Illicit Drugs Policy:

Using evidence to get better outcomes

The Royal Australasian College of Physicians (RACP)

and

The Royal Australian and New Zealand College of Psychiatrists (RANZCP)

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The Colleges would like to acknowledge the following individuals who contributed to the policy document:

- Dr Josephine Anderson, (RANZCP, Faculty of Child and Adolescent Psychiatry)
- Dr Michael Baigent, (RANZCP, Section on Addiction Psychiatry)
- Professor Glenn Bowes, (RACP, Paediatrics & Child Health Division)
- Mr Vaughan Carter (Mental Health Council, GROW Self Help/Mutual Support Group)
- Associate Professor Kate Conigrave, (RACP, Australasian Chapter of Addiction Medicine)
- Associate Professor Paul Haber, (RACP, Australasian Chapter of Addiction Medicine)
- Dr Stephen Jurd, (RANZCP, Section on Addiction Psychiatry)
- Ms Coralie Ober, (RACP, Aboriginal and Torres Strait Islander Health working group)
- Dr Rene Pols, (RANZCP, Section on Addiction Psychiatry)
- Dr Jenny Proimos, (RACP, Paediatrics & Child Health Division)
- Professor Jim Rankin, (RACP, Australasian Chapter of Addiction Medicine)
- Professor Ian Webster, (RACP, Australasian Faculty of Public Health Medicine)
- Dr Alex Wodak, (Chair), (RACP, Australasian Chapter of Addiction Medicine)
- Ms Mary Osborn, (RACP, Policy and Programs)

Further copies are available from:

Policy and Programs, RACP

145 Macquarie Street

Sydney NSW 2000.

Tel (02) 9256 9606, Fax (02) 9256 9610

Email: hpu@racp.edu.au, website: www.racp.edu.au.

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1. EXECUTIVE SUMMARY

This statement updates the previous policy[1] "From Hope to Science: Illicit Drugs in Australia" of the Royal Australasian College of Physicians (RACP) and is now jointly issued with the Royal Australia and New Zealand College of Psychiatrists (RANZCP). Since the release of "From Hope to Science: Illicit Drugs in Australia" in 2000, the RACP has established the Australasian Chapter of Addiction Medicine in cooperation with the RANZCP. This statement is addressed to individuals and organisations in Australia and New Zealand involved in the development of policies and programs concerned with illicit drug* problems; it is also intended as a guide to those in the wider community who are interested in learning more about this field.

Half a century ago, Australia and New Zealand began to follow an international trend to redefine the use of certain illicit drugs primarily as a criminal justice rather than a health and social issue. Since then, there has been a dramatic increase in the quantity and types of illicit drugs consumed and the adverse health, social and economic consequences resulting from such use. However, the cost of controlling these substances often approaches, and sometimes exceeds, the direct consequences of illicit drug use.

It is undeniable that efforts used to reduce the demand and supply of illicit drugs have had limited effectiveness. Nevertheless, the supply reduction measures, though often costly and accompanied by serious unintended negative consequences, are generously funded. In contrast, pharmacological drug treatments and harm reduction interventions that have proved to be relatively inexpensive, effective and safe are relatively poorly funded. For the last three decades, illicit drug policy has been a major political issue during many election campaigns. This has not served the interest of effective policy making.

Improved outcomes can be achieved by investing more appropriately in interventions better supported by evidence of effectiveness. This will only happen if politicians are

* In this document the term "illicit drugs" refers to psychoactive substances covered by legislation in Australia and/or New Zealand in which they are defined as prohibited substances. Some are completely prohibited, e.g. heroin, and cannabis and its derivatives, while in others the term "illicit" applies to circumstances in which they are produced, distributed and/or used for the purposes of self-administration (i.e., non-medical use).

prepared to lead an informed community debate rather than respond to vocal and often unrepresentative media commentators.

During the past few decades there has been remarkable progress in improving the outcomes for a wide range of physical and mental health conditions including heart disease, injury and depression. Application of the same commitment to independent scientific research and transfer of research findings to policy and practice is likely to produce similar improvements in health outcomes for illicit drug users.

There are many aspects of Australia and New Zealand's response to illicit drug use which are commendable. The quality and quantity of illicit drugs research has improved dramatically in Australia and New Zealand in the past decade and a half. Excellent and growing collaboration exists between policy makers, law enforcement, illicit drug users, clinicians and researchers. Whatever the future of illicit drug policy in Australia and New Zealand, these partnerships should be further developed**.**

However, the financial cost of current policy is unknown and in recent decades important drug policy outcomes such as deaths, disease, crime and corruption have been lamentable. The Royal Australasian College of Physicians (RACP) and The Royal Australian and New Zealand College of Psychiatrists (RANZCP) believe that similar improvements in outcomes from illicit drugs would occur in coming decades if the same steady application of scientific research were applied to the illicit drug area. This policy document concentrates on the reasons for policy failure rather than focusing on ephemeral changes in the drug market.

2. RECOMMENDATIONS

1. The Colleges strongly emphasise that harm minimisation should remain the national official illicit drug policy in Australia and New Zealand.

    - Accordingly the Governments* should reaffirm a commitment to harm minimisation;
    - The Governments should provide sufficient funding to allow harm minimisation interventions to be expanded to meet public health need.

2. The Colleges, the medical profession and Governments should urgently improve and increase the prevention and treatment of chronic non-malignant pain.

    Accordingly the Colleges agree to collaborate with other medical and health organisations to:

    - Develop evidence-based guidelines broadly supported by the medical profession to assist medical practitioners to manage chronic non-malignant pain more effectively and mechanisms to enable better monitoring and improved compliance with these guidelines.

3. The Colleges believe that enhanced funding from the Governments is required to strengthen the scientific evidence-base for policy, programs and clinical interventions.

    Accordingly it is ***recommended*** that:

    - The Colleges will continue to provide evidence-based training for Fellows;
    - Governments provide extra training places for medical specialists in this field

4. The Colleges strongly believe that all people being treated for illicit drug problems should be managed appropriately, including provision of treatment

for physical and mental health disorders, regardless of the setting to which the person presents. Accordingly it is ***recommended*** that:

- The Colleges must work with Governments and other interested parties to ensure that all people seeking help for illicit drug problems are treated for physical and mental health disorders, regardless of the setting to which the person presents.

5. The Colleges believe that demand reduction interventions must include a developmental approach at each stage of child and adolescent development, reinforcing positive protective factors such as good housing, education and employment, and promoting early intervention for risk factors predictive of later illicit drug use.

6. The Governments must expand and improve the capacity, range and quality of pharmacological treatments available for illicit drugs.

   Accordingly it is ***recommended*** that Governments:

   - Substantially enhance the funding for staff and expand staff training;
   - Increase research funding and remove political constraints on research options;
   - Improve training for all health professionals working with drug dependent persons and improve quality of treatment premises.

   In particular Governments should support:

   - The development of effective and safe pharmacological treatments for amphetamine dependence;
   - Research to expand the range of effective and safe pharmacological treatments for opiate dependence including, a rigorous trial of heroin-assisted treatment.

7. The Governments must ensure that the prevention, treatment and harm reduction services for indigenous communities are at least of the same

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[*] Governments refer to Australian Commonwealth, States and Territories and New Zealand Government throughout the recommendations.

standard as achieved for non-indigenous communities, while also reducing demand among indigenous populations for drugs by ensuring major advances in health, housing, education and employment.

Accordingly it is ***recommended*** that:

- RACP and RANZCP will adopt the recommendations from *National Drug Strategy, Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003-2006;*
- In Australia the Government through the Office of Aboriginal and Torres Strait Island Health (OATSIH) should investigate the training of Indigenous health workers working in the area of addiction;
- In New Zealand the Government through Department of Maori Affairs must develop an action plan for prevention, treatment and harm reduction for Maori people.

8. The Colleges believe that Governments must re-define illicit drugs primarily as a health and social issue, with funding for health and social interventions increased to the same level as law enforcement.

9. The Colleges believe a comprehensive economic evaluation of the financial costs, specific benefits and nature and extent of any unintended negative consequences of supply control and alternative approaches is urgently required.

Accordingly it is ***recommended*** that the Governments:

- Invest in more cost effective interventions which provide the greatest social and health benefit, and reduce investment in interventions weakly supported by evidence of benefit;
- Take a longer-term view of community benefits when selecting interventions and pay less attention to short term political gain.

3. INTRODUCTION

Over the past forty years, there have been major advances in scientific knowledge and understanding of alcohol and illicit drugs. Advances have spanned the origins, nature and extent of mood altering drug use and related problems and of effective methods for their prevention, intervention and treatment. In the case of alcohol and tobacco, these advances have been critical to the development of more effective policies and programs that have led to major decreases in the use of these substances and problems related to their use. This has not been the case with illicit drugs, where political constraints have been more important and progress in understanding has been more limited. Perhaps not surprisingly, illicit drug use and related problems have increased dramatically over the course of the past few decades in many countries, including Australia and New Zealand.[*]

Why, in the case of illicit drugs, have advances in knowledge during this period had such limited impact on policy and practice? Why have resources been largely concentrated on unproven treatment programs and methods to restrict the supply of illicit substances? Why have only limited resources been available for public health and clinical programs, including services to prevent and minimise the harms associated with illicit drug use? Politicians and other policy makers in the illicit drug field often dismiss findings from scientific research in favour of populist policies and programs promoting ineffective methods over proven ones and restricting advances in scientific knowledge by limiting or preventing research into controversial subjects.

During the past few decades there have been significant scientific advances in many important fields of medicine. These have translated into major benefits for millions of people with diabetes, cancer, heart disease and many types of mental illness. Scientific advances of this kind are the dividend received by the community for substantial investments in medical and public health research. The yield has been so great partly because of the size of the investment, but also because of impressive improvements in scientific research techniques. However, political involvement in

[*] Many of the conclusions drawn from the experience in either Australia or New Zealand are applicable to the other, as current policy and approaches to illicit drugs in the two countries are broadly aligned.

detailed decisions about scientific research or clinical practice in these fields has been minimal. Regrettably, the same cannot be said for political involvement in decisions about scientific research or clinical practice in relation to illicit drugs, where public or personal opinion rather than scientific criticism has often dictated priorities.

