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HARM REDUCTION AND INJECTION DRUG USE:
an international comparative study of contextual factors influencing the development and implementation of relevant policies and programs

Prepared for:

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Hepatitis C Division
Population and Public Health Branch

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La Stratégie canadienne sur le VIH/sida

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The views expressed herein are solely those of the authors
and do not necessarily reflect the official policies of Health Canada.

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Executive Summary

This study examined the socio-political context for harm reduction initiatives related to injection drug use and HIV/AIDS and HCV in Canada and five other countries: Australia, Germany, the Netherlands, Switzerland and the United Kingdom. The aim was to identify options that might be considered to further harm reduction policies and practices in Canada.

The study was conducted during January to May 2001 and involved interviews with key informants and reviews of relevant papers and reports.

In Canada and the five other countries examined, the spread of HIV/AIDS among injection drug users, open drug scenes, overdose deaths and drug-related crime provided the impetus for implementing harm reduction measures. These measures have been implemented in the context of national drug strategies that put comparable emphasis on prevention, treatment, harm reduction and law enforcement.

With the exception of Germany, which did not legally endorse harm reduction approaches until the early 1990s, the countries examined in this report initiated harm reduction policies and programs in the mid-1980s in response to the spread of HIV/AIDS among injection drug users. In most cases, this was a national approach, but large cities such as Frankfurt and Amsterdam also developed local drug strategies, often in advance of supportive national strategies. Both nationally and locally successful strategies have involved collaboration among a wide range of stakeholders, but particularly between health and law enforcement.

The major harm reduction approaches have been methadone maintenance treatment and needle exchange programs. The overall direction is towards client-centred methadone treatment, with an emphasis on low-threshold services and ensuring adequate doses, generally for oral consumption. Needle exchange programs are well established in the countries considered and have generally had the support of local police. In most countries, efforts are made to ensure that needle exchanges and methadone are offered in the context of a range of other support services such as crisis intervention, medical and social care, shelter, housing, outreach and counselling. Supervised injection sites have been approved in Germany, the Netherlands and Switzerland, and are being considered for Australia.

Australia, Germany, the Netherlands, the UK and Switzerland have all approved buprenorphine, although in the Netherlands its use is not common except with younger clients. LAAM is been used experimentally in the Netherlands and Australia and approved for use in Germany. Naltrexone is also being used for withdrawal management in all countries. In the UK naloxone for overdose management is being prescribed to drug users used in a pilot study. Australia is also considering increasing the availability of naloxone.

Heroin is available on prescription for the treatment of narcotic addiction in the United Kingdom and Switzerland, and is being used experimentally in the Netherlands. Heroin trials are due to start in Germany in the fall of 2001. Heroin trails have been widely discussed but not approved in Australia.

User groups and peer education and support have played particularly important roles in the Netherlands and Australia where they user groups have received funding and support from national or local governments.

Some harm reduction initiatives available in the United Kingdom, Europe and Australia are also available in parts of Canada. The most notable exceptions are supervised injection sites, needle exchanges in prisons and the medical prescription of heroin. Other harm reduction initiatives, and especially those involving the prescription of methadone, and street-level medical and social services, are less developed in Canada than in some other countries.

There is evidence that harm reduction approaches have been successful in limiting the spread of HIV/AIDS and engaging large numbers of injection drug users in some type of assistance. However, HCV rates among injection drug users are high in most cases and increased efforts may be needed to prevent the sharing of needles and other drug paraphernalia or to encourage users to switch to methods of use other than injection. The use of cocaine and amphetamines is an ongoing concern in some countries and no country appears to have any especially innovative programs for people who inject these drugs. Amphetamines are prescribed to a limited extent in the UK but this no encouraged by health authorities and remains controversial.

Experiences in other countries support current initiatives to improve Canada's response to injection drug use, especially the recommendations contained in the discussion document, *Reducing Harm Associated with Injection Drug Use in Canada*. These include calls for a comprehensive, coordinated and balanced approach; stronger leadership; increased availability of methadone and needle exchanges; greater access to community-based services; a willingness to experiment with the prescription of other drugs and with supervised injection sites; greater attention to issues concerning injection drugs users and the justice system; and more emphasis on research and evaluation.

Introduction

Injection drug use is associated with a variety of serious harms to the user, the community and to society as a whole. These harms include the risk of overdose injury or death; transmission of blood-borne diseases; abscesses and other health problems; transmission of HIV and HCV through needle and paraphernalia sharing, unsafe sexual practices or from mother to child; and public nuisance problems associated with open drug scenes, discarded needles and other injecting paraphernalia, and drug-related criminal activity.

In Canada, as in most other countries, the traditional response to injection drug users focuses on arrests and incarceration, and provision of abstinence-oriented treatment. However, these responses have had limited success. This fact – added to the spread of HIV/AIDS and hepatitis C among injection drug users – has led to widespread calls for alternative approaches to injection drug use. There is a particular need for measures that aim to reduce or minimize high-risk drug use (e.g., needle sharing) either as an interim objective leading to eventual cessation of all drug use, or as a longer-term outcome for some groups or individuals. There have also been calls for new approaches to reduce high-risk sexual activities and to improve self-care among injection drug users. This report will refer to these approaches as *harm reduction approaches* because they focus on harms associated with drug use and not on drug use *per se*. Other terms that are sometimes used to describe these approaches are *risk reduction and harm minimization*

Advocates of harm reduction policies and programs concerning injection drug use (e.g., Riley, Teixeira and Hausser, 1999) propose these as humane and pragmatic components of a comprehensive response to a complex phenomenon that cannot be addressed simply through increased law enforcement aimed at drug dealers or users, or through traditional abstinence-oriented treatments.

Table 1 indicates the major types of policies and program initiatives that have harm reduction objectives. In practice, many such initiatives have multiple components, including education. Programs that provide drugs for self-injection also usually provide needles and syringes. Some harm reduction initiatives also have explicit or implicit longer-term objectives including reducing the spread of infections, reducing drug-related crime and engaging injection drug users in treatment.

Diversion programs such as arrest/referral and drug courts are sometimes considered harm reduction initiatives because they can reduce the harms associated with criminal prosecution. However, their primary objective is to increase drug users' involvement in treatments that may or may not have harm reduction objectives.

Table 1
Main types of harm reduction initiatives relevant to injection drug use

Initiatives	Immediate objectives
Education about Overdose prevention Safer injection techniques Risks of needle sharing Safe sex	Reduce deaths due to overdose Reduce abscesses and infections at the site of injection Reduce damage to veins Reduce needle sharing and related problems
Needle exchange programs or other methods of needle distribution such as pharmacies, needle dispensing machines, mobile vans	Reduce needle sharing and related problems Reduce spread of blood-borne diseases
Distribution of bleach	Reduce risk of infection if needle sharing occurs
Supervised injection sites	Reduce deaths due to overdose Reduce sharing of needles and associated problems Reduce public exposure to self-injection Access to counselling and other health/social services
Drop-in centres Shelters	Provide food and/or shelter Improve self-care and access to services Reduce public exposure to self-injection Provide counselling
Outreach Professional Peer	Provide food/blankets/condoms Intervene in emergency situations Dispense needles /bleach/methadone
Low-threshold methadone	Reduce need for drugs by injection Reduce use of illegal drugs Stabilization, improved health and social integration
High-threshold methadone	Reduce/eliminate need for drugs by injection Reduce use of illegal drugs Stabilization, improved health and social integration
Prescription of other non-injectable or injectable maintenance drugs LAAM, buprenorphine, codeine, heroin	Reduce/eliminate need for drugs by injection Reduce use of illegal drugs Improvements in other life areas
Prescription of preferred drugs for self injection Opiates, amphetamines, cocaine	Reduce/eliminate use of illegal drugs Improvements in other life areas
Drug-use tolerance zones	Geographical containment of drug use

The literature on harm reduction programs also makes frequent reference to low-threshold services in the context of providing methadone maintenance treatment. Low threshold is generally understood to describe services or programs that are easily accessible to clients and have policies and practices in place that encourage rather than deter client use of the services, e.g., user-friendly opening hours, services provided where clients spend time, tolerance of drug use, etc. Low-threshold methadone treatment usually refers to client-centred programs that do not discharge clients who use other drugs while on methadone, provide greater opportunities for clients to get take-home doses of methadone, and have fewer mandatory requirements for regular urine testing or counselling.

Currently, most national drug strategies, as well as strategies at other levels of government, incorporate a balance of prevention, treatment, harm reduction and law enforcement to address the harms caused by drug use. In particular, harm reduction policies and programs play a central role in addressing injection drug use related to HIV/AIDS and hepatitis C. The cornerstone of support and treatment programs for injection drug users is methadone maintenance and needle exchange. However, some countries appear to have had greater success than others in establishing and sustaining effective harm reduction policies and programs. This is widely believed to be the case in the countries considered in this report: the United Kingdom, the Netherlands, Germany, Switzerland and Australia. This project sought, in part, to validate this perception of other countries; however, the principal objective was to learn how different contextual factors (social and political) have supported or impeded the development and effectiveness of harm reduction initiatives. The goal was to identify options for increasing the use and effectiveness of harm reduction initiatives in Canada.

Objectives

This project aimed to examine (1) the policy contexts in which harm reduction policies and programs are developed and implemented in different countries, (2) the current status of specific harm reduction initiatives in these countries, and (3) the contextual factors contributing to, or limiting, the success of harm reduction initiatives in these countries. Countries considered were Canada, the United Kingdom, the Netherlands, Germany, Switzerland and Australia. The ultimate goal was to identify options to enhance Canada's responses to drug injection drug use in relation to HIV/AIDS and HCV.

Methodology

The project involved a review of key published and unpublished documents concerning programs and practices in Canada and the five other countries (Australia, Germany, Switzerland, the Netherlands and the United Kingdom). In addition, key informants in Canada and the five other countries were interviewed by telephone or e-mail. Contacts were selected through reviews of key national documents and published research, as well as from recommendations of government officials in each country whose names were provided by Canada's Drug Strategy Division of Health Canada. Those contacted are listed in appendix B.

Injection drug use and use-related HIV/HCV in Canada and other countries

It is very difficult to obtain accurate information on rates and patterns of injection drug use and related problems. (Miller, 1998). The illegal nature of injection drug use and its negative image make it difficult to determine the characteristics of people who inject drugs and their behaviour. People who inject drugs are under-represented in population surveys, and many have unstable lifestyles that revolve around drug use and marginalize them from mainstream society. Most estimates of injection drug use in the total population rely on relatively accessible data from treatment programs, needle exchange and methadone programs, and arrest reports. Estimates of the prevalence and incidence of HIV/AIDS and other infections in populations of injection drug users are mainly based on studies involving voluntary testing of drug users in treatment and those using needle-exchanges.

For Canada and the other countries considered in this report, estimates of the rate of injection or problem[1] drug use per 1,000 members of the population aged 15 to 54 are given in Table 2. This shows Canada as having rates of injection drug use within the ranges for other countries and lower than high-end estimates for the U.K., Switzerland and Australia. Further information on injection drug use rates and trends is given in the sections on specific countries.

Tables 3 and 4 summarize data on recent rates and trends in HIV and hepatitis C infections among injection drug users in Canada and other countries. Table 3 suggests that, except for Canada, the countries considered have managed to contain or reduce the spread of HIV infection among injection drug users. Although there may be many reasons for this, there is good reason to believe that it reflects the implementation of harm reduction policies and programs that increase access to methadone and that reduce the sharing of needles and syringes through needle exchanges and user education (Fischer, Rehm and Blitz-Miller, 2000).

The evidence for success in the containment or reduction in the spread of hepatitis C (Table 4) is less clear. Rates of hepatitis C infection are very high (>70%) in Canada, the Netherlands and Germany, between 50% and 70% in Australia and somewhat lower in the U.K (63%). In Switzerland, and Australia, rates of Hepatitis C are declining.

Table 2
Rates of injection/problem drug use in Canada and other countries

Country	Rate of injection/problem drug use per 1,000 population aged 15-54[2]
Canada	2.5-4.6[3]
Netherlands	2.8-2.7
United Kingdom	2.3-8.9
Switzerland	6.2[4]
Germany	1.4-3.0
Australia	6.9[5]

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1 Estimates for European countries are taken from the year 2000 annual report of the European Monitoring Centre on Drugs and Drug Addiction. This gives rates for problem drug users defined as "intravenous or long-duration/regular use of opiates, cocaine and/or amphetamines".

2 See footnote 1 on page 7.

3 Computed from figures include din Fischer, Rehm and Blitz-Miller (2000).

4 Computed from number provided by the Swiss Federal Office of Public Health.

5 Problem drug users (Hall, et al. 2000).

Table 3
Prevalence of HIV among injection drug users in Canada and other countries

Country	Prevalence of HIV
Canada[6]	**Montreal** 4%-5% in 1988/89 19% in 1994/95 16-20% in 1998/99 **Toronto** 4%-5% in 1988/99 8% in 1994/95 10% in 1998/99 **Vancouver** 1%-3% in 1988/89 6% in 1994/95 23%-30% in 1998/99
Netherlands [5]	**Amsterdam** 33% in 1986 26% in 1994/95 26% in 1998/99
United Kingdom	**Edinburgh**[4] 50% in 1985 20% in 1995 **Dundee**[4] 40% in 1995 **London**[4] 7% in 1995 **Outside London**[4] 1% in 1995 **Glasgow**[3] 5%-6% in 1985 1%-2% in 1990/92 **Major urban**[6] 3%-4% in 1997
Switzerland	30% in 1986[12] 9% in 1991 6% in 1995
Germany	**Hamburg** 5% in 1995[7] **Berlin** 3.9-20.7% in 1995[8] **Frankfurt** 14% in 1999[9]
Australia	0.6%-3% in 2000[10]

6 Fischer et al. (2000).

Table 4
Prevalence of Hep-B/Hep-C among injection drug users in Canada and other countries

Country	Prevalence of Hep B/Hep C
Canada	80%[11]
Netherlands	80%[12]
United Kingdom	Hep-B 40%; Hep-C 60% in 1995[13]
Switzerland	Hep-C 92% in 1988; 29.8% in 1993 Hep-B 80.5% in 1988; 20.1% in 1993[14]
Germany	70%-90% [15]
Australia	50%-70% [16]

7 Fischer et al. (1995)
8 Stark et al. (1995)
9 MacPherson (1999)
10 Alcohol and Other Drugs Council of Australia, 2000
11 Leonard , Vavarro and Pelude, 2000
12 EMCDDA, 2000
13 Stimson, personal communication
14 Riley (1993)
15 Gerlach, 2000
16 Alcohol and Other Drugs Council of Australia, 2000

Harm reduction in Canada

The latest version of the Federal/Provincial/Territorial report (2001) provides an excellent summary of harm reduction and related initiatives concerning injection drug use in Canada. What follows is intentionally a brief overview that draws on the FPT and other reports and on information provided by key informants.

Overview

Canada has had needle exchange services since 1987, but the is a general consensus that more needs to be done to increase coverage especially in rural areas. Methadone maintenance treatment has increased significantly in the past few years, but the need still far exceeds the supply. Injection drug use is a major cause for concern in large cities across Canada such as Vancouver, Toronto, Ottawa and Montreal. The HIV/AIDS program of Health Canada reports a public health crisis concerning HIV/AIDS and other infections, such as hepatitis C, among injection drug users in Canada.

There is, however, a momentum to address injection drug use across Canada. The serious harms associated with injection drug use have been identified as a priority issue in Canada by various federal and provincial/territorial committees addressing related issues, including substance abuse, HIV/AIDS, infectious hepatitis, correctional services, Aboriginal issues, and enforcement and justice issues. It has been recognized as a key issue within Canada's Drug Strategy, the Canadian Strategy on HIV/AIDS and the Hepatitis C Prevention, Support and Research Program and by the Advisory Committee on Population Health. All three strategies highlight the need for enhanced harm reduction programming to address the concerns related to injection drug use. Proposals for a scientific trial of heroin prescription, supervised injection sites, and needle exchange in prisons are moving up the political agenda.

The policy context for harm reduction

Canada's Drug Strategy (CDS) has the stated aim of reducing the harm associated with alcohol and other drugs to individuals, families, and communities. The CDS endorses needle exchange, methadone maintenance, abstinence-oriented treatments such as therapeutic communities, and the enforcement of laws pertaing to the use of illegal drugs. Thus, harm reduction is used in a broad sense to refer to any policy or program that aims to reduce drug-related harm (Single, 2001). This contrasts with a more narrow use of the term "harm reduction" to refer to policies and programs that give priority to the *reduction* of high-risk drug use and related behaviours among current drug users.

The strategy reflects a balance between reducing the supply of drugs and reducing the demand for drugs. It involves a variety of partnerships among 14 federal departments, provincial and territorial governments, addictions agencies, non-governmental organizations, professional associations, law enforcement agencies, the private sector, and community groups.

The Office of Canada's Drug Strategy in Health Canada is the focal point within the federal government for harm reduction, prevention, and treatment and rehabilitation initiatives concerning alcohol and other drugs. The Office works collaboratively with other federal departments and provincial and territorial governments, and provides national leadership and coordination on substance abuse issues, conducts research into the risk factors and root causes of substance abuse, synthesizes and disseminates leading-edge information and best practices to key partners, and collaborates with multilateral organizations to address the global drug problem. Major partners in Health Canada for whom injection drug use is a significant health concern include the HIV/AIDS Policy, Coordination and Programs Division and the Hepatitis C Prevention, Support and Research Program.

There have been no funds for new programs under Canada's Drug Strategy since 1997. Cutbacks in other areas have severely limited new initiatives and have had negative effects on established programs. However, the federal government has announced plans for drug strategy that many hope that this will make more funds available and have clearer goals and priorities than the current strategy.

Recently, the Advisory Committee on Population Health (ACPH), and four federal, provincial and territorial (FPT) committees representing substance abuse, AIDS, corrections and justice, prepared a strategy document on reducing the harm associated with injection drug use. The role of the ACPH is to advise the Conference of Deputy Ministers of Health on national and inter-provincial strategies that are required to improve the health of Canadians and provide a more integrated approach to health. The report stresses

> *…(t)he misuse of injection drugs is a health and social issue that has and will continue to have significant consequences for individuals, families and communities in Canada. Failure to act now will result in escalating health, social and economic impacts. It is time for all jurisdictions and stakeholders to work together to renew their commitment to reducing the harms associated with injection drug use. (p. 8)*

The proposed framework for action represents an extraordinary level of consensus among a broad range of stakeholders and calls for a number of priority actions in the areas of prevention and outreach treatment and rehabilitation research, surveillance and knowledge dissemination; and national leadership and coordination. Among the many recommendations, those most germane to the present report include:

- Leadership and coordination to establish an inter-sectoral, multi-level dialogue regarding injection drug use.

- Work with law enforcement, justice, all levels of government, community groups and others to enhance the implementation, accessibility and effectiveness of needle exchange programs and reduce the barriers in all settings in Canada, including the consideration of pilot projects in correctional facilities.

- Support for outreach and networking initiatives at all levels to foster and increase harm reduction initiatives, increase access to effective health, social and treatment and rehabilitation services, and enhance social integration and reintegration (e.g., prisoners returning to their communities upon release from a correctional facility).

- The involvement of drug users and drug user networks in reducing the harm associated with injection drug use.

- Addressing barriers to effective substance misuse treatment and rehabilitation programs, including methadone maintenance treatment, and making these programs more available in all settings, including correctional facilities.

- Support, in principle, for clinical trials to assess the treatment effectiveness of prescribing heroin, LAAM, buprenorphine, and other drugs in the treatment of people who inject drugs.

- The establishment of a task group representing (at a minimum) law enforcement, correctional services, justice, health and social services, addiction and community perspectives to study the feasibility of establishing a scientific medical research project regarding a supervised injection site in Canada.

- Improved surveillance of the injection drug use situation and its consequences in Canada through data collection, targeted studies, and research to assess causes, co-factors, and effectiveness of interventions.

A Task Group on the feasibility of a medical research project on supervised injection sites has recently been established.

British Columbia has taken a leading role in responding to injection drug use at the provincial level. A recently released discussion report, “A Framework for Action: A Four-Pillar Approach to Drug Problems in Vancouver”, contains an urgent appeal for the development and implementation of a coordinated, comprehensive framework for action to address the problem of substance misuse in the city of Vancouver. The framework seeks to balance public order and public health and calls for a strong, comprehensive drug strategy that incorporates four pillars: prevention, treatment,

enforcement and harm reduction. It is a framework that ensures a continuum of care for those suffering from addiction to substances and support for the communities affected by their drug use. The approach responds to those who need treatment for addiction, while clearly stressing that public disorder, including the open drug scene, must be stopped. "In short," says the report, "addiction needs treatment and criminal behaviour needs enforcement."

The framework, however, is not without opposition. There are those who fundamentally resist the expansion of harm reduction measures, including some members of the enforcement community and city council. Endorsement by all levels of enforcement, as well as the federal and provincial government, will be necessary for the framework to reach fruition. There is, however, a general feeling that support is strong.

Funding for harm reduction

Funds for new programs under Canada's Drug Strategy have been limited. Most alcohol and other drug treatment and rehabilitation programs and services are funded directly by provincial and territorial governments, and indirectly by the federal government through transfer payments. The federal government also provides direct funding for addiction treatment and rehabilitation services for some specific groups, including Aboriginal people living on reserves, members of the RCMP and the armed forces, and people in the federal corrections system. With the exception of Quebec, there are few specialized private programs that require clients to pay for treatment.

The current status of specific harm reduction initiatives

Needle and syringe distribution and exchange

Syringe exchanges were first established in Canada in 1987, with the first official exchange opening in Vancouver in March 1989. Services were initially provided through fixed sites and street outreach, and had limited representation at other agencies providing services to drug users in downtown areas. Over time, mobile vans have been added to services in several cities. Kits containing needles, bleach and condoms are distributed through these agencies. Between 1989 and 1993, the Federal government cost-shared pilot outreach programs in four provinces. At the present time, there are more than 200 syringe exchanges in rural and urban areas in Canada, with more under development. In addition, there are now numerous pharmacies that provide syringe exchange services.

The availability of needle exchange has not led to an increase in drug use. On the contrary, needle exchange programs have reduced rates of needle sharing among clients and have linked many drug users with health services. In Canada, needle exchange programs are an important strategy in a harm

reduction approach to injection drug use, but various reports have indicated the need to increase and expand these programs to increase their availability. This is particularly the case in rural communities and in correctional facilities (Canadian HIV/AIDS Legal Network. Info sheet #8, 1999). Needle exchange programs are not available in any correctional facilities in Canada.

Drug substitution treatment

Methadone

The sale and manufacture of methadone is controlled by the Office of Controlled Substances within Health Canada. To prescribe methadone, physicians must receive an exemption under the Controlled Drugs and Substances Act. There are currently 699 physicians authorized to prescribe methadone. Stakeholders have indicated that this number is too low, especially in smaller communities and rural areas.

Methadone maintenance treatment is available in federal correctional facilities only for inmates who were enrolled in a methadone treatment program prior to incarceration. There are "exceptional circumstances" under which this rule may be set aside, but generally inmates cannot start methadone in correctional facilities. At the provincial level, British Columbia, Saskatchewan, Manitoba, Ontario, Quebec and Nova Scotia offer methadone maintenance treatment programs in prison as a continuation of participation in a community-based methadone maintenance program.

Waiting lists for methadone maintenance continue to be a problem in many communities. In response, the federal government has streamlined the authorization process for physicians. For example, the authorization does not place a limit on the number of patients, and physicians are not required to release information concerning patients to the government. The HIV/AIDS Policy, Coordination and Programs Division of Health Canada provides funding to a low-threshold methadone project in Montreal. Others have recommended further expansion of methadone maintenance treatment to correctional facilities and rural areas. However, attracting physicians to provide methadone prescriptions for opiate dependency is an ongoing challenge.

Other substitute drugs

Buprenorphine is not currently available on the Canadian market. However, physicians can access it through Health Canada's Special Access Program under the Food and Drug Regulations. A North American scientific consortium – the North American Opiate Medication Initiative (NAOMI) – is developing a proposal for a clinical heroin trial. Heroin substitution has been used in some countries with heroin users who are unable to benefit from substitution treatment such as methadone. There is no cocaine substitution treatment available in Canada.

Drug user education and outreach

Education and outreach programs, with a harm reduction focus aimed at users of injection drugs, are readily available throughout Canada, and Health Canada recently commissioned a report on ways of improving these programs (Wiebe, 2000). These programs are most often provided through needle exchange programs, and drug user groups and networks. Involving those who are former or current users of injection drugs in outreach efforts and the provision of services have proved to be effective in expanding the segment of the population reached. Formal groups exist in some major cities in Canada. For instance, the Vancouver Area Network of Drug Users (VANDU) is a group of active and former injection drug users who work to improve the lives of people who use illicit drugs.

User groups

VANDU is the most active of the support and advocacy groups of users and former users that are currently developing in several cities. VANDU holds bi-monthly member meetings with occasional guest speakers, and includes a methadone users group and a program to engage members as volunteers. Members also speak to other agencies in the community. Since its formation in 1998, membership has grown to over 500 and VANDU now is one of the largest organizations of its kind in the world

VANDU has collaborated with local health professionals and researchers to produce written material on drug use and proposals for new approaches based on harm reduction principles. A proposal for a supervised injection facility was recently presented to a federal task force on this issue (Kerr, 2000).

