Reducing the harm of drug use and dependence

"Harm reduction is often made an unnecessary controversial issue as if there was a contradiction between prevention and treatment on one hand and reducing the adverse health and social consequences of drug use on the other. This is a false dichotomy. They are complementary."

(Antonio Maria Costa, UNODC, 2007)

Introduction

Historically, substance abuse treatment focused on reducing or eliminating drug use, neglecting the prevention of the adverse consequences of drug use. More recently, there has been rapid development of harm minimisation interventions focused on reducing the negative outcomes of (licit or illicit) drug use to both substance-using individuals and their communities. Harm reduction strategies have been increasingly recognised and rapidly incorporated into the drug treatment strategies and policies of Europe (Council of the EU, 2004, Commission of the European Communities, 2007) and other countries (Hilton et al., 2000). Harm reduction has become, unnecessarily, a controversial issue. There is no contradiction between prevention, treatment, and harm reduction strategies. They are complementary (UNODC, 2008). Whether your organisation agrees or not that the ultimate goal for substance abuse treatment should be total abstinence, drug use control, or both, harm reduction strategies are essential components of any modern treatment programme. Strategies such as supply reduction, community development, preventive education, treatment, and rehabilitation may work in the long term to reduce substance use. However, faster, evidence-based strategies are necessary to prevent the adverse consequences on current drug users, their families, and communities.

What is harm reduction?

"Harm reduction can be viewed as the prevention of adverse consequences of illicit drug use without necessarily reducing their consumption."

(Costigan, Crofts & Reid, 2003, p. 35)

The goal of harm reduction strategies and approaches is to reduce the negative consequences of drug abuse, not to eliminate the use of licit or illicit drugs (Hilton et al., 2000). Harm reduction is a practical approach that employs a range of different strategies with the goal of minimising

the risk of the client contracting infectious diseases, overdosing, or suffering other consequences related to the use of substances. Strategies may include changing the way people consume drugs or insuring that the environment in which they use minimises the risks of negative consequences to their health (infections, overdose) or quality of life (legal problems, social and familial issues, etc.). Strategies can vary depending on the drug, the type of harm related to its consumption, and the individual who consumes the drugs (Addy & Ritter, 2000, 2004).

Why should we implement harm reduction approaches?

The main reason that harm reduction approaches should be implemented is that these strategies save lives and diminish the likelihood of drug use problems for the individual, their families, and the surrounding community. The adverse consequences of drug use have been categorised by Roizen (1979), who identified the "4 Ls" model, or four areas of harm in the life of drug using individuals:

1. **Liver:** Problems related to the user's physical or psychological health such as cirrhosis; cancer; overdose; psychiatric, psychological, or emotional problems (amnesia, depression, paranoia, etc.); accidents or other injuries while intoxicated; etc.

2. **Lover:** Problems related to relationships, family, friends, intimate partner, and children.

3. **Livelihood:** Problems related to the user's professional live (e.g., lack of concentration at work or school) and other non-professional activities such as hobbies.

4. **Law:** Legal problems related to illegal drug use, drug acquisition, and/or trafficking, including driving under the influence of drugs.

In addition to the previous classification of the consequences of drug use, other authors have classified the harms according to the drug using behaviour: drug acquisition, drug use, and drug withdrawal. Each area is related to specific risks for the person who uses the drugs, his/her family and relationships, and for the surrounding community (see Addy & Ritter, 2000, 2004). This classification is especially helpful when interviewing individuals about their drug use and

related harms. Harm minimisation strategies are directed towards reducing harm, in many cases by altering drug using behaviours and effects (acquisition, drug use, and withdrawal).

- **Drug acquisition harms** may be related to the risks of being exposed to high-risk situations, such as criminal behaviour (either being exposed to or conducting criminal acts such as drug dealing, robbery, etc.).