The RACP drew attention to these issues in its policy statement, *From Hope to Science: Illicit Drug Policy in Australia,* [1] released in 2000. The first recommendation in that report was:

> *"Ensure that policy is evidence-based. The fundamental flaw in policy on illicit drugs has been the failure to base policy on evidence. Such an approach would commit government to ensure the gathering of evidence where important gaps exist. Our approach should be similar to our response to other health issues (such as cancer, hypertension and diabetes) where progress in health outcomes depends on adequately funded, rigorous research based on proper scientific processes."*

RACP and RANZCP have collaborated in developing the present statement that builds on the 2000 statement with the aim of emphasising and expanding on the needs and opportunities for applying evidence-based and comprehensive approaches to the prevention and minimisation of illicit drug problems.

The challenge for our communities now is to develop policies based on evidence with the promise of long-term outcomes. Such a change requires politicians to be prepared to lead rather than just follow the community in this sensitive area. There is some evidence that communities are beginning to understand that the simple, hard-line approaches so often advocated are rarely effective and when implemented are often accompanied by major unintended negative consequences. The first *War against Drugs* [2] formed part of President Nixon's successful 1972 re-election campaign. Other politicians soon followed. While the *War against Drugs* may have been a successful political strategy, it has not been a helpful public health policy. [3]

In September 1997, 71 percent of voters in a Swiss national referendum voted to support retaining heroin-assisted treatment as a last resort when other options had been unsuccessful.[4] In the USA, majorities supported drug law reform propositions in

19 out of 23 state-based, citizens-initiated ballot initiatives since 1996. In Australia, majorities supported needle, syringe and methadone programs in the National Household survey and support for medically supervised injecting rooms increased. In contrast to the situation a decade ago, all western European countries (apart from Sweden) now support harm reduction.

This report has been prepared at a time when the RACP and the RANZCP have recently collaborated on the establishment of the Australasian Chapter of Addiction Medicine. The formation of this Chapter represents a milestone in the development of the alcohol and illicit drug field in Australia and New Zealand and also reflects the recent considerable growth in knowledge of clinical aspects in this field. The Colleges would welcome a commensurate improvement in policy sophistication in parallel with the recent development of clinical advances. Since the earlier report appeared, there has been increasing interest in determinants of illicit drug use and early intervention, and other new approaches to prevention. However, the unhelpful belittling of evidence-based approaches that has hindered evidence-informed policy development has unfortunately continued. This perpetuates a 'faith' based approach to one of the major social policy issues of our time.

After decades of increasing illicit drug overdose deaths starting in the 1960s, there has been a substantial and welcome recent decrease in illicit drug overdose deaths in Australia. This followed several years of unprecedented heroin shortage. Explanations for the heroin shortage are complex and include such issues as war in countries that supply heroin, effective law enforcement, and increased demand for heroin in countries higher in the supply chain than Australia and New Zealand. Illicit drug policy has become less controversial during the heroin shortage, but could become more contentious again if heroin and other substance availability increase in the future.[5] The net benefits, likely duration and possible causes of the heroin shortage are questions of the utmost importance and are discussed elsewhere in this report.

The report is not an attempt to list the adverse consequences of illicit drug use, nor is it an attempt to describe the ever-changing epidemiology of illicit drug use in Australia and New Zealand. Knowledge of the toxic effects and epidemiology of illicit drugs continues to advance and is well covered in numerous other publications.

A technical report which substantiates the issues highlighted in this report is available on the RACP website at http://www.racp.edu.au/

This report attempts to look instead at the bigger picture and ask what could be done to achieve better outcomes from illicit drug policies. Australia and New Zealand have much to be proud of in terms of the processes that have been followed but many outcomes over the past several decades have been unquestionably poor.

The conclusion of this report is the need to base policy solidly on evidence. Such an approach does not mean merely that policy makers need to look to evidence, where available, at a time of determining policy. It also means a determination to ensure that researchers ask and try to answer the key questions using the most rigorous and ethical methods available. Evidence informed policy can then be an outcome of evidence-based scientific and social research.

In Australia the political responses to a proposed heroin trial and application of naltrexone treatment and research are salutary. In 1997 Federal Cabinet aborted a heroin trial, despite sound theoretical and empirical evidence justifying the research because of an unsubstantiated claim that such research, 'would send the wrong message'. Yet naltrexone treatment and research continue to receive strong political support despite consistently weak empirical evidence of efficacy and safety.[6] Since the previous RACP report [1], the scientific case for conducting rigorous evaluation of prescription heroin for treatment refractory users has become even stronger. A randomised controlled trial in the Netherlands found 56 percent of the illicit drug users improved in the heroin-assisted group compared to 31 percent in the control group.[7] This study reported considerable improvements in physical and mental condition and social functioning of subjects with few serious adverse events. Australia has the capacity to advance the research evidence in this sensitive and important area.

Improvements in knowledge are always welcome but we know enough now to be able to achieve sustained improvements in outcomes from illicit drugs. What we do not know is how to get the most effective and cost effective policies and programs adopted.

4. HISTORICAL PERSPECTIVES

It is half a century since the Commonwealth of Australia prohibited the production of heroin. The introduction of heroin prohibition was opposed at the time by the RACP.[8] In 2005 it will be a 100 years since the first Commonwealth legislation concerned with controlling psychotropic drugs, the *Opium Proclamation* of 1905.

Dr Rolleston chaired a seminal report the then President of the UK College of Physicians in 1926. The Rolleston Committee has powerfully influenced illicit drug policy and practice in the UK for the next three quarters of a century especially the conclusion that:

> *"...morphine or heroin would be permitted for those"* who "*are capable of leading a fairly normal and useful life so long as they take a certain quantity, usually small, of their drug of addiction, but not otherwise".*[9]

In Australia and New Zealand the main focus of early policy was on preventing the smuggling of opium and pursuing and prosecuting Chinese opium smokers. In contrast, non-Chinese suffering from the illness of addiction were treated medically.

Australia and New Zealand's response followed that of the United Kingdom and was in stark contrast to the United States where users and/or those dependent on opiates, cocaine and marijuana were stigmatised as morally degenerate or as criminals.

Since 1905 Australia has been involved in the progressive development and implementation of legislation and policies related to certain drugs of addiction. Australia and New Zealand have been signatories to evolving international agreements through the League of Nations and then the United Nations. At no stage has there ever been a comprehensive review of the costs and benefits of illicit drug policy and the costs and benefits of alternative policies.

Up until the 1970s, Australia did not consider that it had a significant problem with illicit drugs. Australia followed the lead towards stricter controls and stronger penalties promoted by the League of Nations and then later by the United Nations (UN) organisations. These became increasingly influenced by US policy because of

the proactive US position in the League of Nations and UN budgets. The strong United Kingdom influence on illicit drug policy in Australia waned after World War Two, when the influence of the United States became much more important.

As a result, Australian policy on illicit drug use and dependence moved from a health and a social focus to a law enforcement focus, aimed at suppliers, traffickers and those involved in illicit drug-related crime other than illicit drug possession and use. This focus saw illicit drugs use as a criminal justice issue, rather than a health and social issue in which the social determinants of use and medical knowledge of addiction could be addressed.

In 1985, harm minimisation was adopted by the then Prime Minister, all Premiers and both Chief Ministers as the overarching goal of the newly established National Campaign Against Drug Abuse. The harm minimisation approach sought to balance the health and social and criminal justice aspects of illicit drug use through supply reduction, demand reduction and harm reduction, with the aims of preventing the onset of illicit drug use, reversing illicit drug using behaviour where possible, and preventing and minimising the harms associated with use.

Since 1985, Australia has provided international leadership in the promotion of this approach and largely resisted the moralistic, punitive, criminal justice - driven approach strongly favoured by the US. The Commonwealth Government adopted a *'Tough on Drugs'* policy in 1997 but while the rhetoric has changed, many policies remained unaltered such as support for national needle and syringe programs. The danger is that sooner or later, the rhetoric will determine the programs.[10]

Recommendation

1. ***The Colleges strongly emphasises that harm minimisation should remain the national official illicit drug policy in Australia and New Zealand.***

    - ***Accordingly the Governments should reaffirm a commitment to harm minimisation;***
    - ***The Governments should provide sufficient funding to allow harm minimisation interventions to be expanded to meet public health need.***

5. WHY DO PEOPLE USE ILLICIT DRUGS?

Illicit drug use in one form or another is found in virtually all societies. While the nature and extent of illicit drug use in different countries usually tends to change considerably over time, the factors responsible for these changes are rarely identified. Illicit drugs sanctioned in one culture or community may be prohibited elsewhere or even in the same country at another time. Although illicit drug policy is often assumed to have a very powerful effect on the prevalence of illicit drug use and related problems, other protective factors may be far more important, such as good education, social support for the disadvantaged, housing and improving employment prospects.

Social disadvantage

While illicit drug use is found in all social and economic groups in contemporary Australia and New Zealand, illicit drug use and illicit drug-related problems are generally more prevalent in disadvantaged populations. Severely dependent illicit drug users tend to be concentrated geographically, socially and demographically, so that the impact of illicit drug use on individuals and communities varies considerably. The burden of illicit drug use is reported to be higher in some areas, such as those experiencing high unemployment rates or areas that have a larger proportion of younger people.[11]

When illicit drug use is present, social disadvantage also appears to both increase the likelihood of complications developing and increase their visibility in the community. For example, in the United States of America, patterns of drug use[12] are relatively similar among the more affluent white communities and the more socially disadvantaged minority communities, but the ratio of blacks to whites increases substantially at each step in the criminal justice system from arrests, charges and convictions to incarceration. Affluent illicit drug users are generally more able to ensure that their problems are handled discreetly and more likely to avoid custodial sentences. These are important considerations, as wealth and income inequality is increasing in many countries around the world, including Australia and New Zealand.