Harm reduction within the justice system

Injection drug use, needle sharing, and the transmission of HIV and hepatitis C are prevalent in correctional facilities. In 1994, the Expert Committee on AIDS and Prisons released a report that took a strong harm reduction approach to drug use in prisons. Among its numerous recommendations, the report called for the availability of household bleach, and access to methadone and sterile injection equipment in correctional facilities. The Correctional Service of Canada supported many of the recommendations, but access to methadone maintenance and sterile injecting equipment remains an unresolved issue. Some of the barriers affecting progress toward harm reduction initiatives within correctional facilities are resistance by prison administration and staff, safety concerns, perceptions that such strategies would be sending a contradictory message (that is, if the prison tolerates the use of drugs in prisons, then they are not taking the law seriously), and beliefs that injection drug use will increase.

Although they do not have clearly stated harm reduction objectives, drug treatment courts offer an alternative to incarceration for minor drug crimes. The first drug treatment court was established in

Toronto on December 1, 1998, as a pilot project. The target group is non-violent offenders who are addicted to heroin or cocaine. Participation is voluntary. On completion of the program, participants receive a non-custodial sentence, or may have their charges withdrawn. The Toronto project has a comprehensive evaluation component attached. The results are still too preliminary to draw any conclusions about the effectiveness of the program.

Factors influencing harm reduction policies and practices

Trends in injection drug use

It is estimated that Canada has between 75,000 and 125,000 people who inject drugs such as heroin, cocaine or amphetamines (Single, 2000). In addition, 29.4% of young steroid users, or approximately 25,000 Canadians, report injection use (CCDFS, 1993).

Approximately 30,000 people who inject drugs reside in Toronto (Remis et al., 1997), and 15,000 in Vancouver (Millar, 1998). In Montreal, the number of people who inject cocaine is estimated between 6,000 and 25,000 and for heroin between 5,000 and 15,000 (Roy and Cloutier, 1994). Injection drug use has also been report in many other towns and cities and also in rural communities.

The proportion of injection drug users who report sharing needles varies considerably, but is exceedingly high in many communities: 76% in Montreal (Bruneau et al., 1997), 69% in Vancouver (Strathdee et al., 1997), 64% in a semi-rural Nova Scotia community (Stratton et al., 1997), 54% in Quebec City (Bélanger et al., 1996) and Calgary (Elnitsky and Abernathy, 1993), 46% in Toronto (Myers et al., 1995) and 37% in Hamilton-Wentworth (DeVillaer and Smyth, 1994).

Trends in the rates of HIV and other infections

The proportion of reported adult HIV-positive cases attributed to IDU has increased from 9.1% prior to 1995 to 29.9% in 1995, 34.3% in 1996, 33.6% in 1997 and 29.2% in 1998 (LCDC, 1999). In Canada, IDU is now the main route of HIV transmission and the proportion of new cases attributable to IDU is increasing. Surveillance data for 1999 indicate that almost half (46.8%) of all new HIV infections are among IDUs. In Vancouver, HIV prevalence among IDUs increased from 4% to 30% between 1992 and 1998, in Montreal from 5% before 1988 to 19.5% in 1997, and in Ottawa from 10.3% in 1992-93 to 21% in 1997.

In a recent draft report from the Canadian Strategy on HIV/AIDS Annual Direction-Setting Meeting, it was noted that since 1996, there have been fewer infections among injection drug users. The report cautions, however, that national aggregate information may be misleading, since it does

not reflect local and regional trends; that is, although rates of HIV infection among injection drug users has been declining in large Canadian cities (Vancouver, Toronto, Montreal), there may not be a decline in small or mid-size Canadian cities.

It is estimated that 70% of new HCV infections in Canada each year are related to sharing needles, syringes, swabs, filters, spoons, tourniquets and water associated with injection drug use. Worldwide estimates of HCV infection range from 50% to 100% among drug-injecting populations. For this reason, people who inject drugs are a key group, and central to the persistence of HCV in Canada. HCV spreads quickly. Consistently, research shows high rates of HCV among short-term users of injection drugs who share needles, syringes, swabs, filters, spoons, tourniquets and water.

The most commonly injected drugs are cocaine and heroin. This is a cause for concern in itself, as cocaine use involves particular risk. People who inject cocaine may do so as often as 20 times a day, increasing the problems associated with sharing contaminated needles (McAmmond and Associates, 1997). Information obtained through detailed interviews with 610 individuals who inject drugs in Winnipeg, Manitoba (Elliot and Blanchard, 1998) found that cocaine was the predominant drug injected, and was associated with binge use and frequent injection. Talwin, Ritalin, amphetamines and steroids have also been used intravenously in some areas of Canada at various times (Single, 2000).

There are various injection practices that increase the risk of transmission of blood-borne diseases such as HIV or HCV. For example, in a practice called “front-loading or back-loading”, the drug is mixed in one syringe, and then the mixture is divided by squirting some of the solution into one or more syringes. Although the needle is not shared, HCV can be transmitted if the syringe used for mixing has been previously contaminated. Limited research suggests that people with a history of intranasal or inhaled drug use may be at risk for HCV. Because users of cocaine often have nasal erosions and ulcers, sharing of cocaine straws can transmit HCV. Dehydrated and cracked lips, another common side effect of injection drug use, make pipe sharing a potential risk.

High-risk drug behaviours occur more frequently in certain groups due to complex social, economic and cultural factors, including people with a history of child abuse, those with mental illnesses, the homeless, street youth, and inmates in correctional facilities. The risks for women who inject drugs are particularly high because they are often involved in the sex trade and have histories of child sexual abuse. Women also face barriers to treatment associated with childcare. Injection drug use and its health and social consequences have become an increasingly salient issues for Aboriginal peoples in Canada in both community and urban settings.

- IDU accounts for 19% of AIDS cases in women compared with 3.9% in men.
- The lifestyles of young people living on the streets commonly involves drug use and needle sharing. One study conducted in Montreal in 1995/96 found that 12.6% were infected with HCV.

- Aboriginal peoples are over-represented among inner city IDUs and more cases of AIDS are attributable to IDU in this group (19% of men and 50% of women) than in the non-Aboriginal population.

- High HIV prevalence rates (25-35%) among injection drug users in Vancouver have been linked to poverty in the downtown eastside area of the city.

In prisons, equipment sharing is common because clean needles and syringes are not available. Estimates of HIV prevalence among prisoners vary from 1-4% in men and 1-10% in women, with infection strongly associated with a history of injection drug use. Prisoners have relatively high rates of HCV infection (28-40%) and injection drug use with shared needles is the main risk factor underlying their higher risk.

These trends, and an increasing recognition of the cost of illicit drug use (Single, Robson, Rehm and Xie, 1998) and of untreated opiate drug use (Wall et al., 2000), have contributed to a clear recognition of the need to address the harms associated with injection drug use in Canada.

Availability of general health and social services

Access to health and social service varies among urban and rural communities, but is generally good, except for people living in remote First Nation's communities. However, people with multiple problems or diagnoses often fall between the gaps. Injection drug users tend not to use health services except in emergencies. Some walk-in and outreach health services have been established in areas with large numbers of injection drug users. Housing and employment are significant issues for injection drug users in some communities. Social and health care service for drug users in Vancouver have been described as woefully inadequate and diminishing (Schechter et al., 1999). According to the Canadian HIV/AIDS Legal Network, injection drug users who are HIV-positive are also reported as being less likely than others to receive anti-retroviral therapy. The Network also reports that physicians do not receive adequate training to take care of drug users.

Attitudes of service providers

Interviews with key informants suggested that professional support for the overall direction and specific recommendations of the recent FPT report is quite high. However, there is also evidence that specialized service providers have mixed views about some harm reduction initiatives.

When asked in a questionnaire about staff attitudes to harm reduction, key informants in 42 programs for injection drug users indicated that most staff would support supervised injection sites, heroin prescription trials, or the use of LAAM or buprenorphine (Ogborne and Fischer, in preparation). However, in some cases, staff views were reported as mixed or unknown. Initiatives

most likely to be reported as being opposed – but only by a minority in each case – were heroin prescription trials and supervised injection sites.

In a mailed survey involving staff of specialized addiction treatment services in Ontario (Ogborne and Birchmore-Timney, 1998), 90% of respondents indicated support for needle exchange programs, 70% indicated that they would be willing to set short-term, non-abstinence goals for clients with alcohol or drug problems, 42% indicated a positive attitude to the use of methadone, and 28% indicated support for the provision of heroin prescription to heroin addicts. Support for harm reduction strategies was found to be positively related to belief in the effectiveness of pharmacological and cognitive-behavioural interventions and working in an outpatient treatment service, and negatively related to belief in interventions based on the disease model.

Attitudes of police

Police attitudes vary among communities and front-line police officers do not always share the view of their superiors. However, at the highest levels, Canadian police have long supported efforts to replace punitive approaches to injection drug dependence with treatment and rehabilitation (Lesser, 2001). They have also supported the National AIDS strategy for community-based needle exchange programs that include outreach, education, counselling and testing. Police also see themselves as key stakeholders in addressing issues related to the spread of HCV and other diseases through injection drug use.

Various resolutions made by the Canadian Association of Chiefs of Police have urged governments to take a strong leadership role in the development of preventative education programs, the provision of resources for demand reduction, and the maintenance of a balanced drug strategy.

At the community level, police have established relationships with needle exchange programs, and with groups and agencies that promote other harm reduction initiatives. In Vancouver, the local police service made a film about injection drug use that has done much to put a human face on the issue and to stimulate public debate about the need for new approaches.

Public opinion and the media

There have been no formal studies of public opinion of injection drug use, but it is clear that the subject can generate strong reactions among lay people and professionals. This adds to the stigma associated with injection drug use, and limits opportunities for innovation and development of effective responses to the issue. Negative attitudes to injection drug users have contributed to a lack of support at the provincial and federal political level. However, some interest in medical trials of supervised injection sites appears to be developing among provincial health ministers. In some cities, mayors and other city politicians have also become advocates for harm reduction approaches to injection drug use.

In Vancouver, the "four pillars" proposal has generated a good deal of public and media attention and, in general, the reception has been positive and the approach has received support (Report in *The Province*, April 25, 2001). However, there has been less enthusiasm for supervised injection sites. The Vancouver city council has approved the four-pillar strategy, but provincial or federal support is still needed to implement many of its components, including supervised injection sites (report in *The Province*, May 16, 2001).

Research and evaluation

Canadian researchers have been involved in policy discussions, and significant policy documents and background papers have demonstrated an awareness of the Canadian and international research literature. Policy documents also generally acknowledge the importance of evaluation. Research and evaluation are indicated as priorities in the FPT discussion document.

Research on methadone has influenced the development of policies to make this more available, and local and international research on HIV and Hepatitis C infections among injection drug users has contributed to the support of needle exchange and related initiatives.

Some researchers have, however, been critical of Canada for its slow reaction to research and its failure to adopt some policies and programs that have good research support (e.g., needle exchanges in prisons and supervised injection sites).

Influence of the US and the War on Drugs

Some critics of Canadian drug policy see this as being overly influenced by 'war on drugs' policies in the United States. In regard to injection drug use, US influences are seen as contributing to Canada's original law and order approach and as inhibiting trials involving heroin prescription or the development of supervised injection sites. There is no clear or direct evidence that this is the case but it is possible that, at the highest levels, the US influences Canada's drug policies in many subtle ways.

Other countries have adopted drug policies that are opposed at the highest levels in the US, but Canada may be also be especially vulnerable to US influences due to its close physical proximity and the amount of trade and traffic between the two countries. Canada can, however, still choose to move away from the narrow interpretation of international drug treaties that has been championed by the US. Strategies to counter this narrow interpretation include education of lawyers, judges and policy advocates, and others working in the health and human service fields. (Riley, Teixeira and Hausser, 1999).

Harm reduction in the Netherlands

Overview

The Netherlands has a long history of harm reduction policies and practices. As a result, it has been able to maintain low levels of HIV/AIDS infection compared with some other European countries. Harm reduction in the Netherlands is part of a comprehensive approach to drug use involving both demand and supply reduction, and policies aimed at reducing the nuisance caused by drugs. The aim of Dutch national drug policy is to protect the health of individual users, the people around them and society as a whole; drug problems are viewed as social problems. In terms of harm reduction, the Netherlands has a comprehensive system of methadone treatment, needle exchange services and, more recently, supervised injection sites. As well, user groups, peer support and outreach are well established. In many cases, harm reduction programs are integrated within the larger system of care for people with addiction problems. Other aspects of care such as housing, social services and health care are generally free and easily available. More recently, the Netherlands has been examining the effectiveness of heroin, as well as a number of other substitution drugs, as a treatment option for those with chronic, long-term drug problems who are not responding to methadone treatment. It is also putting into place a range of measures to address drug users with extensive involvement with the criminal justice system.

The policy context for harm reduction

Together with the United Kingdom, the Dutch drug policy has been one of the most widely discussed approaches to addressing drug problems, particularly those related to the spread of HIV and other blood-borne diseases among injection drug users (Boekhout van Solinge, 1999). As Boekhout van Solinge (1999) notes, the Dutch system has won both praise and criticism from its European neighbours and North America.

Examination of drug policy and practices needs to be situated in the context of broader social and health policies in the Netherlands, a densely populated country with a population of 15.8 million and four major urban centres – Amsterdam, the Hague, Utrecht and Rotterdam. Following the end of the Second World War, an emphasis was placed on urban renewal, education and social services. As well, during the 1960s, Dutch society changed from one that was more traditional, conformist, and living in close-knit religious groups to one that is now more free-thinking, individualistic and open-minded (Drugtextfoundation, 1995).

The Netherlands has a well-established social safety net with adequate social benefits, free medical care and generally free legal and social care. Drug treatment is readily available and generally free.

Drug use is viewed as a social problem that cannot be repressed; therefore, strategies must be in place to address harm resulting from drug use (Grund, 1993). Drug policy and practice in the Netherlands is also influenced by a number of other contextual factors. These include the perception of drug use as a normal social problem, the practice of not dealing with social problems through criminal law, a strong emphasis on individual freedom (provided one does not disturb others), and a strong public health tradition (Boekhout van Solinge, 1999).

The origins of the current Dutch approach to drug problems go back to the reports of two commissions, the Hulsman Commission and the Baan Commission, established in the 1960s to respond to increasing concerns about marijuana use. Both commissions recognized the different risks associated with the use of different substances and they saw the danger of soft drug users being influenced by hard drug users if both are part of a criminalized and marginalized sub-culture. The recommendations of the two commissions were also consistent with official policy in general, which was to restrict the reach of law enforcement, to restrict the use of prison as a punishment and to prevent crime through adequate social policies (Cohen, 1996).

The main aim of drug policy in the Netherlands is to protect the health of individual users, the people around them and society as a whole (Ministry of Health, Welfare and Sport, 1997). The policy provides for a balance of demand reduction and supply reduction. Demand reduction is pursued through active policies of prevention and care, while supply reduction focuses on organized crime. A third aim of the policy is to address drug-related nuisance and the maintenance of public order.

Duncan and Nicholson (1997) identify six principles that have guided the prevention and care aspect of Dutch drug policy since 1977:

- the creation of a multifunctional network of medical and social services at a local and regional level to provide assistance in ways appropriate to the particular drug problem;
- accessibility of services;
- promotion of the social rehabilitation of drug addicts and former addicts;
- greater and more efficient use of non-specialist services, such as primary care physicians and youth welfare centres;
- coordination of aid facilities; and
- integration of drug education into a general health education campaign.

The Opium Act is the main piece of legislation concerning illegal drugs. It was revised in 1976 to create a distinction between Schedule I "hard" drugs such as heroin, cocaine and LSD, and Schedule II "soft" drugs such as marijuana and hashish. Though possession, trafficking and production – but not use – of all Schedule I and II drugs is illegal, the Public Prosecution Service guidelines for investigation put the highest priority on prosecution of international trafficking in drugs and the lowest on prosecuting possession of small amounts of drugs for personal use. Thus, someone found in possession of less than 0.5 grams of hard drugs will generally not be prosecuted, though the drugs will be confiscated and a referral may be made to a care agency (Ministry of Health, Welfare and Sport, 1997; Trimbos Institute, 2000; Boekhout van Solinge 1999).

This approach is also consistent with the Dutch approach to other potentially contentious social issues involving activities that may be officially prohibited, but in practice are not subject to enforcement by authorities (Drugtext, 1995).

The Ministry of Health, Welfare and Sport is responsible for overall coordination of the drug policy, as well as for prevention and care services; the Ministry of Justice is responsible for matters related to criminal law and the Ministry of the Interior for issues related to local government and the police (Ministry of Health, Welfare and Sport, 1997). The Ministry of Health, Welfare and Sport is also responsible for the Netherlands AIDS Strategy.

A major intent of Dutch drug policy is to separate out the "markets" for soft and hard drugs; a strategy which authorities believe will reduce the possibility of people progressing to the use of hard drugs. One unique aspect of drug policy in the Netherlands is "coffee shops" where small quantities of cannabis (but not other drugs) can be sold and consumed.

There are about 1,200 coffee shops in the Netherlands (Boekhout van Solinge 1999). Coffee shops allow consumption of soft drugs in a location where other illegal drugs are not sold and therefore contribute to the "market separation" of soft drug users from hard drug users. Though, the sale of cannabis is technically an offence, the coffee shop owner or operator will only be prosecuted if there is a contravention of the guidelines governing the operation of the shops. Coffee shops are restricted under the Opium Act from advertising, allowing hard drugs, admitting or selling to those under 18 years of age, and causing a nuisance (Ministry of Health, Welfare and Sport, 1997). The availability of coffee shops is dependent on the coffee shop policy in any particular municipality, which may chose to allow them, allow them with certain restrictions, or not allow them at all (Trimbos Institute, 2000d). One key informant said that those licensed to sell cannabis in coffee shops are taxed on their sales and a portion of the tax revenue is designated for drug prevention activities.

A 1995 review, *Drugs Policy in the Netherlands: Continuity and Change* reduced the amount of cannabis that could be purchased in coffee shops from 30 grams down to 5 grams, but increased the amount that coffee shops could stock from 30 grams to 500 grams. (Boekhout van Solinge, 1999). Some perceived this as a response to criticism from other European Union (EU) countries who viewed

Dutch drug policy as too liberal. This review also led to a 10-15% reduction in the number of coffee shops (Ministry of Health, Welfare and Sport, 1999).

The low priority given to prosecuting people for possession of small amounts of an illegal drug has apparently resulted in heroin users being more visible in frequented public areas such as shopping malls, and has contributed to their negative image among Dutch youth (Boekhout van Solinge, 1999).

Addressing the nuisance caused by drugs is another plank of the Dutch drug policy. A national policy was introduced in 1993 to tackle nuisance problems related to selling or use of drugs with the formation of an Inter-Ministerial Steering Committee for the Reduction of Nuisance. As part of this initiative, the national government funded municipalities to tackle the nuisance problems; at the local level, close collaboration now occurs among police, health authorities and addiction care agencies in addressing this issue (Trimbos Institute, 2000c). One aspect of the policy is to increase the availability of treatment for hard drug addicts and the use of what the Dutch term the "compulsion and dissuasion measures" that allow diversion to treatment for offenders with drug problems (Trimbos, 2000d).

In 1998, the Dutch government issued a discussion document regarding its drug policy that evaluated the policy over the last 20 years and mapped out approaches for the future (Barnard, 1998). In terms of the results of the policy, Barnard (1998) makes the following points:

- the harm reduction policy has been successful in comparison with many other countries as a result of the high standard of care and prevention, including low-threshold methadone, social and medical assistance for drug users, and large scale free needle exchange;
- the number of addicts in the Netherlands is relatively low compared with other countries, implying that harm reduction measures do not increase drug use;
- the population of addicts is stable and rapidly ageing, suggesting low rates of new users – heroin is not fashionable among youth;
- the mortality rate among drug users is low due to low-threshold methadone programs that provide protection against overdose;
- the health damage caused by hard drugs has been limited, with low rates of HIV and low rates of AIDS among injection drug users; rates of HIV among injection drug users have decreased since 1986;
- reported lifetime and last month use of cannabis has increased recently, but this is also true of other countries in Europe and in North America, and rates are lower than in the US.

Despite the fact that harm reduction is still in a healthy state in the Netherlands, a number of recent articles about the Dutch approach (e.g., Garretsen et al., 1996; Ossebaard and van de Wijngaart, 1998), as well as several key informants, raised concerns about the increasing emphasis on reducing public nuisance and the use of the criminal justice system to address drug problems. One aspect of this is a criminal justice measure that requires drug users with a history of repeat criminal offences to undergo mandatory treatment. In this same context, there has been discussion of changes to the Special Admission to Psychiatric Hospital Act to allow for mandatory treatment for drug users in general. However, this option may run into constitutional difficulties. One key informant said that the desire for a more punitive approach was hard to understand since the Netherlands was not currently at odds with its European neighbours regarding harm reduction approaches as had been true in the past.

Like other countries, the Netherlands has high rates of HCV among its injection drug-using population, but one key informant noted that there hasn't been a national response to this issue, although organizations such as the Trimbos Institute are trying to raise awareness and support prevention activities to address HCV.

Funding for harm reduction

Although it is not possible to determine specific funding for harm reduction initiatives, information on funding for a variety of drug policy initiatives can be found in *Drugs Policy in the Netherlands: Progress Report, September1997-September 1999* (Ministry of Health, Welfare and Sport, 1999). A review of the management of the addiction care system, which called for better co-ordination and collaboration among the various levels of government and addiction care agencies, noted the existence of national government funding support for addiction policy and for 24-hour shelter facilities for people who cause a nuisance. The national government has also provided funding to municipalities for nuisance projects and for facilities for drug users with a history of offences (Ministry of Health, Welfare and Sport, 1999). According to Kuipers (2000), the overall addictions budget for the Ministry of Health, Welfare and Sport was EUR 30 million in 1997. Municipalities provide funding for Institutions for Ambulatory Addictions Treatment and Care (IAVs).

Also, according to the *Drug Policy in the Netherlands* progress report (Ministry of Health, Welfare and Sport, 1999), methadone funding "has been based on a temporary funding scheme set up by the National Health Insurance Council". This has been extended until 2001 while consideration of overall consideration of physician reimbursement for addiction care is considered.

The current status of specific harm reduction initiatives

The current focus of care for addicts in the Netherlands is on developing care that is more "evidence-based", provides greater continuity of care, and is more coordinated (Ministry of Health, Welfare and Sport (1999).

In the Netherlands, specialized addiction care is part of the mental health sector and includes a range of medical and social facilities. Outpatient care is provided through 16 y Consultation Bureaus for Alcohol and Drugs (CADS) with 130 branches across the country (Kuipers, 2000). They are financed by local councils and on a contractual basis by the Netherlands Probation and After Care Foundation. These provide a range of interventions, including pharmacotherapy and counselling. Kuipers (2000) notes that services previously provided by low-threshold centres such as methadone, street work, shelter, and crisis intervention are now merged with the IAVs. In addition to the IAVs, there are 19 inpatient treatment centres, often part of psychiatric hospitals. One key informant expressed concern that with the increased integration of various aspects of care into larger organizational groupings, and the emphasis on accountability, interventions such as outreach may be reduced because its activities and results are less easily measurable.

Needle and syringe distribution and exchange

Services are generally low threshold and clean syringes/needles, as well as methadone, may be dispensed through a variety of locations such as the IAVs, municipal health services, and addiction agencies. As well, needles can be purchased from pharmacies or dispensed through machines. One hundred and thirty needle/syringe exchange programs are operating in 60 different Dutch cities (Trimbos Institute, 2000).

In Amsterdam, formal needle exchange programs were established in 1984, beginning with a small-scale project in which the municipal health service distributed clean needles and collected dirty ones through the Junky Union, a user group. Two years later, the municipal health service decided to make the exchange of needles/syringes available through the methadone bus, and by 1988, Buning (1991) reports that 720,000 needles and syringes were exchanged through 11 different low-threshold locations. At that time, Buning estimates that Amsterdam had about 5,000 to 7,000 people with hard drug problems of whom about 40% injected drugs.

Buning (1991), commenting on Amsterdam's experiences in addressing HIV/AIDS, concluded that needle/syringe exchange programs have been a valuable in curbing the further spread of HIV among Amsterdam's injection drug users. However, Buning cautions that it is still an open question as to whether one could get similar outcomes in countries where law enforcement measures have led to marginalization and criminalization of drug users since approaches such as those in Amsterdam are embedded in a particular social/political climate. One key informant also noted that needle/syringe

exchange in Amsterdam began too late to curb the initial steep rise in HIV rates that occurred among injection drug users.

A recent report from the Amsterdam Municipal Health Services (van Brussel and Buster, 1999) reports that use of the city's needle exchange programs has declined over the last decade. They attribute this decline to a number of factors, including a decrease in the number of foreign addicts in Amsterdam, AIDS-related deaths among those injection drug users who became infected in the early 1980s, older addicts switching to oral use of heroin because they are unable to inject anymore, and the onset of crack cocaine use in Amsterdam.

Drug substitution treatments

Methadone

Dependence on heroin is the criterion for admission to methadone treatment and in most methadone programs use of other drugs, alcohol or psychoactive drugs is allowed if used in moderation. The average dosage of methadone is 39.8mg a day, but a number of programs, such as those in Amsterdam, have increased the dosage to 60mg a day. Methadone is generally dispensed in pill or liquid form, but may also be used intravenously (Trimbos Institute, 2000; van Brussel and Buster, 1999). The Ministry of Health, Welfare and Sport 1997-99 progress report (Ministry of Health, Welfare and Sport, 1999) notes that based on US study results of high doses of methadone (60mg/day), research is underway in the Netherlands regarding increased doses of methadone. Interim results have been positive in terms of improved social and psychiatric status, decline in crime and decrease in additional (drug) use.