- **Drug use harms** are related to the drug used, the amount consumed, and the method of administration. Each drug and method has different pharmacological effects and consequences on the individual's health. For example, injection drug use may lead to open wounds, vein problems, abscesses, skin breakdown, HIV and other infectious diseases when sharing needles and paraphernalia, and, of course, the risk of overdose. The factors that influence overdose or intoxication-related harm include purity of the drug, dose, duration, and frequency of drug use; mode of administration; poly-drug use; physical state (nutrition, tolerance, etc.); and psychological factors (expectations).

- **Drug withdrawal harms** are related to the effects of reducing or eliminating drug use that may impair the individual's work and social functioning. Withdrawal can also be related to a variety of problems such as physical and psychological issues, high-risk activities, and criminal behaviours.

These problems are accentuated among injection drug users, especially the risk of infectious disease, including HIV, and death due to overdose.

HIV: A devastating disease that might be prevented through harm reduction strategies

In spite of the growing efforts to address the AIDS epidemic, the human immunodeficiency virus (HIV) and other infectious diseases continue to spread, particularly among injection drug users (IDUs). The number of people living with HIV and also the number of deaths due to AIDS continues to increase. A total of 39.5 million people live with HIV and an estimated 4.3 million [3.6 million–6.6 million] adults and children were newly infected with HIV in 2006 (about 400,000 more than in 2004, according to the UNAIDS/WHO [2006]).

Family Health International (FHI; http://www.fhi.org), a non-profit public health organisation that manages research and field activities in more than 70 countries, provides information on HIV prevention and treatment. One FHI publication is a compendium on assessment tools (Behavioural Surveillance Surveys) where one can find instruments that assess HIV behavioural risk and evaluate harm reduction programmes focused on HIV prevention (see http://www.fhi.org/en/HIVAIDS/pub/guide/bssguidelines.htm).

Effective principles for working with IDUs to prevent HIV* (Costigan, Crofts & Reid, 2003)*:

1. Have a non-judgemental attitude
2. Emphasise the drug user's ability to care for himself or herself
3. Use short-term pragmatic goals and a scale of behaviours to achieve the goals
4. Provide information about the transmission of HIV, its prevention, and its connection with risk behaviours
5. Focus on concrete risk behaviours and connect those with the individual's reality (his/her own risk behaviours)
6. Provide different options to reduce the risk of infection
7. Provide a supportive environment (professionals, family, peers, etc.)
8. Have a team of experienced professionals involved in designing and implementing harm reduction programmes and strategies.

Additional information on HIV prevention among drug users can be found in the U.S. Centers for Disease Control and Prevention resource book for community centres entitled *HIV Prevention among Drug Users: A Resource Book for Community Planners and Program Managers* at http://www.cdc.gov/IDU/pubs/hpdu/hpdu.pdf.

Harm reduction strategies to prevent HIV and other drug-related harms

The following strategies are taken from the UNODC (*Reducing the Adverse Health and Social Consequences of Drug Abuse: A Comprehensive Approach*), available at http://www.unodc.org/documents/prevention/Reducing-adverse-consequences-drug-abuse.pdf, and also from Ritter & Cameron (2006) and Hilton et al. (2000). We also include information from the Centre for Harm Reduction's *Manual for Reducing Drug Related Harm in Asia* (Costigan, Crofts & Reid, 2003), a complete guidebook offering detailed steps on how to

assess drug-related problems and design and implement harm reduction programmes (http://www.burnet.edu.au/freestyler/gui/files//Manual.pdf).

All harm reduction strategies or measures should be in line with the provisions of international drug control treaties.

General harm reduction strategies

- **Education strategies.** The first step in harm reduction is to provide accurate information about the consequences and risks of drug use and promote behaviours that reduce risk. Education should include information on physical and psycho-social risks of drug abuse, risks of overdose, infectious diseases, driving problems, and cardiovascular, metabolic, and psychiatric disorders. Education needs to be combined with other interventions, such as brief interventions, in order to be effective. Educational strategies may include information on safer sex practices to reduce the risk of HIV transmission and information on the consequences of the various ways that drugs can be taken (routes of administration). These strategies also need to include information on health and social services available in your area. Education for drug users may include one-on-one sessions or group sessions that occur in clinical settings or other settings (institutions, prison, on the street, etc.).