Structural factors, such as poverty and marginalisation, affect the ability of families to nurture their children. These factors are of major importance. There is a great deal of evidence for a link between alcohol, illicit drug use and poverty, although research studies have not been able to establish conclusively whether this link is causal or an association.[13,14] illicit drug use is strongly associated with difficulties in gaining and retaining full employment. People who have had long-term alcohol and illicit drug problems often experience major difficulty in entering or re-entering the employment market.[15] Illicit drug use can also be associated with difficulties in finishing school or acquiring further qualifications. The absence of further qualifications significantly hampers the ability to gain employment, or adequately paid secure employment.[12]

Thirty years ago there was no evidence of illicit drug use in homeless populations, but this is now a major issue with this group. Highly associated serious infections such as HIV and hepatitis C are significant problems among homeless young people in many parts of the world.

Young People

High youth unemployment and low literacy are associated with increased illicit drug use and other risk behaviours.[16] Adolescent illicit drug use is often associated with the presence of many risk factors and few protective factors. The cumulative effect of a number of factors influences the development of harmful illicit drug use among youth, and also predicts other youth problems such as homelessness, delinquency and mental health problems. [17,18]

Indigenous communities

The early settlers in Australia and New Zealand[19,20] are said to have given illicit drugs to indigenous custodians of land to pacify and exploit them during the early colonial era. Numerous inquiries[21,22] into the health of Aboriginal and Torres Strait Islander people have concluded that dispossession and alienation have had a detrimental effect on their health and well-being (as with many other indigenous people). The resulting trauma and loss should be recognised as a major contributing factor to the poorer health and socio-economic status that Aboriginal and Torres Strait Islander and Maori peoples continue to experience. Indigenous communities already used naturally occurring drug substances pre-contact, but they were not prepared for the impact of

commercially produced drugs and illicit drugs distributed through 'underground sources'.[23]

Severe alcohol and illicit drug problems are common in dispossessed indigenous populations. Alcohol prohibition was enforced among indigenous Australians from the 1850s and continued in some parts of the country into the 1970s with significant poor health outcomes, but community-imposed alcohol prohibition may be a successful approach today in some remote locations with community support. Indigenous Australians are vastly over-represented among prison inmate populations, where increasing numbers of illicit drug users are being seen. [24] Aboriginal and Torres Strait Islander people make up 20 percent of the prison population in Australia.[25] Illicit drug use, particularly heroin, plays a significant role in Aboriginal peoples over- representation in the criminal justice system.[26] There is a great deal of concern that HIV entering indigenous populations through injecting drug use could then be spread extensively by sexual transmission.

In New Zealand, use of cannabis continues to increase, as does apparently the tetra hydro cannabinol (THC) concentration of the drug. It is considered to be of particular significance in mental health patients and in certain Maori populations. Cannabis plays an important role in underground economies in many local communities.[27]

There have been parliamentary select committee enquiries, firstly on the mental health effects of cannabis [28] and secondly on the wider legal issues (2003); however changing the legal status of cannabis was not recommended. The New Zealand Drug Foundation has recommended a shift from criminal sanctions to illicit drug assessment by health services, though these are already over utilised.

There is a clear need for the provision of high quality health services for indigenous communities in both Australia and New Zealand as a pre-requisite to the provision of successful and sustainable illicit drug services. The relative absences of widespread harm reduction and population based interventions has become a matter of great concern.

Co-existing mental illness and illicit drug use

It is well known that illicit drug and alcohol problems often co-exist with mental disorders.[29] Mental health disorders are associated with increased rates of alcohol and

illicit drug problems, for example; psychotic illnesses (alcohol, cannabis and stimulants),[30] mood disorders (benzodiazepine), post traumatic stress disorder (alcohol, cannabis), eating disorders (alcohol, stimulants) and conduct disorders (alcohol, polysubstance).[31,32] There are epidemiological data from Australia[33], New Zealand[28] and other countries showing higher rates than expected of co-existing alcohol and illicit drug problems and mental illnesses than in each group alone. In some cases, it is believed that mental illness preceded and may have caused the illicit drug use, while in other areas illicit drug use preceded and may have caused the mental illness.

For many individuals, other factors lead to the substance use and mental disorder. Failure to appreciate the complex interaction process will lead to a poorer treatment outcome.

6. TRENDS IN ILLICIT DRUG USE AND HARM

A major difference between New Zealand and Australia is the pattern of opioid use in the two countries. Since police broke up the "Mr. Asia" drug ring in 1980, New Zealand has been almost devoid of imported heroin. Despite this virtually unique success in reduction of supply of illicit opioids, there are continuing high levels of use of pharmaceutical opioids.

Increasing quantity and diversity of consumption

In Australia illicit drug use was virtually unknown before the early 1960s but was well entrenched by the mid-1970s. The consumption of illicit drugs increased relentlessly until 2000. This is true for the numbers of people using illicit drugs, the apparent quantity of illicit drugs used and the diversity of illicit drugs available.

The first non-government and government services for illicit drug users started to appear in Australian capital cities in the mid-1970s. By the time the National Campaign Against Drug Abuse was established in 1985, illicit drugs were readily available throughout the nation. Illicit drug use and its related harms had become major health, social and political problems.

Since 1985 there have been many surveys of alcohol, tobacco and other illicit drug use in Australia.[34] Between 1991 and 1998 there was an increase in the use of cannabis, analgesics, amphetamines, hallucinogens, cocaine, and heroin, and a decrease in the use of barbiturates. During the period 1998 to 2001, there was a 5.1 percent increase in those reporting no other illicit drug use in the previous 12 months to 83.1 percent. [34]

In the same period (1998-2001) there was a fall in the reported use of all illicit drugs with the exception of steroids, ecstasy/designer drugs, and those reporting injecting illicit drug use. In 1998, reported levels of illicit drug use appear to have been higher than previous and subsequent surveys for many of the illicit drugs evaluated.

However, there were methodological differences in these surveys so the interpretation of the significance of these results is difficult. While a great deal of attention is

always placed on changes in illicit drug consumption measured by surveys, changes in outcomes from illicit drug use (such as deaths, illness and crime) are far more important indicators of effective policy.

Heroin and other opiates

It has been estimated that, since the early 1960s, there has been an approximately seven percent annual increase in the number of heroin dependent injecting drug users in Australia to an estimated total of about 98,000 in 2001, (See Figure1).[35]

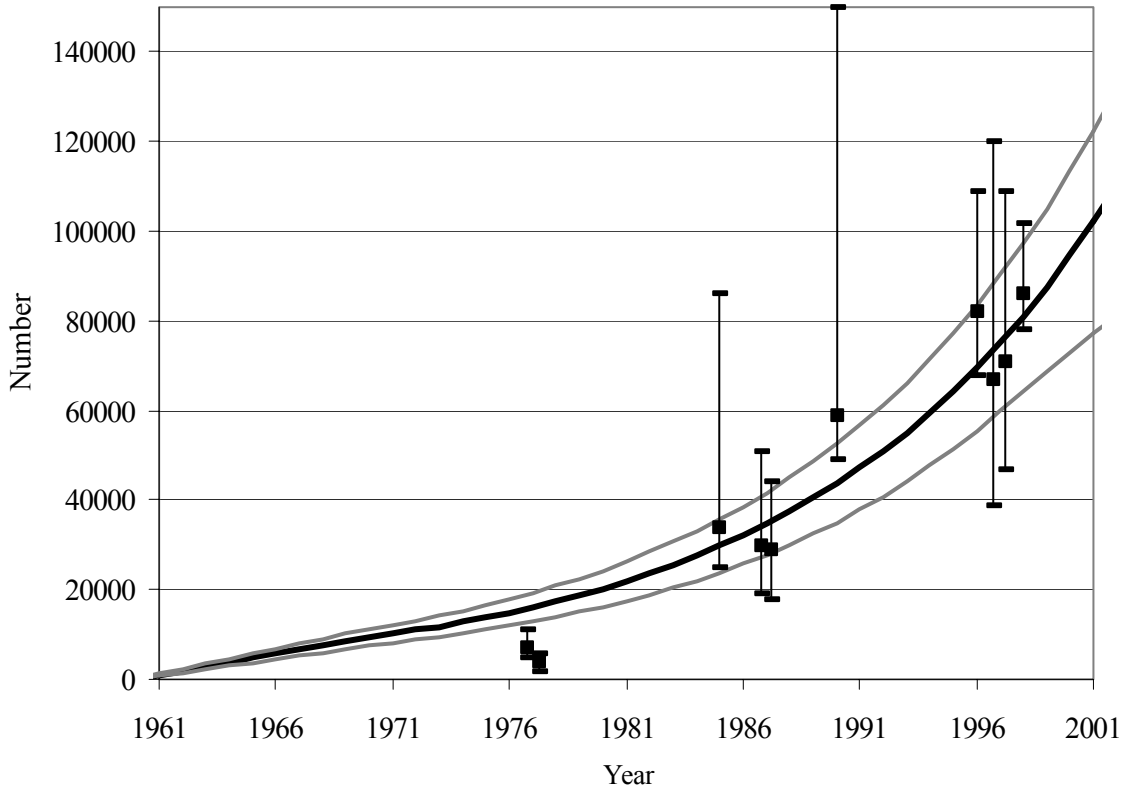
As yet there have not been any estimates published of the number of heroin users since the start of the heroin shortage in late 2000, but it is likely that there are fewer heroin injectors in Australia than previously. The rapid increase and recent decrease in rates of robbery and heroin overdose in NSW are closely correlated and provide further support for the changes in the estimated number of Injecting Drug Users (IDUs) in Australia.[36]

In New Zealand approximately 2,500 or 0.04 percent of the total population are opioid dependent patients on a methadone maintenance program.[37,38] By contrast, Australia has about 35,000 or 0.2 percent of the total population on methadone and buprenorphine.

