduction services and strategies

Despite the growing implementation of harm reduction programmes internationally, unsafe injecting practices remain common among IDUs and have resulted in numerous forms of drug-related harm including Human Immunodeficiency Virus (HIV) and Hepatitis C Virus (HCV) transmission and other bacterial and viral infections. Multiple factors are related to injecting drug use, including individual and demographic characteristics of users, drug markets, economics, social networks and political and cultural environments.





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Special Interest Article - Weeks et al (2009)

The Risk Avoidance Partnership Project was a 4 year peer intervention study based on the premise of community health promotion empowerment theory (Brown, 1991). Specifically, that training active drug users as “Peer Health Advocates” contributes significantly to community-level reduction in HIV risk by changing the environment through the presence of a positive force for harm and risk reduction. The programme involved training active IDU and crack cocaine users as Peer Health Advocates to deliver a HIV, hepatitis, and Sexually Transmitted Infections (STI) prevention intervention to hard-to-reach drug users in their own network (n = 523). Participants were supported to model prevention practices and deliver risk and harm reduction materials and information.

Details of the intervention were as follows.

- 1) Participants received the 10-session, theoretically driven interactive training programme. Sessions 1-4 were small group and delivered by staff in offices, sessions 5-10 involved partnering each participant with a staff member who observed the participant delivering the peer intervention in the community. Group sessions delivered in the office setting provided basic information on HIV, hepatitis, other STIs, and other common health concerns affecting drug users. Group sessions also trained participants in the concepts of peer and public health advocacy, persuasive communication techniques, safety in community intervention provision, as well as extensive role play.
- 2) Peer delivered Intervention: this required participants to deliver at least two of three primary intervention components: 1) provision of prevention education, 2) demonstration of proper prevention practices, and/or 3) delivery of prevention materials. Each participant had a field manual which illustrated and described each component of the prevention intervention, and they were encouraged to use the unique project slogans during intervention delivery (e.g., “Be aware, don’t share, carry a spare”).





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Special Interest Article - Weeks et al (2009) (continued)

The project was evaluated through observation, interviewing, and documentation of intervention delivery and social interactions among drug users in the community before, during, and after provision of the trainings. Outcomes were measured by assessing participants' behavioural and attitudinal changes

at intake and 6 months, by mapping the social network of participants to identify and observe the distribution of intervention effects, and by surveying a cross-section of drug users community-wide after completion of training to assess reach of the intervention.

Findings indicated that training participants "set in motion a process of change triggered by their leadership, their distribution of prevention materials and information, and their modelling of health promotion advocacy and prevention practices among their peers". Evidence suggests that participants also supported and reinforced each other's efforts to spread the harm reduction message, and even motivated some who did not receive the participants training to mimic these efforts as well.

Findings also indicated that the project initiated a change in attitudes about positive drug user influence and reduced risk in normative drug use and sexual behaviours. In particular, the reduction in overall drug use (often leading to drug cessation), especially among participants was positive, particularly as they directly related it to their participation in the training and the process of health and harm reduction promotion with their peers. Additionally, the increased utilisation of services from baseline to 6-month follow up appeared to have been triggered by the efforts of the participants to encourage improved health knowledge and increasing use of available prevention resources.





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Special Interest Article - Weeks et al (2009) (continued)

It should be noted that due to methodological challenges, the study lacks a non-intervention group for outcome comparisons. Given the network referral method for recruiting drug users (as being in the participants network), the sample were not recruited to be representative of the drug using population,

thus limiting the potential to generalise the findings. It should also be noted that some participants who ceased using drugs eventually reduced their interaction with active drug users in order to maintain their drug free lifestyle. Thus, sustainability of such programmes were said to require ongoing training of new participants who will continue to disseminate prevention messages and materials to drug using network members.

To conclude, results indicated a relationship between exposure to the peer delivered intervention and risk reduction among all study groups. Findings suggest that active drug users' engagement in peer health advocacy can set in motion a feedback and diffusion process that supports both the continued work of the Peer Health Advocates and the adoption of harm reduction and mimicking of health advocacy by their peers.

Harm reduction services and strategies (continued)

Winstock et al (2009) conducted research on Australian IDU attitudes towards and experience of injection site examination. A self-completion, anonymous, cross-sectional questionnaire was used with patients in opioid treatment (n = 153). Results indicated the majority were 'happy to have their sites inspected' (78%), and felt it was an 'appropriate part of routine examination' (72%). It was suggested that this examination process could be a useful opportunity to offer harm reduction advice, and as such should form part of routine clinical reviews.

Bridge (2010) reviewed non-injecting routes of administration which seek to reduce or prevent IDU. These included prescribing oral substitutes; providing non-injecting equipment; providing safer smoking facilities; and training individuals to prevent transitions to injecting, promote the programme, or prevent the initiation of new injectors. It was hypothesised that these initiatives have the potential to offer public health gains and empower people to control and manage their drug use, although further research is needed.