Amsterdam, as the most cosmopolitan of Dutch cities with the highest rates of HIV infection related to injection drug use, has been in the forefront of Dutch policy and practice regarding injection drug use. As early as the late 1970s and early 1980s (before the first cases of AIDS were diagnosed in the Netherlands), the Methadone Dispensing Circuit (MDC) was initiated in Amsterdam in order to cope with heroin use in the city (Plomp et al, 1996, Drugtext 1995). Plomp et al (1996) reports that the MDC was established with agreement from most of the general practitioners, local politicians and alternative relief institutions regarding a low-threshold approach. Methadone is dispensed by the municipal health service through outpatient clinics and a bus, and by general practitioners (200 of the 400 general practitioners in Amsterdam prescribe methadone). About 40% of methadone prescribing is handled by Amsterdam's general practitioners (van Brussel, 1995). One key informant noted that the role of Amsterdam's general practitioners in the provision of methadone is rare outside of the city where the HIV/AIDS public health crisis occurred. This same key informant indicated that in other parts of the country, specialist clinics can generally provide sufficient services and many general practitioners do not want to be involved in methadone prescribing.

Amsterdam's municipal health service provides initial services of diagnosis and stabilization. Van Brussel (1995) describes this "basic social regulation" as involving the following points: medical insurance, housing, stable income through work or welfare payments, ability to attend appointments, ability to manage weekly provision of methadone, and minimal use of other drugs (van Brussel, 1995, p.356). Their emphasis is also on monitoring the health of injection drug users through regular testing for diseases such as HIV and TB. Amsterdam health authorities are now providing care to a chronic, ageing population of drug users with complex medical/social needs including HIV/AIDS and HCV, tuberculosis or other respiratory system diseases and psychiatric problems.

Clients who are able to achieve a sufficient level of stabilization are referred back to their general practitioner for ongoing methadone maintenance, with the option of referral back to the municipal health service if difficulties should arise (van Brussel, 1995). The municipal health service also has two doctors who provide consultation to their GP colleagues regarding difficult patients. One key informant, who described them as visiting GPs "by motorbike", emphasized the importance of this consultation and support.

The municipal health service in Amsterdam provides a range of services (Buning, 1997, van Brussel and Buster, 1999). These include:

- Outpatient clinics/methadone bus staffed by doctors, nurses, and social workers seeing people who are legally resident in Amsterdam and who cannot be treated by their GP because of the severity of their social/medical problems. Clients come five days a week with take home tablets for the weekend. They can also exchange needles and syringes and receive periodic medical/social checks. This group of clients has also been treated with other substitution drugs such as palfium, or intravenous methadone or intravenous morphine;

- Outreach medical care (e.g., night surgeries) to see people in the sex trade and transient foreign drug users;

- A mobile medical team that provides medical care for homeless addicts in social care centres, visits clients in hospitals and consults with the hospital medical care team, and makes daily visits to police stations. In addition, case coordination is also provided by the municipal health service.

It is interesting to note that in 1998, 92% of the daily dosages of substitution drugs were for oral methadone, 3.9% for palfium, 0.7% morphine, 1.7% intravenous methadone and 1.5% heroin (van Brussel and Buster, 1999).

Langendam et al. (1998) reports that different types of methadone clients use the various sites in Amsterdam, and that higher methadone dosages are dispensed for certain groups such as older drug

users, HIV-positive drug users, and those who have been injecting or using methadone longer. Lower dosages are dispensed to those in prison or at the police station and patients of general practitioners. Van Brussel and Buster (1999) report that the average methadone dosage in 1998 ranged from 48mg for those of Surinam origin to 60mg for those of Netherlands origin.

The van Brussel and Buster (1999) report on opiate addicts in Amsterdam makes several references to care for those individuals who have a co-occurring psychiatric problem and the importance of continuity of care and networking with a range of other services. The report expresses particular concerns about "socio-medical" care within the legal system and that withdrawal from opiates while in prison results in worsening of a psychiatric condition.

The Amsterdam cohort of drug users has been extensively studied to identify factors that contribute to reductions in transmission of HIV/AIDS, drug-related deaths and public order problems (e.g., Fennema et al., 1997; Langendam et al., 1999, 2000; van Ameijden et al., 1992, 1999).

In terms of the coverage of harm reduction services in the Netherlands (the extent to which drug addicts are in contact with some type of assistance), Fischer (2000) indicates that about 50% of injection drug users have used methadone in the past decade and another 20% are estimated to be in another form of treatment. Similarly, the Trimbos Institute (2000) estimates that 70 to 80% of opiate addicts are in contact with some type of assistance or treatment. In 1997, almost 22,000 opiate addicts were registered as clients of an organization involved in treatment and assistance, with close to 10,000 methadone clients being registered with addiction care organizations in 1997 (Trimbos Institute, 2000). A fact sheet issued by the Ministry of Health, Welfare and Sport indicates that of addicts known to the care services, 75% regularly use methadone, compared with 40% 10 years ago (Ministry of Health, Welfare and Sport, undated).

Prescribed heroin

Like Switzerland, the Netherlands has recognized that there is a hard core of drug users receiving methadone maintenance treatment who are unable to achieve the goals of stabilization, harm reduction and social integration. The issue of heroin trials has apparently been under discussion in the Netherlands for 20 years. However, following the Swiss trials, the government gave approval for the trials (Tanis, 1998). The design, preparation and execution of the heroin trials are being carried out by the Central Committee on the Treatment of Heroin Addicts (CCBH). The study will examine physical, psychological and social functioning of the 750 study subjects over a 12-month period. The study design will compare the use of heroin in combination with methadone with the use of methadone alone among inhalers and injectors. The inhaler condition will be divided into three groups: methadone only, heroin in combination with methadone, and methadone for the first six months and heroin in combination with methadone for the subsequent six months. In the injector condition (this will be a smaller group since fewer people inject in the Netherlands), one group will be given methadone only for 12 months and the other group will receive heroin in

combination with methadone for 12 months. As well as pharmacotherapy, the participants will also receive the usual medical care and social counselling (Ministry of Health, Welfare and Sport, undated). Heroin in combination with methadone will be provided seven days a week, three times a day over the study period. To date, Brink et al. (2000) reports that 180 patients have been randomized and no serious medical complications have occurred, and no serious public order or safety problems have arisen. Compliance among study participants is good with 85% of two-monthly assessments having been completed. Final results of the study are expected in fall, 2001 (Vloemans, 1999).

Prior to the initiation of a full-scale trial, there was a pilot study in Amsterdam and Rotterdam with 50 subjects that involved close monitoring of the study subjects for any adverse health or social consequences, as well as of the neighbourhoods in which the study was occurring to ensure there were no public order problems. Neighbourhood representatives were involved in this surveillance (Vloemans, 1999). Following successful completion of this pilot phase, the study was extended to the full six sites of Amsterdam, Rotterdam, The Hague, Utrecht, Grongingen and Heerlen (Vloemans, 1999).

Other substitution drugs

Buprenorphine is also available, but apparently not widely used except with younger drug users (key informant). There have also been some experiments with LAAM, but it is not often used. The Netherlands government is also examining methods of rapid detoxification from opioids. A study is underway that will contrast use of naltrexone for rapid withdrawal under narcosis with naltrexone prescribed over a longer period (five days) and without narcosis. The results will be compared with the usual method of withdrawal using decreasing doses of methadone (Ministry of Health, Welfare and Sport, 1999). The Netherlands is also experimenting with the use of oral palfium and intravenous methadone and morphine (van Brussel and Buster, 1999).

Supervised injection sites

Amsterdam pioneered supervised injection sites (drug consumption rooms) in the 1970s as part of its harm reduction approach to addressing problem drug use. However, these initial attempts were short-lived because they created a nuisance and were closed down. In 1996, the city of Amsterdam again supported the establishment of supervised injection sites, but with restrictions such as professional management, small-scale, the requirement for ID cards, integration with other services and co-operation with the police (de Jong and Weber, 1999). These authors also report on similar experiences in Rotterdam where the first supervised injection sites were closed down despite support from city politicians and the police. However, since 1996, the city of Rotterdam has formally supported such facilities as part of their framework to regulate the illegal drug market.

The establishment of these facilities has had support at the national level from the Minister of Health, Welfare and Sport, as well as from the Inter-Ministerial Steering Committee on the Reduction of Nuisance. It is recognized, however, that this is primarily an issue for local government, which bears primary responsibility for the development, functioning and financing of such sites The issue of supervised injection sites has also been clarified in relation to the Opium Act, with the Ministry of Justice indicting they would be tolerated provided there is agreement at the local level by the mayor, police and public prosecutor (the local triangle committee) (de Jong and Weber, 1999). There are now 16 official injection sites in the Netherlands with some unofficial ones tolerated by the government and law enforcement officials (Dolan et al. 2000).

The 1999 Ministry of Health, Welfare and Sport (MHWS, 1999) progress report on drug policy in the Netherlands notes that in relation to dealing with public order issues, there is a need to involve all concerned parties. In this context, the report cites the need to intensively police areas around supervised injection sites to avoid dealers being attracted to the area.

Drug user education and outreach

Outreach may take a variety of forms in the Netherlands. These include the extensive involvement of doctors, nurses and social workers in harm reduction services; doctors visiting police stations and hospitals to prescribe methadone to drug user patients; street work by youth workers and social workers; doctors and nurses holding night surgeries in the streetwalker district of Amsterdam; and peer support by users and ex-users who may be paid or who volunteer. Buning (1993) defines outreach as detached work done in other agencies such as prisons, police stations, hospitals or other agencies, and street work in the areas where drug users spend time on the street or in private homes where drugs are sold and used.

The Mainline Foundation in Amsterdam is a harm reduction organization involved in health education and prevention for drug users on the street. Mainline's outreach work enables it to develop a variety of approaches for special population groups such as women, drug users in penitentiaries, HIV-positive drug users, etc. Mainline also distributes a newspaper that gives information about drugs, health and AIDS, and the drug scene. The magazine is now distributed widely outside Amsterdam, mainly through user networks. Mainline also works with other national and international organizations.

Peer education and support can play a key role in reaching drug users who, for one reason or another, are not in contact with professional services. Those not reached may not trust professional organizations and have difficulty in discussing very personal issues such as sex and drug use unless there is a level of trust (Trautmann, undated). Trautmann makes a distinction between peer education and peer support: the task of the former is to teach the drug user about things such as safer use or safer sex. Trautmann describes the latter as a more shared experience involving equality

in the relationship. It may also involve more than just provision of information, but also provision of other harm reduction aids such as clean syringes/needles.

Trautmann provides a summary of pros and cons of providing peer support through an existing professional organization, or through a freestanding drug user organization. Some of the positive aspects of embedding peer support in an existing professional organization include: greater continuity of projects, professional support, shared knowledge about issues such as drug use techniques, social values, attitudes, and improved contact with drug users who may distrust professional organizations. On the negative side, the distrust of some drug users may not be overcome by professional organizations employing peer supporters who may be seen as "traitors" by some of their peers. As well, the attitude of professionals to drug users may be negative, the drug users employed by professional organizations may have little influence on the way they want to work or on policy decisions, and the organization may not be flexible enough to adapt to the needs of its drug-user staff.

The Dutch National Institute for Alcohol and Drugs (NIAD) has been involved in a European Peer Support project to develop materials and training.

User groups

Drug-user groups have a long history in the Netherlands dating back to the late 1970s when user groups were formed in Rotterdam and Amsterdam (van der Gouwe, 2000). The onset of HIV/AIDS resulted in government funding for user groups for HIV/AIDS prevention work and for assistance with drug-related problems. In the 1990s, the National Interest Group of Drug Users (LSD) was formed with funding from the Ministry of Health, Welfare and Sport. LSD provides a national voice for drug users to government, drug services, the judiciary and the medical profession, among others (van der Gouwe, 2000). Currently, there are about 20 local user groups across the Netherlands initiated and supported by LSD. Some groups receive funding from municipal governments or drug agencies, but only the groups in Rotterdam, Amsterdam, The Hague and a group that covers Apeldoorn, Zutphen and Deventer apparently have sufficient financial support to hire paid staff and to carry out a range of activities.

As described by van der Gouwe (2000), user groups have two major roles: the promotion of user interests and the direct provision of services to users. The latter may include providing a drop-in service, outreach work, education about safe injecting and healthy behaviours, and services for specific target groups such as older drug users or women. One key informant with many years of experience in the area of peer support said that autonomous drug-user organizations generally require some level of financial and professional support, e.g., a lawyer to advise on legal issues. In cases where active drug users are working within an existing professional organization, this seems to work best when they are involved in time-limited, defined projects. In his experience, involving

active drug users as staff members has not worked because of lack of acceptance by colleagues and the inability of the drug user to work regular hours. Also, his perception of programs that have been run solely by drug users is that they have experienced difficulties.

Van der Gouwe (2000) describes the need to develop a balance in the activities carried out by drug-user groups. In the past, many use groups been overwhelmed by the demands from drop in members. Some user groups are now moving to more structured approaches to providing direct client service, thus allowing time for interest-promotion activities. Van der Gouwe (2000) also comments on staffing of user groups by active drug users, which can provide a stepping stone to reducing or getting off drugs and to social reintegration. At the same time, staff members who are active drug users experience the same problems as drug users in general such as needing to spend time acquiring drugs, dealing with fluctuations in drug supply or purity, or attending their methadone clinic. As well, they may have difficulty in maintaining objectivity in their direct service work.

Harm reduction within the justice system

The Netherlands has also developed an extensive system for working with drug users with histories of multiple criminal offences. The system consists of the following types of initiatives:

- Motivational centres whose aim is to motivate clients with less serious legal involvement to move on to regular addiction clinics;
- A Forensic Addiction Clinic with one open and one closed ward for drug addicts with more serious criminal involvement;
- Penal Care Facility for Addicts (SOV), which would provide compulsory treatment for drug addicts with a serious history of recidivism for a period of 18 months to two years. A pilot is being tried in Rotterdam. Apparently, this unit would involve six months of residential care, followed by 18 months of less intensive care. (Ministry of Health, Welfare and Sport, 1999; Trimbos Institute, 2000);
- Addiction Counselling Department (VBA) cells within penal institutions;
- Discussion is also underway regarding strengthening the shelter system by providing 24-hour shelter to people causing drug-related nuisance. It is hoped that provision of such a shelter system would reduce pressure on more expensive places in the correctional system (Ministry of Health, Welfare and Sport, 1999).

In terms of mandatory treatment in a penal care facility, one key informant indicated that this criminal justice measure has passed both through the two chambers of parliament. However, there

have been some concerns expressed regarding human rights issues as well as about the appropriateness of this type of measure for the target group for whom it is designed. For instance, the kinds of crimes involved would not normally warrant a two-year sentence. Also, those who potentially might be mandated to treatment are likely to be older, with long histories of drug use, and thus least likely to benefit from such treatment.

This same key informant said that efforts to get policies in place in prisons in the Netherlands for provision of clean needles and methadone have not been successful. At this time, methadone prescribing is the decision of the individual prison doctor and most is prescribed for detoxification or short-term bridging for prisoners who will only be in prison for a few months.

A key informant noted that there has also been discussion about changes to the "Special Admission to Psychiatric Hospitals Act" in order to provide a legal vehicle to admit people to addiction care.

Factors influencing harm reduction policies and practices

Trends in injection drug use

Overall rates of drug use in the Netherlands are not high. A 1997 national survey found that lifetime use of cannabis was 15.5% among those 12 years and older, somewhat lower than Canada's rate for the population aged 15 or older (28.2% in 1994) (Abraham, 1999). Use of cannabis and other illegal drugs such as cocaine is more common in the large cities than in lower-density areas (Abraham, 1999). In terms of injection drug use or other problematic drug use (defined as non-intravenous regular use of opiates, cocaine or amphetamines), the Netherlands has a fairly low rate per 1,000 of the adult population (15-64 years) in comparison with other European countries. Rates of problem drug use across the European Union range from 8 per 1,000 in Italy to a low of 2- 3 per 1,000 in the Netherlands and Germany (EMCDDA, 2000).

This same EMCDDA 2000 annual report notes that different rates of problem drug use do not appear to be associated with national drug policy approaches. But as Boekhout van Solinge (1999) points out, the low numbers of drug addicts in two countries with radically different approaches to the problem – the Netherlands and Sweden – may have more to do with both countries being "rich welfare states with good social policies and relatively few people living in the gutter" (Boekhout van Solinge 1999, p11).

It is estimated that there are 27,000 people who inject drugs in the Netherlands of whom a quarter to a fifth (5,000 to 7,000) live in Amsterdam (Fischer et al. 2000). The Trimbos Institute (2000) reports that the majority of opiate users are single, male, unemployed and with low educational levels. Perhaps uniquely, the injection drug-using population of the Netherlands is an ageing

population – average age now being 42 years (key informant). Several key informants have stated that heroin and injection drug use have negative images among Dutch youth.

Smoking heroin is common in the Netherlands and the current low price of heroin, and the availability forms of heroin most suitable for smoking, encourages users to smoke (chasing the dragon) rather than inject. This is encouraged by the local health authorities (Boekhout van Solinge, 1999). One key informant said that switching from injecting to smoking is continuing to happen in the Netherlands. Former injection drug users who are asked why they have switched indicate that their peers are doing it rather than for health reasons. However, there are also risks when people switch because they are adopting a new behaviour and may revert to risk practices such as needle sharing during the transition (key informant).

Smoking heroin is also the preferred method of some ethnic minorities in the Netherlands. About a third of those using hard drugs are from ethnic minorities originating from Surinam, the Moluccas, or of Turkish or Moroccan origin. Those of Surinamese origin in particular are more likely to smoke, sniff or swallow drugs than inject them. Since some drug dealers are Surinamese in origin, they may also model this behaviour to users (Drug Text, 1995).

As in North America, cocaine is a drug of increasing concern. Lifetime reported cocaine use rates are 2.5% and current use is 0.2% (1997 figures) (Abraham, 1999). In Amsterdam, lifetime use of cocaine rose from 5.7% in 1987 to 9.3% in 1997 (Cohen, 1999). Seventeen per cent of treatment admissions are for cocaine problems (EMCDDA, 2000). One key informant said, however, that most cocaine is smoked rather than injected.

The report on Amsterdam's opiate-dependent population (van Brussel and Buster, 1999) notes increasing numbers of dually diagnosed clients. They attribute this in part to the greater likelihood that clients who are not dually diagnosed will successfully recover, as well as to circumstances such as long-term living on the street. In addition, the exacerbation of psychiatric problems caused by interruption of methadone treatment through imprisonment, and the use of crack all contributing to increased numbers of drug users with a co-occurring psychiatric problem.

Trends in the rates of HIV and other infections

Overall, rates of HIV and HCV are in the mid-range in comparison with other countries of the European Union and North America. In the Netherlands, 8% of AIDS cases are attributable to injection drug use, the second highest risk factor after men with homosexual contacts (Drugtext 1995). It is estimated that 10% of Dutch injection drug users are HIV-positive, although rates are higher in the larger cities, particularly Amsterdam. Rates for new cases of HIV have declined, as have deaths due to illicit drug use (Fischer et al., 2000). In terms of HCV, it is estimated that 80% are infected with hepatitis C (EMCDDA, 2000). However, HCV has not apparently become a major

issue in the Netherlands, according to one key informant, because many of those who are HCV positive are older injection drug users.

The availability of general health and social services

As noted above, the Netherlands has a well-developed health and social service system. Medical and social services have been an integral part of services for injection drug users, with access to regular medical care, low-cost housing and other social services.

Europe

Drug policy in the Netherlands, as in other member countries of the EU, is now influenced by collaboration on a European drug policy. Closer collaboration has highlighted the philosophically different approaches to illicit drug use among EU member countries. In the past, the Netherlands experienced pressure from countries such as France, Germany and Belgium regarding their approach to drug use problems and the perceived flow of drugs from the Netherlands into neighbouring countries. Most of these countries have since adopted many of the approaches used in the Netherlands.

Philosophical differences among EU countries have also emerged at the city level as European municipal governments began collaborating on policies to tackle drug problems. These city-level agreements represent two radically different approaches to municipal drug policy. The European Cities on Drug Policy (ECDP), launched with the signing of the 1990 Frankfurt Resolution, initially involved four cities, including Amsterdam, but other cities have since joined. ECDP members espouse a harm reduction approach to addressing municipal drug problems. In contrast, European Cities Against Drugs (ECAD), which was launched with the Stockholm Declaration in 1994, espouses more restrictive drug policies and opposes moves to decriminalize cannabis or to alternative prescribing of drugs such as heroin. Both groups try to influence European drug policy (Boekhout van Solinge 1999). Boekhout van Solinge notes that harmonization of drug policies among different European countries is unlikely with the current polarization. At the same time, increased co-operation with other EU countries would make it difficult for the Netherlands to deviate much from the centre. However, the fact that social democrats are in power in many EU countries will likely support the continued trend toward more pragmatic, harm reduction approaches to the issue despite opposition from countries such as Sweden and France that have been critical of the Dutch approach to drug policy and practice.

Research and Evaluation

Rates of HIV infection among injection drug users have shown a downward trend between 1991 and 1996, as have rates of unsafe injecting and unsafe sexual behaviour. This has been attributed not just to provision of syringe exchanges and methadone, but also to the provision of treatment, counselling

and information on safe sex and safe use, social assistance and condoms (Trimbos Institute, 2000; Fischer et al. 2000).

The Trimbos Institute (2000) reports results of evaluation of methadone programs indicating that more than a third of clients are able to control their drug addiction and only use other drugs minimally. About 25% can be considered to be well integrated into society in terms of social contacts, work, education, housing and keeping their appointments. However, the majority is not well integrated and for about 25%, methadone has had minimal or no effect on their lives and they continue to experience poor health and engage in criminal behaviour. The Ministry of Health, Welfare and Sport (undated) report that of drug addicts known to the care system, 75% regularly use methadone, up from 40% 10 years ago.

The Netherlands has a long history of research into its harm reduction policies and practices, including an evaluation of its nuisance policy, research with the Amsterdam methadone prescribing circuit, heroin trials, etc. To be better able to monitor and evaluate policy and programming, the Ministry of Health, Welfare and Sport announced a national monitoring system in 1997 – the National Drug Monitor. This is being established in order to create a coordinated and consistent framework for collecting national data (Kuipers, 2000).

Public opinion and the media

Public opinion has generally supported harm reduction policies and programs in the Netherlands. However, more recently there have been concerns raised about the nuisance caused by drug users, leading to the development of the Nuisance Policy in response to public order problems. The current harsher political rhetoric regarding mandatory treatment for drug users is also partly a reflection of public opinion, according to one key informant. On the other hand, another key informant stated that the policy allowing cannabis use and sale in the context of coffee shops has given the authorities more credibility in the eyes of young people and has perhaps contributed to the more negative image that use of drugs such as heroin has among youth in the Netherlands. People who use drugs such as heroin are visible on the street to young people who can see the harmful effects from use of these types of illicit drugs.

Harm reduction in the United Kingdom

Overview

In the area of harm reduction and injection drug use, the United Kingdom is best known for its policies and practices regarding the prescription of drugs for the treatment of drug dependence, its needle exchange and outreach initiatives, and for some well coordinated multi-agency community-based services. All these initiatives, as well as initiatives to educate drug users about ways to reduce risks associated with drug use and related behaviours, are directly or indirectly supported by a national drug strategy that involves partnerships with the police, health and social service providers, educators and other major stakeholders.

Except for one program established in the late 1960s, the UK has not had supervised injection sites. Most addicts in treatment receive methadone and this is increasingly seen as a harm reduction measure and valued as a means to reduce drug-related crime. Oral amphetamine is sometimes prescribed to heavily dependent amphetamine users and one ongoing study is looking at the effects of making naloxone available to injection drug user to manage overdoses. There is growing support for the use of arrest-referral and other justice system mechanisms and incentives to increase the number of addicts in treatment.

The policy context for harm reduction

In 1998, the new labour government under Tony Blair appointed Keith Halliwell as the first Anti-Drugs Coordinator for the UK. This appointment signified the government's concern about drug problems and especially about drug-related crime. At the same time, the government announced a 10-year strategy for tackling drugs. This strategy built on and extended a strategy developed by the previous conservative government and envisioned a society that was healthy and confident and increasingly free from the harms caused by the misuse of drugs. The strategy also signified a commitment to tackling the social inequalities that contribute to drug abuse through reforms to the welfare state, education, health, criminal justice and the economy.

The strategy includes both legal and illegal drugs, but the greatest emphasis is on illegal drugs, especially heroin and cocaine. In his first report to the government, the new anti-drugs coordinator indicated that he was especially concerned with 100,000 to 200,000 illegal drug users. "It is this group which causes the greatest problems for society and for themselves. They are responsible for a substantial amount of crime, many are victims of abuse from drug dealers and pimps: they are often disruptive and make disproportionate demands on law enforcement and on medical, counselling and social services." It can be assumed that many of these are people who use illegal drugs by injection.

The UK strategy has four main elements: (1) education, health promotion and related initiatives to help young people to resist drug misuse; (2) law enforcement and community action initiatives to protect communities from drug-related, anti-social and criminal behaviour; (3) primary, secondary and tertiary treatment, and harm reduction initiatives to enable people with drug problems to live healthy and crime-free lives; and (4) supply reduction initiatives.

Coordinator Halliwell's first report to parliament included a number of statements that indicated support for some elements of harm reduction. For example, the report pointed to the need to provide methadone and other substitute medications according to guidelines developed by the Department of Health. It also indicated the need to provide problem drug users with accurate information, advice and practical help to avoid infections and other health problems related to their use of drugs. Further, one statement in the report touched on the need to support problem drug users in reviewing and changing their behaviour toward more positive lifestyles and in linking them to accommodation, education and employment services. Statements concerning treatment seemed to recognize that abstinence was not necessarily a principal outcome. However, it is otherwise clear that abstinence is considered preferable.