Commonly used street opioids in New Zealand include buprenorphine, codeine, 'home baked' morphine, and, over the last decade long-acting morphine preparations partially acetylated to heroin and methadone diverted from pain and drug clinics. The increase in unsanctioned long-acting morphine use and dependence has occurred in the context of a quadrupling of prescriptions for pain management and palliative care.[39]

Despite the high level of prescription drug diversion and unsanctioned use in New Zealand, there has been a disappointing policy response. This issue is given almost no mention in the National Drug Policy 1997, which otherwise illustrates a comprehensive approach and embraces harm minimisation philosophies and strategies.[40]

Figure 1. Modelled numbers of heroin dependent IDUs in Australia from 1961 to 2001



Best modelled estimates in black, lower and upper limits in grey.*

Chronic non-malignant pain is relatively common in the community and a cause of much discontent, especially when complicated by some degree of drug dependence. These patients complain of severe and unrelieved pain, often exacerbated by their poor functional state. Their families are often just as despondent, while their medical practitioners often feel caught between the unfulfilled demands of the patients and their families and an inflexible and uncaring health care system. A minority of patients end up being prescribed large doses of opioids, often in combination with benzodiazepines, while clinical and policy uncertainty abounds.

* This estimate is based on a best-fit model that incorporated the results of several independent studies during that period. The solid line represents best estimates of the numbers of heroin dependent injecting drug users and the grey lines represent the lower and upper limits of these estimates.

Practical guidelines for prescribing opioids for chronic non-malignant pain[41] should be developed, widely endorsed and well promulgated, and strategies to monitor the situation and ensure high compliance need to be devised. Patients with histories of illicit drug dependence must be monitored closely.[42] Blood levels and urine screens may be useful; however there is a need for greater attention from policy makers, professional organisations, clinicians and researchers to develop an evidence-based and effective approach. Pain and drug clinics need to cooperate more to improve outcomes and there is a need for higher levels of support and funding. Cautious prescribing and dispensing is required to reduce opioid diversion to street sources.

Amphetamine

Amphetamine use is now widespread in most parts of Australia and is the most commonly injected drug in several states. Amphetamine use and related problems are increasing, with few amphetamine users being attracted or retained by current treatment services.[43] The lack of an attractive and effective pharmaceutical agent for treating severe amphetamine dependence is a major management deficiency.

Researchers in the UK have evaluated the effectiveness and safety of amphetamine-assisted treatment for several decades, although the quantity and quality of this research does not yet allow categorical conclusions to be drawn. There is increasing evidence that amphetamine-assisted treatment may help some selected amphetamine dependent users who are resistant to all other therapeutic options. Research is needed in Australia and New Zealand to develop more effective pharmacological and non-pharmacological treatments for severe amphetamine dependence.

In New Zealand, methamphetamine is often manufactured from locally procured pseudoephedrine, imported pseudoephedrine or ephedrine. The Expert Advisory Committee on Drugs reclassified these precursor substances to controlled drug status to attempt to reduce supply, and methamphetamine has also been rescheduled to a higher status. Precursor controls were introduced in Australia and resulted in the disappearance of street amphetamine and its replacement by street methamphetamine.

Illicit drugs and harm

Economic costs

It has been estimated in Australia that in 1998-99, costs to the Australian economy related to illicit drug use totalled $A6.1 billion, compared with $A21.2 billion for tobacco and $A7.6 billion for alcohol. In the case of illicit drugs, tangible costs total $A5.1 billion (crime $A2.5 billion, health $A59.2 million, loss of production in the workplace $A991.2 million, production in the home $A344.8 million and road crashes $A425.4 million) and intangible costs $A968.8 million. In addition, crime involving both alcohol and illicit drugs accounted for an additional $A582.3 million. Although these are often described as the costs of illicit drug use, it is difficult to disentangle the costs of illicit drugs use from the costs of the arrangements chosen by the community in the hope of minimising illicit drug use and illicit drug-related problems. [44]

In New Zealand, prior to treatment in one centre in 1999, the cost of illicit drug use to the government was estimated to be $NZ2.8 million, comprising court and prison expenditure, social benefits, medical costs, motor vehicle crashes and costs associated with criminal activity.[45]

Health

In Australia in 1998, drug use accounted for 1,023 (5.8 percent) deaths out of a total of 17,671 deaths attributable to all forms of drug use. However, illicit drug use accounted for nearly half the 1,544 deaths (42 percent) attributable to illicit drug use between the ages of 15-34 years. The major causes of illicit drug-related deaths were illicit drug dependence (56.2 percent), poisoning (21.7 percent) and suicide (13.2 percent). Alcohol accounted for even more deaths, just over half (814 or 52.7 percent). [34]

While illicit drugs have a major impact on mortality and morbidity in young people across all groups, tobacco smoking was the risk factor responsible for the greatest burden of disease (12.1 percent), with alcohol (6.6.percent) the fourth, and illicit drugs (2.2 percent) the ninth major cause.[46] The burden of disease estimates takes into account both morbidity and mortality.

In Australia in 1997-98, drug use accounted for seven percent (n=14,471) of drug-related hospital admissions and 75 percent (n=10,876) of admissions in the age group

15-34 years. The major causes of admission were illicit drug dependence and poisoning. As each of these risk factors is responsible for substantial ill health, large health gains can be expected from more effective public health interventions.[30]

As with the question of economic costs, it is difficult to estimate the extent to which these health problems are consequent on the use of illicit drugs or the arrangements used to respond to these illicit drugs. When, for example, heroin is prescribed medicinally, side effects are little greater than those associated with prescription morphine and far less than seen with street heroin. A substantial proportion of the physical illness and many of the deaths associated with illicit drug use are a product of the black market system of distribution, rather than it being intrinsic pharmacological properties and side effects of these illicit drugs.

Heroin-related deaths

Increases in the estimated number of heroin dependent injecting drug users have been closely paralleled by increases in the total number of reported deaths from opioid overdose in young Australian adults during the period 1964 to 1998. Between 1988 and 1999, these more than doubled from 45.3 deaths per million persons to a peak of 112.5 per million. In the following three years, when for the first time in decades there was a shortage of heroin, illicit drug overdose deaths fell to 32.3 deaths per million in 2002.[5] The extent to which improved domestic law enforcement under the National Illicit Drug Strategy, which commenced in 1997, was responsible for the heroin shortage or whether it was due more to international reduction in supply is unclear.

The co-morbidities: mental and physical illness and social impairment

Illicit drug use is associated with considerably poorer mental and physical health and social well-being. These factors interact to a great extent. People consuming illicit drugs in large quantities often also consume large quantities of alcohol, tobacco and prescription drugs, and these contribute substantially to their poor health. Limited education and training, high levels of unemployment, poor housing, high levels of debt and major relationship difficulties often compound their many other problems. The quality of life of many illicit drug users is often within the range seen in patients with a severe chronic illness. By the time injecting drug users first seek treatment, many already have hepatitis C infection. Cigarette smoking is almost universal and consequent respiratory impairment is very common.

Consumption of alcohol, cannabis, sedatives, opiates and stimulants may pharmacologically interact with medication prescribed for mental illness, reduce compliance with treatments for mental or physical illness, impair housing stability, and increase the burden on treatment services and the family. The cost to the health system of caring for patients with a mental illness and alcohol and illicit drug problems is significantly higher than for patients with a single problem. There is an increased risk of suicide, hospitalisation and criminal behaviour and less chance of receiving adequate care.[47]

HIV and hepatitis C infection

The number of new AIDS diagnoses in Australia among people who have a history of injecting drug use decreased from 84 in 1993 to 10 in 2001. During the same period, the number of deaths from AIDS in this group decreased from 59 in 1993 to 16 in 2001.[43] Hepatitis C prevalence among people attending needle and syringe programs remained high and increased slightly over the period 1997 to 2001. In 2001, 63 percent of males and 66 percent of females attending needle and syringe programs were hepatitis C antibody positive. Alarmingly, the prevalence of hepatitis C among males and females reporting less than 3 years of illicit drug injecting more than doubled from 13 percent in 1997 to 28 percent in 2001.[43]

Control of HIV infection among injecting illicit drug users in Australia and New Zealand was not achieved easily. The introduction of most harm reduction strategies needed to reduce HIV infection was vigorously resisted by some sections of the community. Yet needle and syringe programs in Australia were estimated by 2000 to have cost governments only $A130 million, but prevented 25,000 HIV and 21,000 hepatitis C infections, saved at least $A2.4 billion, and (by 2010) will have saved 4,500 deaths from AIDS and 90 deaths from hepatitis C. [48]

Needle and syringe programs have been operating for a similar period in New Zealand and Australia. Less than one percent of injecting illicit drug users in New Zealand are HIV positive and injecting illicit drug users contribute two percent of people with HIV in New Zealand.[49]

Why has there been such a different response to harm reduction programs in HIV and Hepatitis C rates among injecting illicit drug users? Hepatitis C spread among

injecting illicit drug users in Australia about two decades before harm reduction programs were implemented widely. In addition, following exposure, blood-blood spread of Hepatitis C is about ten times more likely than for HIV.[50]

Policy makers were prepared to be more flexible for HIV/AIDS because there was considerable concern that HIV could begin to spread extensively among non-drug using heterosexual men and women. Also, gay community groups were extremely effective in efforts to ensure that policy responses to HIV/AIDS were successful. The magnitude of the future health, social and economic costs of hepatitis C are still not widely recognised. While drug policy continues to rely so heavily on supply control, injecting will remain the major route of administration of drugs, such as heroin undermining all efforts to achieve control of hepatitis C.