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Harm reduction services and strategies

(continued)

Smout et al (2010) examined an Australian single session 'check-up' intervention for psychostimulant users. Participants were predominantly young adult methamphetamine users (n = 80). Results indicated a positive impact of the intervention. Specifically, at follow up, there was a significant reduction in self-reported methamphetamine use, the number of self-reported psychostimulant-related negative consequences experienced in the previous month and rates of injecting. In addition, the majority indicated that the Check-Up answered their questions, increased their awareness of services, and they would recommend it to their friends.

Parkin and Coomber (2010) conducted qualitative interviews (n = 31) in the UK examining IDU experiences and opinions of public toilets illuminated with fluorescent blue lights. Results indicated that blue lights deterred less than half the participants, with over half being prepared to inject in conditions specifically designed to deter injecting practice. The authors conclude that fluorescent blue lights contribute towards the development of situated resistance by IDU; a resistance that produces and reproduces drug-related harm and is a behaviour that goes against the purpose of the harm reduction intervention.

Roberts et al (2011) undertook a literature review of studies of interventions designed to increase the uptake of opiate substitution therapy. It was described to have multiple benefits and be a key component of overdose and blood-borne virus prevention in IDUs. Results indicated individuals exposed to motivational interventions were 1.46 times more likely to enter treatment at follow up and individuals exposed to case management were 2.95 times more likely to be entering treatment at follow up. Thus, both approaches were said to be promising interventions to increase the uptake of IDU into treatment.

Bonar and Rosenberg (2011) investigated the use of the health belief model to predict IDU intentions to employ harm reduction strategies. Specifically, they examined whether perceived susceptibility to and severity of two injection-related health conditions (i.e., non-fatal overdose and bacterial infections), and opinion and recent use of two harm-reduction behaviours (i.e., injecting test shots and pre-injection skin cleaning), predicted IDU intentions to engage in these two strategies. Results indicated that recent past use of these two behaviours consistently and positively predicted intentions in each of the four drug-use situations (i.e., in withdrawal, not in withdrawal, alone, and with others).





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Effectiveness of harm reduction information

Research investigating the effectiveness of information is mixed, with some research highlighting that IDU engage in risky behaviour despite being provided with and being aware of harm reduction information, while others suggest the benefits of such information. Once again, it would appear that information has to be targeted to the client group.

Gustafson et al (2008) undertook a needs assessment, mapping exercise and community consultation to investigate the practices of IDU in a Canadian community. Results indicated that there was a discrepancy amongst IDU between awareness and use of safer practices, and also there was a limited formalised network of health and social programmes and services. The authors concluded that accurate and timely information about safer practices, whilst being an essential component of a harm reduction approach, is insufficient to reduce the risk of negative health outcomes for people injecting drugs.

Bryant and Treloar (2008) conducted research with young, early-career IDU (n = 324) on initiation to injecting drugs in Australia. Results indicated that 17% of participants reported giving someone else their first injection, and reported initiating a total of 128 other people within the first 5 years of their own injecting. Compared to non-initiators, initiators were more likely to pass on harm reduction information, although the quality of this information was unknown and initiators did not have more accurate knowledge of blood borne viruses than non-initiators, and commonly obtained needles and syringes from sources where the sterility of the equipment could not be guaranteed.

Wilkins et al (2010) conducted qualitative research with IDU attending a Needle Syringe Programme in the UK (n = 18). The research highlighted the importance of knowing current vaccination and screening history of injecting partners in order to manage risk behaviour when drugs are used communally. The authors concluded that harm reduction services need to target information so it is meaningful and appropriate to those who engage in communal drug use.

Nathani et al (2010) conducted a small Australian qualitative study with IDU to examine practices for cleaning needles and syringes (n = 12). Results indicated that cleaning and reuse of needles/syringes was common, with the most frequently utilised reagent being cool water. However, while all participants reported cleaning and reusing only their own equipment, none of the techniques used would have been sufficient to deactivate HIV or HCV. The authors suggested that both the complexity of current cleaning messages and a lack of accurate information about effective techniques are likely to contribute to poor cleaning practice. Thus, it was recommended that there should be a nationally consistent cleaning message, accompanied by strategies designed to simplify and disseminate this information.





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Tailoring interventions

Research has indicated that any harm reduction approaches, including information, has to be tailored and relevant for the target group.

Paterson and Panessa (2008) conducted a review of the efficacy of harm reduction interventions for at risk youth. They concluded that such interventions have focused on researcher delivered, short term educational sessions. They maintained that assumptions about how to engage at risk youth are untested and problematic to incorporate when executing harm reduction strategies. They concluded that the literature suggests that engaging young people in the planning, implementation and evaluation of harm reduction interventions will not only benefit those who participate, but will contribute to the sustainability and effectiveness of the interventions.

Degenhardt et al (2008) found that younger IDU (under 25) reported significantly different drug use patterns and higher rates of risk behaviours than their older counterparts. They suggested that treatment and harm reduction services need to tailor services to the target group, and deliver messages to new cohorts of IDUs, particularly given that their drug use patterns may be different to those of older users.

HIV and HCV Prevention

The literature generally suggests that while harm reduction strategies appear to have been successful in preventing an HIV epidemic, the results in relation to HCV are less positive. For example, Falster et al (2009) investigated trends in HCV and found a persistent HCV epidemic despite significant harm reduction efforts in Australia since the mid-1980s, with HIV incidence effectively constant in successive initiation cohorts.