> "*…the government acknowledges that there will be those who, through ignorance or other reasons, will misuse drugs whatever the consequences. For these people, information and facilities aimed at reducing the risks should be provided because this may save lives. However, such information must be coupled with the unambiguous message that abstinence is the only risk-free option.*"

The coordinator's report makes only one direct reference to *harm reduction* per se and this is in connection with efforts that had been made to prevent the spread of HIV among injection drug users. This statement did not, however, specifically mention that this was accomplished through needle exchange and no other references to needle exchanges are made.

Comments from those interviewed in connection with this project indicated that the intent of the current national drug strategy has been interpreted in different ways. Some saw the strategy as reaffirming the government's commitment to treatment and harm reduction, but others saw a shift away from harm reduction at the government level. One prominent observer saw nothing in the strategy that recognized drug dependence as a public health issue, and nothing that clearly endorsed harm reduction. Another well-placed observer regretted that UK was "becoming like America" in its approach to drugs. Several of those interviewed noted the strategy's emphasis on drug-related crime and the use of legal means to increase participation in treatment.

The coordinator's report lists a variety of sectors involved in implementing the goals and objectives of the national drug strategy, including high-level strategy support groups from the Home Office, regional advisory services, regional Drug Action Teams, and local Drug Response Teams comprising core agencies concerned with health, education, social services, housing and law enforcement. Key roles are also identified for other major national organizations, including the

Home Office, the Standing Conference on Drug Abuse, the Institute for the Study of Drug Dependence, Customs and Excise, the National Crime Squad, and the National Criminal Intelligence Services. The strategy also identifies opportunities for the private sector, the voluntary sector, the media, parents, young people and community representatives. The strategy does not mention drug users or user/ex-user groups as contributing to its implementation.

The key groups and agencies variously involved in the delivery of harm reduction services (needle distribution and exchange, user education, outreach and/or drug prescription) include general practitioners, social service agencies, public health units, street-level counselling and advisory services[17], drug dependency clinics, residential rehabilitation units, and private rehabilitation units. Hospitals provide both inpatient detoxification services and outpatient services. Specialist drug dependency clinics also offer inpatient and outpatient services, day centres and self-help groups.

Community Drug Teams (CDT) play an important role in service delivery. These are multi-disciplinary teams that include a social worker, a community psychiatric nurse, administrative staff, and a consulting psychiatrist or physician, or close links to local physicians. The teams are sometimes based in a hospital or clinic, but many are based in the community. The teams provide assessment, counselling, detoxification, and aftercare. They also provide or arrange for prescription services. The teams refer clients to relevant services which they themselves do not provide such as child protection, and mental health or medical services. The teams work closely with the local HIV/AIDS teams. Most areas now have active CDTs. One informant who was familiar with methadone services in Canada said the CDTs ensure that methadone treatment in the UK is more closely linked with other services than in Canada.

Funding for harm reduction under the national drugs strategy

The coordinator's report indicates that the UK government spends the equivalent of $2.3 billion a year on tackling drugs. Some new funds have become available under the new national strategy, including new funds for treatment and for a national hepatitis B vaccination program for injection drug users. Otherwise, the strategy aims to ensure that existing resources are aligned with the strategy's goals and objectives. Under the strategy all stakeholders have been asked to realign their priorities, resources and operations in line with the government strategy and to develop corporate and individual performance targets and measures.

At the local level, funds for harm reduction may be specially earmarked (e.g., for HIV initiatives, including needle exchanges) or negotiated from the pool of funds devolved from the Department of

17 The neighbourhood services were reported as being quite common and prominent in some areas.

Health to local health authorities. This process involves members of the Drug Action Teams (DATs) that encompass multiple local agencies. DATs are given support and advice by the Drugs Prevention Advisory Service of the Home Office centrally and through nine regional teams.

There are plans for a National Treatment Centre that will provide funds to local treatment services and the intention is to tie funding to results. However, details have yet to be worked out.

About 50% of all treatment agencies are part of the voluntary (non-government) sector and funded by charitable trusts. However, many also receive some funds from statutory authorities. Hospital and general practitioners and other essential health services are funded under the National Health Service.

Some key informants felt that new resources for crime reduction initiatives were more readily available than those for treatment or harm reduction. One indicated that resources for needle exchanges were under threat because HIV/AIDS was no longer seen as a major concern among injection drug users. However, others felt that efforts were being made to ensure a balance across all elements of the strategy.

The current status of specific harm reduction initiatives

Needle and syringe distribution and exchange

Possession or purchase of sterile needles and syringes has never been illegal in the UK. Needle distribution and exchange schemes run by health and social agencies were first set up on a pilot basis in 1987 and are now widespread and accepted as an integral part of a comprehensive drug service. However, they developed more rapidly in some areas (e.g., Liverpool) than in others (e.g., Scotland). They currently operate from a variety of sources, including drug agencies, retail pharmacies and outreach workers. Needle exchanges also provide condoms, bleach, education and advice. There are more than 2,000 needle exchange outlets and they give out more than 27 million needles a year. Many outlets are in pharmacies and more than 90% of local health authorities have needle exchange schemes.

Needle exchanges sometimes give out large numbers of needles – 50-100 plus at any one time. This has not apparently lead to widespread concerns about the increasing availability of needles or to a large number of needles being found on the streets, in parks or other public places. There are, however, some areas where needles are often found in public or semi-private places. These tend to be multi-problem areas characterized by high rates of unemployment, social disorganization, very poor housing and high rates of drug-related and other types of crime.

One person interviewed for this study said that very little is known about the actual functioning of needle distribution/exchanges or relationships between the clients and the workers. The expectations of the workers, and their capacities and skills have not been studied, but seem to be quite variable. This interviewee was concerned that some needle /distribution/exchange providers had a restricted vision and saw themselves as only responsible for giving out needles rather than capitalizing on the opportunity to bring about some changes in drug-use behaviour. This interviewee also felt that UK needle exchanges needed to be more integrated with other services and to offer a wider range of services.

Some variability in the acceptance and functioning of needle distribution/exchanges is evidenced by a study of the introduction and development of agency- and community-based syringe exchange schemes by community pharmacists in Wales (Keene and Stimson, 1997). Drug agencies with an abstinence policy rejected syringe exchange, while those with a pre-existing harm reduction model easily integrated syringe exchange into their work and played a major part in establishing the services.

Drug substitution treatment

The UK's drug current drug strategy endorses the prescription of substitute medication and this reflects long-established policies and traditions that make this possible. British physicians have always been permitted to prescribe both heroin and methadone to addicts, although the right to prescribe heroin has been limited to specially licensed psychiatrists since the late 1960s. General practitioners do, however, have the authority to prescribe methadone to narcotic addicts and, at present, this includes methadone for self-injection. A few general practitioners and some consultant psychiatrists also prescribe amphetamines to people who are heavily amphetamine-dependent. Cocaine is not approved for the treatment of addiction.

Clinical Guidelines for physicians involved in treating drug misuse and drug dependence have been published by the UK Department of Health (www.doh.gov.uk). The Guidelines specifically addressed the issue of *harm reduction*, which is used to refer to the reduction of various forms of harm related to drug misuse, including social, health, legal and financial problems, until the drug user is ready and able to come off drugs. Physicians are also advised to give their patients advice on harm reduction, including, where appropriate, access to sterile needles and syringes, testing for HIV/AIDS and immunization against hepatitis B.

The Guidelines also encompass issues concerning the prescription of drugs. Preference is urged for the use of longer-acting opiate agonists (e.g., methadone) for the treatment of opiate dependence and long-acting benzodiazepines. The prescription of injectable formulations is seen as having a very limited place and as requiring special knowledge. Some observers view the practice of prescribing injectable methadone in the absence of guidelines or policy as having serious practical, ethical and

legal implications for physicians (Sarfraz and Alcorn, 1999). The aim of prescribing drugs is regarded to be the prevention of withdrawal symptoms and the reduction or elimination of non-prescribed drug use. Preference is given to the prescription of drugs that are used under supervision on a daily basis.

A consultant psychiatrist interviewed in connection with this project emphasized that the aim of prescribing methadone or other drugs was not to attract addicts into treatment, but rather to treat addiction among those who sought treatment for any reason.

With respect to heroin, the Guidelines indicate that this may be used as part of a maintenance regime for a minority of patients: "With the availability of injectable methadone there is very little clinical indication for prescribing diamorphine." A Home Office license is required and this is the preserve of specialists. Heroin is only to be prescribed in situations involving rigorous monitoring and where use in the initial stages can be supervised. The guidelines also indicate that there is no recognized indication for prescribing injectable amphetamines, cocaine or benzodiazepines. Buprenorphine is acknowledged as a potentially useful drug for maintenance especially for those with lower levels of opiate dependence. Naltrexone is acknowledged as blocking the effects of opiates, but its use for this purpose is not addressed in any detail. The guidelines indicate that codeine, LAAM, dexamphetamine and cocaine are not authorized for the treatment of drug dependency.

In practice, heroin is prescribed to less than 1% of addicts in treatment and its use is questioned in the Department of Health Guidelines. Despite international attention, heroin prescription was never a dominant feature of harm reduction or treatment in Merseyside (Eaton, Seymour and Mahmood, 1998), and very few people were ever prescribed heroin-impregnated cigarettes as is commonly believed; no key informant was able to confirm if this practice continues. Several of those interviewed for this study questioned the degree of outside interest in heroin prescription in the UK and one said that he considered reports of heroin prescription in the UK to have reached "mythic proportions".

The infrequent use of heroin is a function of the evidence in favour of methadone, a lack of evidence for the value of prescribed heroin, and the reluctance of most physicians to prescribe drugs for self-injection. One physician interviewed for this study said that this leads to all kinds of difficulties, including overdoses and collapsed veins.

Methadone is the treatment of choice and this is currently prescribed to more than 98% of addicts in non-abstinence treatment. Until quite recently methadone was mainly prescribed for the purpose of withdrawal with the ultimate goal of abstinence (Spears, 1997). Thus, in 1994, there were no methadone maintenance programs under the National Health Service and methadone was prescribed in an arbitrary and ad hoc fashion – predominantly in low dosages and for short terms (WHO, 1994).

The need to enhance methadone maintenance services was recently supported by the Effectiveness Review Task Force in their 1996 report to the cabinet ministers. Most of the recommendations in the report were directed at health and social services. In response to the recommendations of the Task Force the Department of Health issued the following directions to health and social service purchasers:

- the need to encourage greater involvement of primary care professionals, such as general practitioners and community pharmacists, in the care of more stable drug misusers;
- the need to develop accessible and appropriate services for young people who misuse drugs;
- improving the delivery of care for drug misusers in contact with the criminal justice system; and
- supporting well managed methadone administration programs and associated counselling programmes for opiate users (ISDD, 1998, p.1).

The Department of Health Guidelines address these issues, recognizing that some addicts may need long-term methadone maintenance, but encouraging physicians to also consider other options. Maintenance doses of 60-120mg/day are mentioned. One consultant interviewed for this study indicated that maintenance may be "for life" for many of his patients and that that was a widely shared view. This was confirmed by another informant who expressed the concern that that harm reduction had become an end in itself. This informant felt that more attention needs to be paid to getting people off drugs altogether.

As noted above, the Guidelines do recognize that methadone might be prescribed for self-injection in some cases, but this is an issue for specialists:

> *"There is a small section of the treatment population who, despite continued treatment with oral preparations, fail to make adequate progress and continue to be involved in high levels of injecting drug misuse and other risk-taking behaviour. These patients may benefit from specialist assessment: in some instances clinical benefit can be improved by correcting sub-optimum dosing. Although for others specialists could decide to initiate a prescription for a drug taken by injection."*

Plans to restrict the prescription of injectable methadone to specialists are being developed.

Although general practitioners can prescribe methadone, most addicts initially receive this drug from specialized clinics. Patients may be referred back to GPs once they become stabilized but GPs are still encouraged to provide care in collaboration with specialists. There are, however, regional differences in the degree of support available to GPs and many GPs are reluctant to take on addicts as patients. One informant indicated that GPs in his area have wanted more money to treat addicts

because they are seen as difficult patients. Some GPs are also reportedly reluctant to become involved in addiction treatment because they do not understand the shift in policy from abstinence to maintenance and are concerned that this may change again.

The DHS guidelines include the following statements with respect to supervised methadone consumption:

- Most new patients being prescribed methadone should be required to take their daily dose under the direct supervision of a professional for a period of time that may, depending on the individual patient, be at least three months, subject to compliance.

- Similarly, when the patient restarts methadone after a break, or receives a significant increase in the methadone dose, daily dispensing, ideally with supervised consumption, should be re-instated for a period of time stipulated in local guidelines and protocols.

- These arrangements should only be relaxed to allow take-home doses if the doctor can be satisfied that compliance will he maintained. The relaxation of supervision can be seen as an important component of rehabilitation and re-establishing responsible behaviour.

- Arrangements for daily dispensing through instalment prescribing and, where appropriate, supervised consumption of other drugs, should also be made.

The Guidelines also state that take-home doses should not be prescribed where

- the patient shows a continued and unstable, or unauthorized pattern of drug misuse, including a significant increase in alcohol intake, the use of illicit drugs, benzodiazepines or other tranquillisers;

- the patient has a significant unstable psychiatric illness;

- there is continuing concern that the prescribed drug is being diverted or used inappropriately.

The nature of the Guidelines and the degrees of discretion awarded individual practitioners most certainly result in considerable variation in methadone prescribing practices across the country. Variations in the availability and quality of ancillary services also contribute to differences in methadone-based services. The literature also notes that in the UK "the consultant is King" and that this results in considerable variations in the implementation of drug policy in the UK (Strang and Gossop, 1994).

Some physicians who are not part of the National Health Service are involved in the prescription of drugs for addicts, but the number of such physicians and addicts is not known. The Royal College of

Psychiatrist has expressed concerns about "prescription buying" and the lack control on non-NHS service providers, and two interviewees expressed concerns about the quality of some non-NHS physician services and "rogue" practitioners.

No reliable statistics are available to indicate the proportion of opiate addicts receiving methadone or any other kinds of treatment. Estimates provided by various key informants suggested that 30-50% of heavily dependent opiate addicts might be receiving methadone and that 70% may be involved with services of some kind (including needle exchanges). The main barrier to increasing the coverage of methadone services was reported to be a lack of resources. This has limited the capacity of services and contributed to long waiting lists in some cases.

A few specialists prescribe oral amphetamine to heavily dependent amphetamine users and there is some ongoing research concerning the effectiveness of this treatment (Fleming and Roberts, 1994).

Supervised injection sites

The Department of Health Guidelines for the treatment of drug dependence recommend that, if used at all, drugs for self-injection should be used under supervision in a clinic setting. Some clinics have always permitted this, but drugs for self-injection can also be prescribed for home use. When clinics were first established, some addicts were found injecting prescribed drugs in public toilets. This led to the establishment of a day program with an injection room for addicts attending a local clinic in South London. This was in the late 1960s. This program is still operating, but the injection room has closed. The circumstances have not been documented and no accounts of this injection room could be located.

No key informant indicated that injection sites are currently being considered. One reason may be that the drug scene is generally not highly visible except in some high-problem areas. Even there the addicts tend to have places to inject and few are truly homeless. Homelessness is less of a problem in the UK than Canada due to the availability of social housing. Squatting (living in abandoned houses and other buildings) also occurs in some cities. One interviewee attributed the low visibility of drug use in his area to the availability of housing, the geographic dispersion of dealers and home delivery services offered by some dealers. Another felt that rigorous police work had prevented the development of open drug scenes.

One informant described the use of blue lighting in public toilets and railway stations to discourage drug injection in such places. Blue lighting makes it very difficult to see veins and thus inhibits intravenous self-injection.

Drug user education and outreach

Outreach has been a key component of efforts to address injection drug use in the UK. Outreach work is carried out in all public domains. Outreach workers provide much needed contact and information explaining the risks associated with needle sharing and sexual behaviour.

One informant said that outreach is now focused on the hard-to-reach population that includes prostitutes and amphetamine users. He felt that most other drug users had already been contacted and were aware of services. He did, however, indicate that outreach workers from his clinic were based in police stations and went through the cells every day searching for newly arrested drug users and link them with treatment services.

Harm reduction in the justice system

In 1998, an all-party parliamentary group recommended the introduction of needle exchange schemes in prison as a public health measure. The prison service has since ruled out prison-based needle exchanges, but acknowledges that developments in other countries are being monitored. However, at present, the service considers "the arguments in favour are outweighed by the risk of increasing the numbers of needles in circulation and undermine the need to deter and prevent drug misuse".

Disinfecting tablets are increasingly being made available in prisons and these are seen to have worked well in Scotland for some years. However, where they are used, information leaflets and other materials are given out to make it clear that the use of these tablets is a harm reduction initiative, but only abstinence will completely eliminate the risk. Prison medical officers can prescribe condoms if, in their judgment, there is a risk of infection. However, it is not known how often this occurs.

Other recommendation by the parliamentary committee included better training for judges, new national guidelines for treatment of drug users in prisons, provision of rapid drug testing facilities, increasing the number of drug-free wings in prison (wings where the prisoners would agree to voluntary drug testing), a new emphasis on helping short-term or remand prisoners, and substantial improvements in care and aftercare. These recommendations are reflected in a policy statement from the UK Prison Service. This statement is presented as part of the national strategy and aims to offer support and treatment to any prisoner with a drug problem. It includes the following components:

- Improving the availability and quality of treatment,
- Improving the availability of voluntary testing,

- Continuing the mandatory drug testing program,
- Reducing the supply of drugs in prison,
- Improving the training of staff,
- Using research to measure effectiveness and the needs of specific groups of offenders,
- Establishing management information systems to monitor performance, and
- Integrating the work of various departments within prisons and the various agencies involved in working with prisoners.

It is not known how often methadone is prescribed to addicts in prison. This is at the discretion of individual prison medical officers who were reported by several of those interviewed as having traditionally supported rather harsh treatments for addicts.

Factors influencing harm reduction policies and practice

Trends in injection drug use

Until the 1960s, dependence on opiates was uncommon. Opiate users were typically middle-aged and middle-class, and acquired their dependence as a consequence of medical treatment or though self-medication. In the 1960's narcotic use patterns changed rapidly and use was increasingly prevalent among young people. In the late 1970s, use of opiates increased significantly, particularly among males in areas of high unemployment and social deprivation. Since that time, it has continued to grow, fed by an international drug trade, rather than by leakage of drugs from legitimate sources. The use of cocaine and amphetamines also increased in some areas. Increased drug use was associated with rising crime rates and the issue of drug-related crime has since become a significant political issue, contributing to the development of national strategies, increased attention to treatment as a crime reduction strategy, and increased use of legal measures to boost participation in treatment.

Studies and debates about drug problems led to new perspectives and it came to be recognized that if drug misusers were to remain drug-free, it was not sufficient to offer medical help with withdrawal. Addicts needed counselling and help to make more permanent changes in lifestyle, including employment and housing. This lead to a significant expansion of abstinence-oriented treatment and counselling services. However, goals other than complete abstinence also become more widely accepted.

The use of cocaine has increased in some parts of the UK and all key informants considered that cocaine users pose special problems for harm reduction and treatment. Many cocaine users are also heroin addicts. Some inject cocaine many times a day, but others only inject cocaine with heroin (speedballs) three to four times daily. None of those interviewed felt that the UK had anything unique to offer regarding the treatment of heavy cocaine users.

Trends in the rates of HIV and other infections among injection drug users

Support for needle exchanges and the ongoing funding of needle exchanges reflect policies adopted in the late 1980s in response to justifiable concerns about the spread of HIV among injection drug users and to the general population. In 1988, the statutory Advisory Council on the Misuse of Drugs (ACMD) convinced the government to support needle exchanges because it saw the threat of AIDS as being greater than the misuse of drugs. The Council also recommended that drug services modify their policies to make contact with and change the behaviour of the maximum number of drug users, including those still actively using drugs. The ACMD also advised that drug services establish a hierarchy of objectives for behaviour change, starting with the cessation of sharing of injection equipment, followed by a switch to non-injecting drug use, a reduction in drug use, and ultimately, cessation of drug use. The success of the UK needle exchanges and related user education initiatives in preventing the spread if HIV among injection drug users is widely recognized.

Hepatitis C rates among samples of injection drug users in the UK have been around 35-50%. These rates are lower than those reported in Canada and this may also reflect the success of the UK's needle exchanges and related harm reduction strategies. However, these rates are viewed with concern and have stimulated a hepatitis B vaccination program for injection drug users, partly to increase awareness of all types of infection risks. Education materials on hepatitis that target intravenous drug users have also been developed. Some drug treatment providers carry out testing for HCV, but not all have the resources for this.

One key informant indicated that the government has not provided much leadership with respect to hepatitis C and injection drug use. However, new management guidelines that address issues of hepatitis C were reportedly being developed at the time of this project. It is also possible that new funds for hepatitis C prevention may be made available.

Attitudes of service providers

Key informants indicated that most groups and individuals working closely with injection drug users have supported needle exchange schemes and the use of methadone as a maintenance drug. These intervention strategies are seen as evidence in favour of a public health approach to addiction. The evidence in favour of the positive effects of methadone on crime has also been used to champion the cause of treatment – at least at the funding level. One key informant said that some treatment

providers have cited reduced crime levels as the primary goal of treatment, and he was concerned that this could limit expectations for treatment services and restrict their activities.

Treatment providers were also reportedly quite willing to serve clients referred from the criminal justice system. The main concerns have been resource-related, but justice referrals are a source of funds in some cases. One key informant indicated that the growing use of arrest-referrals and treatment orders has not led to much debate about matters such as inappropriately motivated clients or confidentiality.

Attitudes of police

Police attitudes to needle distribution/exchanges were described as "iffy" by one respondent but as "very positive" by another. This latter respondent said the police were early champions of needle exchanges in his community and had never put them under surveillance. Another well-placed observer confirmed that this was generally the case, noting that "the police recognize that they (needle exchanges) have an important role and let them get on with it". Several others indicated that the UK police have been very positive about harm reduction and treatment and that this was a consequence of police involvement in policy-making at all levels. However, one key informant with knowledge of police work felt that uniformed police officers were not always comfortable with needle exchanges and that there were ongoing efforts to develop and provide more police education.

One indicator of success for police work under the national drug strategy is the number of drug users linked to treatment through arrest-referral programs. Some police units, therefore, stake out areas suspected as being frequented by drug users (e.g., abandoned buildings where syringes have been found) and arrest those hanging around on drug-related and other charges. These are then introduced to arrest-referral workers, but not necessarily charged if they go for treatment and no serious offence is involved.

The availability of general health and social services

The UK has a National Health Service and its social services, including public welfare, generally function well. Although there are regional differences in the availability and quality of the services, they are generally accessible even to intravenous drug users. As noted, housing is not a major concern among the injection drug use population, although the quality of housing is, in some case, very poor.

Health and social services are severely stretched in some regions and communities. There are areas of very high unemployment and communities with high rates of mutually compounding problems (unemployment, low education, poor housing, dysfunctional families, alcohol and drug abuse, and

drug-related and other types of crime). The government is on record as intending to address these issues and as seeing drug use in the context of social inequalities.

User groups

As noted previously, drug users are not identified as part of the solution to drug problems in the national strategy, but as the problem itself. Some user groups have developed, including a group that aims to represent people who receive methadone. However, their influence is uncertain. There has been some discussion at a high level of providing funding to hire coordinators of user groups, but no funds are available at the time of writing. One respondent closely involved with treatment planning and delivery indicated that efforts were made to involve users and ex-users, but that they were not well organized as a group.

Europe

It does not appear that the UK's involvement in the European community has had a direct impact on risk management initiatives. European involvement may influence the priority and resources given to treatment and harm reduction if substantial resources are given to cross-national supply reduction initiatives.

Research and evaluation

The new national strategy includes many statements about the importance of evaluation and performance measurement. The coordinator has indicated an expectation that all key players will develop business plans and will submit annual reports indicating the cost-effectiveness of their programs. One well placed observer felt that this signified a key role for research and evaluation in shaping future risk management and other initiatives in the UK. However, it was not possible to find out what resources were available for research or evaluation.

Some researchers were less certain that research has had or will have an influence on UK policy, and two other respondents suggested that drug misuse has always been a political issue largely uninformed by research. It does, however, appear that research had influenced the level of support for methadone and needle exchanges. Research seems likely to inform future practices with respect to the prescription of amphetamines, and some ongoing research on the prescription of heroin could influence future prescribing practices. The lack of experimental research on the prescription of injectable drugs is, however, noteworthy given the many years during which experimentation has been possible in the UK (Strang and Gossop, 1994).

Public opinion and the media

No studies of UK public opinion or media reporting of drug-related issues could be found. Key informants indicated that the general public was generally indifferent and largely unaware of how this was being handled except from media reports of drug busts. Another felt that drugs were probably among the top 10 issues of concern in some areas and that opinions about what to do were very divided. However, the public seems to accept that drug abuse is in the hands of professionals. One informant said that public discussion of drug policy could limit options for policies based on research or sound reasoning. He also felt that professionals should try to ensure that drug abuse does not become too political because this tends to reduce opportunities to implement evidence-based programs and to use the results from evaluations of new initiatives.

Key informants indicated that the media have not noticeably favoured or opposed needle exchanges or the use of methadone. None could recall any media reports of problems associated with either of these initiatives. Rather, the media were see as principally concerned with drugs and crime, and drug use by celebrities and those in high places.

Harm reduction in Switzerland

Overview

In the area of harm reduction, Switzerland is best known for its medical heroin prescription programs and its supervised injection sites. Switzerland also has well-developed needle exchanges (including exchanges in prisons), outreach and methadone prescription services, as well as non-abstinence lodging and day projects for drug users. It also has projects to increase the integration of drug users into the workplace, sick bays for drug users and homeless people, and projects that provide assistance to workers in the sex trade. Self-help among injection drug users has also been encouraged. Harm reduction is identified as one of the four pillars of the Swiss federal drug policy.