Crime and law enforcement

Criminal activity involving illicit drug users includes the possession, use and trafficking of illicit drugs as well as violence, property and other offences while under the influence of illicit drugs or to maintain their supply. In some cases, illicit drug use precedes criminal activity while in other cases, criminal activity precedes illicit drug use.

It is often assumed that an increase in the price of street drugs will automatically reduce illicit drug use and conversely, a decrease in the price of street drugs will automatically increase illicit drug use. However, evidence to support these propositions is hard to find. The considerable profits available to illicit drug traffickers also need to be taken into consideration. Many decades of efforts to depress illicit drug use by raising street drug prices through vigorous law enforcement have not achieved the expected results. In fact, illicit drug use has often increased despite ever increasing resourcing of legal and law enforcement control aimed at reducing supply and increasing severity of penalties for persons convicted of illicit drug-related offences. The limited evidence for the effectiveness of supply reduction was noted in a recent comprehensive review of prevention of illicit drugs.[51]

Policy responses to illicit drug use and related problems may be characterised in three ways:

- Measures to reduce availability (supply reduction);

- Strategies to reduce demand (demand reduction); and
- Interventions designed directly to reduce illicit drug-related harm without necessarily reducing availability or demand (harm reduction).

Australia and New Zealand have adopted a combination of these in their illicit drug strategies, but supply reduction has received and continues to receive the overwhelming bulk of resources not-withstanding the meagre evidence of relative effectiveness or cost effectiveness. Needle and syringe programs in Australia brought a benefit of almost $A2.4 billion at a cost of $A130 million.[52]

Recommendations

2. The Colleges, the medical profession and Governments should urgently improve and increase the prevention and treatment of chronic non-malignant pain.

Accordingly the Colleges agree to collaborate with other medical and health organisations to:

- ***Develop evidence-based guidelines broadly supported by the medical profession to assist medical practitioners to manage chronic non-malignant pain more effectively, and mechanisms to enable better monitoring and improved compliance with these guidelines.***

3. The Colleges believe that enhanced funding from the Governments is required to strengthen the scientific evidence-base for policy, programs and clinical interventions.

Accordingly it is recommended that:

- ***The Colleges will continue to provide evidence-based training for Fellows;***
- ***Governments provide extra training places for medical specialists in this field***

4. The Colleges strongly believe that all people being treated for illicit drugs should be managed appropriately, including provision of treatment for physical and mental health disorders, regardless of the setting to which the person presents. Accordingly it is recommended that:

- ***The Colleges must work with Governments and other interested parties to ensure that all people seeking help for illicit drug problems are treated for physical and mental health disorders, regardless of the setting to which the person presents.***

7. DEMAND REDUCTION

Demand reduction is divided into measures designed to prevent or delay experimental use (primary prevention), interventions intended to prevent or delay experimental users progressing to entrenched use (secondary prevention), and measures targeting already established drug users promoting reduced use or abstinence or reducing complications if consumption continues (tertiary prevention or drug treatment). This approach is comparable with the framework adopted for many physical conditions. In cardiovascular disease, primary prevention aims to delay or avert any cardiovascular disease, secondary prevention is intended to reduce the progression of patients from angina to myocardial infarction, while tertiary prevention concentrates on rehabilitation of people after a myocardial infarction and minimising other complications.

Primary prevention

In some countries, such as the Netherlands, where illicit drug use is now considered principally a health and social issue, the number of young people starting to inject illicit drugs appears to be decreasing. For example, it is now increasingly difficult to find young illicit drug injectors in the Netherlands.[53,54] Australia and New Zealand need to look to countries that have been successful in reducing the demand for illicit drugs among young people. Positive reinforcement such as good housing, education, employment and social support for disadvantaged groups appears to be more effective than relying on negative reinforcement such as criminal justice measures.

Mass media education and school based education campaigns

As noted by a recent comprehensive review of illicit drug prevention, narrowly focused and episodic intervention, such as media campaigns have been found to be largely ineffective.[51]Although the expectations of community members and policy makers for mass media and school based education drug education campaigns are consistently and unreasonably high, research evaluation generally finds only modest benefits. Strategies incorporating a skills based approach, a longitudinal view and utilising developmentally appropriate measures are more likely to be successful. There is an increasing realisation that the modest gains of well-conducted media and

school-based campaigns are worth having but that more effective prevention methods need to be identified.

Similarly, illicit drug education interventions in schools have generally used individually focussed methods. The results have often been disappointing. By contrast, the Gatehouse Project in Victoria had broader objectives including reducing bullying, promoting better student communication with teachers and encouraging participation in community activities.[55] This project demonstrated a 25 percent reduction in risk behaviours (including illicit drug use) using a randomised controlled trial design. The Gatehouse Project is an example of recent and more encouraging approaches to prevention in schools, which have moved beyond more traditional health education towards programs that embrace health promotion and promote social inclusion.

The other broad area of intervention relating to young children is in the school environment, where the aims should be prevention of school failure (for either academic or behavioural reasons). School organisation and behaviour management programs which encourage positive interpersonal relationships, ensure effective discipline, and maximise learning are effective in reducing risk factors such as early school drop-out and subsequent unemployment. These factors are known to predispose to later illicit drug use.[51]School based drug education programs, although of limited value as a stand-alone strategy, have an important role as part of a comprehensive approach. Early primary school identification and remediation of learning difficulties is also vital in the prevention of school failure.

Early childhood intervention

Research in the past two decades has shown that surprisingly minimal interventions with high risk families soon after childbirth is often very effective in reducing the incidence of a wide range of later problems, including subsequent illicit drug use.[51] These interventions can be as inexpensive as several visits by a community nurse to an ‘at-risk’ family soon after the birth of a child.

Many of the risk factors in children for problem illicit drug use are also frequently the presenting symptoms in behavioural and emotionally disturbed youth. Family factors that confer higher risk of substance use in adolescence, such as chronic parental and

family conflict and parental alcohol and illicit drug problems, are also common in the families of children presenting with severe behavioural disturbance.[51] There is evidence of good outcomes for well-resourced, preventive, home-centred family intervention in infancy, early childhood and primary school years targeting 'at-risk' families (e.g. parents with illicit drug problems, mental illness, or where other children have aggressive behaviour) especially where they do not stigmatise but promote social inclusion.

An evaluation of the evidence[51] for preventive measures against substance use within a life stages framework supported the following early childhood interventions:

Children 0-11 years

- Family home visiting saves up to $A5 for every $A1 spent on the program over the first 15 years of the child's life, and the programs that are most effective are those provided to women and families at most risk;
- Parent education that extends through pre-school and early school years; and
- School preparation programs which start as early as pregnancy or infancy for families at risk

Young people 12 to 24 years

- Drug education programs that include community mobilisation with social marketing;
- Use of laws and regulation to reduce sales to minors; and
- Programs using police and the legal system to divert youth into prevention programs where they are apprehended or charged with illicit drug use offences to reduce the escalation to harmful illicit drug use.

Structural determinants

Illicit drug use should not be seen as an isolated behaviour amenable only to illicit drug-specific education and other activities directed at individuals.[14] Rather, specific illicit drug prevention programs need to now make better use of the research literature available for over a decade. The structural changes needed to have a positive impact include:

- Better planning practices utilising established methods such as those available in the field of health promotion through:
    - Addressing the multiple risk and protective factors for youth illicit drug use;
    - Having specific, measurable, realistic objectives;
    - Working at all levels of influence: the individual, the family and the local and macro environments;
    - Taking a long-term view — one-shot interventions are not effective; and
    - Learning from the research experience relating to illicit drug prevention.
- Taking a broader view of illicit drug prevention by:
    - Acknowledging that illicit drug use is one of a range of problem behaviours and not an isolated factor.
    - Working collaboratively with others concerned with problem behaviours, including crime, suicide and educational problems to address the shared pathways to these outcomes.
- Understanding how human developmental processes from birth shape illicit drug use. This requires consideration of the importance of:
    - Early intervention in view of critical and sensitive periods in child development;
    - Timing interventions to coincide with natural developmental transitions; and
    - Recognising the influence of community and other social networks.
- Acknowledging that illicit drug use is not simply an individual behaviour, but is shaped by a range of macro-environmental factors, including the economic, social and physical environment;
- Considering the impact of all government policies and programs on the macro environmental influences on developmental health. This needs to be

done at the national, State/Territory and local government levels, and in all areas (including taxation, employment, education, urban planning, transport, justice and so on), not just in the health portfolio;

- Shifting the focus from the negative to the positive by working towards supporting young people to be happy, socially connected, and engaged in life, rather than focusing on negative outcomes such as illicit drug use;
- Recognising those groups in Australia and New Zealand that disproportionately suffer the adverse impacts of macro-environmental risk factors with targeted interventions for high-risk groups; and
- Improving the links between research and practice by basing policy and funding decisions on recent research evidence, monitoring and evaluating policies and programs; and continually adjusting policies and programs to reflect new information as it becomes available.

Secondary prevention

Preventing progression from experimental to entrenched illicit drug use is very difficult when illicit drug use carries the severe stigma of a criminal behaviour and drug users are severely ostracised. The essence of current illicit drug policy is that the (health, social, economic, legal) harms of illicit drug use are increased in the hope that this will maximally deter individuals considering experimental or low-level illicit drug use. However illicit drug use has increased for most of the last half century while this approach has been followed.

One of the unintended negative consequences of relying heavily on law enforcement to control drug use is that drug users tend to delay seeking help until their circumstances have become desperate. Thus the zero tolerance approach produces a perverse incentive, deterring illicit drug users early in their career from seeking help, which could prevent them escalating from experimental to entrenched use. This approach increases the harm per illicit drug user in the hope of reducing the number of illicit drug users in the community. However, the number of illicit drug users has increased steadily for the last few decades (although it has decreased in Australia since 2000). A harm reduction approach has opposite potential benefits and risks: harm per illicit drug user is likely to decline but at the potential risk that the number

of illicit drug users might increase. However, there is no evidence after almost two decades of intensive research that harm reduction interventions, such as needle and syringe programs, actually increase illicit drug use.