HIV can spread rapidly between IDUs (through injections and sexual transmission), and potentially the virus can pass to the wider community (by sexual transmission). IDU have several sources of syringes—friends, other drug users, sexual partners, street vendors, Needle Syringe Programmes (NSP), and pharmacies, depending on convenience and availability. Much research has focused on harm reduction strategies to prevent the spread of HIV and HCV (including NSP and safer injection facilities). However, Wolfe and Cohen (2010) outline how efforts to provide HIV prevention, treatment, and care to IDU are shaped by tensions between approaches that regard IDU as criminals or as patients deserving treatment and human rights. They highlight how national commitments to universal access to prevention and treatment for IDUs, and the recognition that these individuals should have an entitlement to health services, suggest directions for work which will increase availability of sterile injection equipment, opiate substitution treatment, and antiretroviral therapy.

McDonald et al (2012) examined trends in HIV incidence and prevalence in Scotland and found that the incidence rate among IDU and heterosexuals decreased from 1980 – 2009 but stayed the same among men who have unprotected sex with men. They suggested that harm reduction measures initiated from the late 1980s were effective in reducing HIV transmission in some risk groups; however, the absence of a reduction in HIV incidence rates among men who have unprotected sex with men highlights the need for renewed efforts in the prevention of HIV in this major risk group.





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Combined approaches tackling a range of factors

Research has focused on the range of interventions targeting HIV and HCV prevention, suggesting that a combination of approaches is effective. Wodak and Maher (2010) assert that harm reduction approaches to HIV prevention among IDU are effective, safe and cost-effective. They discuss the effectiveness of both Needle Syringe Programmes (NSP) and opiate substitution treatment, and the fact that there is no convincing evidence that NSP increases IDU. They maintain that countries that have provided extensive NSP and opiate substitution therapy appear to have averted an epidemic, stabilised or substantially reduced the prevalence of HIV among IDU. Degenhardt et al (2010) summarised individual-level approaches to the prevention of HIV infection, specifically opiate substitution therapy, NSP, and antiretroviral treatment. They concluded that each intervention alone will achieve modest reductions in HIV transmission, but that HIV prevention necessitates high-coverage and combined approaches. Social and structural changes are potentially beneficial components in a combined intervention strategy, especially when reductions in HIV transmission and injection risk are difficult to achieve.

Exner et al (2009) investigated the concept of risk and worry in relation to IDU. They conducted research with a sample of IDU enrolled in a Needle Exchange Programme (NEP) in Canada (n = 105). Three common factors representing worry were found relating to overall personal security, health concerns specific to injection drug use, and contracting HIV, HCV, and STIs. Participants not only worried about HIV and the acquired immune deficiency syndrome (AIDS) but also about stressful factors in their daily life which have been linked to both increased HIV/AIDS risk behaviour and decreased anti-retroviral treatment adherence. Given the level of worry experienced, it was said to emphasise the need to include HIV/AIDS intervention, education, and treatment programmes within a broader harm-reduction framework that incorporates their perspectives on both worry and risk.

O'Leary et al (2012) conducted a cross-sectional survey of IDU accessing harm reduction services in Glasgow in 2005 and 2007. They found that IDU who believed they were HCV infected were more likely to abstain from alcohol, but those who drank continued to do so to excess. It was concluded that IDUs diagnosed with HCV need greater support to reduce their alcohol consumption.

Rhodes and Treloar (2008) reviewed studies of HCV risk among IDU. They found evidence supporting a perception of HCV as a risk accepted rather than avoided, with HCV being perceived largely as socially accommodated and expected, and in relative terms to HIV as the 'master status' of viral dangers. Critical factors in the risk environment included policing, homelessness and gendered risk. Thus, it was recommended that interventions should foster community changes towards the perceived preventability of HCV.





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Needle and Syringe Programmes (NSP)

Needle and syringe programmes (NSP) play an important role in providing targeted services for IDUs to prevent the harms associated with drug use, and are vital for the distribution of clean injecting equipment and disposal of equipment. Research has shown NSP to have a range of benefits including decreasing injection frequency, reducing syringe reuse, and reducing needle sharing (Holtzman et al, 2009). For example, Turner et al (2011) analysed data from IDU (n = 2,986) surveyed during 2001 – 2009 over six UK sites. Findings provided good evidence that uptake of OST and high coverage of NEP can substantially reduce the risk of hepatitis C virus (HCV) among IDU.

Des Jarlais et al (2009) reported on annual surveys of US NSPs undertaken since 1994. Results indicated that the numbers of programmes had increased from 68 in 1994 to 186 in 2007. Among programmes participating in the survey, the numbers of syringes exchanged increased from 8 million to 29.5 million per year.

Recent research has highlighted the harm reduction benefits of NSP for its users. For example, Holtzman et al (2009) examined whether participation in NSP influenced HCV infection using data from three multi-site studies carried out in four US cities that enrolled IDU over the period 1994-2004 (n = 4,663). The results suggested an indirect protective effect of NSP use on HCV infection by reducing risk behaviour. That is, sharing needles, sharing other injection paraphernalia, longer injection duration, and injecting daily were all positively related to prevalent infection; whereas IDU reporting NSP use were significantly less likely to share needles.