- **Brief Interventions and Counselling.** Brief interventions are focused on changing high-risk behaviours. These interventions might include single-session therapy, cognitive behavioural therapy, and/or motivational interviewing (see Volume B, Modules 1-3). These interventions may last between 15 minutes to 4 hours and, again, they may or may not be conducted in clinical settings.

- **Interventions to reduce injury and violence**. Drugs such as alcohol have been related to injury, violence, and public disorder. Strategies to change the environment may be helpful, such as changing alcohol containers (from bottles to plastic glasses), banning beverages with high concentrations of alcohol, community mobilization, etc. Other interventions can be aimed towards reducing road accidents by promoting public transportation, punishment for drinking and driving, etc.

- **Availability of measures to prevent the acute consequences of stimulant abuse** in the outlets of frequent abuse of these substances could contribute to the prevention of related emergencies.

Harm reduction strategies for injection drug use: Preventing the spread of HIV and other adverse consequences

- **Low-threshold pharmacological interventions (opioid-antagonist and antagonist drugs), not directly related to drug-free (non-methadone) programs but to immediate health protection.** One of the aims of these interventions is to reduce the risk of contracting or transmitting HIV and other infectious diseases by substituting non-injecting drugs for the injected substance. Drug substitution also switches users from "black market" drugs to legal drugs dispensed under the care of a health professional, so the risk of overdose and other medical complications is minimised. Drug substitution helps to reduce crime and drug users' high-risk behaviours since it reduces the urgency of acquiring the drug. Drug substitution also allows health professionals to keep in contact with drug users, which aids in keeping them in treatment and thereby reduces relapse.

- **Needle/syringe exchange programs.** This section includes strategies to prevent the sharing of injecting equipment and strategies for the safe disposal of non-sterile injecting paraphernalia (such as needle exchange programmes) through the following:
    - Raising awareness and knowledge of the risk of contracting infectious diseases through injecting drug use
    - Providing information and advice on the steps to inject safely
    - Providing sterile injecting equipment, if possible
    - Providing pragmatic information on how to disinfect needles, syringes, and other equipment
    - Providing safe disposal for non-sterile injecting equipment or
    - Providing pragmatic steps on how to dispose of non-sterile equipment

- **Emphasising non-injection routes of administration over injection routes.** The goals of this effort are to reduce initiation of drug injection among people who do not use this route of administration and to reduce drug injection by promoting other routes of administration among IDUs.

- **Voluntary HIV counselling and testing**. Early detection of HIV infection is critical. Barriers such as lack of HIV testing availability and the questionable accuracy of HIV tests, together with people's fears of discrimination, fears about getting a positive result from the test, and fears of social stigma need to be overcome to better implement HIV testing as a prevention programme. Voluntary testing should, ideally, be accompanied by HIV counselling. This includes a risk evaluation and information on prevention of HIV transmission. Pre-test counselling should focus on assessment and getting the necessary information from the client on his/her medical history, drug use, knowledge of HIV and AIDS, sexual behaviour (number of partners, condom use, etc.), exposure to high-risk situations, and other information. Information about the test should also be provided at this moment. Post-test counselling depends on the test results. If negative, the client should receive information that the results might not be reliable and that a new test should be conducted in 3–6 months. Counselling after a positive test requires more details and sensitive treatment (see Costigan, Crofts & Reid, 2003). In addition to this, antiretroviral treatment for HIV-infected drug users should be made available and accessible.

