

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 opened 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 additional 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 Partnerships: 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

Metadone

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 Strait 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 policies 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 developed 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 policies. 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 is not encouraged by health authorities and remains controversial.