OF SUBSTANCE
THE NATIONAL MAGAZINE ON ALCOHOL, TOBACCO AND OTHER DRUGS

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Not Just Youth:
Drugs, Boomers & Beyond

Drug Testing: how it's done

Diversion: out of court, out of trouble

Fitzroy Crossing: grog cut's mixed blessings

Spotlight on Iran

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Editor’s letter

In the many years I’ve worked in the alcohol and other drug sector, I’ve often wondered about the people who don’t make the headlines.

I’ve long seen studies and reports - and written - about topics such as youth, remote residents, the homeless and many other groups worthy of attention. But rarely have I seen discussion about what happens to all these people as they age. In this issue, we ask that and other questions: What are the licit and illicit substance-using behaviours of people over the age of 40? What do their lives look like? What are the problems they may face? And for people who use opioids – what are the implications of spending 10, 20 or more years on methadone maintenance or its equivalent treatment?

We’ve devoted a sizeable portion of this issue to exploring this subject and in doing so, discovered that there is very little Australian literature about it. With a rapidly ageing population, changing demographics and culture, it is time the sector turned its attention to this subject. I urge both our clinicians and researchers to look into the needs of the not-so-young Australians who drink, smoke or use illicit drugs.

With Australia’s first drug court turning 10 this year, we also thought it was time to give an update on programs which divert people who use drugs away from the criminal justice system.

And staying with the law, there has been talk in recent months of nationally implementing elements of the drug section of the Model Criminal Code. We ask what this could mean for people who use drugs for personal reasons, as opposed to those who traffic in them.

These are just a few of the topics in this new-look issue of Of Substance. I hope the articles challenge and inform you, and as always, I welcome your feedback. Just email me at editor@ancd.org.au. And of course, don’t forget to check out all our past issues at www.ofsubstance.org.au.

Jenny Tinworth
Managing Editor

Guest editorial

Proof diversion works

Jeff Linden, Regional Coordinating Magistrate for the Far North Coast of NSW and a member of the Australian National Council on Drugs.

It is not surprising to read Dr Caitlin Hughes’ article on page 20 and see that 69 per cent of programs that divert drug and drug related offenders have been introduced since 2000. In formal terms, diversion within the Criminal Justice System is a relatively new phenomenon. Upon my appointment as a magistrate of the NSW Local Court in 1988, formal diversion in any guise was virtually unknown. Indeed, the first forms of diversion in NSW occurred at about that time and were spawned from the frustration of magistrates with the lack of any alternatives. The father of diversion was a magistrate named Errol Consadine. He created Community Aid Panels, Traffic Offender Programs and an innovative ‘Day in Jail’ program. These programs at the time had no statutory basis, were adopted on various court circuits on an ad hoc basis and utilised willing police and volunteer community members.

The consensus at the time by the magistrates was that these programs ‘worked’. The critical flaw in this conclusion emanated from the fact, that being ad hoc systems with no statutory basis, there was no scope for appraisal or evaluation in any formal sense.

Notwithstanding the above, two events occurred. Firstly Magistrate Consadine received an Order of Australia for his innovative ideas and secondly diversion became firmly placed in the mind of government. Hence, since the year 2000 there has been a proliferation of diversion programs. As the articles by Dr Katie Willis (page 22) and Dr Caitlin Hughes show, diversion is in two forms, namely police diversion before any court activity is commenced and diversion within the court system once police charges are activated. Diversion within the court system is itself divided into two facets, namely pre-plea diversion (such as MERIT) and after-plea diversion (such as the Drug Court). These programs have been and continue to be vigorously appraised, evaluated and utilised. They have in the main been embraced by Courts and Health Departments who act in tandem to identify and treat the root cause of the problem from a health perspective and by courts in turn encouraging offenders to undertake and continue in appropriate programs. There are now proven benefits for the community.
PM responds to homelessness
The Federal Government’s much anticipated White Paper on homelessness, *The Road Home*, released in December 2008, is the culmination of year-long investigations into homelessness in Australia initiated by the Rudd Government soon after it took office. Hundreds of submissions and nationwide consultations have delivered a wealth of experience and ideas to guide the way forward.

Attentive to the scope and complexity of the problem, *The Road Home* affirms the need for principles that ensure the national response to homelessness is client-centred, respectful and effective, and sets out detailed strategies and targets to meet the Australian Government’s ‘headline goals’ to:

- halve overall homelessness by 2020
- offer supported accommodation to all people in need who sleep ‘rough’ by 2020.

On any given night in Australia, around 105,000 people are homeless. Homelessness can happen to anyone, and is not just about housing. It affects different groups and individuals in myriad ways. Its causes include housing shortages, long-term unemployment, mental health issues, substance abuse, family and relationship breakdown, and, especially for women, domestic and family violence.

*The Road Home* presents three main strategies to tackle the problem long-term:

1. Turning off the tap: early intervention by services to prevent homelessness. Prevention strategies should focus on key transition points and life events. Specific measures supporting people with problematic substance use and mental health issues include:
   - a policy of ‘no exits into homelessness’ from statutory, custodial care or health settings, including mental health and drug and alcohol services
   - financial support for community-based mental health services under the Personal Helpers and Mentors Program (PHaMS)
   - additional services to assist people with mental health issues and/or substance abuse issues who have been homeless to maintain their housing.

2. Improving and expanding services: making services more connected and responsive to achieve sustainable housing, improve economic and social participation and end homelessness for clients. Measures include more effective collaboration, reforms to funding models, better use of IT, workforce planning and new national standards and charters.

3. Breaking the cycle: moving people who become homeless quickly through crisis housing to stable housing with the support they need so that homelessness does not recur. Specific measures supporting people with problematic substance use and mental health issues include:
   - additional assertive outreach programs to locate ‘rough sleepers’ and connect them to long-term housing and health services
   - an increase in the supply of affordable and specialist housing that links accommodation and support
   - improving services for older people experiencing homelessness.

A National Homelessness Research Strategy will underpin the reforms, which will be coordinated and monitored until 2020 by the Prime Minister’s Council on Homelessness. The government will also establish the Bea Miles Foundation, to work in partnership with the business sector on tackling homelessness and to sponsor innovation and research.


NT Indigenous health improves
Aboriginal and Torres Strait Islander health in the Northern Territory is showing signs of improvement, according to the report *Aboriginal and Torres Strait Islander Health Performance Framework 2008*, released by the Australian Institute of Health and Welfare.

The report’s findings indicate that:

- the mortality rate for NT Aboriginal babies has decreased by about 26 per cent since 1997
- immunisation rates for NT Aboriginal children are now higher for all age groups than in other jurisdictions
- life expectancy for Aboriginal women in the NT has increased by 3.2 years since 1996, and is 65.2 years (Australian Indigenous average 64.8 years)
- rates of avoidable mortality in Aboriginal Territorians declined significantly between 1991 and 2006
- risky alcohol consumption by Aboriginal and Torres Strait Islander Territorians is lower than in all other jurisdictions except Tasmania.

Twice as many Aboriginal people reported abstaining from alcohol than was the case for non-Indigenous Australians, but a greater proportion who drank did so at risky levels. Other major health concerns are continuing high levels of smoking, high rates of hospitalisation following assaults, and life expectancy for Aboriginal men.

Awards and honours
Major contributors to the alcohol and other drugs sector have been recognised for their leading work in research and practice:

**Australia Day awards**

Professor David Hill AO, Director, Cancer Council of Victoria – for service to public health, particularly through leadership in the promotion of cancer awareness and prevention programs. Professor Hill has played a key role in national anti-smoking efforts.

Peter Drennan APM, Assistant Commissioner, Australian Federal Police.

Dawn O’Neil AM, CEO Lifeline Australia – for service to the community through the development of support services delivered by Lifeline Australia and the promotion of reform in the mental health sector.

**Research awards and grants**

Professor Wayne Hall, School of Population Health, University of Queensland – awarded a prestigious Australia Fellowship by the National Health and Medical Research Council (NHMRC). A former Director of the National Drug and Alcohol Research Centre, Professor Hall has a long and distinguished career in public health. He will use the funding to establish a research program focusing on the ethical implications of new treatments for drug use and addiction that are emerging from cutting-edge genetics and neuroscience advances.

Associate Professor Tony Butler, National Drug Research Institute, Curtin University of Technology – awarded a major NHMRC 2008 Capacity Building Grant for Population Health and Health Services Research, to build Australia-wide research capacity in Indigenous offender health and health care delivery.

Associate Professor Margaret Hellard, Co-director of the Centre for Population Health, the Burnet Institute – awarded an NHMRC 2009 Research Fellowship. Much of her work focuses on preventing the transmission and impact of sexually transmitted infections in vulnerable populations.

**Professor Lisa Maher**, National Centre in HIV Epidemiology & Clinical Research, University of New South Wales – awarded an NHMRC 2009 Research Fellowship for work with infectious disease prevention.

**Dr Kypros Kypri**, School of Medicine and Public Health, University of Newcastle – awarded an NHMRC Career Development Award for a study aimed at reducing the injury and disease burden attributable to alcohol.

**IN BRIEF**

**NSW Drug Court turns 10**

The New South Wales Drug Court celebrated its tenth anniversary in February. Since 1999, the court has helped almost 1700 drug-dependent offenders, with around 150 defendants completing the program each year following intensive drug treatment and rehabilitation.

An evaluation in 2008 by the NSW Bureau of Crime Statistics and Research found that those who finish the program are 37 per cent less likely to be convicted of a further offence and 58 per cent less likely to be convicted of a drug offence.

**Sports Code of Conduct**

Six sports have signed up to the National Alcohol Code of Conduct: rugby league (represented by the National Rugby League and the Australian Rugby League); Australian rules (Australian Football League); netball (Netball Australia); football (the Football Federation Australia); rugby union (the Australian Rugby Union) and cricket (Cricket Australia).

The code addresses the responsibilities of organisations and individuals regarding consumption of alcohol and promotion of responsible drinking to the broader community.