- **Overdose prevention.** Naloxone, a short-acting opioid antagonist, overturns the immediate effects of heroin and prevents overdose among injection drug users. Other drugs, such as methadone, which have similar properties to heroin and morphine, help to reduce overdose, risk of HIV and hepatitis infection, and criminal acts and other high-risk behaviours (the latter two because methadone is delivered legally). Other overdose management strategies include peer-to-peer education in first aid and resuscitation (CPR); establishing collaborations among peers, and encouraging peers to seek help and call an ambulance when an overdose is suspected.

- **Prevention and services for the management of sexually transmitted infections.** It is critical to provide information to drug users about the risk of HIV transmission and the

main strategies to reduce such transmission. Strategies may include using condoms, reducing the number of sexual partners or being faithful to one partner, treating sexually transmitted diseases, abstinence, etc. Strategies for men and women may vary depending on socio-political and cultural factors (e.g., many women do not have a choice regarding their own sexuality; see Costigan, Crofts & Reid, 2003). Working with those involved in sex work is particularly important. Also educating mothers on the risks of transmission of HIV to their babies (e.g., infant feeding) should be included when working with women and parents in general.

- **Wound care and vein maintenance.** These topics should be addressed along with teaching proper care of infections and cleanliness of paraphernalia. Vein maintenance includes vein preparation, “saving” one vein, avoiding arteries, selecting the proper site, etc.). In addition, harm reduction strategies, such as decreasing the number of injections, type of drugs, etc., can also be addressed.

In addition to the previously listed harm reduction strategies, the UNODC also recommends the following:

- Adequate social assistance should be provided for marginalized drug-dependent people;
- Vaccination programmes against hepatitis should be available to all drug abusers and in all appropriate facilities;
- Medication and emergency kits for management of overdoses should be available in appropriate places;
- Interventions in emergency rooms have to be guaranteed;
- Well-equipped street-workers and peer outreach workers have to be adequately trained to contact drug abusers and dependent individuals in need of assistance.

What steps should we take to develop harm reduction strategies with our clients?

Individualised harm minimisation strategies need to be based on knowing the client’s situation in the following key areas: type of drug used (or poly-drug use), method of administration, and pattern of use. There are a number of recommended steps for implementing harm minimisation strategies (Addy & Ritter, 2000, 2004):

- **Step 1:** Be familiar with the potential harms associated with all types of drug use. Such information is available at the U.S. National Institute on Drug Abuse InfoFacts site, http://www.drugabuse.gov/Infofacts/Lista-sp.html, and in *The Manual for Reducing Drug Related Harm in Asia* (http://www.burnet.edu.au/freestyler/gui/files//Manual.pdf ; Costigan, Crofts, & Reid, 2003).

- **Step 2:** Assess the harms and risks associated with the client's drug use by analysing their pattern of drug use. You could use forms such as the "5 Ws" (When? Where? Why? With/From Whom? What happened?), which is also called a functional analysis (see Volume B, Module 3), to analyse patterns of drug acquisition, use, and withdrawal with your client. You could also use Ruefli & Rogers (2004) table of outcomes to measure incremental change before and after your harm reduction intervention (see http://www.harmreductionjournal.com/content/1/1/8).

- **Step 3:** Assess with the client and provide feedback to them about how their behaviour is contributing to the harms they are experiencing. You might use this information on negative consequences together with motivational techniques (Volume B, Module 2).

- **Step 4:** Use a collaborative approach with the client to consider as many harm reduction strategies as possible. It is equally important to identify barriers to the implementation of these strategies.

- **Step 5:** Have the client identify their goals regarding drug use and related behaviours and delineate how they will achieve these goals (see Volume A, Module 2).

- **Step 6:** Monitor the client's behaviour, reinforce positive changes, and address difficulties.

Where can I find more information on harm reduction strategies and HIV?