Tertiary intervention or treatment

Treatment of illicit drug use has been demonstrated by research to play a vital role in responses to illicit drugs in the community. Major improvements are required in drug treatment capacity, range of options and quality of service. Enhancement of illicit drug treatment, which is likely to require a substantial increase in funding, may reduce the size of the illicit drug market so that law enforcement measures could then become more effective. Treatment and harm reduction for illicit drug users has to be based on the knowledge that all forms of drug use – alcohol, tobacco, prescription and illicit drugs – are relapsing and remitting conditions.

Pharmacological treatments

Pharmacological treatments for illicit drug problems continue to expand and improve. Pharmacological treatments are better supported by evidence of effectiveness and perform better than non-pharmacological treatments at attracting and retaining people, particularly with heroin and opioid dependence, in health care. However, the range of pharmacological treatments available for heroin and for illicit drugs urgently needs to be expanded and improved. This will require substantial long-term investment in relevant research.[56]

In the treatment of heroin dependence, there is evidence that methadone and buprenorphine maintenance are effective in terms of retention in treatment, reduction in illicit opioid use, reduction in criminal behaviour, reduction in mortality rate, reduction in HIV infection and improvement in health status and social functioning.[57] Effectiveness of methadone is probably also improved when combined with treatment addressing the psychological and social issues that often accompany dependence. Despite this, methadone is increasingly subjected to relentless criticism from advocates for illicit drug free lifestyles and there are high levels of community ignorance of the benefits of treatment.

Community leaders are increasingly reluctant to advocate for methadone. In most parts of Australia and New Zealand, illicit drug users seeking methadone treatment

experience long waiting times. Demand for methadone in Australia has consistently out-stripped supply even though the number of treatment places has increased nationally from about 2,000 in 1985 to about 35,000 in 2003. In 1998, New Zealand[58] set a government target of 5,666 methadone treatment places by 2003 but only 3,896 were provided. Illicit drug users, their families and their communities all suffer when illicit drug users who want to get into treatment cannot do so.

Experience has shown that general practitioners are critical providers for illicit drug treatment services as specialist services, alone are never able to provide sufficient coverage of the community, especially in rural areas. A shared care approach between specialist and general practitioner treatment providers is long overdue in this field and matching developments in other medical specialities. In Australia, general practitioners in several states are already major treatment providers in opioid dependence. Overall, treatment for illicit drug users in Australia and New Zealand compares well with most other developed countries but treatment is still poor compared to general medical and mental health services.

Current international research is investigating improved methods for pharmacological treatment of other illicit drug use disorders, in particular stimulant dependence and cannabis dependence.[59] Research into agonist treatments for amphetamine and cocaine dependence is proceeding in the USA and UK. Australia and New Zealand should collaborate with their research programs.

Non-Pharmacological treatments

Despite the availability of pharmacological treatments, there is a steady demand for outpatient counselling, detoxification and residential rehabilitation. These options are very important for illicit drug dependent persons who reject or do not benefit from pharmacological treatments or are using multiple different drugs.

Existing evidence for the efficacy of non-pharmacological treatments is still poor, but this should not be used to cut existing programs which are needed to provide diversity of options and manage those who do not want or do not respond to pharmacological treatments. On common sense grounds non-pharmacological treatments are likely to be effective, and there is some indirect evidence that these forms of treatment may be

useful for some illicit drug users at some times in their careers. More research is needed to determine the efficacy of appropriate non-pharmacological treatments. It is important that well resourced non-pharmacological treatments of diverse kinds are available for illicit drug users who do not want to undertake pharmacological treatments.

Special populations

Illicit drug users are as diverse a population as non-drug users. They span from privileged and well-educated groups through to groups who are particularly vulnerable and disadvantaged. Often at-risk populations are geographically and demographically clustered and their problems are compounded by social disadvantage and discrimination.

Illicit drug policy would be more effective if greater attempts were made to include these groups in the main stream instead of making them feel even more marginalised.

Young People

Many of the factors known as predictors of harmful adolescent illicit drug use also predict other youth problems such as homelessness, delinquency and mental health problems. Strong predictors of harmful drug use for young people are youth unemployment and low literacy, early childhood onset dysfunctional behaviour, and school failure. Delaying the onset of use of legal drugs, cannabis and other illicit drugs is a desirable goal but it is easier to state this objective than achieve it.

The earlier treatment of frequent cannabis and other substance users may reduce the incidence of mental illness and prevent subsequent recruitment into polydrug use.

General practitioners and primary health care workers have an important role in carrying out brief, targeted, educational interventions to outline the paths to illicit drug use which adolescents might take. General practitioners warning their young patients of the increased risk of developing psychotic symptoms if they use cannabis on a regular basis are following the same important educative role they provide for alcohol and tobacco.

Another example is to advise patients with a family history of psychotic illness, such as schizophrenia, of the added risk resulting from their genetic vulnerability. Since

cannabis is commonly used among youth in our culture, simple brief interventions by GPs may well be clinically useful and cost effective and should be evaluated.

Many adults who use illicit drugs started in their adolescence. This observation underlines the importance of enhancing direct primary intervention during adolescence. The National Mental Health Strategy 1999[60] proposed measures to decrease risk factors predisposing to subsequent risk behaviours, including illicit drug use.

Evidence-informed strategies for improving adolescent health include family interventions, parent education, school drug education, school organisation and behaviour management and community mobilisation. One-off school-based drug education or interventions based in only one school year were less effective than interventions that were based across multiple school years. [61]

Socially disadvantaged

Severely dependent illicit drug users tend to be concentrated geographically, socially and demographically, so that the impact of illicit drug use on individuals and communities varies. The burden of illicit drug use is reported to be higher in areas experiencing high unemployment rates, areas that have a large proportion of younger people,[11] and in certain defined groups.

Structural factors, such as poverty and marginalisation, affect families' health and well-being and their capacity to nurture their children. The breakdown of family and social networks experienced by many people with illicit drug problems adds to the risk that they will be affected by poverty as financial and emotional support networks are withdrawn. There is anecdotal evidence for a link between disadvantage and illicit drug use but this has not been conclusively established.[13]

- Illicit drug use is strongly associated with difficulties in gaining and retaining full employment.[15] People who have had long-term alcohol and illicit drug problems often experience difficulty in entering or re-entering the employment market.
- Illicit drug use can also be associated with difficulties in finishing school or acquiring further qualifications.[13] The absence of further qualifications

can significantly impair the ability to gain adequately paid secure employment.

- The cost of medical and other care, pharmaceutical drugs and pharmacotherapies and residential services for people currently receiving treatment for illicit drug problems can add significantly to the cost of living for people with illicit drug problems.62 This can be a particular issue for persons on methadone maintenance treatment, where the cost of pharmacy or private clinic dispensing fees can consume a significant proportion of the weekly income.
- The illegal nature of some forms of illicit drug use and the high rates of incarceration of people with illicit drug problems creates problems for those who are seeking to gain employment in areas which require police clearance, seeking a bank loan or relying upon a credit rating.63
- A history of illicit drug use can often pose additional barriers for people seeking reliable and affordable housing. [64] In turn, the absence of secure housing can create difficulties in gaining and retaining employment.

Indigenous communities

In Australia, the use of illicit drugs such as marijuana and heroin is increasing, [65] while in New Zealand cannabis use and economic dependence on the cannabis industry is a great concern. In 2001, 13 per cent of Aboriginal and Torres Strait Islander people reported using an illicit drug other than cannabis in the last 12 months, compared with eight per cent of other Australians.[43] In some remote Aboriginal communities cannabis use has risen steeply in recent years, and is used by up to 31 percent of males and 12 percent of females.[66] There are limited data on Aboriginal and Torres Strait Islander illicit drug use and on methods to prevent and treat illicit drug related problems. [67]

Services for affected individuals are provided through a complex web of specially funded programs. However, there are insufficient services available in remote areas. Where services are available indigenous Australians may be reluctant to use those that they see as culturally inappropriate and primarily intended for non-indigenous Australians. Similar issues arise for indigenous people in New Zealand. In some areas

there is also a lack of community awareness of the range of treatments available, and in particular the non-residential options for treatment.

There are difficulties providing services to remote communities and a need for more support for substance use workers in isolated locations. Detoxification and rehabilitation facilities are often far away and may require a plane trip to an area where a different language is spoken. Services such as early intervention are often lacking and there is often a narrower range of support services available.

The gap between the level of services needed and the level of services available is greater for indigenous Australians compared to non-indigenous Australians. As with other disadvantaged populations, simply improving the availability and quality of illicit drug treatment services is insufficient. Improving housing, education, employment and community and individual sense of control will all, in the long term, help reduce the demand for illicit drugs.

Harm reduction is often especially controversial among ethnic minorities and disadvantaged populations. This is also true among Aboriginal and Torres Strait Islander communities in Australia. The process of identifying Aboriginal and Torres Strait Island illicit drug issues relative to non-Aboriginal and Torres Strait Island illicit drug issues must be completed with cultural sensitivity. It is an international phenomenon that indigenous cultures have poorer health outcomes; there are also deeply entrenched racial stereotypes that affect the range of services offered to improve the health outcomes of indigenous people. Yet, the need for effective harm reduction programs among indigenous populations may be more critical.

An HIV epidemic initially spreading in some indigenous Australians through sharing of needles and syringes could rapidly spread via sexual contact due to the high prevalence of ulcerative genital lesions. Similarly, an epidemic of hepatitis C would be of major concern in indigenous communities in both Australia and New Zealand.

In Australia, a recently released National Action Plan[68] for reducing harm in the area of illicit drugs highlighted opportunities for communities, non-government organisations, and Aboriginal and Torres Strait Islander community controlled

organisations to pursue strategies that are specifically relevant to indigenous peoples and appropriate to their circumstances, needs and aspirations.