Research and monitoring studies show that Switzerland has made considerable progress in reducing drug-related problems. The Swiss approach to drug problems has also contributed to the debates about other national and international drug policies.

The policy context for harm reduction

The Swiss federal government's current drug policy was formulated in the early 1990s. It has four objectives:

- To reduce the number of new users/addicts;
- To increase the number of addicts who stop using drugs;
- To reduce damage to the health and social integration of users/addicts;
- To protect society from the harmful effects of drug use and to fight against organized crime.

The federal strategy for pursuing these objectives has four components. The following descriptions of these pillars are provided in a booklet published by the Swiss Federal Office Public Health.

1. Law enforcement

The Swiss Drug Policy relies on the strict regulation and prohibition of certain addictive substances and products. Illicit production, trafficking and consumption of substances regulated by the law can result in criminal prosecution and there are strict controls on the use of narcotics.

The federal government has introduced new, legal instruments against money laundering and organized crime. The new law on money laundering, which has been in effect since April 1, 1998, makes it mandatory for banks to report suspicious accounts to the federal authorities and to freeze the assets concerned. It also extends this obligation to asset management companies, insurance companies, foreign exchange bureaus, lawyers and other professionals.

Switzerland has, however, become quite tolerant of the personal use of cannabis. Recently proposed legislation will decriminalize personal cannabis use and allow for some legal cultivation and distribution – possible through cannabis cafés as in the Netherlands.

2. Prevention

Prevention is considered the most important of the four pillars. The aims of all prevention initiatives are to convince people not to use drugs and to adopt a healthy lifestyle. Certain target groups, such as socially deprived youngsters and migrant populations, and certain social settings, such as schools, youth homes, youth events and sports clubs, receive special attention.

3. Therapy

Those who have become drug-dependent are encouraged to enter therapy. At present, there are approximately 100 specialized, in-patient institutions designed to provide drug therapy and rehabilitation. The declared goal of these therapies is abstinence and social reintegration/rehabilitation. The federal government also supports methadone maintenance and treatment for people who suffer from psychiatric problems and drug abuse.

4. Harm Reduction

The federal government has supported a variety of harm reduction measures, including needle exchange programs, injection sites, and housing and employment programs. These are described below.

Two aspects of Swiss policy are also emphasized in the booklet published by the Federal Office of Public Health:

- Close, coordinated collaboration among all participating services and agencies involved, and
- Scientific research and systematic evaluation.

Leadership and coordination for the development and implementation of measures to reduce drug problems is provided by the Federal Office of Public Health (FOPH). This Office has four main

modes of action: (1) information development and dissemination, (2) promotion of tested models and innovations, (3) coordination and harmonization, and (4) promotion of quality.

The overall program of measures to reduce drug problems (ProMedDro) is run in cooperation with other areas that fall within the jurisdiction of FOPH such as the AIDS, tobacco and alcohol programs. These share common strategies and projects, particularly with respect to prevention and health promotion in schools, prevention among young people, the health of migrants, drugs/AIDS harm reduction, health promotion in prisons, professional training, and the promotion of high-quality services.

During 1990-1996, FOPH activities concerning treatment and harm reduction included the development and evaluation of a program of medical prescription of narcotics (see below), needs analysis, the establishment of a national coordination centre, support for the opening and reorganization of various residential treatment services, national statistics on out-patients and residential treatment, support for needle distribution and exchange, and low-threshold services.

With respect to treatment and harm reduction, FOPH priorities for 1998-2002 focus on collaboration and coordination, and include the consolidation of the range of therapies into a coordinated system to provide better opportunities to overcome drug dependence. Specific objectives include:

- Reach agreements between the federal government and the cantons regarding the harmonization of funding for abstinence-oriented therapies;
- Improve methadone treatment and increase retention rates in methadone programs;
- Establish the medical prescription of heroin as an option within an integrated system of treatment;
- Improve the treatment of drug dependence in at least one-third of prisons and detention centres;
- Ensure (through promotion and funding) the perpetuation of harm reduction measures within cantonal and municipal drug policies;
- Broaden access to injection equipment;
- Improve harm reduction measures and especially improve networking among those involved in prevention, therapy and the maintenance of public order; and
- Improve harm reduction in at least one-third of prisons and detention centres

Researchers at Lausanne University have completed two extensive evaluations of FOPH measures to reduce drug-related problems. The first covered the years 1990-1996 and the second focused on accomplishments and proposed priorities and activities for the years 1998-2002. These evaluations were commissioned by FOPH and signify the importance attached to evaluation among Swiss policy-makers and policy advocates.

The first evaluation was very positive and resulted in the following general conclusions about FOPH activities over the period in question:

- The FOPH has been very active and innovative in developing and supporting projects relating to prevention, therapy and harm reduction.

- In interaction with the FOPH's partners (cantonal and municipal authorities, professionals, associations, etc.), FOPH collaborators have progressively developed consistent policies in each of its fields of intervention.

- The decision to operate in all fields relating to drug abuse has greatly contributed to achieving general recognition that the problem requires a global approach.

- In the field of prevention, the use of existing experience and abilities has proven more fruitful than the development of totally new projects.

- The FOPH has helped to develop a broad range of therapeutic and harm reduction approaches, thus improving care for various types of drug users. The introduction of innovations in this field (trials involving the medical prescription of narcotics, distribution of syringes in prisons, etc.) has been carefully managed, and depends extensively on fieldworkers.

The second evaluation was also positive and included a number of recommendations concerning future directions. Those of particular interest in the present context were as follows:

- The FOPH should pay particular attention to harmonizing statistics related to drug problems in order to obtain reliable epidemiological indicators. Epidemiological surveillance is essential if an effective health policy is to be implemented in the field of drug abuse, and should therefore be a priority for the FOPH.

- Nearly 50% of heroin users are now treated with methadone: resources must therefore be allocated to this sector, in order to ensure the quality of such treatments and to gain further knowledge concerning them.

- Offering therapies and subsistence aid to drug users is of fundamental importance and the FOPH should make constant efforts to ensure the diversity and accessibility of these initiatives.

- The FOPH's internal co-ordination should be developed so that its partners can refer to clearly defined concepts and methods. In particular, this concerns co-ordination in the general field of prevention, and in such sectors as substitution therapies, subsistence aid and secondary prevention. Those collaborating with the FOPH would find it easier to adjust their efforts if projects or research were subject to competition, and if selection criteria were more clearly stated.

- One of the FOPH's essential activities is to inform its partners and the general population. Through public awareness campaigns, brochures and reports, it is able to develop national co-ordination and encourage the social and political acceptance of dealing with drug problems. The FOPH's work is exemplary in this field, and should be continued.

- The FOPH has also shown great skill in taking the needs of field workers into account. It would be desirable to carry on in the same vein and to ensure ongoing exchanges of information and ideas.

- National co-ordination should be further specified and developed.

- Collaboration with the police should be maintained and strengthened, and the FOPH should ensure that police forces are aware of the health aspects of drug use.

- Finally, continuity in the FOPH's actions is essential if the achievements of the last few years are to be maintained.

Funding for harm reduction under the national drug strategy

Operational funding for public health initiatives to reduce drug-related problems is provided by the Federal Office of Public Health. However, Switzerland has 26 cantons and each has budgetary control over local activities related to the national drug strategy. Not all cantons have voted funds to support either heroin prescription or injection sites. However, one canton that did not vote for heroin prescription did vote funds for a clinic to provide methadone for self-injection.

The current status of specific harm reduction initiatives

Needle and syringe distribution and exchange

Syringes became available in pharmacies in 1987. In 1991, a nation-wide syringe exchange and availability program, including dispensing machines, was initiated. Needle distribution and exchange are now well supported by the police and the general public.

Street-level, walk-in, non-abstinence centres (SBS) are the main sources of injection equipment for drug users. There are currently 25 such centres in Switzerland, spread across 10 cantons, mostly in German-speaking areas. Thirteen such facilities have an injection room. Pharmacies represent the second-largest source of supply, followed by the clinics established for the Swiss Heroin Trials (PROVE program). Although automatic distributors (of which 76 have been installed in Switzerland) make a more modest contribution, this is probably qualitatively important in the event of an emergency.

In 1996, nearly 532,000 syringes were issued to drug users in Switzerland every month, equivalent to an annual volume of 6.4 million. They were distributed through low-threshold facilities (320,000 per month), pharmacies (122,000 per month), automatic distributors (20,000 per month), and the PROVE program (70,000 per month). There were differences among cantons with respect to the numbers syringes distributed relative to the population of young people.

Needle exchange in prisons is described below.

Drug substitution treatment

Methadone

Methadone is widely prescribed in Switzerland. About 18,000 narcotic addicts receive methadone on any given day. Almost all methadone is prescribed for oral consumption, but a few people receive methadone for self-injection at clinics established for the Swiss studies of medically prescribed narcotics.

Methadone maintenance services tripled in number between 1986-1990 in response to a rapid increase in heroin use during the same period (Klingemann, 1993, p. 18). Policies and practices with respect to methadone also became less restrictive and rule-driven during this period. The average length of methadone maintenance episodes has been 28.5 months, but many patients have been on methadone for much longer periods (Swiss Federal Office of Public Health, 1997). One informant described the ideal approach as client-centred where decisions about the dosage and duration are based on clients' needs and aspirations. Those who chose to enter abstinence programs are encouraged to do so, but this is not a goal in all cases. There have been numerous studies of methadone use in Switzerland and these have confirmed its value in a comprehensive treatment system (Swiss Narcotic Substance Commission, undated).

Some of the residential treatment programs are now providing methadone. Doctors who prescribe methadone require a special license and all patients put on methadone need to be approved by the chief medical officer of the canton. This is typically a very quick process taking between two hours

and one day. Each canton, therefore, has a registry of people on methadone and this prevents double doctoring. Guidelines for methadone treatment and national guidelines are presently being codified.

Prescribed heroin

Heroin is currently prescribed to about 1,100 people at special clinics established in the mid-1990s to support scientific studies of medically prescribed narcotics – the so-called Swiss heroin trials or PROVE projects. Most prescribed heroin (80% by weight) is for self-injection. The rest is in the form of slow- or fast-release tablets for oral consumption. The Swiss trials are described in other reports prepared for Health Canada and will not therefore be described in detail. These trials were established to assess the feasibility of the medical prescription of narcotics drugs (including heroin, morphine and injectable methadone) to severely dependent and destitute addicts who had not been motivated to participate in other forms of treatment.

The Swiss government concluded that the results of the trials supported the prescription of heroin in some circumstances and new regulations to be enacted will allow the prescription of heroin in situations other than as part of a research project. These regulations may allow heroin to be prescribed outside of special clinics, but this is not entirely clear. Several key informants indicated that heroin prescription has become normalized as an option in the medical treatment of narcotic addiction and that this was no longer a topic of concern to the public or politicians.

Not all cantons with large numbers of injection drug users initially agreed to support heroin prescription. However, a number have since been persuaded to provide such support by the results of evaluations of heroin prescription in other cantons.

Those prescribed heroin must be individually approved by the canton chief medical officer and through the FOPH. Heroin is only prescribed for on-site self-injection. No take-outs are allowed. Patients attend up to three times a day and take their heroin while being observed by a nurse. Some are also prescribed oral methadone and drugs for mental health problems such as anxiety and depression. Social assistance, counselling and psychotherapy are provided based on individual needs and all patients are assessed on an ongoing basis.

One finding of the evaluation of heroin prescription in Switzerland was the high rate of retention (89% at six months and 66% at 18 months). This suggests that heroin was popular with addicts. However, no client satisfaction studies have been conducted and the demand for places at clinics has been modest. The requirements to attend multiple times a day and to forfeit drivers licenses seem to make the clinics unattractive to many narcotic users and its appears that the clinics do not always operate at maximum capacity.

Concerns about the scientific validity of the Swiss trials were expressed by a WHO expert review panel (Ali et al., undated), the UN Commission on Narcotic Drugs and some Swiss psychiatrists

(Aeschbach, 1998). Essentially the WHO expert panel concluded that the Swiss trials had shown that the prescription of heroin was medically feasible and that the consequences of this treatment to patients and to society may be comparable to other forms of treatment. However, the panel considered that the knowledge base was insufficient to determine the cost-effectiveness and the differential indications for heroin substitution treatment.

The WHO expert panel also drew attention to a number of contextual factors that may have contributed to the outcomes of the Swiss trial and may limit the applicability of the results to other situations:

- High degree of oversight from federal and canton authorities,
- Built-in monitoring for research purposes,
- Novelty of intervention and high-level of public interest,
- Highly qualified, multidisciplinary teams,
- Ongoing staff training and development,
- No take-home narcotics for self-injection,
- Patients required forfeiting driver's licenses (patients could not legally drive under the influence of prescribed doses of heroin),
- Provision of ancillary services,
- Adequate measures to ensure the security of opioid type drugs and the safety of staff and patients.

It is also of note that Swiss towns and cities are small compared with those in many other countries and have excellent transportation systems. This makes it possible for people to attend clinics two or more times a day.

Other substitute drugs

One informant reported that there is some use of buprenorphine but not LAAM.

Supervised injection sites

Switzerland has 30 injection sites. These are facilities where drug users can inject drugs and obtain clean needles, condoms, advice, medical attention, and so forth. These sites are considered

legitimate under Swiss law because they do not distribute illegal drugs or allow drugs to be sold or traded. Although they provide aid to people who use illegal drugs, this is not an offence (Geense, 1997).

A detailed description of Swiss injection sites is provided in another report prepared by Canada's Drug Strategy Division (September 2000). This indicates that Swiss injection sites have the following essential features:

- Mobile and or fixed facilities are located in areas with open drug scene mainly involving users who live locally;
- Typically located within a larger centre that includes a cafeteria, counselling room and primary care clinic;
- Open about seven hours a day seven days a week;
- Entry is controlled and restricted, and some staff are principally concerned with security in and around the injection sites;
- Police cooperate by referring addicts to injection sites and do not arrest people with drug paraphernalia in or around the site. Police assist with dangerous and other difficult situations and enforce laws concerning drug trafficking.

The report by Canada's Drug Strategy Division also summarizes what is known about the effectiveness of injection sites from various perspectives. Overall, the evidence indicates that well run and appropriately integrated injecting sites can have a positive influence on the health, social integration and rehabilitation of their clients, and also reduce drug-related nuisances and drug-related crime in their neighbourhoods. There is no evidence that injection sites contribute to increased drug use in the general population or condones drug use. Rather, they tend to reinforce the view of drug dependence as a debilitating health condition that is far from being exciting or glamorous.

Drug user education and outreach

Outreach work is undertaken by a variety of agencies and especially by those offering low-threshold services such injection sites, needle exchanges, drop-in and day care centres and shelters. However, no accounts of outreach work were located.

Harm reduction in the justice system

The FOPH has declared support for the WHO principle of equivalency with respect to the treatment of drug use in prisons and in the community, and has supported initiatives to make this a reality. Despite political and other objections, the office has worked closely with prison managers to ensure that prisoners are provided with information on the risks of drug use and needle sharing, and ways to reduce these risks. Automatic needle dispensers have also been installed in some prison. In other prisons, medical staff exchanges needles with prisoners and also gives out condoms and other prevention aids (e.g., bleach). However, one informant indicated that the situation in any one prison depends very much on the attitude of prison governors. Some are opposed to needle exchanges, but others have been able to implement needle exchange services despite opposition from guards.

Only two detailed accounts of prison needle exchanges were located. The first was a report on the installation of automatic syringe dispensaries in a small (85 bed), women's prison where many of the inmates were sentenced for drug-related crimes (Nelles et al., 1998). Six dispensers were installed in different wings and they dispense one new syringes in exchange for used ones. Prisoners who have previously used drugs by injection are, on admission, provided with a dummy syringe on admission and this can be used to obtain a real syringe from the automatic dispenser. Dispensers were freely accessible, but hidden from general view. Prisoners also had access to condoms and were given lectures and counselling concerning drug use and harm reduction.

During a 12-month evaluation period, 5,335 syringes were distributed (0.2 per inmate day). None were used as weapons and no prisoners or prison officers were injured by discarded needles. Needle-sharing (based on self-reports) was virtually eliminated and despite high rates of blood-borne infection on admission (HIV 6%, hepatitis B 47%, hepatitis C 30%), no prisoner was found to have become infected while in prison. There was no evidence that drug use increased during the evaluation period, but most of those who used drugs regularly before admission continued to do so while in prison.

The second report of the use of automatic syringe dispensers in a Swiss prison concerns a small (100 bed) semi-open prison for men serving sentences from a few weeks to several years (Nelles, et al., undated). The results were essentially the same as for the women's prison. Consumption of drugs did not increase, syringes were not used as weapons, there were no incidents of needle stick injuries, sharing of syringes among prisoners greatly decreased, there were no new cases of HIV or hepatitis C, injection site abscesses did not increase, there was a decrease in drug-related sanctions, there was a decrease in overdoses and suicides, and staff acceptance of the program increased.

Methadone treatment can also be initiated on admission to prison. However, the range of treatments provided to injection drug users in prison have been described as varying widely from one prison to the next (Gervasoni, 2000). Follow-up after leaving prison is also described as insufficient in that prison medical services are not systematically informed when a prisoner is released.

Those receiving heroin from special clinics can continue to receive heroin for self-injection if they go to either of two large prisons. A few prisoners have also been prescribed heroin for the first time on admission to these prisons. Prisoners enter a special room to receive a syringe of heroin from a nurse. The nurse observes while the prisoner self-injects but does not usually assist.

Factors influencing harm reduction policies and practice

Swiss drug policy is influenced by a large number of stakeholders: international partners, the federal government, the cantonal (or state) government, the local communities, and private pressure groups. Supply reduction is the main objective of the Swiss police and juridical system, and this is where most resources are allocated. Demand reduction through preventive and therapeutic measures are largely in the competence of the 26 cantons of the country, which are each responsible for the application of the federal laws. All cantons, therefore, have organs and political structures concerning drug use. Important cities as Bern and Zurich also have substantial power and independence (Haemming, 1992). Besides cultural differences between the Swiss-German speaking part of Switzerland and the French- and the Italian-speaking parts, this independence explains the widely divergent drug policies of Switzerland. Each action taken by the federal government relies on a process of consensus building, which usually takes time and effort, to achieve a certain harmonization of the widely divergent interests of different stakeholders (Rihs-Middel, 1995). Nevertheless, Swiss drug policy over the last 10 years can be characterized by rapid change, and political willingness to experiment.

Trends in injection drug use

Switzerland experienced a significant increase in injection drug use and related problems during the1980s in the context of a growing restlessness and rebelliousness among Swiss youth, and the infiltration of the established drug scene by the international drug Mafia (Klingemann, 1998). Charges filed under the narcotics law for use or trafficking involving heroin or cocaine increased from 3,412 in 1980 to 11,590 in 1990, and drug-related deaths (mostly from heroin) increased from 88 in 1980 to 281 in 1990.

Initially the response was to try to contain drug use by tolerating use within limited geographical areas. However, as one informant indicated, the policy was not well thought out and should not be construed as one of harm reduction. The assumption seemed to be that containment would limit the spread of drug use and also make it easier to provide services to users. In Zurich, this policy contributed to the rise of the so-called “Needle Park”, which at its peak was estimated to include 3,000 heroin users. The park became a public embarrassment for the Swiss and clearly contributed to increased trafficking and to a variety of public health and public order problems. Drug-related arrests tripled from 1990-1994 (Klingemann, 1998). When police activity in the park was first

intensified, a core group of 200-300 addicts moved to an abandoned railway station. For a while these and about 2,500 occasional drug users continued to congregate in and around the station area and to cause problems for the police and public. However, as a consequence of more assertive police activities, the forced relocation of addicts to their home cantons, and the establishment of decentralized low-threshold and other services, the open drug scene was radically diminished.

The Zurich park and other open drug scenes were major factors in the development of new drug policies and contributed to an increase in a variety of prevention, treatment and harm reduction initiatives. In order to avoid the mistakes of Needle Park, the Swiss government agreed in 1992 to take over some responsibility for drug problems – a responsibility that until then had largely rested with the cities.

Needle Park and other open drug scenes also contributed to public and media discussion of alternative drug policies and to the development of two radically different proposals that were ultimately rejected in national referenda. The first, called "Youth Without Drugs", placed more emphasis on attempts to deter drug use, the elimination of any distinction between "soft" and "hard" drugs, and the closure of drug substitution and low-threshold programs. The second proposal was for the legalization of all drugs and the creation of a state-controlled drug monopoly. Neither proposal received widespread support.

More recently cocaine use has increased in some parts of Switzerland and some of those who were prescribed heroin continued to use cocaine at least at the time of the Swiss trials. Key informants considered that cocaine use poses special challenges and one saw cocaine use as an unsolved problem.

Trends in the rates of HIV and other infections among injection drug users

Relatively high rates of HIV/AIDS (over 30%) were found in some samples of intravenous drugs users tested during the 1980s. These high rates were a major factor in the development of harm reduction initiatives in Switzerland and the expansion and liberalization of methadone prescription. Rates of HIV/AIDS have been much lower in recent years (8-16%), although still higher than those in recent samples of injection drug users in the UK.

High rates of hepatitis C were found in samples of intravenous drug users tested in the 1980s (up to 90.6%) but these were also much lower in more recent samples (see table 4).

No specific objectives or priorities specific to hepatitis C are noted in a recent review of FOPH plans for 1998-2002 (Gervasoni et al., 2000).

Attitudes of service providers

Many providers of more traditional, abstinence-oriented programs have been concerned that the expansion of methadone services, the prescription of heroin and the emphasis on harm reduction undermine addicts' motivation to seek help from these programs. There is some evidence that this has occurred particularly with respect to abstinence-based residential programs. Traditional programs have therefore become more flexible and have been willing to adapt to accept clients stabilized on methadone. Others have become more specialized in treating people with specific problems such as dual diagnoses.

The availability of general health and social services

Switzerland has highly developed health and social service systems that have supported efforts to integrate and rehabilitate injection drug users who continue to use illegal drugs, as well as those who are on methadone, legally prescribed heroin and those who become abstinent. Since 1991, the federal government has also supported a variety of projects designed to connect injection drug users with health and social services. These include low-threshold lodging and day care projects for drug users, projects to ensure integration in the workplace, street work and counselling projects, sick bays for drug users and the homeless, assistance for female sex workers, and fostering of self-help among drug users.

Attitudes of police

Police have generally been very supportive of low-threshold methadone and other harm reduction initiatives and have cooperated with health and social service providers in the implementation of the four-pillar policy. However, a key informant study conducted as part of the evaluation of the FOPH plans for 1998-2002 noted the following obstacles to cooperation between the police and health and social services:

- police have been made to feel insecure in their role due to general social changes;
- development of drug policy is ahead of that of legislation. Several of those interviewed pointed out that the implementation of the legal provisions is difficult, and a revision of the narcotics law is seen as urgently necessary;
- differences between cities and rural regions. The police often have dual functions in rural areas as both representatives of the law and as "social workers". For a clear division of roles, the necessary social and health infrastructure needs to be available, but this is often not the case in rural areas;
- lack of a round-the-clock social services;

- limited scope for exchanges of information due to official secrecy, privacy laws and data protection laws that inhibit the flow of information between the police and health and social services.

The same report cited the following as beneficial to collaboration:

- Continuing education,
- Leadership training,
- Pilot-projects,
- Selection of staff who are open to the constant rethinking required in the drugs field,
- Regular and transparent information (via in-house journals, staff publications, etc.),
- Attention to the needs and views of front-line staff.

Police are seen as contributing to prevention, treatment and harm reduction in many ways, including:

- Dealing with organized crime
- Arrests of drug dealers
- Disruption of the open drug scene
- Referring addicts for treatment
- Supporting injection sites and needle exchange programs
- Involvement in public education, professional education and education in schools.

User groups

Self-help among injection drug users is encouraged under the confederation's four-pillar drug policy. However, it is not clear this occurs. No key informant spontaneously mentioned user groups and one said that there are a few user groups, but that they are not as organized or influential as in the Netherlands.

Europe

Switzerland is not part of the European Union, but is involved in multi-national efforts to prevent drug trafficking. However, it is not clear if or how Swiss policies with respect to treatment and harm reduction have been shaped by the considerations of the EU or its member states. A made-in-Switzerland tone is evident in written accounts of Swiss policy and some key informants for this and other studies of Swiss drug policy were proud of Switzerland's independent and innovative approach.

Those involved in Swiss drug policy development and evaluation have encouraged other countries to learn from its experiences. To this end, the FOPH supports a multi-language Web site on drug policy and has produced several reports in English, French and German versions. In 1999, the Federal Office of Public Health also sponsored an international conference focused on the heroin trials and this was attended by participants and observers from other European countries and elsewhere.

Research and evaluation

Documents on Swiss drug policies and statements by key informants indicate that these policies have been informed by the results of various types of research and evaluation, including (1) studies and informed critiques of law and order approaches to drug problems, (2) empirically-based projections of the consequences of the unchecked spread of HIV/AIDS among injection drug users, and (3) evidence for the effectiveness of methadone maintenance.

Reports of the benefits of heroin prescription based on practices in Liverpool (MacGregor and Smith, 1998) also had a strong influence over the establishment of the Swiss heroin trials or the PROVE project (Klingemann, 1998). A literature review prepared by Dr. Annie Mino (Mino, 1997), which concluded that there was a need for further study regarding controlled distribution of narcotics, convinced the Swiss Council of Ministers to develop and circulate a proposal outlining possible amendments to medical prescription practice to include narcotics. The response from the community was positive and led to the establishment of the PROVE projects.