**CEO moves on**

In January 2009, Daryl Smeaton resigned as CEO of the Alcohol Education and Rehabilitation Foundation (AERF) after more than seven years in the position. Mr Smeaton led the AERF from its inception in 2001 with a mandate to ‘change the way we drink’. Established with a federal government grant and now a perpetual trust, the AERF has become a leading organisation in the fight to address alcohol-related harm in Australian society.

**Clarification**

In the January 2009 issue of *Of Substance*, there was a geographical error in the article Drug Use Snapshot: The 2008 IDRS and EDRS Findings. The IDRS report on the origin of brown heroin should have read ‘This form of brown heroin is produced in the Golden Crescent region (Afghanistan, Iran and Pakistan) and until recent years, had rarely been seen in Australia’. The report incorrectly identified countries which are located in the Golden Triangle region.
Spotlight on drug policy
The third Annual Conference of the International Society for the Study of Drug Policy took place at the United Nations Office on Drugs and Crime in Vienna on 2-3 March 2009, with Australian delegates in attendance. The conference agenda included research issues relevant to policy discussions at the UN General Assembly Special Session on drugs.

Cost of methamphetamine use
A study by US non-profit research organisation RAND Corporation has estimated that the overall economic cost of methamphetamine abuse reached $23.4 billion in 2005, including the burden of addiction, premature death, drug treatment and other aspects of the drug. Knowledge and understanding of the role of methamphetamine in certain types of harm is still emerging. Given this uncertainty, the figure was calculated as a conservative ‘best estimate’, based on a range of estimates by researchers from a low of $16.2 billion up to a high of $48.3 billion.

According to Tom Siebel, chairman of the Meth Project Foundation, this was the first comprehensive economic impact study to be conducted with the rigour of a traditional ‘cost of illness’ study, applied specifically to methamphetamine.

The study was sponsored by the Foundation, a non-profit group dedicated to reducing first-time methamphetamine use. More details can be found at www.rand.org.

Opium increase
A new survey by the United Nations Office on Drugs and Crime (UNODC) reveals a rise in opium cultivation in South-East Asia during 2008. The region’s major opium-producing countries planted 30 000 hectares last year, an increase of 26 per cent on 2006. In recent years, there had been a marked decline in opium poppy cultivation, as alternative sources of income for poor rural families were developed and supported. Opium production in Vietnam was eliminated in 2000 and in Thailand in 2003, with Lao PDR declared opium-free in 2005.

Families who used to grow opium are now facing difficult living conditions. High levels of poverty and food shortages, together with the recent rapid increase in the price of raw opium and ineffective law enforcement, are driving a return to opium poppy cultivation in these South-East Asian countries.

The UN says that only sustainable alternative income sources for very poor farming communities will lead to the eradication of the opium crop.

Myanmar, the world’s second-biggest opium producer behind Afghanistan, had also seen a continuous decline of opium production in recent years, but it appears again to be a hub for drug production, with opium now grown on some 28 500 hectares.

International snapshot
The 2008 annual report of the International Narcotics Control Board (INCB) provides comprehensive analysis of worldwide drug abuse and trafficking and describes the various drug control efforts undertaken in 2008.

The report highlights that:
• access to controlled medicines in over 150 countries is almost non-existent
• implementation of cannabis control provisions is inconsistent
• ‘rogue’ internet pharmacies promoting drug abuse among vulnerable groups are cause for concern.

With respect to Asia and Oceania, the report reveals that the Philippines has the highest annual prevalence of amphetamines abuse in the world; HIV infection is high among people who inject illicit drugs in South Asia; illicit opium cultivation in Afghanistan dropped by 19 per cent; drug trafficking from Canada to Australia has risen; drug seizures in 2007 confirm concerns that Fiji, Papua New Guinea and Vanuatu are vulnerable to trafficking.

The INCB has an independent and quasi-judicial role in monitoring the implementation of UN drug control conventions. For information, visit www.incb.org.
Youth binge drinking

*What are you doing to yourself* is a NSW Government campaign – a new interactive website and booklets to raise awareness among young people and their parents about the risks of binge drinking. The guides to dealing with alcohol for teenagers and parents will educate young people about the risks associated with binge drinking and inform parents of the significant influence they have on their children’s attitudes. Visit: [www.whatareyoudoingtoyourself.com](http://www.whatareyoudoingtoyourself.com).

Homelessness website

The Homelessness Information Portal, a new website launched by the Australian National Council on Drugs late last year, is designed to assist service providers in the homelessness sector to address alcohol and other drugs use among people who are homeless.

The website is a searchable directory of alcohol and other drugs support services in Australia, and an online resource guide for those working within shelters and organisations who have face-to-face contact with those who are homeless. It provides a clear set of guidelines for dealing with alcohol and drug-affected clients and information and direction for referrals on to services such as sobering-up shelters, rehabilitation and therapeutic communities. [www.hip.org.au](http://www.hip.org.au).

Yarning with the mob

The Australian Indigenous HealthInfoNet has developed Indigenous substance misuse web resources and ‘yarning places’ (electronic networks) designed for workers, students and others interested in these issues. Four ‘one-stop info-shops’ cover alcohol, inhalants, illicit drugs, and kava and other drugs. Online resources include reviews, policies, programs, guidelines, health promotion, publications, grants and events, and links to other relevant sites. Membership is free and users can submit information on their programs and resources to share with others online.

The web yarning place offers an e-mob list (members’ contact details), an e-yarning board (discussion board) and an e-message stick (email list for communicating with other members). Visit: [www.healthinfonet.ecu.edu.au/substancemisuse](http://www.healthinfonet.ecu.edu.au/substancemisuse).

National Household Survey update


New titles


This book focuses on two key areas: an overview of existing practice responses to alcohol and other drug use, and the identification of emerging innovations in practice. It covers a range of drug types, populations and areas of intervention, and draws on psychological, sociological and environmental perspectives.


This evidence-based practical guide to managing people with substance use disorders covers specific types of psychoactive substance and treatment options, focusing on specific groups and placing addiction medicine within a broad professional and legal context.


Do you or your client need cannabis information or advice?

Call the Cannabis Information and Helpline

1800 30 40 50
Shared responsibility

I read your article ‘The language we use’ (OS, January 09) with interest. I am, like the author, very keen to encourage my clients to see themselves as active participants in their own life choices rather than powerless victims.

The suggestion that we need to ‘tell them what we really think’ rather than taking a non-judgmental approach, however, obscures the responsibility the rest of society needs to take on board for constructing the reality in which the client has in fact had very little power to effectively make positive choices. The ‘tell them what we really think’ language may obscure the responsibility of the rest of us to keep working towards creative structural changes that will make positive individual change more accessible and maladaptive responses less likely.

I am all for being very clear with clients about whose responsibility is what. I was very concerned however that this article may be tacitly encouraging a ‘blame the victim’, or ‘pull yourself up by your own bootstraps’ approach, disrespecting the extreme difficulty many clients have in constructing a hopeful world view given their real lived experiences in our culture. The author may also be tacitly letting off the hook the rest of us who share responsibility for changing the social circumstances that set clients up to slip into drug and alcohol dependence and keep them stuck there.

I agree that the language we use is very important in shaping the way we treat our clients in the process of attempting to give them a hand. I think we can talk about responsibility in a very straightforward way and still maintain a non-judgmental approach.

Jude Painter,
Northern Territory.

Whose truth?

I read with interest Andrew Hick’s letter (OS, January 09) about the need to be aware of the language we use and to avoid being morally neutral with our words.

While I agree with his intent in saying that we should be more open and honest in our work environment, Andrew’s letter left me wondering exactly what he meant.

The problem with ‘telling it like it is’ is that the ‘truth’ is not necessarily a shared or agreed concept and experience. Especially when we talk about people’s behaviours and beliefs, who are we to tell someone how to behave? Are our morals the accepted truths, the standard that we think everyone else should behave like us?

I think history is littered with examples of societies that tried to ‘educate’ people and communities, usually marginalised ones, to conform to the mainstream. The results have usually been more pain, loss and dispossession.

Andrew also talks about individual responsibility as if it was the only factor in the equation that produces poverty and marginalisation in our society. I think that any community, health or welfare worker would know that we, as individuals, are a product of the family, community and society that we live in.

A good starting point to see the forces that shape people’s health and well-being is the World Health Organization’s Commission on Social Determinants of Health report published in 2008.

If anything, we as workers need to ‘tell it like it is’, not to the marginalised people who we see at our workplace, but to the power brokers in our society who allow inequalities and poverty to continue to exist. The remedies for producing a healthy society are known, it is up to us to advocate for them.

Piergiorgio Moro,
Victoria.

Families need help, too

Thank you for finally raising the subject of families and substance abuse (OS, January 09). It was so encouraging to see this article.

Although you raise the issue of families needing help when there is someone in the family with a substance abuse problem, it should also be noted that families are integrally affected by the substance abuse and therefore should be involved in the recovery process of the abuser, and also be made aware that they need a recovery program of their own.

As the substance abuse by one family member continues, the dynamics of the family shift. Eventually, the family system looks very different to what it started out looking like. Each member of the family, and each relationship within the family, has been affected by the substance abuse and therefore should be involved in the recovery process of the abuser, and also be made aware that they need a recovery program of their own.

Warwick Murphy,
Victoria.
In this issue of *Of Substance*, we bring you a selection of research findings from poster sessions at the Australasian Professional Society on Alcohol and other Drugs (APSAD) Conference, held in November 2008. A ‘poster session’ is an opportunity for researchers and practitioners – usually using large posters to highlight key points – to answer delegates’ questions about their projects.

**Poster 1**
**Injectable opioid clinic**
Strang, J, van der Waal, R, Lintzeris, N, Zador, D & Metrebian, N.
National Addiction Centre, London (SLaM NHS Foundation Trust & Institute of Psychiatry).

In 2005, the first pilot supervised injecting clinic opened in South London, as part of the Randomised Injectable Opioid Treatment Trial (RIOTT). Through a combination of daily attendance and frequent psycho-social support, the program provides treatment to a small group of ‘hard-to-treat’ patients who continue to inject street heroin despite many previous treatments. Although the trial results will not be available until later in 2009 this poster provides a brief overview of clinical practice and experience thus far.