NSP have also expanded to include other types of interventions. Leonard et al (2008) evaluated an intervention in a Canadian NSP which sought to reduce the harms associated with smoking crack on a range of HCV- and HIV-related risk practices. The intervention consisted of a NSP distributing glass stems, rubber mouthpieces, brass screens, chopsticks, lip balm and chewing gum. The evaluation was conducted with active IDU who smoked crack, who were interviewed at four time points. Results indicated that following implementation of the initiative, a significant decrease in injecting was observed (78% at 12 months compared with 96% pre-implementation), as were HCV- and HIV-related risks associated with this method. Thus, the authors recommended that these practices should be implemented at other NSPs.

Beletsky et al (2011) conducted research on the utility of police training sessions aimed at reducing interference with NSP. They conducted a survey with managers of NSP (n = 107) and found that 20% reported participating in training sessions during the previous year. Training topics included the public health rationale behind NSP and harm reduction philosophy. On average, training sessions were seen as moderately effective but assistance with police training sessions was identified by the majority of respondents as the key to improving police relations.





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Needle and Syringe Programmes (NSP)

(continued)

Strike et al (2011) evaluated the dissemination of a set of best practice recommendations to Canadian NSP. A survey of managers (n =94) indicated that the majority reported following the best practice recommendations including distributing cookers and sterile water equipment following dissemination of the document. Commonly cited barriers included funding, senior management and decision making. To conclude, it appeared that managers welcomed the new guidance, which they used for a range of purposes including increased implementation of practices shown to help reduce disease transmission among IDU, planning and advocacy, and they expressed an interest in having sets of recommendations developed for other areas of harm reduction.

Matheson et al (2008) conducted a survey among IDU in Scotland (n = 370) to investigate in what ways NSP could be improved to encourage more users. Participants' priorities were provision of paraphernalia (citric acid, water and filters), weekend opening hours and antibiotic prescribing. Other suggested improvements were friendly, approachable staff, family planning, and dressings for wounds/sores. Geographical gaps in current NSP were identified. The authors highlighted the importance of including the views of IDUs in service development, noting that participants were keen to help and gave clear, practical suggestions to improve service user attendance at NSP.

Link to treatment

Research has provided mixed evidence for linking NSP to treatment. For example, some researchers have indicated the value of NSP as a service for IDU, who perhaps may not be ready to engage in treatment while others have highlighted how substance misuse treatment significantly expands the harm reduction benefits for service users who participate in NSP.

Brener et al (2010) examined whether the role of NEP could be expanded to include prevention of initiation to injecting by undertaking qualitative research with key stakeholders (n = 13). Results indicated that incorporating strategies to prevent initiation of injecting within the existing NEP framework appeared complex and required attention to the following: the current focus and success of NSP, the target group that access NSP, concerns about perceived moralism, workforce development concerns and the culture and setting of NSP. It was concluded that without careful consideration of these important issues, a strategy to prevent initiation of injecting could undermine the core business of NSPs - of preventing harms associated with IDU - and could alienate IDU who are their primary target group. Knittel et al (2010) conducted an evaluation of a small, peri-urban NSP by conducting interviews with its users between 2003 and 2006 (n = 88). Results indicated that participants at follow up reused their syringes significantly fewer times before getting new ones, were significantly less likely to report giving another IDU a previously used syringe, and were more likely to clean their skin with alcohol either before or after injecting than the baseline comparison group. However, the frequency of injection did not change significantly from baseline to follow up. It was suggested that this highlights the role for NSP, as those individuals using such services are not yet ready to enter treatment and substantially change their drug use behaviours.





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Link to treatment (continued)

Kidorf and colleagues have published recent research highlighting the role of NSP in enrolling its users in substance abuse treatment programmes.

Kidorf and King (2008) reviewed literature on community NSP. The main results were as follows: 1) NSP have little impact on rates of drug use or injections, 2) Substance misuse treatment reduces HIV transmission through drug use reduction and psychosocial functioning improvement, yet NSP participants only infrequently engage in treatment, 3) Psychological and pharmacological interventions delivered at NSP can improve treatment seeking in NSP participants, and 4) Use of NSP by substance misuse treatment programmes can improve harm reduction efforts at these settings. It was concluded that interventions to enhance cooperation across NSP and substance misuse treatment should be prioritised. Kidorf et al (2009) presented evidence indicating that NSP can be effectively used to motivate opiate users to enrol in substance misuse treatment and ultimately reduce drug use and the number of drug injections. Their research evaluated an intervention combining substance misuse treatment readiness groups with a NSP. Those participants who were assigned to the condition consisting of motivational enhancement sessions and treatment readiness group sessions with monetary incentives for attending sessions and enrolling in treatment were more likely to enrol in treatment than control participants or those in the same condition without monetary incentive. They also reported less heroin and injection use.