The 2003 National Drug Policy in New Zealand[40] outlines a Maori Health Action Plan which focuses on an interagency approach. The plan identifies standards to provide minimum requirements to be met by service providers offering treatment and support to the range of people who present with illicit drug problems.

Sex workers

From a public health perspective, commercial sex workers who inject illicit drugs are a critical population as they provide a bridge in transmission of infectious diseases to their clients and sexual partners of their clients. There is little information on the health and well-being of street workers or on those who work as commercial sex workers in brothels.

In New Zealand the Massage Parlours Act regulates sex workers. However, a number of women work outside the Act. Street workers have been found to be at significant disadvantage in comparison with those working in licensed premises. Just under half of the sex workers interviewed in this study reported taking illicit drugs mainly to get them through their work.[69]

In Australia, commercial sex work is not illegal in non-residential areas in New South Wales and Victoria, but is illegal in the rest of the country. Female sex workers[70] identified a number of illicit drug-related, sexual health and social and policy issues that affected their lives. Another study reported that women who are commercial sex workers[71] took more illicit drugs more often than other women. In the case of intravenous illicit drugs, such as heroin and cocaine, sex work is often undertaken to support an illicit drug habit. In South East Asia, HIV epidemics among commercial sex workers who inject drugs have led to generalised epidemics in the wider community.

The importance of improved access to illicit drug treatment and needle syringe programs for commercial sex workers is self-evident. Some commercial sex workers inject considerable quantities of stimulant drugs, such as amphetamine or cocaine.

The development of a pharmacological treatment for stimulant users should be a high priority.

Correctional environment

Correctional environments include prisons, juvenile justice facilities, detention centres and police holding cells. The association between crime and illicit drug use has been well documented, although there is some debate about whether this is a cause or effect relationship.[72,73] In some studies, the prevalence of lifetime illicit drug use among inmates in correctional institutions has been reported to be as high as 80 percent.[74,75]

In 2000, 65 percent of the 1,631 adult males detained in four police lockups across Australia were detained for violent offences and 82 percent of those detained for property offences tested positive for amphetamines, benzodiazepines, cannabis, cocaine, methadone or opiates.[76] Illicit drug use was reported to be the single largest factor affecting the lives of offenders, with over two-thirds of prisoners reporting a history of illicit drug use and a high correlation between illicit drug use, criminal activity and re-offending. Once in prison, drug use continues to have a negative impact on prisoners, and also affects prison staff and eventually, the broader community.

Illicit drug use is prohibited for prisoners and is frequently prohibited for parolees. Nevertheless, random urinalysis conducted in South Australian prisons consistently indicates that approximately 30 percent of inmates have used illicit drugs in prison. On average, 78 percent of positive results are for cannabis alone. Many prisoners have alcohol or other illicit drug use problems that significantly increase the risk of re-offending.[77,78]

Although some might contend that rates of criminal activity among illicit drug dependent populations are not a health matter, the experience of incarceration can have an adverse impact on physical and mental health. Penalties for a positive urine test in correctional settings can have substantial unintended negative consequences. Inmates who face the same penalty for a positive urine test indicating recent cannabis use or recent heroin use may opt to inject heroin rather than smoke cannabis, as

cannabis remains detectable for longer (up to five weeks compared to two days for heroin).

Illicit drug and alcohol issues for indigenous prisoners, often involving polydrug use, frequently compound the burden of social disadvantage. The value of traditional healing for indigenous offenders should be acknowledged. Justice Departments should form a strong commitment to comprehensive family and community responses in partnership with indigenous communities.

Methadone treatment programs in prison settings have been shown to be effective in New South Wales,[79] but there is still limited access to methadone and other forms of illicit drug treatment in most prisons in Australia and New Zealand. In most jurisdictions, harm minimisation is limited to education and peer support programs, restricted availability of methadone maintenance, and provision of bleach to decontaminate needles and syringes (although the latter is an unproven strategy). Provision of sterile needles in Australian prisons does not seem likely in the short-term, despite international evidence that it reduces risks of sharing of injecting equipment, does not increase illicit drug use, and does not give rise to the use of needles and syringes as weapons.

Given the high prevalence levels of blood borne viral infections, particularly hepatitis C, in Australian and New Zealand prisons, evaluation of a needle and syringe program should be considered as a matter of urgency.[80]

In Australia the average number of sharing partners of injectors is about six per year but inmates[79] often share injecting equipment with five or six other prisoners at each injecting episode. The extent of risk of blood borne viral infections that this represents to these individuals and to the wider community has not received adequate recognition.

It is estimated in Australia that 58 percent of prisoners have been imprisoned previously, and 22 percent of police detainees have been imprisoned in the past twelve months. Therefore, implementations of illicit drug treatment interventions that break the cycle of re-offending would have significant benefits for the individual and their community. The most likely way of reducing re-offending is by providing a

range of high quality illicit drug treatment services that met the needs of the prison population.

Recommendations

5. ***The Colleges believe that demand reduction interventions must include a developmental approach at each stage of child and adolescent development, reinforcing positive protective factors such as good housing, education and employment and promoting early intervention for risk factors predictive of later illicit drug use.***

6. ***The Governments must expand and improve the capacity, range and quality of pharmacological treatments available for illicit drugs.***

   Accordingly it is recommended that Governments:

   - ***Substantially enhance the funding for staff and expand staff training;***
   - ***Increase research funding and remove political constraints on research options;***
   - ***Improve training for all health professionals working with drug dependent persons and improve quality of treatment premises.***

   In particular Governments should support:

   - ***The development of effective and safe pharmacological treatments for amphetamine dependence;***
   - ***Research to expand the range of effective and safe pharmacological treatments for opiate dependence, including a rigorous trial of heroin-assisted treatment.***

7. ***The Governments must ensure that the prevention, treatment and harm reduction services for indigenous communities are at least of the same standard as achieved for non-indigenous communities, while also reducing demand among indigenous populations for drugs by ensuring major advances in health, housing, education and employment.***

   Accordingly it is recommended that:

- ***RACP and RANZCP will adopt the recommendations from National Drug Strategy, Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003-2006;***
- ***In Australia the Government, through the Office of Aboriginal and Torres Strait Island Health (OATSIH) should investigate the training of indigenous health workers working in the area of addiction;***
- ***In New Zealand the Government, through Department of Maori Affairs must develop an action plan for prevention, treatment and harm reduction for Maori people.***

8. The Colleges believe that Governments must re-define illicit drugs primarily as a health and social issue, with funding for health and social interventions increased to the same level as law enforcement.

8. SUPPLY REDUCTION

Supply reduction involves the use of customs, police, courts and prisons in efforts to reduce the cultivation, production, transport, sale, possession and use of illicit drugs as well as finances involved in illicit drug transactions.

Governments allocate considerable resources to supply reduction. Evidence of effectiveness, cost effectiveness and lack of unintended negative consequences are rarely required to increase funding for these measures. ***It was estimated that in Australia in 1992, 84 percent of Commonwealth and State government expenditure in response to illicit drugs was allocated to law enforcement, while only six percent was allocated to illicit drug treatment and ten percent to prevention and research.***[81]

In 2004, there is little evidence to support the long-standing heavy reliance on law enforcement as the major national and international response to illicit drugs.[82] The benefits, costs and nature and extent of unintended negative consequences of prohibition are difficult to estimate. The lack of evidence to support supply reduction was confirmed by a recent comprehensive review[51] of illicit drug prevention that showed that supply reduction strategies must be part of an integrated set of strategies and activities, that include the community, to be effective.

The relationship of a prohibition-based illicit drug policy to the prevalence, patterns and health consequences of illicit drug use has never been well established. A recent comprehensive US report [3] concluded that the 'war on drugs' achieved disappointing outcomes, noting that despite 25 years of zero tolerance and strict enforcement of illicit drug laws, heroin and cocaine availability and use have continued to rise. Overdose deaths in the US increased five fold between 1985 and 1995.[3] Despite huge seizures and vast expenditures on interdiction, the availability and potency of street drugs has been increasing while prices for street drugs have been declining.

Inevitably, consideration of the high cost of illicit drugs to an economy raises important questions.[83] How much does our present illicit drug policy based on a criminal justice approach cost? What does it achieve? To what extent does the effectiveness of the law in preventing illicit drug use indirectly add to other costs paid

by taxpayers and other sectors of the community? Are less expensive and more effective approaches available?

Law enforcement issues

Studies of the effect of law enforcement operations have varied from nationwide policies, such as "zero tolerance", to individual initiatives undertaken by local police in specific jurisdictions at specific times. In general, it has been found that policing initiatives have a role in regulating or shaping the market for substances, at least in the short-term, rather than attempting the eradication of all illicit drug use indefinitely.[84, 85,86, 87]

Over the last half century the international community has accepted the role of law enforcement as the major response to illicit drug use. Higher concentrations of illicit drugs increases the chance of traffickers and illicit drug users successfully evading detection by authorities and also increase the likelihood of administration by injecting. This adds to the risk of illicit drug overdose and the development of other serious health problems. There are numerous examples where prohibition has resulted in a shift from less dangerous to more dangerous drugs (pharmacological replacement), or a shift from one demographic group of traffickers to another (demographic replacement), or from one geographical area to another (geographical replacement).

Prohibition of some illicit drugs has been successful in other countries at some times, but this has generally involved illicit drugs for which demand has been modest, production and smuggling has been difficult, and the replacement illicit drug has been less dangerous than the prohibited drug. Examples of successful prohibition include the banning in Australia of barbiturates and the prohibition in 1979 of Aspirin Phenacetin and Caffeine (APC) after these tablets were linked to analgesic nephropathy. Both drugs were replaced by the benzodiazepines. While benzodiazepines have still been associated with significant problems, overall the policy provides some evidence that judicious prohibition can be successful.