The injecting clinic runs a morning and afternoon session every day of the year. A team of specially trained nurses observe patient safety pre- and post-dose administration and the application of safe and hygienic injecting practices. In general patients on injectable diamorphine attend twice daily while those on injectable methadone attend once daily. Supplementary oral medication is prescribed to prevent withdrawal symptoms in between injecting sessions. The clinic supports flexibility of attendance by converting injectable medication to oral medication – either methadone with take-home privileges or slow-release morphine – so patients can choose to come in once daily or can decide instead to have oral medication for the day.

We have observed extremely high retention and attendance rates. Patients view daily attendance for supervised injecting as an acceptable part of their treatment that helps them to structure their days and stay clear of street drugs. In addition, patients value the daily interaction with staff, which complements more structured key work sessions. Recently a number of patients have successfully reduced the frequency of injecting after making significant changes in their lives (i.e. stopped using street drugs, found work or started courses).

Daily attendance enables staff to assess and change injecting practices through an interventionist approach resulting in significant reduction of injecting-related harm. In many cases patients with poor veins change to intramuscular injecting. Some patients report that they now prefer intramuscular injecting to intravenous injecting.

We observe a range of side effects. At the less threatening, we see mainly mild transient histaminic reactions (injectable diamorphine) and also frequent complaints about ‘burning’ and ‘stinging’ of veins and/or muscles (injectable methadone). A different picture is emerging with serious clinical problems. Although less popular with patients, injectable methadone appears clinically safer than diamorphine as no episodes of critical post-dose intoxication were observed. In contrast, occasional unpredicted severe post-dose diamorphine intoxication has presented a serious challenge for clinicians.

In conclusion, this model of injectable opioid treatment was found to be feasible and very acceptable to a group of people who are at high risk of harm. These people were previously difficult to engage in drug treatment. Daily attendance provides structure; reduces injecting-related risks and harm; and creates an opportunity to input on a range of client behaviours.

**Poster 2**
**Homelessness and PTSD**
Larney, S, Conroy, E, Mills, K, Burns, L & Teesson, M.
National Drug and Alcohol Research Centre.

This cross-sectional study analysed the prevalence of, and factors associated with, post-traumatic stress disorder (PTSD) among a cohort of homeless people who use alcohol and illicit drugs. PTSD is a disorder that develops after a person experiences a highly stressful event involving actual or threatened harm. Symptoms of PTSD include re-experiencing the event through nightmares and intrusive
memories; avoidance of reminders of the event; and high levels of psychological arousal (i.e. being ‘jumpy’). PTSD is known to be higher among people with substance use disorders, and homeless people often experience violent victimisation, suggesting they may also have a high prevalence of PTSD. However, very little is known about how PTSD, substance use and homelessness interact, particularly in the Australian context.

We interviewed 106 men and women accessing an intoxicated person’s unit in inner-Sydney. The majority (80%) were male and they ranged in age from 20-76 years, with a mean age of 42. Eighteen participants identified as Aboriginal or Torres Strait Islander.

Patterns of drug use were complex, with participants reporting using an average of four drug classes in the previous month. The most commonly used substances were nicotine (used by 95% of the sample) and alcohol (84%), followed by cannabis (55%), methamphetamine (34%), benzodiazepines (28%), heroin (24%) and cocaine (16%).

Over half of the participants (57%) screened positive for PTSD. Factors associated with PTSD were identified. Sexual assault (at any age) was associated with a seven-fold increase in the likelihood of PTSD, while heroin use was associated with a three-fold increase in PTSD. Having been homeless for a longer period of time and having experienced a greater number of traumatic events also increased the risk of PTSD. These factors were entered into a multivariate model. Controlling for heroin use, number of traumatic events experienced and duration of homelessness, having been sexually assaulted was associated with a four-fold increase in PTSD. A longer duration of homelessness was associated with a small increase in PTSD.

The prevalence of PTSD was very high among this sample of homeless, substance-using adults. People working clinically with this population need to be aware of the likelihood of past trauma and PTSD in their clients, and should become familiar with the identification and management of PTSD symptoms. The association between PTSD and longer duration of homelessness highlights the importance of addressing PTSD in preventing chronic homelessness.

**Poster 3**

**Malnutrition and detox**

Wilson, M.

Royal Brisbane and Women’s Hospital Alcohol and Drug Service.

Substance dependence is associated with lifestyle disruption including disturbances in diet. Thiamine deficiency and ethanol neurotoxicity in alcoholic organic brain disorders is well established. However, less is known about the true prevalence of malnutrition in this population.

This study was designed to identify the prevalence of malnutrition in patients admitted to the Alcohol and Drug Service, Royal Brisbane and Women’s Hospital and to provide specific dietary advice to each patient.

Funding was obtained for a sessional dietician for a four-week period. All patients admitted for detoxification during this time were eligible for study inclusion.

Dietician assessment, using the Subjective Global Assessment (SGA) in conjunction with the Simplified Nutritional Appetite Questionnaire (SNAQ) and a diet quality questionnaire, and blood markers (routine biochemistry and haematological tests with additional vitamin and iron studies) were used to assess nutritional status. Data regarding co-diagnoses, smoking status and residential status were also collected.

Ninety-seven patients were admitted, of whom 18 declined participation and 12 discharged prior to consent; leaving 67 (48 male; 19 female) who consented and participated. Forty-nine (73%) were alcohol dependent and the balance were opiate, benzodiazepine, and/or amphetamine dependent. Fifty-two (78%) were current smokers, 33 (49%) were diagnosed with a current mood disorder and 11 (16%) had unstable accommodation. The age range was 21-62.

The SGA identified 55% of participants as having mild to moderate malnutrition or ‘at risk’ of malnutrition. There was no statistical difference in nutritional status based upon primary drug used.

The most significant finding was that diet quality was very poor with 88% of participants requiring dietary advice. This included 25 of the 27 participants who were assessed as ‘not at risk’ by the SGA.

Appetite was assessed as poor, with 81% of participants at risk of at least 5% weight loss in the next six months. This included 19 of the 27 participants who were assessed as ‘not at risk’ by the SGA.

No significant trends were found in blood markers relating to primary drug used. Plasma albumin and total protein levels were found NOT to be good indicators of malnutrition. Fifty per cent of participants were micronutrient deficient on at least one element of vitamin and iron study results.

Only 12% of patients had adequate diets as assessed using the diet quality questionnaire and 50% of those were at risk of weight loss due to low appetite. High levels of current mood disorder and tobacco smoking are likely to contribute to poor nutritional status. Nearly one in five participants were admitted from unstable accommodation. Given the significance of vitamin deficiencies in the aetiology of alcohol related brain injury and the importance of diet in recovery, greater investment in the nutritional management of addiction is warranted.
Young people seem to be the focus of most discussions about drug use. Media and politicians talk about youth binge drinking, young women taking up smoking and of illicit drug use by children as young as 12. But, what about the rest of the community? Few researchers focus on the drug-using habits of those aged over 40. Is alcohol, tobacco and illicit drug use the province mainly of the young, or do their habits simply reflect those of their elders?

**Table 1. Australian population aged over 40 at June 2007.**

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<thead>
<tr>
<th>Age group</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-49</td>
<td>3,041,942</td>
</tr>
<tr>
<td>50-59</td>
<td>2,656,238</td>
</tr>
<tr>
<td>60-69</td>
<td>1,871,974</td>
</tr>
<tr>
<td>70-79</td>
<td>1,198,508</td>
</tr>
<tr>
<td>80+</td>
<td>758,999</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,527,661</strong></td>
</tr>
</tbody>
</table>

Source: Australian Bureau of Statistics and author’s calculations.

**Drug use**

The 2007 National Drug Strategy Household Survey (AIHW, 2008) highlights a few statistics about Australians aged 40-plus:

**Tobacco**

Those aged 50-59 who smoke go through a mean number of 125 (124.9) cigarettes per week. Although higher numbers of younger age groups identify as recent smokers, on average, they use fewer cigarettes (i.e. 20-29-year-old smokers puff 78.8 per week).

**Alcohol**

Among those who drink alcohol, daily drinking increases with age, peaking at 15.6% in the 60+ age group (in comparison to 2.3% of 20-29 year olds). This trend occurs in both males and females.

**Illicit drugs**

Between 2004 and 2007, the percentage of Australians who had used any illicit drug in the past 12 months fell by 2.4% to 15.8% for men and by 1.5% to 11.0% for women. However, the 50-59 year old age group broke this trend, increasing recent use from 7.6% to 8.7% for men and 4.8% to 5.4% for women.

Cannabis was the most common illicit drug used by people aged over 40. As use of other illicit drugs was low, the National Drug Strategy Household Survey (First Results) does not provide a breakdown of the age groups over 40 for use of any other individual illicit drug.
**Table 2. Tobacco, alcohol and illicit drug use by Australians aged 40 or older.**

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>14–39 year olds</th>
<th>40–49 year olds</th>
<th>50–59 year olds</th>
<th>60+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoke tobacco daily (%)</td>
<td>18.0</td>
<td>21.2</td>
<td>17.5</td>
<td>9.7</td>
</tr>
<tr>
<td>Mean number of cigarettes per week</td>
<td>84.0</td>
<td>105.8</td>
<td>124.9</td>
<td>103.9</td>
</tr>
<tr>
<td>Drink alcohol daily (%)</td>
<td>2.9</td>
<td>8.5</td>
<td>11.8</td>
<td>15.6</td>
</tr>
<tr>
<td>Used alcohol in the last 12 months (%)</td>
<td>83.8</td>
<td>87.6</td>
<td>86.0</td>
<td>75.3</td>
</tr>
<tr>
<td>Drink at risky or high-risk levels of long-term harm* (%)</td>
<td>12.1</td>
<td>10.8</td>
<td>10.4</td>
<td>6.4</td>
</tr>
<tr>
<td>Drink at risky or high-risk levels of short-term harm at least yearly** (%)</td>
<td>18.5</td>
<td>17.6</td>
<td>11.6</td>
<td>5.1</td>
</tr>
<tr>
<td>Drink at risky or high-risk levels of short-term harm at least monthly** (%)</td>
<td>19.4</td>
<td>12.3</td>
<td>7.1</td>
<td>6.3</td>
</tr>
<tr>
<td>Drink at risky or high-risk levels of short-term harm at least weekly** (%)</td>
<td>11.0</td>
<td>7.5</td>
<td>6.3</td>
<td>2.7</td>
</tr>
<tr>
<td>Have ever used any illicit drug^ (%)</td>
<td>48.8</td>
<td>47.6</td>
<td>32.5</td>
<td>12.6</td>
</tr>
<tr>
<td>Have used an illicit drug in the past 12 months^ (%)</td>
<td>20.9</td>
<td>11.6</td>
<td>7.0</td>
<td>4.3</td>
</tr>
<tr>
<td>Have used cannabis in the past 12 months (%)</td>
<td>15.6</td>
<td>8.3</td>
<td>3.8</td>
<td>0.5</td>
</tr>
</tbody>
</table>

* Risky and high-risk levels of long-term harm described as 29–42 and 43 or more drinks per week for men and 15–28 and 29 or more drinks per week for women.