Kidorf et al (2011) investigated rates of drug use and other risk activities among participants newly registered in NSP (n = 240). They compared these behaviours in enrolled versus not enrolled participants in substance misuse treatment over a 4-month period. Results indicated that those enrolled in treatment (n = 113) reported less days of opiate and cocaine use, injection drug use, illegal activities, and incarceration than those not enrolled in treatment (n = 127). For those enrolled in treatment, days of treatment was strongly correlated with each of these outcomes. These findings were said to provide good evidence for a dose response effect of treatment in syringe exchangers and suggest that substance misuse treatment significantly expands the harm reduction benefits of NSP participation.

Stigma

MacNeil and Pauly (2011) conducted qualitative research (n = 33 interviews and 2 focus groups) with users at Canadian NSP. Results indicated that respect for the users and the development of trust with outreach staff supported IDUs to feel safe. Participants described the important role that NSP play in reducing and countering negative stigma. In fact, Islam et al (2008) found that the main reason younger IDU used syringe vending machines was due to stigma.





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Stigma (continued)

Simmonds and Coomber (2009) undertook a case study to evaluate NSPs throughout England and Wales and common concerns of stigma. In particular, IDU concern for being recognised or 'seen' as IDU affected service uptake and/or their interaction with services. In addition, 'normal' IDU tended to stigmatise 'worse' IDU, primarily the homeless. Thus, stigma was seen as a barrier to accessing harm reduction services. It was also concluded that many IDU sought to enhance their own self-esteem and reinforce their own sense as 'responsible members of society' rather than the outsiders they often feel themselves to be by attributing stigmatised behaviours on other 'lesser' IDU.

Link to other services

IDUs have reported benefits of NSP as providing access to other services (MacNeil and Pauly, 2011). The authors highlighted this crucial role of NSP that not only do they create the potential to reduce risk behaviours, but they also give increased access to other services, particularly given that the many service users are homeless and living in poverty.

Des Jarlais et al (2009) reported on annual surveys of US NSP undertaken since 1994. Condoms, referrals to substance misuse treatment, HIV and HCV counselling and testing and naloxone for overdose were among the most commonly provided services in addition to basic needle exchange. Each of these services was provided by 40% or more of NSP in 2007. Thus, the growth of NSP has included utilising NSP as a new platform for providing additional health and social services.

Pharmacies dispensing syringes

Vorobjov et al (2009) highlighted the benefits of involving pharmacies in harm reduction services for IDU as follows: extended hours of operation and convenient locations compared to NSP, IDU who avoid NSP may use them, and they are a trusted health resource in the community. They conducted qualitative research with pharmacists (n = 19) and IDUs (n = 15) in Estonia, to explore their attitudes toward the role of pharmacists in HIV prevention activities for IDU. Results were mixed, with the majority of pharmacists reporting a readiness to sell syringes to IDU to help prevent HIV transmission. However, there were barriers such as negative attitudes toward IDU, particularly in relation to syringe sales, and the free distribution of clean syringes or other injecting equipment and the disposal of used syringes in pharmacies eliciting strong resistance. Thus, it was proposed that pharmacists would need up-to-date, local information on harm reduction and health services available for IDU, so they could provide referrals where needed. In addition, it was recommended that pharmacists should be involved in developing appropriate interventions, particularly those who are motivated to work with IDU and/or those who work in high drug use areas. IDU were positive towards the role of pharmacies as they were seen to be convenient for acquiring syringes due to their extended opening hours and local distribution, but service users were also aware of potential stigma from pharmacists and other customers.





Harm Reduction - Drugs

Pharmacies dispensing syringes (continued)

Tesoriero et al (2009) conducted a longitudinal survey to examine a harm reduction initiative in New York – the Expanded Syringe Access Programme (ESAP) - which permits over-the-counter sale of syringes by registered pharmacies. Postal surveys were conducted with managing pharmacists in 2002 (n = 507) and 2006 (n = 682). Results indicated that approximately 75% of pharmacists reported that ESAP had facilitated timely/emergency access to syringes, and more than 90% in each year reported no problems or very few problems administering ESAP. ESAP also equalled the number of syringes being distributed by syringe exchange programmes. It was concluded that pharmacy-based syringe access is a viable harm-reduction alternative but that continued education and training is necessary to increase participation in ESAP and to further reduce barriers to ESAP use.

Torre et al (2010) conducted a survey with pharmacies in Portugal and found that syringe selling was reported by 76% of pharmacies. Among current providers, 64% followed a strict “one-for-one” policy and 22% established limits on the number of syringes distributed. Problems in service provision were reported by 13% of respondents, including the need for increased training and improvement of referral pathways.

Syringe dispensing machines (SDM)

Recent research has investigated the effectiveness of syringe dispensing machines (SDM) in Australia, as an intervention aimed at increasing the availability of sterile injecting equipment for use by IDUs. Overall, they have received positive feedback and been recommended as a means of increasing accessibility. Jones et al (2010) conducted a review of studies of NSP and found that mobile van sites and vending machines appeared to attract younger IDU and IDU with higher risk profiles.