Research and evaluation feature prominently in all statements about Swiss drug policy and especially those from the Federal Office of Public Health (FOPH). FOPH supports monitoring, research and evaluation and has also commission two independent evaluations of its own work in the area of drug abuse (see above).

Research on the prescription of morphine and heroin-impregnated cigarettes led to the abandonment of these practices. The evaluation of the heroin prescription trials has clearly informed subsequent decisions to make heroin prescription an option in the medical treatment of heroin

addiction. However, the widely recognized need for further research on heroin prescription has resulted in further Swiss research on this topic.

Nonetheless, Swiss studies provide substantial support for the wisdom of current approaches. Thus, in the last few years:

- the incidence of HIV and hepatitis infections has been noticeably reduced,
- mortality from overdose has been noticeably reduced,
- the open drug scenes have been eliminated,
- the crime rate connected with obtaining drugs has been substantially reduced, and
- the number of drug addicts in treatment has almost doubled.

Public opinion and the media

The drug problem has regularly sparked controversy in Switzerland. During the early 1990s, the open drug scene was a major concern to the Swiss population and headline news on many occasions. Public pressure to do something about drugs was clearly influential to the development of new drug policies.

As noted above, there have been several referenda on drug policy issues, and in 1997 there was a referendum that called for a strict, abstinence-oriented drug policy and the closing down of the heroin prescription clinics. This was rejected by 71% of voters (41% turnout) and this was seen as evidence for wide public support for the government's pragmatic four-pillar approach. Public support is likely to have been influenced by the obvious effects of new policies on the open drug scene and by favourable media reports of the results of the evaluation of the narcotic prescription trials. These reports did not apparently pay much attention to criticisms of the evaluation by the WHO expert committee (Gervasoni, 2000).

Harm reduction in the Federal Republic of Germany

Overview

Over the past decade Germany has moved toward harm reduction in its policies and practices regarding illicit drug use and related problems. This has been in response to rising rates of HIV/AIDS, drug-related crime and mortality.

Germany approved the prescription of methadone and legalized needle/syringe exchanges in the early 1990s. More recently the federal government legalized supervised injection sites and approved heroin trials. Some large German cities, such as Frankfurt and Hamburg have developed comprehensive and successful approaches to illicit drug use problems.

The current policy context for harm reduction

Germany, with a population of 82.7 million, is a federal republic with 16 states (Laender). Up to the mid- to late-1980s, Germany's response to illicit drug use empathized law enforcement and drug-free treatment. Professionals such as social workers, doctors, researchers and drug counsellors, were generally reluctant to work with active drug users (Vogt and Schmid, 1998). Key informants noted that the federal government under Chancellor Kohl resisted many attempts to bring federal laws and policies in line with harm reduction policies and practices, and that resistance to changing drug policies was found among all federal parties and their supporters.

Germany's drug free service did not, however, attracted many clients and they had high dropout rates. This, and increasing rates of overdose deaths, drug-related crime and the emergence of open drug scenes in many large German cities contributed to a shift toward harm reduction. However, this has not been uniform across the country. In general, harm reduction services are more limited in the south than in the north and central regions. Harm reduction policies and programs are also less developed in the former East Germany where illicit drug use was traditionally less prevalent.

The current Social Democrat/Green Party coalition government of Chancellor Schroeder, which came to power in 1998, established new national priorities and shifted responsibility for demand and harm reduction from the Home Office to the Ministry of Health. The government also appointed a drug commissioner and established a multi-disciplinary advisory body made up of experts from the field.

Reports from Germany's Drug Commissioners (Nickels, 2000; Caspers-Merk, 2001) reflect a public health perspective on addiction and identify two major goals for drug policy: (1) prevention and (2) treatment.

The 1999 Drug Commissioner's report (Nickels, 2000) addressed issues concerning both legal and illegal drugs and proposed a greater focus on the social and health consequences of tobacco and alcohol use. The report also emphasized that a variety of measures are needed to address legal and illegal drug problems, including increased public awareness, pilot projects, research, co-ordination with the Laender and international cooperation.

One key informant noted that in addition to the national drug strategy, there are drug strategies at the state (Laender) and city levels. However, these are not always in complete harmony and not all city-level initiatives have state-level support.

Funding for harm reduction

In 1999, the federal Ministry of Health provided DM23.8 million for various measures to prevent and treat substance abuse. This included DM12.9 million for education and prevention, DM 6.9 million for new pilot studies, and DM2.3 million for research and monitoring. The remainder (DM1.7) was for various other initiatives such coordination, support for professional associations and international collaboration. The Laender, and some towns and cities also provide funds for primary, secondary and tertiary prevention and these makes up the bulk of the money that goes into the drug field. Money for law enforcement comes from the federal Home Office and as from equivalent offices at the state level.

The current status of specific harm reduction initiatives

Needle and syringe distribution and exchange

In the mid-1980s, concerns about the spread of HIV/AIDS among injection drug users convinced many front-line workers in the drug field of the need to provide injection drug users with clean needles/syringes. At that time, the sale and possession of syringes and needles was legal but many pharmacists would not sell syringes to drug users. Also the police often confiscated drug-injecting equipment from those suspected of using drugs illegally. This contributed to a shortage of clean needles and to needle sharing (Weber and Schneider, 1998).

Needle exchange programs were first established in the larger cities such as Frankfurt, Hamburg and Berlin and were made legal under federal law 1992. Needles are distributed through pharmacies,

shelters, crisis centres, drug counselling offices, user groups and outreach workers (Weber and Schmidt, 1998). Needles are also provided by centres that offer a range of other health and social services. Fischer (1995) reports that 80% of all needles in Frankfurt are provided through mobile outreach services. In smaller cities and rural areas, particularly in the more conservative southern states, pharmacies provide the only legal source of clean needles and syringes. Weber and Schmidt (1998) reported that between 1995 and 1997, 6,000-7,000 syringes were exchanged daily.

Drug substitution treatment

The main drugs prescribed as substitutes for illegal narcotics are codeine and methadone. In accordance with the Narcotics Act these can only be prescribed in the context of comprehensive programs that include medical and therapy and psychosocial services (Nickels, 2000).

Codeine

German physicians were not able to prescribe methadone to narcotic addicts until the early 1990s. However, they used a loophole in the Narcotics Law to prescribe codeine. Though codeine is a controlled substance, regulations allowed it to be prescribed as an anti-tussive agent with no special restrictions if prescribed at concentrations of no greater than 2.5% in liquid preparations or no more than 100 milligrams in pills or capsules (Weber, 1997). The use of codeine is currently more common in southern Germany where access to methadone is more restricted (Krausz et. al., 1998). However, codeine is generally regarded as inappropriate for maintenance purposes and is only prescribed now for patients who cannot physically tolerate methadone (Gerlach (2000).

Weber (1997) reports that codeine as a maintenance drug has been the subject of considerable debate in Germany and in 1994, the Federal Ministry of Health recommended that it should be illegal. However, the 1999 report from the Federal Drug Commissioner indicted support for both methadone and codeine as substitutes for illegal narcotics (Nickels, 2000, p.29).

Krausz et. al. (1998) studied patients on codeine over a three-year period. They found results similar to those with methadone with respect to improved physical and mental health, stability in living and working conditions and drug use. Krausz et al recommended that codeine maintenance treatment be further examined through controlled trials.

Methadone

The use of methadone as a substitution drug was only approved in 1991 in response to increases in drug-related crime and mortality, and evidence for the lack of effective alternatives. After successful pilot studies the statutory health insurance system approved methadone treatment and introduced treatment guidelines.

The current federal government has stated its commitment to improving the prescription of substitution drugs through the development of a central registry, special qualifications for physicians prescribing substitution drugs, and the development of guidelines. Nickels (2000) notes that methadone (and other substitution drugs) are successful therapeutic options, which, when compared with drug-free therapies, result in comparable rates of abstinence. The federal government has also lifted budget capping for prescribing substitution drugs and the drug commissioner has stated that drug substitution treatment should be part of the mandatory package of benefits covered under the statutory health insurance.

Methadone is regulated under Schedule 3 of the German Narcotics Act that allows its prescription for:

- treatment of opiate addiction with the goal of step-by-step recovery to abstinence, inclusive of improvement and stabilization of general health;
- treatment of patients addicted to opiates who have to undergo medical treatment for serious medical illness;
- to reduce the risks of opiate addiction during pregnancy and after delivery.

Only oral forms of methadone can be prescribed and doctors must use special prescription pads. The guidelines for treatment covered under statutory health services (AUB guidelines) also require evidence that methadone is being prescribed to treat comorbidity and severe illness, AIDS, during pregnancy, severe withdrawal symptoms, for severe pain or other severe illness such as hepatitis (Gerlach, 2000a &b). These guidelines do not permit the prescription of methadone for addiction per se.

Two other aspects of the German system of methadone treatment are of note: (1) the use of other drugs while on methadone is not officially permitted and can result in the termination of treatment (2) regulations under the Narcotics Law and the AUB guidelines require mandatory participation in psychosocial care and counselling. However, the extent to which prescribing doctors tolerate the use of other drugs and the provision of funding for psychosocial care vary widely across the country (Schmid et al., 1999, 2000; Gerlach, 2000).

The number of addicts prescribed methadone increased by from about 1,000 to about 40,000 over the past decade. Gerlach estimated that in 1998 about 30-50% of heroin users were receiving some kind of substitution treatment (including methadone and codeine). Fischer et al., (2000) estimated that the coverage was 35-55%.

Most of those receiving methadone do so from general practitioners with small caseloads. However, some major cities have specialized outpatient centres for substitution treatment. Gerlach (2000a)

quotes high retention rates ranging from 66-84% after three years to 48-77% after seven years. Thus, although the ultimate goal of substitution treatment may be abstinence, it is clear that many patients are being maintained on methadone for considerable periods of time.

One key informant made the following comments about methadone treatment in Germany:

- methadone treatment in Germany has been positively associated with improved health and life expectancy among addicts and with decreased in involvement with the legal system

- it is debatable whether more spaces in methadone treatment are required since in cities with open drug scenes such as Hamburg and Frankfurt appear to have sufficient spaces to meet demand;

- most injection drug users living in large cities receive their methadone from clinics staffed by doctors, social workers and nurses who also provide medical care, including treatment for HIV infections. Doctors in such clinics do not discharge clients who use other drugs, but rather refer them for detoxification from these other drugs. In these settings, methadone is seen as a basis for treating severely ill addicts with the goal of stabilization rather than abstinence;

Prescribed heroin

A study involving the prescription of heroin is scheduled to start in fall, 2001.The commissioner's report (Nichols, 2000) describes this as a "multi-centre clinical study for non-residential heroin-based treatment for opioid addicts with a long-term addiction who have undertaken several unsuccessful attempts with abstinence-oriented therapy and cannot become stabilized in substitution". The study will examine the safety of heroin-based treatment, and will consider whether the prescription of heroin results in the stabilization or improvements in health, social functioning and motivation for further treatment.

The study will involve 1,100 patients recruited from seven cities (Hamburg, Hanover, Cologne, Bonn, Frankfurt, Karlsruhe and Munich) in five Laender. An experimental group will receive injectable heroin and a control group will receive methadone maintenance. Two psychosocial interventions will also be evaluated: case management in combination with motivational interviewing or psycho-education in combination with traditional psychosocial counselling. The Laender and the city councils will meet the costs of the heroin trial in the first place, and the federal government will be responsible for all research costs.

Other substitute drugs

LAAM was approved in 1999 and buprenorphine in 2000 (EMCDDA, 2000) and trials are being undertaken with these drugs. A pilot study of rapid detoxification under anaesthesia has also been undertaken (Nickels, 2000).

Supervised injection sites

The first supervised injection room was opened in Frankfurt in 1994 as part of a comprehensive approach to the open drug scene and related problems in that city. As of January 2000, there were 15 supervised injection sites in Germany. These have a total of 154 injecting spaces and, on average, admit 2,600 clients a day.

The Frankfort plan involved city staff, health and social service officials, the justice department, the police, housing officials and high-ranking members of the business community, especially from the banking sector. Representatives from these different departments and interest groups met (and continue to meet) to discuss ongoing problems of the open drug scene, drug politics and policies.

The first phase of the plan was the introduction of low-threshold methadone treatment. The second phase involved a comprehensive package of measures including shelter beds, multi-service crisis centres, expanded needle exchange and education programs, outreach workers and methadone dispensaries. These coincided with the police closure of the open drug scene near the city centre – and to a lesser extent the main train station. The third phase involved the establishment of five injection sites.

The comprehensive harm reduction approach in Frankfurt has coincided with a dramatic drop in overdose deaths (MacPherson, 1999; Nickels, 2000). Drug-related deaths have also declined in other cities with supervised injection sites. As well the drug scene has become less open and public security has improved. Other important outcomes include increased contacts between drug users and counsellors and increased rates of and referral to other service.

The role of injection sites in reducing drug-related deaths has been acknowledged by the federal government (Nickels, 2000) and appears to have been a significant factor in the decision to legalize them. The German federal government's approval of injection sites (drug consumption rooms) provided legal clarity to the services that had existed in large German cities for some time. A key informant provided the following information about the requirement for the establishment of supervised injection rooms:

- the community must already have a wide range of programs available for drug addicts, and the supervised injection room must be linked with these programs (counselling, medical outpatient care, therapy, etc.). In particular they should be linked to emergency services, syringe exchanges and overnight shelters.
- the target group should be intravenous drug users who are at least 18 years and not receiving methadone;
- first aid and medical care by a doctor must be guaranteed;

- addicts have to be “purposefully influenced” to make use of the following types of assistance to encourage them toward the goal of abstinence: counselling and care, detoxification/withdrawal management, placement and/or drug substitution treatment, medical care;
- measures must be taken to prevent drug trafficking within and in the vicinity of the supervised injection room;
- drug users are allowed to bring in only one dose of a drug per admission;
- injection should only be with equipment supplied by the staff;
- all critical activities must be documented
- the rooms must be managed and staffed by a multi-professional team of social workers, nursing staff and trained auxiliaries.
- users should be issued identification cards
- there should be clear house regulations regarding opening hours, banning users who infringe regulations, police reporting requirements regarding drug dealers, number of injecting spaces (max .12), provision of injecting paraphernalia, physical layout and the separation of the injecting room from other program areas.

The development and regulation of supervised injection rooms that conform with the basic criteria established by the federal government is left to the Laender. One key informant said that this allows some Laender the choice of not developing regulations or issuing regulations that are so stringent that they make the operation of injection rooms very difficult. Political differences between state and city governments may also impede the development and operation of injection rooms.

While further development of injection rooms may be slowed in Laender that do not support their establishment, the German Constitution does not allow the federal parliament to bypass the Laender in terms of the organization and financing of health care at the local level. Cities normally operate in accordance with the Laender government, and this holds for injection rooms, as well. However, some cities that are under severe pressure from open drug scenes may develop harm reduction services without approval of the Laender government. This seems likely in Karlsruhe, which is to participate in the national heroin trials without the approval of the state government of Baden-Wuerttemberg..

In 1999, under the auspices of the federal drug commissioner, Germany has hosted an international conference to develop guidelines for the operation and use of drug consumption rooms.. This was attended by representatives from the Netherlands, Switzerland, Austria, France and Australia. The

conference working groups developed guidelines on planning, operation, documentation and data collection and the political acceptability of these services. A Web site (www.uni-oldenburg.de/saus) has also been established to share scientific knowledge and practical experience (Schneider and Stoever, 1999).

Drug user education and outreach

Germany is unique among European countries in having nationally defined standards for outreach work and for teaching outreach work skills in professional training settings (Korf et al., 1999). The nationally defined aims include identifying and contacting hard-to-reach populations, improving service access and uptake, promoting adequate services, and promoting safe drug use and safe sexual behaviour (Korf et. al.,1999). Since 1995, the federal government has also been co-operating with the Laender in a pilot study of outreach and case management services to hard-to-reach addicts

In Hamburg it has been estimated that 80% of drug users are in contact with the treatment system, including its outreach component (Fischer,1995; Schmid et al., 1999, 2000). In Berlin, an outreach agency called Fixpunkt reaches a large proportion of the city's 8,000 injection drug users, especially those not in contact with other drug or health services agencies including drug users from the Russian migrant community.

Harm reduction in the justice system

Germany has about 60,000 people in prison and estimates indicate that 20-30% of males in prison these have a history of illegal drug use often involving injection drug use. Similar estimates for women run as high as 50-80% (Jacob and Stoever, undated). Stark and colleagues found that syringe sharing in prison is an important risk factor for HBV, HCV and HIV infection (Stark et al., 1995; Stark et al., 1997).

Methadone is available to addicts in some cases. However, decisions about the actual use of methadone are made by individual prison doctors. Although the use of methadone in prisons has increased along with the general increase in methadone prescribing, its use in prisons is mainly for detoxification or as a maintenance drug for those incarcerated for short time periods. The most recent EMCDDA Scientific Report (EMCDDA, 2000) indicates that there are about 800 methadone patients in penal institutions in Germany. However, only six of the 16 Laender provide methadone treatment to addicts in prison.

Germany has several pilot projects for the provision of clean injecting equipment in prisons. In Lower Saxony, there has been one such project in a prison for women and one in a prison for men. (Jacob and Stoever, 2000). In the women's prison, machines dispensing sterile equipment were set up for those who were drug-dependent, but not on methadone maintenance treatment. In the men's

prison, clean needles were handed out by staff of the drug counselling services. As in the women's prison, the program is not available to those receiving methadone treatment. However, a prison in Hamburg has installed a machine for dispensing sterile needles and this can be used by prisoners on methadone.

An evaluation of the projects in Lower Saxony focused on the feasibility of the two needle exchanges, their acceptance by prison staff and inmates, changes in inmates drug-use patterns; and in knowledge and attitudes regarding health and health behaviour. Jacob and Stoever (2000) drew the following conclusions from this evaluation:

- needle exchange projects are feasible in that they can be incorporated into the everyday routines of the prison without causing major disruption;
- needle exchange projects highlight discrepancies in the way drug use is dealt with in prisons(control versus health maintenance and harm reduction);
- the level of acceptance among prisoners depends on the level of anonymity that is possible;
- needle-sharing is not ritualized, but rather a response to the lack of sterile injecting equipment;
- prevention measures and educational programs for prison staff and inmates are very important to help achieve the overall goal of preventing blood-borne infections;
- there was no evidence of threats of harm with dirty needles;
- health was improved with no evidence of abscesses caused by injecting, or new HIV or hepatitis infections;
- health-related knowledge about hepatitis was limited among both staff and inmates, but knowledge of HIV/AIDS was adequate.

The two prisons in Lower Saxony have also had peer support pilot projects. These involve peer leaders, staff and external agencies in the provision of education about safer drug use and safer sex (Stoever and Trautmann, 1998).

Factors influencing policies and practice

Published reports and key informant interviews indicate that the political parties in power at the federal, Laender and municipal levels have influenced and continue to influence the interpretation and implementation of national laws, and the availability of harm reduction programs. At the level of

the Laender, there has been a north/south split, with the more conservative southern Laender being less supportive of harm reduction approaches. However, cities may deviate from the drug policies of their Laender (for example, Frankfurt in Hesse), and create their own drug policy. Thus, drug policies are created from the bottom up, as well as from the top down.

Trends in injection drug use

Like many countries, Germany experienced an explosion in use of illicit drugs in the late 1960s and early 1970s, beginning with cannabis and hallucinogenic drugs such as LSD and moving to heroin and other opioids (Vogt and Schmid, 1998). Between 1984 and 1994, the number of drug offences doubled and many people with drug problems spent time in prison (Vogt and Schmid, 1998).

Current estimates of the number of people addicted to heroin range from 100,000 to 200,000 or 1.2 – 2.5 per 1,000 (Gerlach, 2000a & b; Fischer, 2000). Fischer (2000) estimates that 75,000 to 120,000 people inject drugs. The GRN database indicates 80,000 to 165,424 "problem users" including as non-intravenous regular consumption of opiates, cocaine or amphetamines. The 2000 Annual Report from the European Monitoring Centre on Drugs and Drug Abuse (EMCDDA, 2000) quotes a problem drug use rate of 2-3 per 1,000. This rate is comparable to that of the Netherlands

An increasing number of drug-related deaths, particularly in big cities such as Frankfurt and Hamburg, played a significant role in shifting the agenda from law enforcement to a health approach. Gerlach (2000 a & b) reports that drug-related deaths in Germany increased from 0 in 1969 to 623 in 1979. Although these rates fell during the early 1980s, there were again substantial increases in the following years, peaking at 2,125 in 1991. Vogt and Schmid (1998) state that there is no simple explanation for this pattern, although by the end of the 1980s many of those with chronic drug problems had forsaken traditional abstinence-based treatment agencies. Although drug-related deaths have declined in some of the large German cities that have put in place comprehensive harm reduction programming such as Frankfurt and Hamburg, the drug commissioner's report (Nickels, 2000) indicates that drug-related mortality increased 8.2% in 1999. In many cases, deaths are attributable to use of several drugs at one time such as heroin, cocaine and alcohol. However, some deaths have also been attributed to the use of methadone with other drugs such as cocaine, crack, alcohol and benzodiazepines.

Trends in the rates of HIV and other infections among injection drug users

Estimates of the prevalence of HIV among injection drug users varies considerably, ranging from 0.6 to 3.8% (GRN database). The 2000 EMCDDA report reports rates of less than 5% for Germany (EMCDDA, 2000). However, this rate is for opiate users in treatment and thus may underestimate the overall rate among injection drug users. Gerlach, (2000a &b) estimates 20% of all injection drug users are HIV-positive with injection drug users making up 12% of all diagnosed

AIDS cases in 1997 (Robert Koch Institute 1998 in Gerlach, 2000a & b). He also reports that the annual number of AIDS cases has decreased from 228 in 1989 to 125 in 1997 (Gerlach, 2000 a&b).

Gerlach (2000a & b) also reports on rates of HCV infection ranging from 70-90% among injection drug users. Similar rates (63%-95%) are reported in the GRN indicators database.

Attitudes of service providers

Until the mid 1980's most German doctors favoured abstinence-based treatment although a few used a loophole in the Narcotics law to prescribe codeine. Other powerful groups, such as the association of social workers and the DHS (German Council on Addiction Problems) also opposed substitution treatment at that time (Vogt and Schmid, 1998). However, with increasing evidence that traditional approaches was not working, physicians, social workers and others working in the field moved to support the new, harm reduction approaches. The medical profession is now clearly in favour of heroin prescription.trials.

Attitudes of police

The German Police Presidents came out in support of heroin trials in 1995/96. In large cities such as Hamburg and Frankfurt, the police have actively participated in the development of harm reduction policies and programs. In these cities, the police have also developed an approach somewhat similar to the Netherlands in that they do not arrest those found in possession of small quantities of drugs for personal use. However the police sometime put drug users from out of town on buses or trains bound for their hometowns. Of course, the police do arrest those suspected of trafficking in drugs.

Weber and Schmidt (1998) state that weekly meetings and good information exchange among all municipal policy-makers, including police, state attorneys, health department, drug policy division, drug user groups, drug user help providers, the business community, and political bodies, contributed to the success of the Frankfurt approach.

Europe

In the face of rising drug-related crime, overdose deaths and very visible open drug scenes, a number of large German cities, particularly Frankfurt, Hamburg and Berlin, pioneered harm reduction approaches to address their drug problems in concert with other European cities. The Frankfurt Resolution of 1990 initiated the European Cities on Drug Policy that recognized that attempts to eliminate the supply and consumption of drugs had been a failure and that a shift in drug policy was essential. It was agreed that this must involve not just a greater emphasis on prevention and education, but also treatment and harm reduction initiatives such as needle distribution and

exchange, methadone maintenance, supervised injection sites, and the prescribing of other substitute drugs (ECDP, 1990).

Germany is also involved in various policy-making initiatives of the EU, including the European Union Drug Strategy (2000-04) that was approved in 1999. As well, it is working collaboratively with a number of other EU projects including the development of guidelines for drug services in prisons and peer education in prisons.

Research and evaluation

Compared with other countries Germany has been slow to evaluate its harm reduction policies and programs. However, the drug commissioner's reports recognizes the importance of research as a basis for drug policy and indicates that the federal government is supporting a variety of projects in the areas of epidemiology and monitoring, aetiology, clinical treatment research, social research and evaluation research. The government is, of course, financially supporting heroin trials. The 1999 drug commissioner's report indicates that the federal government has invested DM 2.3 million in research (Nickels, 2000).

Public opinion and the media

In the 1970s and '80s, changes to the Narcotics Law following the widespread increase in illicit drug use in the 1960s and '70s, led the public to see drug addiction as a serious social problem or "scourge" (to quote Vogt and Schmid, 1998). One key informant noted that the drug problem was, at one time, seen as one of the top 10 problems of German society. However, more recent surveys show that this is no longer the cases

Harm reduction in Australia

Overview

Australia's National Drug Strategic Framework provides for a balance of supply reduction, demand reduction and harm reduction. Australia has an extensive system of harm reduction services, particularly needle/syringe exchange, methadone and peer education and support, and has been able to maintain low rates of HIV infections among its injection drug-using population. More recently, Australia has open a supervised injection site and is currently considering trials involving heroin and other drugs such as LAAM, buprenorphine, and slow-release morphine. Recent increases in injection drug use and overdose deaths, however, give cause for concern.

The policy context for harm reduction

Australia is a country with a similar federal and state/territorial political structure to Canada, with patterns of high immigration initially from Europe, but now increasingly from Southeast Asia. Australia also has a significant Aboriginal population. The roles and responsibilities of federal, state and municipal governments in addressing substance use issues are also very similar to Canada. However, it appears that Australia developed harm reduction policies and programs to address HIV/AIDS in relation to injection drug use earlier and more comprehensively than Canada, and has been able to maintain low rates of HIV infection among injection drug users.