** Risky and high-risk levels of short-term harm described as 7 or more standard drinks per day for men and 5 or more for women.

^ Illicit drugs include any illegal drug, prescription or over-the-counter pharmaceutical used for illicit purposes, and other substances used inappropriately.

**References**


‘Baby Boomers’ constitute a sizeable chunk of Australia’s population – around 4.5 million people – and as they move into their more mature years, they are attracting considerable attention.

Born between 1946 and the early ’60s, the senior’s journey upon which Baby Boomers are embarking is different from that of the generation that experienced the Depression and World War II. By and large, Baby Boomers have enjoyed unprecedented peace and prosperity. Moreover, they have experienced substantial shifts in social mores and rapid cultural and technological change.

The difference was put nicely by Jill Ireland in the Sydney Morning Herald. ‘Last century, when Boomers were young, anyone in their 50s was considered old. It was a time to settle in with a cup of tea and a scotch finger biscuit and wait to die. These days a person in their 50s is just as likely as their children to use both the internet and SMS, wear jeans, work out, drink Coke, smoke pot, and use words like “cool”.

A generalisation maybe, but Ireland’s comments convey something distinctive about the way Baby Boomers are ageing.

Official statistics and some serious research on the Baby Boomer generation reveal a quite complex picture. Senior Australians are a very different breed from their equivalents 20 or 30 years ago. Although they are in many respects better off than previous cohorts of seniors, their next few decades are not going to be a doddle.

The Australian Bureau of Statistics reports that, compared with people in their 50s two decades ago, today’s 50-somethings have significantly improved health outcomes, their living arrangements are quite different, and the gap between men and women in both educational attainment and incomes has narrowed significantly. Their death rates have dropped by around half. There is a 250 per cent increase in the proportion of Baby Boomers who are divorced, and they are much less likely to specify a formal religious affiliation.

Some changes for women have been dramatic. The proportion of female seniors with a university degree is five and a half times what it was 20 years ago, and their participation in the workforce has nearly doubled. Women are still way behind men in income terms, but the differences are considerably less.

**High expectations**

These factors must have a significant bearing on the expectations of those entering old age now, both in terms of how they prefer to age, and how they might respond to the social and economic realities of the 20-30 years they may have ahead of them.

What does that future hold? The Australia Institute has done some interesting research on what it calls ‘the retirement prospects for the not-so-lucky generation’. Their findings go something like this …

While many people envy Baby Boomers their good fortune – free higher education and the wealth-creating property boom being two advantages – the majority have not necessarily benefited from these.

Lines between working and retirement have become blurred, and expectations have strengthened that people will provide for their senior years through superannuation. But compulsory superannuation was not in play for most of the Baby Boomers’ working lives (particularly not for women): superannuation was largely the province of high-income earners. Everyone agrees the aged pension is far short of what is needed for even the basics, yet many will continue to be dependent on it. Seniors who have had their superannuation slashed by the global financial crisis will also need to turn to the pension for support. This has significant implications both for individuals and for Treasury coffers.

Our Baby Boomers will be living longer, but many may have to work into their 70s to make ends meet. More people are entering retirement with mortgages. It is estimated that over 400 000 seniors will enter the rental market by 2020. There will be many more single-person senior households, notably among women.

Many surveys reveal a consistent pattern of expectations and hopes among Baby Boomers. They are generally well informed and have high expectations of their future. Travel, learning and closer relationships with families and communities are high on their agendas. The thought of nursing homes and decrepitude appalls them.

In short, those Australians who are entering their mature years at the start of the 21st century have higher expectations – and in many respects, greater capacities – than those who grew old in the 1970s and 80s.

One thing is certain – ageing ain’t what it used to be.

**For a list of references used in this article, email editor@ancd.org.au.**

* Brenton Holmes writes from the Council of the Ageing Over 50s Ltd.
The Australian Injecting and Illicit Drug Users League (AiVl) is a national organisation representing people who use illicit drugs. Here, Of Substance asks AiVl staff Jude Byrne and Nicole Wiggins about the experiences of people who may have been using illicit drugs for many years.

OS: What do we know about people who are over 40 and use illicit drugs?

AiVl: There is very little formal research. Anecdotally, we know that many of these people do have significant issues and needs.

OS: Tell us what you know.

AiVl: Isolation is a big issue for many people – not for all, but certainly for a sizeable group. When you are under 30, you are still young, healthy and have hope; you may be employed either regularly or occasionally and you’re likely to have family contact. However, as you get older and if you have been using for a long time, it’s likely lots of those normal social networks will have eroded.

Many of these people are living in really difficult circumstances because their drug use has led them to a place where they are socially isolated and economically vulnerable. They may not have had a job in years, they may be suffering from the long-term effects of hepatitis C or other health issues and be quite ill, with no-one who will take them in. It can be a time of change and they don’t have the resources to cope.

As people age, the lifestyle gets tougher – older people don’t bounce back as easily, so they may turn to drugs that are easier to get, like alcohol and pills. We have also found that the shortage of heroin meant that many people turned to amphetamines. You don’t see this in the official statistics, but we regularly hear from their peers that ‘X was doing OK on heroin, but then he/she switched to speed and died’.

Even day-to-day activities can be difficult. If they have been using illicit or substitution treatment long term, their teeth may be missing or in very poor condition. You’re not going to be able to get a job if your front teeth are missing, and even things like picking up kids from school or doing volunteer work at the canteen can be very embarrassing because of the way they look. Self-esteem is lost.

OS: What happens when these people seek medical treatment for their health problems?

AiVl: They often face discrimination because of their drug use or because they are on opioid substitution treatments. It tends to be a case of perception – if they are well spoken and look presentable, they will be given less grief, but if they don’t look that way, then staff can be very discriminatory.

They also face a lot of misunderstanding from medical staff about pain relief. For most, pain relief seems to be almost impossible because of their tolerance to opiates. The standard doses of pain medications don’t do anything, and any admission of pain is seen as drug-seeking behaviour.

It can be very difficult to challenge this attitude, especially when they are already laid low because they are sick or in a lot of pain. User groups have been approached by people who are really afraid of having to go to hospital because of the lack of pain relief and the discrimination they will face.

OS: What about specialised alcohol and other drug treatment services? Are they serving the 40+ age group?

AiVl: We think that many of these people simply aren’t connecting with treatment services. Sadly, when they do, the majority of services still treat them in a very discriminatory way. With older people, it is even worse because there is an attitude of ‘you should have grown out of this’. We need to work hard to educate services and staff about the barrier discrimination creates.

We also need to challenge the attitude that if you use drugs problematically you must be a problematic person and have mental health issues.

It would be even better if drug user groups were given funding to provide treatment services, so the community could look after itself.

OS: Is there anything else this group needs?

AiVl: People who are in their 40s and 50s often have teenage children. Parents really need some information about how to talk to teenagers and young adults about their drug or methadone use. They need to know how to handle those generational issues which come up so they don’t destroy their relationships with their kids.
A growing number of ‘middle-aged’ Australian women are drinking dangerously, yet it appears there is little recognition of the seriousness of this problem.

Sixteen per cent of women aged 35-60 are drinking at risky or high-risk levels (Withnall & Hill 2006; Clemens et al, 2007; NSW Chief Health Officer 2008).

In a bid to tap into the experiences of this group and the practitioners who care for them, since 2005 we have been researching midlife women who are in recovery for alcohol dependence (see page 15). Our goal is to explore, explain and develop gender-sensitive support for this group.

Our research is ongoing, and this article draws on analysis of data collected in 2007 and 2008.

The ‘superwoman’ myth
Senior practitioners in our study observed that in today’s Australian society, women are still working out how to be women. For the participants in our study, this has been further confounded by the emergence of ‘super mum’ and ‘sex and the city’ career woman expectations. Taking on new roles, as well as traditional women’s responsibilities, makes life very complicated and hectic, with much energy and effort required to perform additional tasks. As a self-reward for a job well done, a drink is – at least initially – perceived as a reasonable option. As a sedative, it works to bring relief from heightened stress to enable the woman to continue, get the jobs done, and even ‘sparkle’ while doing them. It also masks the distressed thinking, feeling and associated damage that the alcohol does to her physiology, psyche and sense of being.

Coupled with this is a culture where midlife women don’t want others to see their alcohol misuse, so they may drink in secretive ways. This collusion may mean that alcohol dependence in this age group is under-recognised and is a barrier to the provision of effective treatment.

Achieving recovery
Participants in this study generally said that, to recover, they needed to have a goal of abstaining from alcohol use. Most noted they had experienced distress, confusion, frustration and lying when undertaking a controlled drinking program. Many had experienced detoxification and rehabilitation facilities, and also Alcoholics Anonymous (AA). Very few had been able to achieve abstinence and remain abstinent for years without the support of these kinds of services. They believed their recovery pathways could have been shortened if there had been better public and expert understanding of both women’s life concerns and challenges associated with the ‘accepted’ place of alcohol in Australian culture. The ongoing changes involved in women’s recovery demand that support for respite, rehabilitation and ongoing chronic illness management be recognised as important requirements for midlife recovery.