Islam et al (2008) conducted a survey with users of SDMs (n = 167). The majority of participants reported being happy with the quality of the SDM services. Identified problems included machines often being broken or jammed, machines not being in the right location or machines requiring money. Results also reinforced the utility of the machines in increasing accessibility, with just over half the participants only using the machines from 5 p.m. to 9 a.m., the time when almost all other outlets for accessing sterile injecting equipment remain closed. There were age differences, with IDU aged 30 or under being more likely to prefer SDMs over staffed NSP than older users. Primary users of SDMs did not differ from primary users of NSP or pharmacies in terms of sharing of needles. Thus, it was concluded that SDMs appear to complement other outlets of NSPs. Islam et al (2009) conducted a survey with key stakeholders (n = 94) to gain their views on the role and effectiveness of SDM in NSP. Almost 80% of participants rated SDM as successful (or moderately successful) in reducing sharing of needles and syringes. Staff considered that introduction of these machines to NSP had improved services for IDUs without increasing unsafe disposal of used equipment, community drug use, or vandalism. However, lack of staff user contact was seen as their main disadvantage.





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Syringe dispensing machines (SDM) (continued)

McDonald (2009) reported on a 12 month pilot of SDMs, which indicated the successful implementation of the trial and recommended that SDMs should be an integral component of harm reduction strategies. The SDMs appeared to be serving both the usual clients of the other outlets for sterile injecting equipment (community pharmacies and the NEP outlets) and others who were reluctant to use such outlets or find them inconvenient. The out-of-business-hours provision of syringes through the SDMs was particularly welcomed by both SDM clients and other stakeholders. The continuing operation of the initial four SDMs was widely supported, with additional machines being requested by clients and others.

Secondary exchange

Secondary exchange involves people acquiring needles from formal services and redistributing them to others. Des Jarlais et al (2009) reported on annual surveys of US NSP, and found that in 2007, 89% of programmes permitted secondary exchange and 76% encouraged it.

Bryant and Hopwood (2009) conducted a cross-sectional study to describe secondary exchange practice in Australia and examine whether secondary exchange is independently associated with blood borne viruses risk practices. Surveys and in-depth interviews were conducted with people using community-based pharmacies to obtain sterile needles and syringes (n = 229). Of those interviewed, over half reported secondary exchange in the previous month, with respondents reporting passing on 22% of their needles to others. Recipients of secondary exchange were four times more likely than non-secondary exchangers to report borrowing used syringes in the last month. Respondents reported supplying sterile equipment to others to prevent reuse and to reduce risks associated with unplanned drug use. It was suggested that harm reduction programmes could capitalise on the prevalence of SE to reach IDU who do not use formal distribution services.





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Special Interest Article - Davidson et al (2011)

Barriers to accessing formal NSP include fear of police, fear of being identified by other community members as an IDU, limited operating hours, difficulty accessing the physical locations of exchanges (e.g. Bruneau et al., 2008) and stigma against drug users (Simmonds & Coomber, 2009). Davidson et al (2011) discussed the concept of satellite exchange, which involves collaborating with people who already use an exchange to deliver needles and other supplies to those unable to access the exchange. Although this can be a successful approach, it does mean that those most willing to deliver needles to their peers are often members of social networks that are already well connected with the needle exchange, leading to duplication of effort. Thus, Davidson et al outline a simple method for identifying groups of people who are in need of improved access to needles, and for re-targeting efforts to meet the needs of those people. The method was piloted at an US NSP.

The process involved 1) surveying exchange users to find out where (and when) they and their peers found themselves without needles when they needed one; 2) mapping those locations to identify 'hotspots' where people often run out of needles; and, 3) pooling the knowledge of exchange users and exchange staff to interpret the maps and design locally appropriate methods to deliver needles to the people and locations identified in the mapping exercise.

The method has obvious weaknesses including gathering data that shows where people who are willing and able to use the exchange are running out of needles. Another limitation is that maps generated using this method will inherently be maps of under-served and un-served groups with some level of geographic proximity to the location of the exchange/s at which the survey is conducted.

Despite these limitations, it was suggested that the method is useful for rapidly assessing, describing, and responding to unmet and under-met need among IDU who use or associate with users of fixed site NSP. The authors suggested this method is particularly well suited to organisations with extremely limited resources, and can be conducted without the use of computer technology or related expertise.





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Supervised Injecting Facilities (SIF)

Seamaan et al (2011) provided a description of SIF:

“SIFs offer a hygienic environment to inject drugs, provide sterile injection equipment at time of injection, and allow for safe disposal of used equipment. Injection of pre-obtained drugs, purchased by persons who inject drugs, happens in a facility where trained personnel provide on-site counselling and referral to addiction treatment and health care and intervene in overdose emergency situations. SIFs provide positive health benefits (reducing transmission of HIV and viral hepatitis [HCV], bacterial infections, and overdose mortality) without evidence for negative health or social consequences. SIFs serve most-at-risk persons, including those who inject in public or inject frequently, and those who do not use other public health programmes”.

They conducted a review of SIFs and concluded that SIFs have the potential to reduce risks associated with injecting drugs by offering unique public health services that are complementary to other interventions.