The issue of injection drug use related to HIV/AIDS and HCV is addressed under three different strategies. These are the National Drug Strategy Framework, the HIV/AIDS Strategy and the recently approved National Hepatitis C Strategy.

Australia's National Drug Strategy was renewed in 1998 for an addition five years with harm minimization as a key principle. The strategy provides for a balance of demand reduction, supply reduction and harm reduction strategies. Under the framework, there are eight priority areas: increasing the community's understanding of drug-related harm, building partnerships, links with other strategies, supply reduction, preventing use and harm, access to treatment, professional education and training, and research and data development.

The Ministerial Council on Drug Strategy (MCDS) is the major policy and decision-making body in relation to the strategy and it brings together Commonwealth and state/territorial ministers for both health and law enforcement to determine national policies and programs. Under the MCDS, the Australian National Council on Drugs (ANCD) brings together experts from government, non-governmental organizations and the community to provide the MCDS with independent expert

advice. The work of the MCDS is supported at the level of officials through the Intergovernmental Committee on Drugs. As well, there are a variety of national expert advisory committees on tobacco, alcohol, illicit drugs and school-based drug education (MCDS, 1998). The emphasis on strong partnerships between health and law enforcement has been a key element of the previous national drug strategy (Single and Rohl, 1997) and its emphasis continues in the current strategy. Overall co-ordination of the National Drug Strategic Framework rests with the Department of Health and Aged Care.

Under the previous National Drug Strategy 1993-1997, the Australian government launched a 1997 National Illicit Drugs Strategy – "Tough on Drugs". This provided funding for a range of supply and demand reduction measures. Demand reduction measures included treatment of illicit drug users, prevention of illicit drug use, training and skills development for front-line workers, monitoring and evaluation, and research. One key informant noted that the background to the "Tough on Drugs" funding was the decision by the Prime Minister to not allow heroin trials to go forward. However, in response to the need to address illicit drug problems, the National Illicit Drug Strategy was launched. Funding through this strategy made available resources to evaluate a variety of other pharmacotherapies such as LAAM, buprenorphine and naltrexone through the National Evaluation of Pharmacotherapies for Opioid Dependence (NEPOD) (Commonwealth of Australia, 2000).

The Commonwealth Department of Health and Aged Care also co-ordinates the National HIV Strategy and the National Hepatitis C Strategy which was launched in June, 2000. There are also close links between the National HIV/AIDS Strategy and the National Indigenous Australians' Sexual Health Strategy.

While Australia's drug policies and practices related to injection drug use have been very successful in maintaining low rates of HIV/AIDS among injection drug users, a review of the previous HIV/AIDS strategy, *Proving Partnership: Review of the National HIV/AIDS Strategy 1996-97 to 1998-99*, by the Australian National Council on AIDS and Related Diseases (ANCARD), raised concerns regarding Australia's ability to provide sufficient resources to address injection drug use and blood-borne diseases. *Proving Partnerships* makes the following points:

- the lack of a source of funds to meet the exponentially increasing demand for injecting equipment: it will be difficult, if not impossible for the states and territories to continue to fund needle and syringe exchange programs to the level required without compromising other programs;
- the politically contentious nature of the harm-reduction approach and its erosion in some jurisdictions as a result of political and community pressure;
- the changing patterns of injecting drug use: different drugs (such as cocaine and steroids) come into focus and different groups begin to use injection as a mode of administration;

- the very high incidence and prevalence of hepatitis C among people who inject drugs;
- the precedence has been given to criminal law approaches over evidence-based public health interventions under the National Drug Strategy (ANCARD, 1999, p.53).

The review of the Hepatitis C National Action Plan that preceded the National Hepatitis C Strategy, also identified a number of similar challenges. These included the need to provide sufficient sterile injecting equipment and methadone treatment to meet demand; the provision of safe injecting places and education programs (including peer-based programs); the need to extend and support the participation of affected communities, and involve stakeholders in policy, strategy development and decision-making; and providing resources to user groups and hepatitis C councils (Lowe and Cotton, 1999).

In terms of Australia's ability to co-ordinate responses under these three strategies, one key informant noted that the various government committee structures under these three strategies have agreed on the need to communicate and have consistency of approach.

The state of Victoria is particularly notable for the work of its Drug Policy Expert Committee appointed to advise the state government regarding drug policy. This committee, in a series of recent reports (Victoria Drug Policy Expert Committee Stage 1 and Stage 2 reports, April and November, 2000), strongly endorsed the need for community mobilization strategies, and expanded treatment and support services. The committee recommended that encouragement be given to local government to work with a range of local stakeholders, including users, police, residents, business, schools, multicultural groups, community organizations, addiction and other service providers, to develop local drug strategies; and that financial support should be given to implementing local drug strategies in communities particularly affected by drug use and dealing. In its first report, the committee also laid out a detailed framework for conducting a multi-site trial of injection sites within the State of Victoria. In its second report, released in November, 2000, the committee identified five objectives to guide the implementation of a drug strategy in Victoria:

- Prevention – focusing on reducing demand and promoting opportunities, settings and values that encourage resilience and reduce risk;
- Criminal justice and law enforcement, using interventions to reduce availability and supply;
- Getting lives back on track through providing treatment and support;
- Saving lives by reducing drug-related harm;
- Workforce development and research.

The National Drug Strategic Framework also identifies a key role for local government in facilitating local responses to drug-related harm with an emphasis on linking with community safety initiatives and public-place management strategies, supporting accords between police and health services, and the development of drug and alcohol action plans (MCDS, 1998).

The issue of reducing penalties for the possession of small quantities of cannabis has also been the subject of discussion and some states have adopted a cannabis expiation notice (CEN) system, which means that a criminal conviction is not recorded, provided an administrative fee is paid within a specified time (Lenton et al., 1999). Such schemes have been initiated in South Australia, the National Capital Territory and the Northern Territory. Recently a number of the states, including Victoria, Tasmania and Western Australia, have introduced cautioning. It is not clear that reducing penalties for cannabis offences is designed to separate the markets for soft and hard drugs as is true in the Netherlands, but it is the case that people charged with cultivation are permitted to expiate their offence if only a small number of cannabis plants are grown (originally 10, now three plants).

Funding for harm reduction under the National Drug Strategy

Australian state and territorial governments have jurisdiction in areas such as policing, health, education and law enforcement, and have developed their own drug strategies reflecting the particular social and political contexts of each jurisdiction. However, the Commonwealth government directly funds initiatives related to treatment and harm reduction. For instance, it allocated $516 million to the National Illicit Drugs Strategy of which $303 million was allocated for prevention, training, treatment, monitoring and evaluation and research. Of this amount, $57 million was designated for the establishment, upgrading and operation of treatment services across the country (Commonwealth Department of Health and Aged Care, 2000). The evaluation of the National Drug Strategy 1993-1997 also notes that since 1993, $200 million has been provided by the Commonwealth government to states/territories under a cost-shared arrangement for prevention and treatment and a further $66 million to fund national drug programs and special initiatives (Single and Rohl, 1997). As one key informant noted, considerable monies going to demand reduction initiatives, including trials of various substitution drugs balanced the tough-on-drugs rhetoric.

The current status of specific harm reduction initiatives

Needle and syringe distribution and exchange

The first pilot needle/syringe exchange program began in 1986 with government-funded programs beginning in 1987. One key informant commented that because of its geographic isolation, the

AIDS epidemic started later in Australia. This provided an opportunity to get needle exchange programs and user education about needle sharing in place before the epidemic took hold. Senior physicians also used their medical authority to advocate for needle exchange programs. Needle exchange programs are currently available in every state of Australia. According to the Alcohol and other Drug Council of Australia (ADCA, 2000), large numbers of needles are distributed annually with more than 4.1 million in Victoria alone in 1998. The GRN database cites a throughput of more than 20 million in Australia as a whole (GRN Database, undated). The ADCA report also notes that police in Australia have developed specific policies to ensure that police activity does not interfere with the operation of needle/syringe exchanges. Injecting equipment can also be purchased through pharmacies, and in some large cities such as Sydney and Melbourne, outreach services and patrols distribute clean needles and syringes and retrieve used ones. These services are run in consultation with local police (ADCA, 2000).

Although sterile injecting equipment is widely available through needle exchange programs, pharmacies and vending machines, there is still a problem with availability in rural areas, the outer suburbs, and at nights and on weekends, according to Burrows (1998). Reilly (1990) describes the establishment of a rural needle exchange program and the challenges posed by geography and clients' need for anonymity. The model he describes involves appointing area coordinators who establish needle exchange programs in a variety of venues, including doctor's offices, hospitals, health centres, women's centres and pharmacies. As well, the model involves reaching out to where drug users spend time and developing the support of media, police, community and area health services.

In Western Australia, the majority of needles are bought through pharmacies, especially in the Perth area (66%). Lenton et al., (2000) comments that pharmacies may reach a more hidden population of drug users that do not want to be identified by going to designated needle exchange sites. Those using pharmacies for their injecting equipment were surveyed and found to have different patterns of injecting from those injection drug users reached through previous Australian surveys of agency and peer-recruited injectors. A fairly high proportion (over 40% in each case) were women, parents, living with a partner and employed. Their rates of injecting and sharing were also higher than agency/peer-recruited samples. This sample of injectors was identified as an important group to reach with harm reduction strategies (Lenton et al., 2000).

Factors that may have an impact on the effectiveness of needle exchange programs identified by Burrows (1998) include lack of political support in some circumstances, and some legal uncertainties under which needle exchange programs are operating. In some states, it is illegal to possess equipment for self-injecting. Funding shortfalls have occurred in some Australian states that may affect the ability to respond to the increasing demand. In this regard, a survey in Western Australia (Loxley, 2000) found that two-thirds of injectors purchased their sterile equipment through pharmacies, but more than a third continued with unsafe injection practices because of lack of

money to buy sterile equipment. One key informant felt that political will and funding shortfalls were not the most important threats to needle exchange programs, but rather community backlash because of the public visibility of discarded needles in some areas. This key informant noted that the emphasis has been on getting sterile injecting equipment to drug users, with less emphasis on retrieving used needles. To address this issue, states use a number of mechanisms to reduce the numbers of discarded needles including "Fitpacks" in New South Wales and canisters in Victoria.

Drug substitution treatment

Methadone

Methadone was first used in Australia to treat heroin dependence in 1969. In 1985, methadone maintenance was endorsed as an appropriate treatment for heroin dependence as part of the National Campaign Against Drug Abuse (Commonwealth Department of Health and Family Services, 1998). The number of people receiving methadone has increased more than six-fold in the last decade. Although in the early 1980s, the approach was more toward short-term maintenance, the approach is now toward longer-term maintenance (two years on average, but for some clients up to 10 years) and to ensuring an adequate dosage (key informant). National Methadone Statistics as of June, 2000, indicate that slightly more than 30,000 clients are registered and collecting methadone. Of these, approximately 65% collect their methadone at a pharmacy, 16% through a public clinic, 8% through a private clinic and the remainder through a correctional facility or some other source. One key informant stated that the goal is to increase the proportion of those receiving methadone to 60% of the estimated 100,000 opiate-dependent users. Methadone treatment programs may not be reaching some groups, such as members of the Aboriginal and Torres Straight Islander communities, and those of Indo-Chinese origin. One key informant noted that users in some groups have cultural objections to maintenance treatment and that Aboriginal communities are not very supportive of harm reduction approaches such as needle/syringe exchange and methadone maintenance treatment.

In 1995, the final report of A Review of Methadone Treatment in Australia (Commonwealth Department of Human Services and Health, 1995) found that methadone treatment was available in every state and territory in Australia except the Northern Territory. Methadone treatment is delivered in a variety of ways in Australia, including both specialized public and private clinics and through general practitioners. A report by the Australian Institute for Health and Welfare (AIHW, 1998) found that 67% of clients on methadone were using private clinics in 1998, an increase from 39% in 1986. The role of general practitioners versus clinics may also vary among states. For instance, in Victoria, the majority of methadone prescribers are general practitioners and those who are certified can do their own assessment, induction, stabilization and maintenance. In other states, the client may first be seen at a specialty clinic and, if appropriate, referred on to general practitioner once stabilized.

One key informant emphasized the need to provide support and consultation to general practitioners and pharmacists involved with methadone treatment, and described the services his clinic provides. These include a doctor working as an education coordinator, a nurse who visits general practitioners to determine the resources they require to respond to clients with alcohol and drug problems, and a pharmacist who works with pharmacies to encourage them to be dosing sites for methadone. The pharmacists are linked to methadone-prescribing general practitioners as part of shared care with specialty clinics. Ward et al. (1996) describes another model involving the incorporation of methadone treatment in a primary health care centre in order to reach young, at-risk injectors, and found that providing methadone in this setting resulted in a reduction in heroin use, crime rates and HIV risk behaviours.

The review of methadone treatment in Australia (Commonwealth Department of Health and Human Services, 1995) quotes the findings of a clinical outcome study undertaken by the National Drug and Alcohol Research Centre, which included the following:

- despite systematic differences in service delivery, the outcomes achieved in the public and private clinics were very similar;
- clients of public clinics reported greater satisfaction with counselling services, but the greater emphasis on formal counselling did not contribute to less heroin use or greater psychological stability among public clinic clients;
- the role of medical practitioners differed significantly between the public and private sectors, particularly in their formal counselling role;
- the study did not find support for the value of regular urinalysis to detect illicit drug use;
- differences in take-away availability did not seem to affect clinical outcomes;
- adequate methadone doses were associated with the lowest rate of heroin use;
- low levels of non-opioid drug use, good levels of social functioning and high client ratings of services were associated with clinics that had a more clinical and therapeutic approach to treatment and client relationships;
- the report emphasized that one of the major factors affecting outcome was the experience and approach of service providers and the need for qualified people who are able to maintain their skills, together with the need for more standardized training;
- the study reinforced the need for quality assurance mechanisms to be implemented for both public and private sectors.

Australia has had national guidelines for methadone treatment since 1985. Since 1993, these guidelines have taken the form of a national policy on methadone treatment with a National Methadone Committee established as a standing committee of the National Drug Strategy Committee in 1994. This committee has developed a strategic plan of action to address training, service quality, alternative pharmacotherapies and monitoring procedures (Commonwealth Department of Health and Family Services, 1998). Further work on developing national standards for methadone prescriber competencies in terms of core knowledge, attitudes and skills, methodologies for assessing competencies and providing training to attain competencies are underway (key informant). This key informant also stated that over the next two or three years, Australia hopes to have specialty in addiction medicine and a method for benchmarking quality of care.

Attention is also being paid to induction and stabilization of patients into methadone treatment following coroners' inquests into a number of overdose deaths in the first week of methadone treatment (Humeniuk et al., 2000). Pharmacotherapy for the very young (14 to 17 year olds) is also an issue that requires further examination (key informant).

Prescribed heroin

Australia has been considering the feasibility of heroin trials since 1991. Although the feasibility of such trials has been examined, including the inherent risks, Australia has not yet piloted heroin prescription or undertaken a full clinical trial. The proposed Australian research, as described by Bammer (1999), would involve a randomized controlled trial with a choice of treatments (injectable heroin alone, injectable heroin plus oral methadone, and oral methadone alone) versus no choice (oral methadone only). This trial was to be carried out in the Australian Capital Territory (ACT). The trial was approved by the Ministerial Council for Drug Strategy, but the Commonwealth government did not support its decision.

One key informant noted that heroin would provide another option for treatment when other treatments have failed and to bring people into treatment early and to then introduce them to other options. However, this question has not been asked in the international trials undertaken to date. This same key informant noted that a lot of the normal testing that would be done before a product comes on the market has not been done with heroin. Even if a trial was not done for the ultimate purpose of making it available for treatment, it would be useful to look at it from the physiological point of view. The other issue raised by this key informant was that if heroin was approved for use and seen as a "medicine", a well thought-out prevention strategy should be in place to discourage young people from using heroin illegally.

Other substitute drugs

Australia has been undertaking trials of a variety of other substitution drugs, including buprenorphine, LAAM, naltrexone and slow-release morphine as part of the 1997 Illicit Drug

Strategy. One key informant noted that buprenorphine has just been registered for treatment of dependency. He felt that this will lead to further expansion of options because buprenorphine "doesn't have any political and community baggage" and will attract more GPs to prescribe. This was said in the context of a concern regarding community backlash against methadone fuelled by proponents of rapid detoxification and stories in the media. Another key informant said that buprenorphine has been positively received by clients of her agency: some found it more comfortable and experienced fewer side effects, and it was good for people who are unable to tolerate methadone or do not want to take methadone. This key informant also noted that the novelty factor of a new drug also helps to bring people into treatment and she felt the same would be true if heroin were available as a substitution drug.

Slow-release morphine has been used informally by a few practitioners and this has led to the decision to undertake a research trial (key informant).

Consideration has also been given to making naloxone available to users as a way of addressing overdoses. A key informant indicated that the issue is on the agenda for the next meeting of the Ministerial Council on Drug Strategy in June, 2001. This key informant also noted that there are many scientific and ethical issues involved and he felt that the MCDS would be reluctant to encourage a research trial; however, it would be possible for a state to go ahead and allow its use without scientific trials.

Because of the increase in use of amphetamines among injection drug users, practitioners are also looking at options for addressing this issue. A few doctors are prescribing amphetamines to dependent users. There is also a proposal before Australia's national health and medical organization to undertake a research trial for amphetamine prescription. However, practitioners have less confidence in the effectiveness of this since amphetamine users often have more chaotic lives and perhaps fewer resources to follow a treatment regime (key informant).

Supervised injection sites

Dolan et al. (2000) reports that several trials of supervised injection sites are planned in Australia. In New South Wales, after many political debates and several false starts, a trial of one injection room has recently started in Sydney. The Wood Commission in New South Wales came out strongly in favour of injection sites, highlighting the anomaly that public funds are provided to dispense clean needles and syringes to administer illegal drugs, but not to provide appropriate premises in which injection can occur (Micallef, 1998).

In Victoria, the government appointed a Drug Policy Expert Committee (DPEC) that came down with comprehensive guidelines for a trial of injection sites in Victoria. However, to date, injection sites have not received the necessary political or community support in Victoria (DRCNet, June 23,

2000). In the Australian Capital Territory (ACT), legislation was passed to allow a trial following extensive public consultation and debate in the legislature; however, funding was not approved. Proposed areas for evaluation of supervised injection sites would include public nuisance and amenity, referral and drug treatment utilization, overdose deaths and blood-borne infections.

One key informant commented that injection sites and heroin trials get a lot of attention in the public debate, but may make a marginal contribution to reducing deaths and blood-borne infectious diseases. This informant also observed that money would be better spent on broadening the range of maintenance treatment, and providing better access to other forms of treatment for heroin users. Another key informant noted that injection sites are only an appropriate solution in situations where there is a lot of public injecting. This is not generally true in Australia where most people inject at home. However, in Sydney and Melbourne, street injecting is becoming more visible. Often this involves people who have to travel some distance to obtain their drugs, who inject quickly and buy a larger quantity of drugs of unknown purity. In these situations, injection sites could be vehicles to teach safe injecting techniques, reduce overdose deaths, and encourage users into treatment.

Drug user education and outreach

Outreach and education are provided by various groups and agencies, but mainly in large cities and with mainstream groups. Young injection drug users, rural residents, the Aboriginal community, gay/lesbian injection drug users and those from multicultural communities may not be reached by such initiatives. One key informant stated that messages concerning HIV/AIDS and HCV are not reaching or not being heard by amphetamine injectors who do not perceive HIV/AIDS and HCV as a health issue relevant to them. Burrows (1998), in a discussion of needle/syringe exchange programming, notes that findings from a survey undertaken by the Australian Federation of AIDS Organizations (AFAO) in 1995 indicated that the provision of needles should not continue as an activity separate from peer education

User groups

Australia has funded drug user groups at national, state/territory and local levels and has promoted peer education as part of its responses to injection drug use and HIV/AIDS. According to several key informants, user participation in decision-making has been a central component of Australia's response to HIV/AIDS and injection drug use. Although user groups have been effective in providing education and commitment to needle exchanges and in advising on message acceptability, this key informant also said there was a need for greater representation from those who inject amphetamines and performance-enhancing drugs.

Harm reduction within the justice system

As in other countries, drug users involved with the justice system, particularly those in prison, present a risk for unsafe injection practices and the transmission of blood-borne diseases. Loxley (2000) quotes a study by Dolan, Wodak, Hall and Kaplan that provide the following figures regarding high-risk behaviour among prisoners: 30% inject drugs, 20% tattoo themselves, and up to 10% engage in unprotected anal sex. Crofts et al. (1996) quote figures of 50% of prisoners reporting a history of injection drug use and about 40% of injection drug users reporting a history of incarceration. Loxley (2000) states that there is some limited methadone maintenance treatment in prisons in New South Wales, Queensland, South Australia and Victoria. There has also been some discussion and study regarding needle/syringe exchange in prisons in New South Wales.

In 1999, the Council of Australian Governments endorsed a National Drug Diversion Initiative. This is part of a broader approach to combating drugs that will also involve action against drug traffickers and early intervention strategies. It is intended that the diversion initiative will target drug users early in their contact with the criminal justice system and will involve both police and courts in diverting offenders to compulsory drug education or assessment. From there, they will be referred to drug education or treatment. The initiative will be supported by Commonwealth funding of $111 million (Commonwealth of Australia, 2000).

Factors influencing harm reduction policies and practice

According to key informants, a number of factors contributed to the initiation and sustainability of harm reduction policies and practices in Australia:

- bipartisan political support for the broad drug strategy framework;
- early recognition by the lead federal department, the Commonwealth Department of Health and Aging Care, of the threat posed by HIV/AIDS and the development of evidence-based policy options that supported needle/syringe exchange. These were accepted and acted on by the Commonwealth government;
- consistent messages to government by experts in the field who knew each other and have been able to share knowledge about new approaches;
- the federal Minister of Health in 1985 saw the AIDS issue as important and gave it priority;
- physicians recognized the HIV/AIDS issue as important and used their medical authority to advocate for needle/syringe exchange programs.

Trends in injection drug use

The most recent Australian household survey of drug use, the 1998 National Drug Strategy Household Survey, reports increases in recent use of heroin between 1995 and 1998 for the general population as well as among teenagers. The estimated number of recent heroin users was 112,600, of whom 15,500 were aged between 14 and 19 years (AIHW, 1999). The survey also reported an increase from 1.3% to 2.1% in the percentage of people who have ever injected illicit drugs. However, the proportion of teenagers and the proportion of recent injectors remained stable between 1995 and 1998. Finally, the most common drugs injected were amphetamines (70%), followed by heroin (51%) and cocaine (12%) (AIHW, 1999).

An estimate of the number of people dependent on heroin is provided by Hall and colleagues (Hall et al., 2000). Using a number of different data sources, Hall et al. provide an estimate of 74,000 heroin-dependent people in Australia (range 67,000 to 92,000) producing a rate of 6.9 per 1,000 adults aged 15-54 years. This is in the mid-range when compared with rates in European countries. Hall et al. (2000) note that this estimate for 1997 would represent a doubling of the estimate for 1984-87 of 34,000 and they suggest a number of explanations for this increase. Among these is the drop in the price of heroin and the increase in the purity of the drug available to users; this means that more users can be initiated into heroin use through other modes of use than injecting. However, one key informant stated that currently heroin is hard to obtain, so drug users may turn to amphetamines and possibly cocaine.

The 1998 National Drug Strategy Household Survey Report (AIHW, 1999) provides an estimate of the number of recent injection drug users in Australia as 107,800, of whom 12,100 are estimated to be between 14 and 19 years of age. The report also indicates that the first drug injected was "overwhelmingly" amphetamines, followed by heroin. One key informant noted that amphetamine injectors are not being reached by the current harm reduction approaches such as needle exchange programs.

Trends in the rates of HIV and other infections among injection drug users

Australia has generally maintained very low rates of HIV infection among people who inject drugs. The report of the Australian National Council on AIDS and Related Diseases (1999) quotes rates of less than 0.6% among people attending sexual health centres between 1992 and 1997, and less than 2-3% among people attending needle exchange programs (ANCARD, 1999; Hall et al, 1999). This latter rate has remained fairly stable since the mid-1990s. However, among those who inject drugs and also identify themselves as homosexual, the rate was 27.3%. Approximately 8% of new AIDS diagnoses occur among those with a history of injection drug use, half of these also reported homosexual contact (AIHW, 1998).

Estimates of HCV rates among injection drug users range from 50-70%, with about 13% of those uninfected becoming infected each year (Ministerial Council on Drug Strategy, 1998). Crofts et al. (1999) quotes numbers of new HCV infections among heterosexual injection drug users as ranging from 600 to 10,000 a year, while new HIV infections are very low among this group. AIHW (1998) report that HCV prevalence among injection drug users is strongly related to the duration of injecting, with rates of less than 20% among those who had injected for less than three years. A history of incarceration is also an independent risk factor for hepatitis C transmission because of high HCV rates among inmates and high-risk sexual practices (Commonwealth of Australia, 2000). Several studies have found that HCV rates appear to be declining among Australian injection drug users (MacDonald et al. (2000) Crofts et al. 1999).

Hepatitis A and B have also been a significant problem among people who inject drugs. As a result, the ANCARD review of the 1996/97 to 1998/99 National HIV/AIDS Strategy recommended that vaccination against HAV and HBV should be expanded to the population of people who inject drugs (ANCARD, 1999).