It is clear from the women and practitioners in our study, and supported by our extensive literature review and secondary data analysis, that midlife women need much more support to effectively transform (Mezirow & Dirkx 2006) from unhealthy dependence to healthy independence. We have developed a framework that involves three phases of recovery, with specific types of care being needed during transitions and through each phase. For convenience we have labelled these phases the ‘Three Es’:

• engagement (in the early period of recovery)
• embodiment (during the maintaining recovery period)
• enrichment (throughout the sustaining recovery period).

Similarly, we use the following ‘Four Bs’ to refer to the personal work women must become engaged in throughout their journey towards abstinence:

• bonding
• belonging
• believing
• (feeling) better.

We have summarised women in recovery’s psycho-socio-emotional areas of learning under the following ‘Five Rs’:

• reciprocal relationships
• rightful respect
• responsibility
• respite
• complementary roles.

For the participant women in recovery, actualising the Bs and Rs was achieved through an evolving process, integrating individual work with external support such as outpatient groups, AA, counselling and peer support.
It is important to realise that it takes time to achieve sustained recovery. We found that achieving early recovery can take three to five years; maintaining a recovery lifestyle develops over three to 12 years; and sustained recovery occurs after eight to 21 years of abstinence.

Women in midlife (wm) space
The need for easy access to a choice of women-oriented midlife safe places was a common theme among participants over the three years of our study. We called them ‘wm (women in midlife) living spaces’ that are able to support each woman’s particular recovery process. Within this space are people who will help these women to form a healed identity, participate in treatment decision-making and achieve self-managed care. This requires compassion, credibility and commitment. Some participants told of feeling ‘undeserving’ of this within some health, medical, community and family settings. The stigma of a woman with an ‘alcohol problem’, which by midlife in many women has also become a self-stigma, prevents them from becoming happy and well. Many women spoke of damaged self-referencing and self-harming that had occurred, and of how being with experienced women enabled them to understand and process their own deep fear, anger and anguish. Access to safe spaces within which to practise new thinking and actions is vital to maintaining and sustaining recovery.

Screening and prevention
How can women at risk of developing a midlife alcohol dependence be helped before it becomes an entrenched problem?

Screening for alcohol misuse needs to be part of an annual general check-up, and considered in relation to the full range of life events, e.g., alcohol consumption and contraception advice. Ongoing monitoring and access to abstinence-reinforcing information is essential when self-denigration, disturbing memories and reactions, and other indicators of limited identity and socio-emotional development appear. It is important to recognise that alcohol dependence is a life-course illness, and in midlife more likely to be a comorbid condition.

Current facts on increased alcohol related accidents, injury and death in midlife women (Women in Australia 2007) must be available as educational materials, especially for female university students, and early career women with home situations where alcohol consumption is the norm. Women find it hard to believe that only two to four drinks can cause damage. All of the participants in this study were, to some extent, unaware of the numerous (60+) medical conditions – within systems, organs and tissues, especially alcohol related brain damage – directly related to alcohol misuse (Antai-Otong 2006). Health, medical and community workers must be better informed, through ongoing training and education programs, to consider misuse of alcohol in women when seeing signs of extended stress or trauma around major life events and ongoing frivolous and escapist behaviours.

In a perfect world, treatment would begin before dependence is reached. With midlife alcohol dependence, remission or survival is not enough. Women’s recovery needs must be met and ongoing developmental support available to realise sustained positive outcomes. Providing this will result in enriched, strong and able midlife and older women.

References


* Janice Withnall, Stuart B Hill & Sharon Bourgeois write from the University of Western Sydney.

The research
This ongoing Australia-wide study, “Researching with Midlife Women in Recovery from Alcohol Dependence”, was designed to better understand how these women came into recovery, how they sustain their recovery, and what needs to happen to more effectively enable such sustained recovery. The study looks at 35-55 year old women. In January 2009, participants included 104 women in recovery (self-assessed women with alcohol dependence) and 58 practitioners (working with women in recovery). In 2009, final focus groups, expert interviews and concept surveys will be completed.

For information, email Janice Withnall at 94302279@student.uws.edu.au.
AGE-APPROPRIATE: SERVING OUR SENIORS

If you are an older Australian seeking help for an alcohol or other drug (AOD) problem, chances are you’ll find yourself queuing for treatment with people half or a third your age.

Few, if any, drug treatment services in Australia are designed specifically to meet the needs of older people. Yet with an ageing population and more than 2.8 million people already over the age of 65, seniors represent a significant group with major health needs, including substance-related ones. Yet they are unlikely to get help when they need it. For example, in 2007/08, Victorians aged under 16 years were, proportionally, almost three times more likely to receive treatment than those aged over 65 (DHS Victoria, 2008).

What we need to know
Before services can be tailored to the needs of seniors, a number of questions need to be answered:

• how can services engage older people in AOD treatment?
• what constitutes age-appropriate and effective AOD treatment for older adults?
• what factors assist older people to change their drug-using behaviours?
• what skills and knowledge do treatment staff need to effectively engage and treat older people’s problematic substance use?
• are older adults more likely to attend tailored services and if so, what encourages them to do so?

Study tour
In 2008, the Victorian Department of Human Services and the Victorian Quality Council funded a Victorian Travelling Fellowship focused on older-adult AOD treatment. The fellowship visited 13 older-adult-specific treatment services in Canada and the United States.

The services included a mix of residential and outpatient programs, both public and private. They were located in a mix of seniors’ and veterans’ agencies, general AOD services and older-adult-specific AOD agencies. A range of treatments were offered, including individual counselling and outreach, group programs and residential services.

The location of the services was diverse, both geographically and in their philosophical settings. California and Canada are comfortable with the language of harm minimisation but in Florida needle exchange is a taboo subject. The 12-step philosophy was strong in both Canada and the USA, although it was integrated into treatment in varying degrees. Ontario did not offer medicated withdrawal in public services, nor did much of California. Alcohol and medications were the key drugs of concern among older adults at the services visited in Canada and Florida, while in the San Francisco Bay area, crack cocaine and methamphetamines were commonly used.

Findings
The study tour found that although treatment varied widely between the 13 services, there was a general consensus that older people do better in, and receive a better service from, older-adult-specific treatment services. Common themes emerged about how older-adult treatment differs to the AOD treatment provided to the more general adult population. These characteristics are discussed below.

Slowing the pace
Every service acknowledged that older-adult AOD treatment is slower than usual. The residential services found that older people require more breaks in residential treatment and the pace is slower than in a mixed-age facility.

Some services reported that counselling sessions needed to be shorter (30-45 minutes) and groups smaller than usual. Others commented that older adults often missed appointments due to poor health.

Several services described how older adults’ cognitive functioning may take weeks to recover after withdrawal. Some services cited examples of older people entering treatment in wheelchairs with diagnoses of dementia and, weeks later, being able to walk away with normal cognitive functioning. It seems, misdiagnosis, especially with regards to dementia, is a common occurrence.
Medical complications
All services reported that older people have more complex medical issues and are likely to be on a wider variety of medications than younger adults. This complicates treatment and makes adequate medical support a necessity.

Loss & identity issues
Older adults face loss of employment, mobility, health, peers, partner, hope and identity. Many find it hard to imagine a positive future, and feel unneeded or useless. With shrinking incomes, they may have difficulty maintaining social networks. Thus, treatment focuses on shifting motivation and creating change for a better future. However, many older adults also believe their life is coming to an end.

Involvement of significant others
Many older people are motivated to attend treatment because they want to re-establish relationships with loved ones. Services reported higher levels of worker engagement with significant others than one would expect in a more generalised AOD service.

‘No’ to non-medicated withdrawal
There was a consensus that non-medical withdrawal was not suitable for older adults. Where that was the only option, services preferred to support clients through slow reductions. Even at services which offered medicated withdrawal options, older adults required longer and slower withdrawals than younger people.

Creating barriers
AOD agencies may inadvertently create barriers to treatment. Service criteria that exclude on the basis of mobility, English competency, general health, cognitive capacity, hearing, literacy, motivation or ability to pay, all discriminate against older adults. Residential services that exclude on the basis of health concerns also prevent many older people from receiving treatment. Smoke-free policies may also discourage older adults from attending.

Workforce skills
Staff should be specifically trained to provide AOD treatment with older adults. Services found that staff in mixed-age services are often frustrated by older adults as the treatment is slow, health issues can be complex and older adults are motivated by very different things to younger people.

The common skills and qualities most regularly suggested as necessary were:
• knowledge of gerontology, particularly in relation to medications and changes in physiology – use of multiple medications is high and lower dosing levels than usual often apply to older people
• qualifications in AOD treatment
• respect for older adults and their place in the community
• patience and perseverance
• strong boundaries.

Services emphasised that staff need to be able work through issues slowly and not become overwhelmed by the big picture. Workers may often be the only person in the older person’s life and be asked to assist with decisions around property or finances.

Where to from here?
As our population ages, developing services for the treatment of older people who have substance use problems is a new challenge for the Australian AOD sector.

Not only must we acknowledge that older people have specific needs, we must also recognise that seniors are not a one-size-fits-all group.

Many of the services visited on the study tour highlighted distinct attitudinal variations between different generations of older people. Younger clients (those aged 55 to 65) preferred not to be grouped with older ones, as they had different interests, experiences and topics of conversation.

In January, Peninsula Drug & Alcohol Program, in Melbourne’s Outer South East employed its first Older Adult AOD Worker as part of a two-year pilot program.

References
*Simon Ruth writes from Peninsula Health, Victoria.*
A MODEL CODE?

For 18 years, a group of government lawyers has been developing a Model Criminal Code that has been reshaping criminal law across Australia. Early in their work, they turned their attention to a recommendation of the 1980 Williams Drugs Royal Commission which called for a ‘uniform Drug Trafficking Act’. In October 1998, they produced a 459-page report on ‘serious drug offences’, complete with draft legislation.

This draft legislation, forming part of the Model Criminal Code, covers drug trafficking, commercial manufacture and cultivation, drug offences involving children and offences relating to property derived from drug offences. The Standing Committee of Attorneys-General and other meetings of Australian Governments have called for the reflection, with some adjustments, of the code in state and territory legislation. To varying degrees this has occurred in a number of places, including Victoria, Tasmania, the ACT, South Australia and the Commonwealth.