Reddon et al examined SIF use in Canada, among HIV-positive IDU (n = 3,995). Frequent SIF use was associated with homelessness, daily heroin injection, and daily cocaine injection. The reasons given for not using the SIF included a preference for injecting at home and already having a safe place to inject. The SIF services most commonly used were needle exchange and nursing services. Parkin and Coomer (2011) recommended that particular ‘spaces’ of harm reduction (such as ‘safer injecting facilities’) should be considered in UK settings in order to address injecting-related harm. They conducted qualitative research with IDU who reported using communal space within high rise social housing on a daily basis for injecting drugs. Such settings were found to contribute to a wide range of injecting-related harm and hazards.

Salmon et al (2010) provided evidence of the impact of SIF on ambulance call outs in Australia. They examined data of patterns in ambulance attendances at opiate-related overdoses, before and after the opening of a SIF in Sydney. Results indicated that the burden on ambulance services of attending to opiate-related overdoses declined significantly, particularly in the immediate vicinity of the SIF.

Wenger et al (2011) conducted qualitative research with key stakeholders to assess their opinions towards the implementation of a SIF. Stakeholders included representatives from neighbourhood and business associations, school officials, community activists and service providers. Results indicated concerns that implementation of a SIF would further degrade a community struggling with safety and cleanliness and questioned the efficacy of harm reduction strategies to address drug use. Stakeholders were open to dialogue about how a SIF might support neighbourhood goals, stressed the importance of respect and collaboration between stakeholders and those potentially implementing a SIF, and they were interested in evidence of the impact SIFs have on communities.





Harm Reduction - Drugs

Special Interest Articles - Safer Injection Education

Fast et al (2008) undertook qualitative research with users from Canada's first SIF (n = 50). To date, over 7,000 IDU have attended the facility, and approximately 600 injections are supervised at the facility each day. Healthcare professionals are present at all times to supervise injections, intervene in

the event of an overdose, and provide safer injecting education. It is argued that the facility is needed as ongoing drug-related harms among IDU indicate that novel public health interventions are needed.

Results indicated that significant gaps in knowledge regarding safer injecting practices exist among local IDU, and that these knowledge deficits result in unsafe injecting practices and negative health outcomes. However, IDU perspectives reveal that the SIF allows clients to identify and address these gaps in knowledge through a number of mechanisms unique to this facility, including:

- the opportunity to provide hands on, client-centred safer injecting education;
- demonstration of safer injecting techniques that takes place the moment a client is experiencing difficulties; and
- enhanced opportunities to seek help from 'expert' healthcare professionals.

Importantly, participants indicated that the overall environment of the SIF promoted the adoption of safer injecting practices over time, both within and outside of the facility. Thus, it was concluded that the SIF offers a unique 'micro-environment' that has been particularly effective in transmitting educational messages targeting unsafe and unhygienic injection practices to a population of active IDU.

However, the fact that the SIF is not accessible to all local IDU (i.e. people who rely on others to administer injections, or who engage in assisted injection for a variety of socio-cultural reasons are excluded from the facility as a result of regulations prohibiting assisted injection within the SIF) was recognised. Additionally, a minority of participants reported that they had not received safer injecting education within the facility, or that they disliked the overall environment within the facility. This was said to indicate that the SIF can greatly benefit those individuals who visit the site regularly and have developed good relationships with staff, but may not be as effective for other IDU.





Harm Reduction - Drugs

Special Interest Articles - Safer Injection Education

(continued)

Wood et al (2008) examined the use of safer injection education delivered by nurses on a SIF in Canada. They examined the characteristics of participants receiving safer injection education from nurses (n = 1,087). Approximately one third of participants reported receiving this education at baseline and an additional 13% reported receiving it during follow up. Those receiving were more likely to be females, persons requiring injecting assistance, binge users, and those using the SIF for most of their injections. It was concluded that there is a real need for nurse delivered safer injection education in reaching IDU most at risk for injection-related harm, and that SIFs may provide unique opportunities to deliver safer injection education to high risk populations.

Supervised Injecting Facilities (SIF) (continued)

Low-threshold drug services such as drug consumption rooms have been posited as referral gateways to drug treatment for IDUs (Palmateer et al, 2010).

Kimber et al (2008) undertook behavioural surveillance and collected data from 3,175 IDU at an Australian drug consumption room. Results indicated that 16% of clients who received written referrals to drug treatment had confirmed drug treatment referral uptake. Factors associated with drug treatment referral were frequent attendance at the drug consumption room, heroin as main drug injected and completion of high school education. Factors associated positively with drug treatment referral uptake were recent sex work and at least daily injection. Previous psychiatric illness or self-harm was associated negatively with drug treatment referral uptake. The authors concluded that drug consumption rooms engaged IDU successfully in drug treatment referral and this was associated with presentation for drug treatment assessment and other health and psychosocial services.





Harm Reduction - Drugs

Overdose - Naloxone

Overdose remains a major cause of death among IDU. As such, a number of overdose prevention programmes have been implemented that include training IDU to administer naloxone, an opiate antagonist.

Wagner et al (2010) evaluated an overdose prevention and response training programme for IDU delivered by a community-based organisation.