Here is a list of articles, manuals, and Web sites that can help build capacity on harm minimisation strategies in your centre:

- Asian Harm Reduction Network (AHRN): http://www.ahrn.net/
- The Canadian Harm Reduction Network: http://www.canadianharmreduction.com/
- European Monitoring Centre for Drugs and Drug Addiction: http://www.emcdda.europa.eu/
- Family Health International (http://www.fhi.org/en/index.htm) provides information on assessment tools (Behavioural Surveillance Surveys) that might be useful for assessment and programme evaluation.
- National Institute on Drug Abuse – InfoFacts. Provides information on various drugs and related harms. http://www.drugabuse.gov/infofacts/Infofaxindex.html
- Saferinjecting.info: http://www.saferinjecting.info/
- SAMHSA TIP 37 (Substance Abuse Treatment for Persons with HIV/AIDS) http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.chapter.64746
- The Centre for Harm Reduction: http://www.burnet.edu.au/home/chr
- The Harm Reduction Journal: http://www.harmreductionjournal.com/
- The Manual for Reducing Drug Related Harm in Asia: http://www.burnet.edu.au/freestyler/gui/files//Manual.pdf
- United Nations Office on Drugs and Crime (2004). HIV prevention among young injecting drug users. Publication No. E.04.XI.20. ISBN 92-1-148190-2. Vienna, Austria. http://www.unodc.org/pdf/youthnet/handbook_hiv_english.pdf
- United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organization (WHO). (2006, December). *AIDS Epidemic Update*. http://www.unaids.org/en/HIV_data/epi2006/default.asp /

References

Addy, D., & Ritter, A. (2000). *Clinical Treatment Guidelines for Alcohol and Drug Clinicians. No 4: Reducing Harm for Clients who Continue to Use Drugs*. Fitzroy, Victoria, Australia: Turning Point Alcohol and Drug Centre.

Costigan, G., Crofts, N., & Reid, G. (2003). *Manual for Reducing Drug Related Harm in Asia*. Melbourne, Victoria, Australia: The Centre for Harm Reduction.

Commission of the European Communities (2007). *Report from the Commission to the European Parliament and the Council*. Brussels, 18.4.2007. COM (2007) 199 final.

Council of the European Union (2004). *EU Drugs Strategy* (2005-2012). Available at http://www.emcdda.europa.eu/index.cfm?fuseaction=public.Content&nNodeID=6790&sLanguageISO=EN.

Hilton, B.A., Thompson, R., Moore-Dempsey, L., & Janzen, R.G. (2000). Harm reduction theories and strategies for control of human immunodeficiency virus: A review of the literature. *Journal of Advance Nursing*, *33*, 3, 357-370.

Ritter, A., & Cameron, J. (2006). A review of the efficacy and effectiveness of harm reduction strategies for alcohol, tobacco and illicit drugs. *Drug and Alcohol Review, 25*, 611-624.

Roizen, R., & Weisner, C. (1979). *Fragmentation in Alcoholism Treatment Services: An Exploratory Analysis*. Berkeley, CA, United States: Alcohol Research Group, University of California.

Ruefli, T., & Rogers, S. (2004). How do drug users define their progress in harm reduction programs? Qualitative research to develop user-generated outcomes. *Harm Reduction Journal, 1*:8. http://www.harmreductionjournal.com/content/1/1/8

United Nations Office on Drugs and Crime. (2004). *HIV Prevention among Young Injecting Drug Users*. Publication No. E.04.XI.20. ISBN 92-1-148190-2. Vienna, Austria. http://www.unodc.org/pdf/youthnet/handbook_hiv_english.pdf

United Nations Office on Drugs and Crime (2008). *Reducing Adverse Health and Social Consequences of Drug Abuse: A Comprehensive Approach*. Discussion Paper. Available at http://www.unodc.org/documents/prevention/Reducing-adverse-consequences-drug-abuse.pdf.

United Nations Program on HIV/AIDS (UNAIDS) and the World Health Organization (WHO). (2006, December). *AIDS Epidemic Update: December 2006*. http://www.unaids.org/en/HIV_data/epi2006/default.asp.