It is worth asking what this could mean for people at the very bottom of the distribution pyramid who consume the drugs.

Penalties

The code as adjusted provides penalties for offences involving commercial, marketable and less-than-marketable quantities. At one extreme, trafficking of a commercial quantity carries a penalty of life imprisonment. The other extreme, which encompasses activities that people who use drugs commonly engage in, still has a severe penalty. The sale of even a single dose of a controlled substance falls within the code. Under Commonwealth law, it carries a penalty of 10 years imprisonment, $220 000 or both. A child above the age of criminal responsibility (10 in the case of the Commonwealth) is similarly liable. The same penalties apply to the cultivation of even a single cannabis plant for a commercial purpose.

Proof of guilt

The legislation has features that make it easier to achieve convictions by reducing the traditional requirement that the prosecution must prove beyond reasonable doubt all elements of an offence. Even for the basic trafficking offence the prosecution need prove only that the accused was reckless with regard to the identification of the drug and not that he actually knew what it was.

The concessions in favour of the prosecution mount as the quantity of drugs involved increases. If someone is caught in possession of more than what is designated as a ‘traffickable quantity’, that person will be ‘taken to have had the necessary intention or belief concerning the sale of the substance to have been trafficking in the substance’. Similarly cultivation of cannabis of more than a traffickable quantity of 250g will give rise to a presumption that the person was ‘cultivating the plant for a commercial purpose’. The burden is placed on the person found in possession to prove that they did not have that intention.

User-growers of a few cannabis plants who may intend selling only a small portion of what they grow could be exposed under Commonwealth law to a penalty of 15 years, $550 000 or both for cultivating or trafficking in a commercial quantity of 2.5kg. The Code’s drafters noted that a single average plant would yield about 250g of dry usable cannabis. They added that: ‘The small number of plants, once harvested, will almost always exceed the traffickable quantity and may exceed the commercial quantity of 2.5kg’. When a commercial quantity is reached, liability is absolute as to quantity. That means that ‘the prosecution does not need to prove that the defendant either knew, or was reckless as to whether, the quantity involved was a commercial quantity’.

Controlled operations and double jeopardy

Australian governments have taken further steps to facilitate prosecutions for drug and some other offences. This is in the area of ‘controlled operations’ and relaxation of the rule against ‘double jeopardy’. In controlled operations, law enforcement officers allow a criminal scheme to continue rather than seeking to end it immediately. It will often involve undercover operations. The fear is that people may be entrapped into committing offences.

There is little doubt that the Commonwealth could, if it chose, apply its own Australia-wide drug law to negate any state or territory law.

Controlled operations, in accordance with the model legislation agreed to in 2003, may well involve user-
dealers. Indeed, a provision of the sections on drugs of the Model Criminal Code is tailor-made for this to occur. It is permissible to combine different small amounts trafficked by a person dependent on drugs to produce a total quantity supporting a charge of trafficking a marketable quantity or more. The report in support of the code acknowledges ‘that aggregation of small transactions has the potential to amplify the liability of habitual users who engage in frequent small sales to sustain a habit’. The provision was included to cover ‘undercover police operations directed against dealers at the lower end of the illicit market’.

The rule against double jeopardy – that a person cannot be tried again for an offence for which they have been acquitted – has long been regarded as a cornerstone of the criminal law. Even so, nearly all Australian governments have agreed to make some exceptions including where ‘fresh and compelling evidence’ comes to light. Proceedings for these reasons can be undertaken only in the case of several categories of the most serious offences including ‘the trafficking or manufacture of large commercial quantities of drugs’. The quantities involved make it most unlikely that a second prosecution is possible for offences by users.

**Significance of Commonwealth legislation**

The enactment in the Commonwealth's Criminal Code of general drug offences ranging from mere possession is highly significant. It represented an unprecedented extension of Commonwealth law into criminal law, which has traditionally been the responsibility of the states. Until recently, the Commonwealth made criminal law only in support of specific federal areas of constitutional responsibility such as customs and banking. To support its 2005 legislation, the Commonwealth has relied on the external affairs power and an underlying United Nations treaty.

There is little doubt that the Commonwealth could, if it chose, apply its own Australia-wide drug law to negate any state or territory law inconsistent with it. It is thus conceivable that action by the Australian Federal Police could close down the Medically Supervised Injecting Room in Kings Cross that has been operating under NSW law for years. The Commonwealth has, however, declined to use this power.

In contrast, the Commonwealth legislation does have respect for state and territory provisions to divert people charged with possession offences. Indeed, it ‘allows for drug users to be diverted from the criminal justice system to receive the same education, treatment and support that is available in relation to drug offences under state and territory laws’. This recognition for diversion is understandable in light of the strong support of the Commonwealth for the procedure.

**Conclusion**

This survey of the ‘serious drug offences’ chapter of the Model Criminal Code and related initiatives has concentrated on the extent to which they have application beyond their ostensible target of serious offenders in the supply chain, to include people who use drugs. The drafters of the code were conscious that the overlap was considerable but, they felt, unavoidable. They concluded that ‘discriminating exercise of the prosecutorial and sentencing discretions offers a more flexible method of mitigating the harms associated with law enforcement’ than attempting to exclude them from the code.

The code represents Australia’s most sophisticated and thorough attempt at legislation to achieve the supply reduction arm of the National Drug Strategy. At the same time the report of the code’s drafters contains most eloquent statements of the harms that attempts to achieve supply reduction by law enforcement inflict on people who use drugs. They say, for example, that: ‘In the years since the 1980 Williams Royal Commission, it has become increasingly apparent that significant elements in the harm which result from habitual use of illicit drugs are a consequence of criminal prohibitions and their effects on the lives of users.’

Any law should meet standards of effectiveness, particularly if it is known to cause collateral harm. Issues that the code’s drafters wrestled with remain relevant, particularly in light of recent observations by the Australian Federal Police Commissioner, Mick Keelty, about the level of the illicit drug trade. According to the Police Commissioner: ‘We actually have to now think of a different strategy, a better way to combine the demand reduction and the harm minimisation, as well as the supply reduction strategies, in order to stem the flow of these drugs into our country.’

**Key references**


* Bill Bush writes from Families and Friends for Drug Law Reform.
Australia takes a multi-faceted approach to drugs, involving supply reduction, demand reduction and harm reduction. One important policy intervention that has gained increased prominence in recent years is the diversion of drug and drug related (crimes committed while under the influence of drugs) offenders. Aimed at deterring, educating or treating the causes of drug dependence, diversion involves the use of the criminal justice system to provide alternative responses, including referral to drug treatment.

The Drug Policy Modelling Program recently reviewed the current state of drug and drug related diversion, to identify the range of programs operating in Australia and their similarities and differences (Hughes & Ritter 2008).

**Diversion in Australia**

**As of July 2007, there were 51 programs that divert drug and drug related offenders:**

- 69% of programs have been introduced since 2000
- 59% were funded by the Coalition of Australian Governments’ Illicit Drug Diversion Initiative
- 31% involved police diversion, 22% court diversion, 18% drug court diversion and 29% were mixed
- 33% of programs targeted drug use/possession offence(s), 12% drug related offence(s) and 55% any offence(s)
- 45% of programs targeted adults, 27.5% youth and 27.5% mixed
- 49% resulted in assessment and compulsory treatment, 17% assessment and voluntary treatment, 9% cautions and referrals to education sessions, 20% warning/formal caution/family group conference, and 8% a fine or optional attendance at an education session.

**Types of diversion**

Five major types of programs are provided for drug and drug related offenders. Their key characteristics are summarised below:

**Police diversion for cannabis only**: Aimed at offenders detected using or possessing 15-100 grams of cannabis. Responses include cannabis cautioning and cannabis expiation. The former involves a more one-off, therapeutic approach – an ‘on the street’ formal caution, provision of educational information and optional referral to an education session or telephone service. The latter provides offenders with multiple opportunities to avoid a criminal record through the payment of an expiation fee of $100–$300.

**Police diversion for other illicit drugs**: Requires offenders to undertake an assessment and attend a minimum of one to three sessions of education/counselling. Aimed at offenders using or in possession of between 0.5 grams and 2 grams of amphetamines, cocaine, ecstasy or heroin.

**Police diversion for youth or other drug related offenders**: Aimed predominantly at offenders aged 10-18. Results in the provision of non-therapeutic sanctions including a warning, caution or the requirement to attend a family group conference. There are no limits on the number of times offenders can be diverted.

**Court diversion for minor drug/drug related offenders**: Aimed at minor offenders with a recognisable drug problem. Most programs are pre-plea and require assessment and education/treatment (predominantly counselling) for a period of three to four months.

**Court diversion for serious drug/drug related offenders**: Aimed at drug-dependent offenders whose offending is directly related to their drug use. Requires intensive case management, supervision and drug treatment for six to twenty-four months. Programs generally operate pre-sentencing.

**Different approaches**

Australian states and territories have created their own diversion systems: some responses are more complex than others, some use more generalist systems and some target more Indigenous offenders and so on. Key differences in state/territory diversionary systems include access to diversion programs, the number of diversion programs provided and jurisdictional priorities.

**Access to programs**

State and territory governments have increasingly identified and addressed gaps in access for different types of drug and drug related offenders. As a consequence, the five main forms of diversion are now provided in most jurisdictions. Gaps are evident in only three places: police diversion for use/possession of other illicit drugs (NSW and Qld); and court diversion for serious drug related offenders (NT).

The absence of such diversion programs will not necessarily reduce access. For example, in Queensland individuals detected for use/possession of other illicit drugs are ineligible for police diversion, but eligible for diversion through the Illicit Drug Court Diversion Program. But, if individuals are not provided with alternative forms of diversion then they may be more likely to receive a criminal justice sanction than in other jurisdictions. This appears to be the case in NT for serious drug related offenders.
Number of programs

The number of programs provided by jurisdictions ranged from three to twelve (see Figure 1). A smaller number of programs may be a sign that a jurisdiction has a smaller/less complex drug problem, a lower population, a smaller geographic area to cover or that their diversionary response is in its infancy. All factors appear influential in the design of Tasmania’s diversionary system. On the other hand, both the number of programs and diversity of options in Western Australia’s diversion system appear to reflect that this is the largest jurisdiction in Australia and an area with a complex set of drug and alcohol related problems.