During a one hour training session, participants (n = 93) learned skills to prevent, recognise, and respond to opiate overdoses, including: calling for emergency services; performing rescue breathing; and administering an intramuscular injection of naloxone. The evaluation consisted of baseline and follow up interviews (n = 47). Results indicated significant increases in knowledge about overdose, in particular about the use of naloxone. This information appeared to have been put into practice, with 22 participants responding to 35 overdoses during the follow up period. At an overall level, the average number of appropriate response techniques used by participants increased significantly from baseline to follow up. An additional finding was that just over half of participants reported decreased drug use at follow up. Thus, it was concluded that this programme was associated with improved overdose response behaviour, as well as unforeseen benefits such as reductions in personal drug use.

The 'Staying Alive' (SA) programme - an overdose prevention and naloxone distribution programme in Baltimore which trained drug users to prevent and respond to opiate overdose using techniques including mouth-to-mouth resuscitation and administration of naloxone – has been evaluated in the literature. Participants (who were recruited from multiple locations by staff working at the local NSP) took part in a one hour training session conducted by two facilitators, and those who successfully completed the programme were provided with a kit that contained naloxone. Tobin et al (2009) undertook a pre- and post-test evaluation survey with participants (n = 85). Results of the intervention were positive, with 19 participants post-training reporting administering naloxone with no adverse effects. Participants also reported increased knowledge specifically about naloxone, and using resuscitation skills taught in the SA programme. Sherman et al (2009) conducted qualitative research examining the SA programme. Qualitative interviews were conducted with participants (n = 25) who had completed the training and had reported using naloxone to revive an overdose victim. Results indicated that participants successfully shared information on overdose prevention and management, particularly the use of naloxone, to their peers and family. Thus, the research was taken as evidence of IDU interest in and ability to diffuse overdose prevention information and response skills to other IDU.





Harm Reduction - Drugs

Implications for Practice

Recognition of the direct impact that stigma and tension between approaches can have on the effective provision of harm reduction services for drug users

The literature outlines how IDU perceive stigma when accessing services, which can dissuade them from undertaking harm reduction behaviours.

This perceived stigma was also present when stakeholders discussed the potential introduction of harm reduction services in their area, such as safe injecting facilities or pharmacies dispensing syringes. There can be tension between planners and practitioners advocating some approaches that regard IDU as criminals and other approaches that view IDU as patients deserving treatment, with human rights being emphasised. This can impact on the effectiveness of service delivery and highlights the need for staff to be well trained, skilled and understanding when engaging with drug users.

Harm reduction interventions need to be tailored to the target group

Research has indicated that the provision of information and interventions has to be tailored to and be meaningful for the target group. This should also help to reduce the possibility that interventions can cause more harm than good (e.g. public toilets illuminated with fluorescent blue lights).

It is also important to recognise that even if drug users have the required information, this does not always translate to safe behaviour, and it may be insufficient to reduce the risk of negative health outcomes for people taking drugs.

Active drug users should be included in the development and delivery of interventions

Evidence indicates that target groups (such as at risk youth) should be engaged in the planning and implementation of the harm reduction intervention to make it have more impact. The importance of including the views of IDUs in service development has also been highlighted.

In a related vein, the use of peer approaches has also been shown to have real promise for training active IDUs in harm prevention activity, particularly by using active drug users to engage with others in their community/network.





Harm Reduction - Drugs

Implications for Practice (continued)

There is a need for a range of approaches

It is important to avoid a 'one size fits all' approach and assume that all drug users will utilise the same facilities and find them to be accessible. This indicates the need for a range of approaches.

For example, the literature generally advocates the use of NSP as being effective, safe and cost-effective. They discuss the effectiveness of both NSP and OST, and the fact that there is no convincing evidence that NSP increases IDU. Other approaches such as opiate substitution treatment and antiretroviral treatment have also been shown to have promise, as have syringe vending machines and pharmacy-based syringe access (as a means of increasing accessibility to such a service by reducing stigma). The concept of satellite exchange has also been discussed as a means of collaborating with people who already use an exchange to deliver needles and other supplies to those unable to access the exchange. Supervised injection facilities (which also offer nurse delivered safer injection education) have also been shown to have the potential to reduce risks associated with injecting drugs by offering unique public health services that are complementary to other interventions.

It should be noted however, that while each intervention alone will achieve modest achievements in harm reduction, there is a need for high coverage and combined approaches.

A continued focus on HCV prevention is necessary

The literature generally indicates that harm reduction strategies appear to have been successful in preventing an HIV epidemic, the results in relation to HCV are less positive, highlighting the need to focus on interventions that will reduce HCV transmission amongst the IDU population.

There is a need for harm reduction services

Discussion of the benefits of NSP have highlighted the need for there to be services for drug users who are not ready to enter treatment and substantially change their drug use behaviours, but are ready at this time to simply focus on harm reduction. In the longer term these services may potentially lead to other types of services for drug users, who may eventually decide to enter treatment, but initially the primary focus needs to be on reducing harmful behaviours amongst those who engage in risky behaviours.

A focus on harm reduction programmes such as Naloxone is vital in reducing the number of IDU having an overdose

Naloxone programmes delivered to service users aimed at reducing drug overdose have proven to be associated with improved overdose response behaviour, as well as unforeseen benefits such as reductions in personal drug use.