More emphasis is required on health and social interventions, especially pharmacological treatment. Specifically, the need is to attract and retain more illicit drug users in treatment, provide more effective treatments and use more cost effective

interventions. Additional funding would enable better social rehabilitation of illicit drug users with improved education, training, employment and more early childhood interventions.

The heroin shortage

In late 2000, the availability of heroin in Australia began to decline relative to demand. The shortage of heroin has since started to ease somewhat, but availability has after three years still not returned to the levels experienced in the last quarter of 2000. The heroin shortage has been noted in multiple data sources and these show very consistent trends. A disruption of an illicit drug market of this duration and severity is most unusual. There is little doubt that the substantial decline in heroin availability was a major factor in the sharp reduction of illicit drug overdose deaths in Australia from 2000. In New Zealand there has been low usage most of the time, partly due to the fact that New Zealand is at the end of the chain of supply.

There has been a corresponding fall in 2001 and 2002 in heroin-related offences and seizures resulting from the shortage of heroin.[88] While this suggests that supply reduction can have beneficial outcomes, they cannot be sustained without simultaneous education and prevention services within a harm minimisation framework.

There appears also to have been a net reduction in the number of injecting episodes, although there has been an increase in the use of stimulant drugs, especially amphetamine. This has led to increasing violence and also increased numbers of individuals experiencing psychotic episodes. There is also concern that more frequent injecting of stimulants increases the risk of blood borne viral infections.

The reason for the heroin shortage is not yet clear. The quantity of heroin seized has increased somewhat but not by enough to explain the reduction in availability. At the same time, the number of heroin seizures has dropped. The fact that a heroin shortage has not developed in any other country provides some support for the claim that the heroin shortage resulted, in part at least, from improved Australian domestic law enforcement effectiveness. However, there are a number of other important factors at play as well.

Myanmar is the source of most of the heroin reaching Australia. A drought in the eastern part of Myanmar decreased heroin production by three-quarters over the past five years. There is also some evidence that Myanmar drug traffickers switched from heroin to amphetamine production and transport. It is now known that some Australian criminal intelligence analysts predicted a heroin shortage as long ago as 1996, because of rapidly increasing heroin use in China and the knowledge that heroin reaching Australia often passes through China.

As a consequence of the heroin shortage other illicit drugs are being used,[89] most commonly cocaine. Methylamphetamine is the principal illicit drug produced in clandestine laboratories in Australia and New Zealand. This is because it is easier to obtain the precursor chemical, pseudoephedrine, than it is to obtain other amphetamine type precursors.

Despite all attempts made to restrict the demand and supply of illicit drugs, some consumption of illicit drugs will occur. It is both realistic and responsible to attempt to reduce the adverse health, social and economic consequences of such illicit drug use. Debate about the toxicity of cannabis continues unabated although there is widespread agreement that it is not innocuous but causes much less harm than alcohol or tobacco; the financial and social cost and the health and other benefits of cannabis prohibition are difficult to determine; there is a world wide trend to less punitive arrangements for cannabis within a prohibition framework, and some consideration is now being given to taxation and regulatory controls.

9. HARM REDUCTION STRATEGIES

Since 1985 the stated aim of Australia's national illicit drug policy has been "to minimise the harmful effects of illicit drug use in Australian society". This approach is commonly known as "harm minimisation" which in the current Australian framework encompasses "supply reduction", "demand reduction" and "harm reduction".

New Zealand adopted a similar approach with the introduction of the Health (Needles and Syringes) Regulations 1987 (later replaced by the Health (Needles and Syringes) Regulations 1998).[90]

Although the term harm reduction seems specifically applied to community responses to illicit drugs, similar approaches are very common in clinical medicine, public health and general risk management. Good examples are; encouraging the use of car safety belts to reduce death and injury caused by motor traffic crashes, introducing blood alcohol limits to reduce death and injury in drink driving, and the promotion of sterile injecting equipment to reduce HIV infection. One reason that some of these interventions are controversial is the potential for political gains to be made by appeals to community fears. The criteria that should be used to evaluate public policy interventions are: the costs of the intervention, the benefits of the intervention and the costs and benefits of alternative options.

Harm reduction interventions cover a wide range of strategies, such as realistic and explicit education of illicit drug users and the development of protocols for police and emergency workers attending overdoses. Some interventions are still being developed, for example the distribution of naloxone (Narcan) to heroin injectors has been proposed but has not yet been rigorously evaluated.

In 2001, the NSW State government established a medically supervised injecting centre at Kings Cross. An evaluation[91] of services offered at the centre demonstrated that the potential rate of return of the centre to the community, in terms of the estimation of deaths averted, was comparable to other widely accepted public health measures. However, despite the evidence similar programs and strategies are not

supported elsewhere. This is due in part to the political gains to be made by supporting zero tolerance and strict prohibition.

Hepatitis B vaccination has been known for many years to be effective, safe and cost effective. The uptake of this service by injecting illicit drug users who are at high risk of hepatitis B has not been good. Implementation of hepatitis B vaccination programs in this population in Australia and New Zealand has been disappointing.

Blood borne diseases

It was estimated[35] that in 2001 there were 16,000 new hepatitis C infections in Australia and 60 to 100 new cases[92] each year in New Zealand. Harm reduction does not seem to have been as effective in controlling the hepatitis C epidemic in Australia or New Zealand as it was for HIV. This was due in part to the community response to harm reduction strategies for HIV and also because hepatitis C became established among injecting illicit drug users in Australia in the early 1970s, almost two decades before harm minimisation programs were established. Also, hepatitis C is more infectious by blood-blood spread than HIV.

In Australia, following the establishment of a pilot needle and syringe program in Sydney in 1986, official needle and syringe programs were established in all jurisdictions within the next few years. There are now approximately 30 million sterile needles and syringes provided each year. Hepatitis C prevalence among people with HIV attending needle and syringe programs continues to be reported at high levels. Hepatitis C prevalence among this group reporting less than three years of illicit drug injection has steadily increased from 17 percent in 1998 to 38 percent in 2002. [93]

There is good evidence that sharing behaviour declined rapidly after education programs and needle syringe programs commenced in Australia and New Zealand in the late 1980s. Few prevention strategies have been implemented in prisons and coverage of indigenous and some ethnic illicit drug injecting populations is still poor.

Most harm reduction interventions for blood borne virus infections are relatively inexpensive. Compelling evidence of effectiveness, safety and cost effectiveness

supports some harm reduction strategies such as needle and syringe programs and methadone. Despite the impressive evidence[94] in favour of specific harm reduction strategies and strong community support in community surveys, many interventions remain very controversial. There are now numerous endorsements of harm reduction from major United Nations[95] organisations. Harm reduction in many parts of the world has become accepted as the mainstream illicit drug policy.

10. ECONOMIC COSTS

Published data on cost effectiveness of different interventions for illicit drugs are available, but rarely seem to influence the policy making process. Evaluation of supply control shows poor cost effectiveness.[51] Some studies[96, 84] show that increasing expenditure on law enforcement worsens outcomes. For example, it was estimated that each $US 1 million spent on 'tough prison sentences' reduced cocaine consumption by 13 kg compared to an estimated 26kg reduction with conventional prison sentences and a 103 kg reduction with illicit drug treatment for cocaine users.[97] A number of studies have shown that the cost effectiveness of illicit drug treatment is far more impressive than law enforcement interventions. Despite this, the vast bulk of government expenditure in response to illicit drugs continues to be allocated to supply control.

There are considerable economic costs associated with illicit drug use and its consequences that are borne by the community, individuals, businesses and governments. The costs of illicit drug use to the economy were estimated in Australia as $A6.1 billion in 1998/99 out of $A34.4 billion for all illicit drugs.[41] There is some literature[98] on the cost and cost-effectiveness of interventions for opioid dependence, with impressive evidence on the cost-effectiveness of opioid agonist maintenance treatment, such as methadone, buprenorphine and prescription heroin.

Access Economics estimated that consumer spending on illegal drugs in Australia amounted to $A7 billion in 1997.[99] This is more than consumer spending on cigarettes and tobacco ($A6 billion) and pharmaceuticals ($A4 billion), though less than the amount spent on alcohol ($A12 billion). Seventy per cent of spending on illegal drugs was on cannabis. Such spending is entirely unregulated.

Crime costs the Australian community an estimated $A32 billion annually. Of this, $A1.96 billion is directly attributable to illicit drugs, and, if indirect costs were included, the proportion attributable to illicit drugs would be even higher.[100] Effective interventions that target potential risk factors for crime, such as illicit drugs and mental health problems, will have significant payoffs for individuals and the community.

In most major policy debates, economic considerations are one of the most important factors. However, in the illicit drug policy debate many politicians and community leaders are content to ignore the economic costs and benefits of alternative policy options. This occurs at a time when health care providers are frequently reminded of a need to be more business-like and to ensure that research findings are translated promptly into policy and practice.

Inevitably, drug policy will always involve elements of supply reduction, demand reduction and harm reduction. The major failing of current policy is to place unrealistic expectations on drug education to reduce demand and supply reduction to reduce availability. Continuing this approach represents a triumph of hope over experience. Communities can start to expect consistently improved outcomes when political leaders start to advocate investing in interventions for which there is best evidence of effectiveness.

Overall, positive reinforcement to improve integration of illicit drug users in the community is more effective and has greater social benefits than interventions which increase the health, social and economic cost of illicit drug use to drug users.

Recommendation

9. The Colleges believe that a comprehensive economic evaluation of the financial costs, specific benefits and nature and extent of any unintended negative consequences of supply control and alternative approaches is urgently required.

Accordingly it is recommended that the Governments:

- ***Invest in more cost effective interventions which provide the greatest social and health benefit, and reduce investment in interventions weakly supported by evidence of benefit;***
- ***Take a longer-term view of community benefits when selecting interventions and pay less attention to short term political gain.***

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