Yet our analysis suggests that while having more programs may be beneficial through enhancing the capacity to capture a range of drug and drug related offenders, it may also be counter-productive e.g. reducing the overall number of referrals to the programs. This is more likely if demand is small and/or the system is too complex.

Figure 1: Number of diversion programs in each jurisdiction

Priorities differ

While different states and territories have increasingly adopted similar sets of programs, there are continuing variations. Jurisdictional priorities shape the relative emphases on police versus court diversion, the choice of eligibility criteria and the program requirements. This may well be necessary, but jurisdictional priorities and/or peculiarities can have important consequences, e.g. on access and equity of diversion systems or the risk of net-widening.

The relative spread of diversion programs differs. Some jurisdictions, such as NSW and WA, place strong emphasis on the use of drug courts. Others have greater emphasis upon court programs aimed at minor offenders who use drugs and drug related offenders (such as Victoria).

A system with multiple programs offering intensive drug treatment, case management and supervision is more likely to benefit serious drug and drug related offenders, but it may create gaps in access for less serious drug offenders or a pressure to divert less serious drug offenders through the more intensive programs. Alternatively a system offering primarily less intensive drug treatment may provide limited or ineffectual opportunities to address serious drug related offending.

The states and territories also differ in the level of discretion provided to the judiciary, in both their gate-keeping and sentencing roles. Some jurisdictions (e.g. ACT and Victoria) use few eligibility criteria for their court diversion programs. Others have multiple (e.g. NT). Fewer criteria may prevent the exclusion of individuals who would otherwise benefit from the program, but increase the capacity for inequitable and/or differential application.

Research/policy implications

These findings indicate that there has been a concerted commitment to provide diversionary responses across Australia and to the development of a more systematic and targeted approach. This bodes well for the improvement of current diversion systems.

The challenge now is to understand which design features contribute to effective outcomes and which do not, particularly which features contribute to effective system design. Much research is needed to inform future policy decisions. Two priorities are to expand the evidence base on diversion programs and to develop methods for examining the operation of jurisdictional systems of diversion.

A number of topics for future consideration include:

* what are the relative strengths and weaknesses of each type of drug diversion?
* to what extent and how do program features (e.g. eligibility criteria and minimum requirements) impact upon program outcomes?
* how can jurisdictions maximise the effectiveness and cost-effectiveness of drug diversion systems?

This knowledge is essential to support debate and improve the effectiveness of Australian systems for diverting drug and drug related offenders.

Reference


* Dr Caitlin Hughes writes from the Drug Policy Modelling Program.
Police play a key role in diverting low-level drug offenders away from conventional criminal justice processes, with the aim of minimising levels of contact with the courts. Each Australian state and territory has implemented at least one police-based drug diversion program. This is complemented by other diversion programs applied at other points in the criminal justice system.

A recent Australian Institute of Criminology (AIC) study (Payne et al, 2008) focused on the police-based diversion programs and found a range of positive outcomes. Compliance levels are high and the majority of people referred do not offend post-program (at least not during the follow-up period studied). Even among individuals with prior criminal records, the study found that the majority significantly decrease their offending behaviour after participating in a diversion program. As such, it appears that programs impact positively on both entrenched offenders as well as less-experienced offenders.

The AIC’s study also provided important insights into (among other things):

- client profiles of diversion participants
- compliance levels and predictive factors in compliance
- offenders who respond best to diversion, particularly in terms of discouraging future re-offending
- the cost-effectiveness of police-based diversion programs.

Client profiles
In terms of the demographic and offending profiles of people referred to diversion programs, the study found that the majority are male – from 70 per cent in the Northern Territory to 86 per cent in New South Wales. There are marked inter-program variations in all other areas that were assessed (including age and Indigenous status).

Compliance levels
Requirements for program compliance vary greatly across programs. Some programs involve the simple issue of a caution by a police officer with no further action required by the offender; however, other programs may require individuals to attend one or more assessment and treatment sessions, with non-compliance potentially resulting in the individual being prosecuted in court for the original offence (or facing a financial penalty). Where some level of compliance is required, the majority of people referred fulfil these requirements. Compliance levels also vary according to offender characteristics, particularly in relation to offending histories.

Shifts in pre- and post-offending levels
Overall changes in the rates of re-offending for individuals were found to be positive, particularly for individuals who had prior offending histories. Among this group, the majority were apprehended for either no or fewer offences post-program than prior to entering the program. Figure 1 shows that of all those who had offended at least once during the 18 months before diversion, between 53 per cent (Australian Capital Territory) and 66 per cent (New South Wales and Victoria) recorded fewer offences in the 18 months after diversion.

Figure 1: Pre-post change in offending among those with prior offences (percentage)

Costs and savings of diversion
There has only been one study (Baker & Goh 2004) that has examined the cost-effectiveness of diversion. This study of the NSW Cannabis Cautioning Scheme demonstrated positive results in savings to the criminal justice system. In the first three years of operation, it was estimated that over 18 000 police hours were saved as a result of not having to charge offenders, prepare matters for court or attend subsequent hearings.

It was estimated the scheme resulted in total savings of well over $1 million during its first three years. While these savings were balanced against the program’s operational costs (about $1 096 000), the evaluators still concluded that the scheme paid for itself in that time.

References

* Dr Katie Willis writes from the Australian Institute of Criminology.
The remote town of Fitzroy Crossing in the Kimberley region of Western Australia has a long history of alcohol related harm. In 2007, police estimated that up to 95 per cent of their time was spent responding to alcohol-fuelled incidents. Health statistics show that in the 12 months prior to October 2007, the hospital's emergency department had, on average, 50 alcohol related presentations from local residents per month. There was a very high level of suicide within the community, with alcohol named as a key contributing factor in the 2008 Coronial Inquest into Aboriginal Suicide in the Kimberley.

These and other issues led a group of community members to call for alcohol restrictions in an effort to give the community respite and to enable them to start rebuilding for a better future.

In response, the Director of Liquor Licensing imposed liquor restrictions in Fitzroy Crossing in October 2007 for a six-month trial and has since made them indefinite. The restriction in Fitzroy Crossing is ‘the sale of packaged liquor, exceeding a concentration of ethanol in liquor of 2.7% at 20 degrees Celsius, is prohibited to any person other than a lodger’. In other words, while you can drink all types of alcohol at the two bars in Fitzroy Crossing, you are not able to purchase takeaways other than light beers unless you are staying at the Lodge or the Crossing Inn. There is no restriction on bringing alcohol into town for personal use.

Local key stakeholder groups, including agencies and businesses, formed the Fitzroy Valley Alcohol and Other Drug Management Committee. The committee’s purpose is to ensure that programs and activities designed to address alcohol and other drug related issues are implemented in a strategic, integrated and coordinated manner.

The work of the committee has been instrumental in the success of the alcohol restrictions in the Fitzroy Valley. This includes implementing a comprehensive communication strategy, developing culturally appropriate information resources for the community and developing interim statistical reports to assess the impact of the liquor restriction.

To encourage longer-term positive results, the committee is also developing a local alcohol management plan, and is working towards developing research projects to determine the long-term impact of the alcohol restriction on child health.

The activity in Fitzroy Crossing has resulted in some positive and negative outcomes. On the positive side, information gathered for the interim report covering the period of October 2007 to February 2008, when compared to the same period for 2006/07, found that there had been a 27% reduction in alcohol related domestic violence reports to police, a 48% reduction in the number of Fitzroy Crossing residents presenting to the Fitzroy Crossing Emergency Department with alcohol related presentations and a 60% reduction in ambulance call-outs. There has also been a four to 14% increase in school attendances.

Sales data provided by the licensed venues in Fitzroy Crossing showed an increase in the percentage of pure alcohol consumed on the licensed premises, but this was greatly outweighed by the decrease in takeaway alcohol being sold, resulting in an overall 77% reduction in available pure alcohol.

Negative implications include an increase in sly goggling – community members travelling to other communities to access alcohol (sometimes staying for a day but often longer) – and children being left by themselves or in the care of elderly relatives while parents travel to get alcohol. In addition, there have been reports of community disharmony between those who did and those who did not want the restrictions. These issues are being quantified and strategies will be developed to address them as needed.

* Grant Akesson is the WA Drug and Alcohol Office’s Manager of Community Programs and a member of the Fitzroy Valley Alcohol and Other Drug Management Committee.

Further reading
Image courtesy of Tourism Western Australia.
Drug testing is commonplace in our society, but remains controversial. In the first in a two-part series, Of Substance looks at the mechanics of drug testing and explores why saliva, blood, urine and hair are used for testing in different situations.

Laboratory testing for drug use involves the detection and measurement of psychoactive substances and their metabolites in body fluids or tissues. Drug detection testing is conducted in a variety of settings with a range of objectives. A clinician might test to screen for eligibility for treatment, to identify a drug in an overdose situation or to monitor compliance with medication. In the criminal justice setting, drug testing might be used punitively, with consequences such as withdrawal of prison privileges or revocation of parole or bail. Researchers might use drug testing to verify participants’ self-reports. Road safety advocates have drawn attention to drug-affected driving, leading to the introduction of roadside drug testing. Workplace safety concerns underlie demand for strategies to deter and detect workers who may put themselves and others at risk by operating machinery while intoxicated. In recent decades, drug testing has become a feature of our society that few people consciously consider or question. Nevertheless, identifying the presence of drugs is not a straightforward matter. A variety of bodily fluids and tissue can be tested. Historically, the most common biological specimen used in illicit drug detection has been urine. Blood tests are also employed and recently, the testing of both hair and oral fluid has increased. The choice is influenced by the way the body processes different drugs, and the ease with which the specimen can be collected and analysed. The most appropriate test will depend on factors including the purpose of testing, the setting, the population of interest, and the resources available. In addition, accurate drug testing requires highly trained analysts with specialist interpretative skills who understand how drugs are broken down (metabolised) to their constituent parts (metabolites) in the body.