One key informant noted that Australia's success in containing HIV among injection drug users has created some complacency, making it harder to mobilize around HCV. However, the key informant also noted that Australia is still ahead of some other countries with its testing, education of users, and monitoring and surveillance. However, amphetamine injectors don't see risk of viral exposure because they view HCV and HIV as related to use of heroin. Another key informant identified the need to understand injecting behaviour among various groups of injection drug users before effective HCV prevention measures can be put in place.

Although the threat posed by HIV/AIDS was a major factor shaping Australia's harm reduction policies and practices, one key informant noted that even prior to the onset of HIV/AIDS, in the mid-1980s, the then-prime minister made available a large amount of funding to the addiction care system, including funding to address heroin dependency problems.

Overdose deaths

Overdose deaths have also increased substantially in Australia over the last three decades ADCA (2000). An AIHW report (AIHW, 1998) notes that there was a 71% increase between 1990 and 1995, followed by a small decrease in 1996, but this decrease was reversed in 1997. Hall et al. (1999) report a 55-fold increase in overdose rates per million of the population 15-44 years of age, the majority (90%) being among males, with heroin users making up most of the deaths over approximately the last 20 years.

One key informant identified major risk factors for overdose deaths as being use of heroin together with alcohol and benzodiazepines, longer term use (six years or more) and loss of tolerance among

those who stopped using heroin and then started using again. This same key informant has examined overdose deaths among cohorts of drug users and found that while the absolute numbers are greater among older users, relative risk rates for young users are much higher even though numbers are small. He noted that there is a need to understand what younger users are doing that is riskier and different from older users.

Warner-Smith et al. (2000) propose several possible intervention strategies to address overdose deaths, including increasing the number of older, long-term opioid users in methadone treatment, peer education, the distribution of naloxone and medically supervised injection sites.

Attitude of service providers

Those who provide methadone maintenance treatment are well connected with the needle exchange programs. However, there is still considerable distance between traditional abstinence-oriented programs and harm reduction programs (key informant).

The availability of General Health and Social Services

Australia has a well-developed social safety net. However, the availability and delivery of health and social care varies among states and territories. One key informant noted that access to good health care and welfare probably contributed to better health among injection drug users than in some other countries. Since the mid-1990s there have been cutbacks and emphasis on user-pay. Another key informant emphasized the need to consider these health and social services as primary sites for providing screening, assessment and treatment because of the numbers of people they see with substance use problems. This same key informant also stated that the provision of good medical care was variable and that there was a need for specific medical services for those who are still actively using drugs.

Research and evaluation

The Commonwealth government has provided support to monitoring, evaluation and research through its various strategies. As well, the government recognizes the importance of evaluating the various strategies themselves. Most recently, the National Drug Strategy was evaluated by Eric Single and Timothy Rohl with the results providing direction for the renewed National Drug Strategic Framework (Single and Rohl, 1997). With regard to individual initiatives, one key informant emphasized the importance of evaluating both demand reduction and supply reduction initiatives and felt that the latter was not often subject to evaluation.

Public opinion and the media

The media and public opinion have apparently played a significant role in shaping Australia's responses to the drug problem. The 1998 National Drug Strategy Household Survey (AIHW, 1999) surveyed community support for drug-related policy. Over half of those surveyed supported measures such as free needle exchanges, methadone maintenance programs, treatment with drugs other than methadone and rapid detoxification therapy. A third supported regulated injection sites.

At the same time, Ali and Gowing (1999) note that there has also been a public perception that the heroin problem is out of control. This has arisen from factors such as highly publicized heroin seizures by the police and used needles in public places. These authors also state that the debate in 1997 over heroin trials in the Australian Capital Territory focused on public concern over heroin use and criticism of harm reduction initiatives such as needle exchange and methadone treatment.

Public concern and the media also appeared to have played an important role in the prime minister's decision not to proceed with heroin trials. However, as part of the development of protocols for the heroin trials, public opinion was sampled and found to be more in favour than opposed to heroin trials, provided that the long-term goal was abstinence (key informant).

Discussion

Injection drug use is of concern in five countries examined for this study and all have developed policies and programs of prevention, treatment and harm reduction. Harm reduction initiatives were in all cases, given new impetus by concerns about increasing rates of HIV/AIDS among injection drug users and the subsequent spread to the general population. In some cases, other aspects of injection drug use such as the open drug scene, overdose deaths and drug-related crime also acted as catalysts for harm reduction policy and program development. These concerns surpassed those that supported abstinence-only polices and continue to be prominent in discussions of future directions in drug policy. They provided the primary rationale for the development and support of methadone maintenance treatment, needle exchanges, the distribution of bleach kits and condoms, and efforts to educate injection drug users about the risks of sharing needles and syringes. More recent concerns about the spread of hepatitis C among injection drug users also support the same kinds of harm reduction initiatives as well as increased efforts to prevent needle and paraphernalia sharing, encourage testing for HIV/AIDS and hepatitis C and encourage users to switch to other routes of administration such as smoking.

The need for new approaches to injection drug use has also been fuelled by an increased awareness of the limitations of traditional abstinence-oriented treatments for some heavily dependent, socially marginalized drug users, and by the failure of simple law and order approaches to address the needs of these users and others affected by their behaviour.

Public opinion and the media also played a role in influencing political decisions on drug policy, and, in turn, the approach taken to drug-use problems by government also shaped public perceptions of appropriate solutions. In most of the countries considered, the publicly visible consequences of injection drug use, such as open drug scenes, discarded injection equipment, public injecting, etc., have played an important role in shaping government response. In some cases, as in Australia, strong political leadership at a crucial time, supported by experts in the field and government officials, was a catalyst for the development of harm reduction approaches.

European countries may also have been influenced by the activities and concerns of their neighbours, particularly with the move to more open borders as well as collaboration among European Union partners to develop consistent policies and practices. Canada and other countries are also to some extent limited in the scope of initiatives to address injection drug use by the need to adhere to international conventions.

A number of consistencies in approach emerge from examination of these five countries, which support current directions in Canada, particularly those outlined in the recent report, Reducing the Harm Associated with Injection Drug Use in Canada: Working Document for Consultation, March, 2001.

Comprehensive, coordinated and balanced strategies

In the countries examined, harm reduction policies and programs generally form part of a more comprehensive national drug strategy with components of prevention, treatment, harm reduction and law enforcement. Switzerland's "four pillar" approach to drug use exemplifies the full integration of injection drug use policies within a comprehensive national drug policy. The current UK national drug policy also has multiple components, including harm reduction measures that target injection drug users. Australia's national drug strategy emphasizes a balance of supply reduction, demand reduction and harm reduction. Similarly, in the Netherlands, the main aim of its drug policy is to protect the health of individual users, the people around them and society as a whole, while also aiming to restrict both the demand for and the supply of drugs and tackle drug-related nuisance. Despite the perception of some that drug laws in the Netherlands are lax and encourage illegal drug use, their drug policy and practice also include strong law enforcement. components.

Key informants all supported the need for a comprehensive approach to drug use and argued that in the absence of more comprehensive policies, harm reduction can be misrepresented, misunderstood and too narrowly focussed.

Key informants also emphasized the need to coordinate activities at all levels: national, state or regional and municipal. In Australia, the State of Victoria has developed a comprehensive strategy

that supports the need for local community drug strategies. In Europe, cities such as Frankfurt and Amsterdam have taken the lead in developing innovative policies and programs to address injection drug use and HIV/AIDS. It is clear that successful strategies, at whatever level, have involved multi-sectoral collaboration, including police and other law enforcement officials, health and social services, addictions, education, housing, local residents, business, user groups and the media. At the national level, a key factor in the success of the Australian drug strategy was the partnership between health and law enforcement at the federal and state ministerial levels. In cities such as Amsterdam and Frankfurt, mechanisms to ensure ongoing collaboration between health and law enforcement officials, as well as other partners, have played a key role in the success of local drug strategies.

Advocacy and leadership

Injection drug users are socially marginalized. Where progress has been made in the development and implementation of humane and realistic treatment or harm reduction policies and programs, this has been in response to advocacy by some professional organizations, individuals and, in some cases, from drug users and their families. Strong political leadership for harm reduction per se seems rare, but innovative drug policies that include harm reduction require high-level political champions in all areas of government. These individuals have sometimes had personal reasons to be concerned about drugs. Others have been otherwise well informed about drug-related issues and have recognized the need for new, comprehensive approaches. A number of key informants in Australia stressed the important role that the federal minister of health played in championing a harm reduction approach in the mid-1980s. This ensured that methadone treatment and needle exchange programs were put in place early in the AIDS epidemic.

Range of treatment options

Detailed attention to other approaches to the management of injection drug use (e.g., abstinence-oriented treatment) was beyond the scope of this project. However, there were evident differences in the degree to which harm reduction programs are integrated within the larger addictions care system or are part of a "parallel" system. In some cases, such as in the Netherlands, harm reduction services appear to be integrated into the broader addictions care system. In Germany as well it appears that there are efforts to ensure that cessation programs are part of multi-service programs that serve injection drug users. This appears to be less true of other countries. Although integrated services may assist clients in making the transition to addictions treatment, as one key informant in the Netherlands commented, they might also stifle more innovative approaches to programming for hard-to-reach users. An Australian key informant also commented on the need for separation of abstinence-oriented services from services for active users, e.g., needle exchange.

High priority given to the use of methadone

Methadone is the most widely prescribed drug for the treatment of narcotic addiction and in all countries considered, medium to long- term methadone maintenance is regarded as an acceptable treatment modality. The overall direction is toward client-centred treatment where dose levels and decisions concerning the duration of treatment are based on client needs and progress rather than on rigid treatment protocols. However, comprehensive guidelines for methadone treatment are recognized as essential, as are national competency standards and appropriate training. Easily accessible, flexible, low-threshold methadone services that do not insist on complete abstinence from other drugs are also well developed in some countries. A number of countries, such as the Netherlands, are examining the issue of increased dosages of methadone to improve treatment retention and reduce use of other drugs. In the vast majority of cases, methadone is prescribed for oral consumption. However, in some cases injectable methadone can be prescribed if indicated on clinical grounds. Access to methadone services has increased in all cases over the past decade, but there are local variations that relate to local resource allocation.

Efforts have been made to ensure that methadone is offered in the context of a comprehensive range of services available on site or through active referral. In some countries, this may include provision of clean needles/syringes, medical care, help with shelter and housing, social assistance, crisis intervention, outreach, as well as access to more traditional addictions care such as withdrawal management and drug-free treatment.

The extent to which methadone is provided through specialized clinics, and the role of general practitioners as methadone prescribers, differ both among countries and within countries. A number of jurisdictions have developed models in which the initial assessment, induction and stabilization are undertaken in a specialized clinic. Once stabilized, the client is referred on to a general practitioner for continued care. In such models, the specialized clinic plays a key role in providing consultation to general practitioners and often pharmacists in their catchment area, as well as resuming management of a client who becomes destabilized. This model is common in the UK, is well develop in Amsterdam and also occurs in some Australian jurisdictions. Amsterdam also provides outreach services to methadone clients in police stations and hospitals, and works with hospital staff to ensure those patients receive appropriate care.

The use of other substitution drugs

The countries examined have all recognized that there is a need to look at other options in terms of substitution drugs in order to engage those not being reached through methadone treatment, or those for whom methadone treatment has not been successful in stabilizing their lives.

Buprenorphine and LAAM are the most common options being considered to extend the range of substitution drugs. Buprenorphine has now been approved for use in Australia, Germany and the

UK. It is available in the Netherlands, but apparently not widely used. LAAM has been approved for use in Germany and is undergoing trials in Australia. As one key informant in Australia noted, alternatives to methadone as well as increasing the available options, may also attract users into treatment because of the novelty factor. Australia is also researching the use of slow-release morphine.

Codeine is still being prescribed as a substitution drug in Germany, although its use is now considered less desirable with the increasing availability of methadone treatment.

Oral amphetamine is sometimes prescribed to heavily dependent amphetamine users, including those who use amphetamines by injection in the UK. At this time, there is no good research to support this practice. However, researchers in Australia have proposed a research trial in response to the increasing rates of amphetamine use among Australian injection drug users.

Heroin is prescribed to 1-2% of all addicts involved in drug substitution treatment in the UK and to about 5% of those in Switzerland. In both of these countries, heroin prescription is now regarded as an option available for specially licensed community physicians as part of their normal work; that is, heroin is no longer regarded as an experimental drug for addiction treatment. However, in the UK, the prescription of heroin is discouraged in national guidelines and many physicians are thus reluctant to prescribe it. In Switzerland, it seems more widely accepted that there is a small minority of narcotic addicts for whom all other treatments are ineffective who do well on heroin. Heroin for self-injection is also prescribed to a few narcotic addicts in Swiss prisons.

Heroin is also being prescribed to narcotic addicts involved in research in the Netherlands and a heroin trial is scheduled to start in Germany later this year. In the UK, all prescribed heroin is for self-injection, as is most heroin prescribed in Switzerland. However, about 10% of Swiss heroin is in the form of fast-release tablets and 6% in the form of slow-release tablets. These tablets are for oral consumption. In the research trials in the Netherlands, heroin is being prescribed in injectable and smoke-able forms. In Germany, the government has given approval for multi-site heroin trials to commence in 2001.

Key informants from the UK and Switzerland cautioned against giving priority to trials involving heroin unless all other services, and especially methadone-based services, are widely accessible and of high quality. Some informants also expressed concern that the general application of the results of the ongoing heroin trial in the Netherlands will be compromised by strict selection criteria imposed by the research. The German trials appear to be feasibility studies, as was the case in Switzerland.

Where used, heroin and other drugs are provided in the context of a comprehensive array of services, including methadone maintenance, detoxification and abstinence-based treatment services.

Several countries are also examining rapid detoxification with naltrexone (Australia and the Netherlands) and the treatment of overdoses with naloxone using peer administration. The latter is being considered by the Ministerial Council on Drug Strategy in Australia, and is apparently being used on a small scale in the U.K.

The importance of needle exchange and related initiatives

Needle exchanges, and the distribution of bleach, condoms and user education concerning safe injection practices and safe sex are well established in the countries considered and have limited the spread of HIV/AIDS and other infections.

Needles and other items are seen as ideally available from a variety of readily accessible outlets, including pharmacies, public health units, drug clinics, street-level drop-in services, mobile vans and other outreach services. Automatic dispensaries are also available some countries. However, availability in rural areas, particularly in large countries such as Australia, is still a problem.

The police are positive about needle exchanges when they understand their role and see them as part of a more comprehensive approach to drug use that gives police a clear role consistent with their mandate to ensure public order and safety. In these circumstances, police do not stake out needle exchanges to identify drug users or confiscate needles from those found in possession. However, some informants stressed the need for police education and the need for ongoing dialogue between police and other stakeholders.

Some key informants stressed the need to ensure that needle exchanges are integrated with other services. Otherwise, the distribution of needles can be an end in itself with no concern to capitalize on opportunities to provide education and motivation for reducing drug use or dealing with other issues. Attention also needs to be paid to the retrieval of used needles in order not to create community backlash against needle exchange programs.

Needle exchange schemes have been successfully developed in a few prisons despite initial objections of some prison staff. The attitude of prison governors was cited as critical to the implementation of these schemes. The results of the evaluation of the pilot projects in Lower Saxony and in Switzerland have generally been positive with needle exchange becoming incorporated into the prison routine. It was also found that distribution of clean needles improved health among prisoners who inject drugs and there was no evidence of needles being used to threaten staff. Education for staff and prisoners has been an important part of these projects. Of note is that sterile needles/syringes are also available in some Spanish prisons.

The importance of outreach and readily accessible community-based services

Injection drug users often lead chaotic lives and may have difficulty trusting or accessing services. Countries examined, especially the Netherlands and Germany, have recognized the need to take services to the client. Examples include mobile bus services providing methadone and clean injecting equipment, health care staff visiting police stations and hospitals, street workers, mobile doctors surgeries, etc. Harm reduction services that also provide a range of other low-threshold services such as drop-in, meals, medical and social care, washing facilities and crisis shelter are important mechanisms for reaching marginalized drug users. Several key informants and the literature highlighted the needs of older, chronic injection drug users. Despite access to harm reduction services, many continue to deteriorate and experience serious psychiatric and medical problems. Accessible medical (including psychiatric) and social care is required for this population.

Housing has also been identified as a key element to improving the lives of injection drug users. Research in Germany found that those without consistent housing were least likely to be successful in treatment. Shelter and housing are also important components of the Dutch approach.

Users and user groups play an important role in reaching injection drug users. For some drug users, peer outreach and education may be more acceptable than professionally run services, although, as pointed out in the section on the Netherlands, user groups or organizations can find themselves overwhelmed by the day-to-day counselling needs of their clients to the detriment of their other role in promoting the interests of users to policy and decision makers.

Supervised injection sites have a role in some situations

These have been found to be useful in situations where groups of local drug users would otherwise frequently inject in public or in high-risk situations (e.g., alone, using drugs from a new dealer). They need to be closely linked (sometime physically) with other services. They can win acceptance from local neighbourhoods if they reduce drug-related public nuisance and do not attract drug users and dealers from other areas. Police have been willing to limit their law enforcement activities in and around injection sites while vigorously enforcing drug laws in surrounding areas. Supervised injection sites formed part of the comprehensive approach to injection drug use and the open drug scene in Germany, the Netherlands and Switzerland. They are also being considered in Australia and the State of Victoria Drug Expert Committee has provided comprehensive guidelines for their implementation. Like some other contentious harm reduction initiatives, supervised injection sites should be one component of a comprehensive local drug strategy developed with the collaboration of all key stakeholders.

The need to attend to issues concerning injection drug users involved with the legal system

Key informants and published literature from the five countries examined recognized the problems posed by the high percentage of illicit drug users who become involved with the legal system, and the particularly high risk posed by incarceration such as needle-sharing, unsafe sexual practices, loss of tolerance and risk of overdose on release. As the 2000 EMCDDA report notes "conditions in prison are even more conducive to the spread of infectious diseases than conditions outside" (EMCDDA, 2000). Like Canada, these countries are also struggling with an appropriate response to the reality of drug use in prisons that is both politically acceptable and humane. In Europe, the European Network on HIV and Hepatitis Prevention in Prison has developed guidelines supportive of the principle that people in prison should have access to the same types of health care services available on the outside.

More generally, all countries examined recognized the need for measures to divert drug users from incarceration where possible. Emphasis is on the diversion of people as early as possible in their contact with the legal system, e.g., the arrest referral programs in operation in the UK and Australia. For those who are incarcerated, drug-free units, counselling, methadone (usually at the discretion of individual prison medical officers and short-term) and, in some prisons in Germany and in Switzerland, clean needles are available for prisoners. Several European countries are also examining the effectiveness of peer support programs in prisons.

Research and evaluation are acknowledged to be important

Research has informed, and continues to inform, policy debates, but, as in other policy areas, the relationship between research and policy is complex. Some research has been ignored, used selectively or interpreted in different ways to suit different agendas.

Research that has generated the greatest interest has concerned needle exchanges, HIV/AIDS and drug use, methadone maintenance and heroin prescription. Research on drug use and crime also seems to have influenced drug policies, especially in the UK. Research on drug use in prison and the effectiveness of prison-based needle exchange has had more influence in some countries than others. Several key informants also identified the need for research that would give a better understanding of various populations of injection drug users and their injecting practices in order to put in place better measures to reduce the spread of HCV.

Research and evaluation are also seen as very important to the future of harm reduction and other drug polices. Some key informants have emphasized the need for equal weight to be given to the evaluation of both demand reduction and supply reduction initiatives. The extent to which this occurs in the future will depend on the resources available for research, the quality of research

undertaken and the clarity of results. However, the political nature of "drug problems" means that it would be naïve to assume that research results will be the sole determinates of future drug policies.

In conclusion, many of the harm reduction initiatives in the five countries examined are already available to some extent in Canada, and have been endorsed by the various federal/provincial and territorial committees. A population health approach to policy development, co-ordination and programming underpins the approaches of most of the countries examined. Although the five countries have been successful in limiting the spread of HIV/AIDS and engaging large numbers of injection drug users in some type of assistance, most have HCV rates that are similar to Canada and are engaged in increased efforts to prevent the sharing of needles and other drug paraphernalia or to encourage users to switch to methods of use other than injection. The use of cocaine and amphetamines is an ongoing concern in some countries and no country appears to have any especially innovative programs for people who inject these drugs. Amphetamines are prescribed to a limited extent in the UK but this no encouraged by health authorities and remains controversial.

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Appendix A
Sample email sent to those selected for interview[18]

Dear …..,

I am writing to ask if you would consent to a telephone interview in connection with a project concerning injection drug use that my colleagues and I are undertaking on behalf of Health Canada

Health Canada has asked for study of contextual factors (social and political) surrounding the development and implementation of harm reduction policies and programs concerning injection drug use in Great Britain, Germany, the Netherlands, Switzerland and Australia. The purpose of the study is to identify options for furthering the adoption of harm reduction initiatives in Canada based on the experiences in other countries.

The study is being undertaken in two phases. In the first phase we will be reviewing relevant publications and reports. Following our review of the available literature, we would like to interview (by email or by phone) key informants in each country who could provide us with a more in-depth view of factors that have contributed to or inhibited the development, implementation and sustainability of harm reduction initiatives in their country.

At this stage, I am contacting you to ascertain your willingness to be interviewed (probably during March or April), as well as to ask whether you could provide the names of others in the UK who you think we should talk to.

Would you be able to help us? If so please let me know ASAP and I will then write back to nail down a time for us to talk. A list of the issues of interest is included below. I would not, of course expect you to address all of these issues or to limit yourself to issues on the list. Rather I would prefer you to talk about factors that have had the greatest influence on harm reduction in the UK and about things that might be done to improve on Canada's performance in this arena.

Some questions and topic of interest

- What are the trends in injection drug use and relate problems including HIV and Hep C and drug overdoses
- What is the current status of harm reduction in your country?

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18 Emails were customized to some extent depending the previously know interests of some respondents and the preferences of interviewers.

- What relevant policies have been endorsed and by whom
  - National
  - Regional
  - Law enforcement bodies
  - Health bodies
  - Social welfare bodies
- Relationship with other policy initiatives nationally and regionally
- What resources are available and from where
- Specific initiative (yes/no, who provides and how accessible/successful)
  - Needle exchanges
  - Methadone high threshold
  - Methadone Low
  - Supervised injection sites
  - Outreach
  - Prescription of heroin/other drugs
  - Specific programs/policies in prison
- How have the following contextual factors influenced policy and program and how have any specific impediments been addressed
  - jurisdictional issues with respect to drug abuse treatment, harm reduction and related matters
  - the ideologies, roles and influences of key stakeholders and the ways in which they view harm reduction initiatives (e.g. medical professionals, other treatment professionals, police, advocacy groups)
  - the influence of public opinion and the media
  - other policy initiatives
  - neighborhood concerns
  - the accessibility of social and medical services (including substance abuse treatment services
  - the influence of research, evaluation and pilot studies
  - events that may have created or closed windows of opportunity for new harm reduction policies and programs.
- To what extent is injection drug use accepted as a health issue?
- ‘must read reports?
- key people we should be trying to contact?

Appendix B
Key informants and others with whom the project was discussed[19]

Canada

- Dr. Perry Kendal
- Dr. Pat Erickson, CAMH
- Dr. Bruna Brands, CAMH
- Paddy Meade, CEO AADAC
- John Borody, CEO AFM
- Michel Perron, CEO CCSA
- Rick McHutchison
- Dr. Eric Single

United Kingdom

- Dr. Gerry Stimson, Director of the Centre for Research on Drugs and Health Behaviour, Department of Psychiatry, Charing Cross and Westminster Medical School
- Dr. Michael Farrel, National Research Centre, Institute of Psychiatry, London
- Dr. Peter Fleming, Drug and Alcohol Services, Portsmouth
- Dr. Niel McKageny, University of Glasgow.
- Dr. John Merrill – head of drug treatment service in Manchester
- Mr. John Sayer – Superintendent of Police, Merseyside
- Ms. Jill Britton, Drugscope

Switzerland

- Dr. Margaret Rihs – Swiss Federal Office of Public Health
- Dr Christopher Eastus – Swiss Federal Office of Public Health
- Dr. Harald Klingemann – researcher
- Mr. Christian Buschan – Federal Office for Police Policy and Management

19 Aspects of this project were discussed with some colleagues who provided useful information or advice. However, there were not all formally interviewed.

The Netherlands

- Dr. Franz Trautman, Head of Substance Abuse and Risk Reduction, Trimbos Institute, Netherlands Institute of Mental Health and Addiction
- Dr. G. van Brussel, Medical Director of Drug Programs, Amsterdam City Health Department, Amsterdam, Netherlands
- Gert Bogers, Netherlands Ministry of Health, Welfare and Sport
- Hugo van Aalderen, Mainline Foundation
- Daan van der Gowe, LSD (Dutch National Interest Group of Drug Users).

Germany

- Dr. Heino Stoever, Carl von Ossietzky University, Oldenburg, Lower Saxony
- Dr. Irmgard Vogt, University of Applied Sciences Department of Social Work, Frankfurt, Germany
- Heinz-Harald Koerner, Attorney General, Frankfurt
- Astrid Leicht, Fixpunkt, Berlin
- Martin Koehler, Ministry of Health, Bonn

Australia

- Dr. Robert Ali, Drug and Alcohol Services Council, Adelaide, Australia
- Dr. Alex Wodak, Director, Alcohol and Drug Service,,St. Vincent's Hospital, Sydney, Austrlia
- Dr. Gabriele Bammer, Acting Director, National Centre for Epidemiology and Population Health The Australian National University, Canberra, Australia.
- Dr. Wayne Hall (by email), Executive Director, National Drug and Alcohol, Research Centre, Sydney, Australia
- Professor. Margaret Hamilton, Director, Turning Point Alcohol and Drug Centre, Fitzroy, Victoria