Drug metabolism

After drugs are ingested, the body begins to break them down, or metabolise them, sometimes changing their chemical form. The time this process takes varies between drugs. A drug’s half-life is the time taken to remove 50 per cent of the drug from the body, by either metabolism or excretion. Heroin, for example, with a half-life of approximately three minutes, persists in the brain only briefly before being metabolised to monoacetylmorphine and then to morphine. Morphine takes longer to be excreted than heroin, and may be detected two to four days after the last dose. The synthetic opioid codeine, available in pharmaceutical drugs, is also metabolised into morphine. Drug tests are generally designed to identify the major metabolites of the drugs in question, as these have longer half-lives than the drugs themselves.

Testing for illicit drug use

General principles

Some general principles apply to all drug testing procedures. The way samples are collected, supervised and handled is critical. The occupational health and safety (OHS) implications of handling biological specimens must be considered. Ethical issues of confidentiality require careful documentation and systematic identification and labelling of samples. Collection of additional information assists interpretation of the test results. The time of sample collection and, where possible, time since recent use of both licit and illicit drugs, should be noted. Pregnancy or disease should be documented, along with abnormalities in liver or kidney function.

Test results

In most drug tests, each sample is reported either positive or negative for a particular drug (or ‘family’ of similar drugs). There are four possible interpretations of a test result (Table 1):

1. true positive (drug is present)
2. true negative (drug is not present)
3. false positive (drug is detected when it is not present)
4. false negative (drug is not detected when it is present).

It is not surprising that drug detection is not an exact science.
Table 1: Interpretation of test results

<table>
<thead>
<tr>
<th>Test result</th>
<th>Actual drug use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>1. True positive</td>
</tr>
<tr>
<td></td>
<td>3. False positive</td>
</tr>
<tr>
<td>Negative</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>2. True negative</td>
</tr>
<tr>
<td></td>
<td>4. False negative</td>
</tr>
</tbody>
</table>

Screening tests
Standard procedures for large-scale illicit drug testing generally occur in two steps: the screening test and the confirmatory test. Generally, screening tests are conducted using immunoassay methods, in which antibodies detect the presence of drugs. Screening tests aim to minimise false negatives, that is, to ensure that no-one is classified as not using a drug when in fact they have. Screening tests are relatively cheap, with results available quickly. Screening tests are generally less accurate than confirmatory tests. They are designed to maximise the likelihood of finding a drug – any drug – and must sometimes sacrifice specificity, or the ability to discriminate between different drugs. Screens generally only identify ‘families’ of drugs rather than specific chemical components. For example, a positive screen for opiates cannot distinguish whether the drug was heroin or codeine. The lower specificity and higher likelihood of false positives of screening tests means positive results should be followed by a confirmatory test.

Confirmatory tests
In contrast to screening tests, confirmatory tests are designed to minimise false positives, while also enabling the identification of the specific drug or metabolite. These tests are more sophisticated, accurate and expensive than screening tests.

Cut-off values
To accommodate the range of requirements for drug testing of biological specimens, different thresholds, or cut-off values, have been established. These cut-offs are the agreed concentrations at which the drug or metabolite can be detected. Although tests are based on the concentration, or amount, of a drug or its metabolite in a given volume of biological specimen (for example, nanograms per millilitre), screening results are normally expressed as simply positive or negative; the cut-off is used to determine which.

Cut-offs are generally set by national organisations and implemented by laboratories to standardise the reporting of test results. The point at which the cut-off is set will influence the number of false negatives and false positives. Employment drug screening, for example, may require a totally different set of validation criteria compared to routine screening of drug treatment clients.

Test sensitivity
Different testing procedures have different levels of sensitivity in detecting a drug that is present at greater than or equal to its predetermined analytic cut-off point. Screening tests are generally highly sensitive, meaning that they maximise the likelihood of finding a drug, and minimise the risk of false negatives. In the confirmatory phase, the detected drug is confirmed using a test with high specificity.

Drug detection testing is highly contingent on a range of variables. The analytical reagents used in testing, the calibration of the machines, the cut-offs chosen, and the time of sample collection relative to testing may all vary. In addition, drug metabolism is affected by both characteristics of the drug and individual variation among users. It is perhaps not surprising, then, that drug detection is not an exact science.

Biological specimens
Urine, blood, hair and oral fluid can all be used in drug testing. Each has advantages and disadvantages, differing in terms of the invasiveness of collection techniques, potential for adulteration, average detection time and the sample preparation required before analysis (Table 2, adapted from Makkai, 2000).

Table 2: Comparison of biological specimens for drug analysis

<table>
<thead>
<tr>
<th>Specimen</th>
<th>Ease of collection</th>
<th>Stability of drugs</th>
<th>Average exposure window</th>
<th>Sample preparation</th>
<th>Possible adulteration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood</td>
<td>Most invasive</td>
<td>Variable</td>
<td>Very recent</td>
<td>Moderate</td>
<td>No</td>
</tr>
<tr>
<td>Urine</td>
<td>Moderately invasive</td>
<td>Stable</td>
<td>1-3 days</td>
<td>Minimal</td>
<td>Yes</td>
</tr>
<tr>
<td>Hair</td>
<td>Less invasive</td>
<td>Stable</td>
<td>7-90 days</td>
<td>Significant</td>
<td>No</td>
</tr>
<tr>
<td>Oral fluid</td>
<td>Less invasive</td>
<td>Variable</td>
<td>Very recent</td>
<td>Minimal</td>
<td>Limited</td>
</tr>
</tbody>
</table>

Urine
Advantages of urine testing include that urine is generally available in sufficient quantities; requires relatively little preparation before it is analysed; can be collected in a variety of settings; and drugs and their metabolites are generally present in relatively high concentrations. Urine is ideal for detecting recent drug use, as drugs are generally present from one to several days after use. If evidence of only very recent drug use is desired, blood or oral fluid are more appropriate specimens.
Disadvantages of urine testing include that the collection procedure is moderately invasive, or under supervised testing, highly invasive. It can be easy to adulterate urine samples with chemicals (bleach, vinegar) or to dilute them to produce false negative results.

**Blood**

Blood is the most useful sample to accurately identify drugs for quantitative analysis. Blood allows more valid interpretations than other specimens of degree of exposure and likely drug effects. It is useful for identifying very recent drug use; as many common illicit drugs leave the blood within a few hours of use, including heroin, cocaine and ecstasy. Blood samples cannot be adulterated, and require minimal preparation before analysis.

The major disadvantage of blood in drug testing is the invasiveness of the procedure, which is costly and resource-intensive, requires trained personnel, and raises significant occupational health and safety considerations. Blood can be difficult to obtain in large volumes, and collection may be particularly difficult in people who inject drugs due to vascular damage.

**Hair**

The major advantages of hair testing are the potential for examination over a much longer period of time than is possible with other specimens, reducing the need for frequent sample collection; and the potential to detect changes in drug use over time within an individual from a single hair sample. Essentially, hair records what drugs were in the blood at the time the hair was made into a hair follicle. Hair grows at just over one centimetre per month; so a sample of about four centimetres is required to detect drug use in the previous 90 days. For a sufficient sample, six days’ growth is generally required. Proponents of hair testing argue that it is a more dignified collection procedure than for blood or urine, and can prevent conflict in some testing settings. Hair samples are relatively easy and safe to collect, store and transport, and they are difficult to substitute or adulterate. Hair does not deteriorate or lose the drugs trapped in it.

Disadvantages of hair testing include the underdeveloped technology underlying the technique and debates about its accuracy; the relatively high cost and limited number of laboratories undertaking hair analysis; substantial individual differences in drug metabolism and hair colour, texture and growth rate, all of which affect drug absorption; the impact of environmental contamination such as peroxide bleaching and hair treatments; substantial differences between drugs in metabolism and incorporation into hair; difficulties in detecting very low levels or very recent drug use; and insufficient samples for testing among those with cropped hair, or bald or shaved heads.

**Oral fluid**

The major advantage of oral fluid (saliva plus other secretions) for drug testing is the minimally invasive nature of collection. Samples can be collected in the presence of a second person without infringement on privacy; hence, oral fluid is less vulnerable to adulteration or substitution than urine. Drugs can be easily extracted from oral fluid and thus testing is less complex, and also less expensive, than for blood or urine.

There are reasonable correlations between blood and oral fluid concentrations of drugs, but this depends on a number of factors. Emotional state and stimulation by food, chewing and appetite can increase oral fluid flow rate from almost zero to several millilitres per minute. As the flow rate of oral fluid increases, the composition changes, including the pH. Collection techniques (e.g., use of chewing gum to stimulate flow) can artificially affect production of oral fluid and its pH, and pH is a major factor in the transfer of many drugs into oral fluid. Acidic drugs (e.g., benzodiazepines) have generally much lower concentrations in oral fluid than in blood, whereas those that are basic in nature (e.g., amphetamines, cocaine and opiates) have much higher concentrations. THC concentrations are more variable in oral fluid than in blood because an inhaled drug is absorbed locally into the mouth's mucous membranes, and leaches out into the oral secretions over the next few hours. Similar considerations apply to smoked amphetamines.

Various collection techniques have been tested. In people with normal oral fluid flow, collection time is typically one to three minutes.

**References**


Set against the backdrop of Sydney’s Darling Harbour, the Australasian Professional Society on Alcohol and Other Drugs (APSAD) Conference 2008 shed a bright light on evidence, policy and practice in the alcohol and other drug addictions and treatment field. This was the latest conference in a tradition set into motion by a previous incarnation of APSAD, the Australian Medical Society on Alcohol and Other Drugs (AMSAD), which held its first general meeting in 1981.

From its origins as a conference for medical practitioners, the APSAD Conference now attracts a diverse range of presenters and delegates drawing from frontline workers, researchers, psychologists, educators, policy makers, service providers, law enforcement, consumers as well as those clinicians who had the vision to form the society that is now APSAD and from which emerged the now internationally circulated journal, *Drug and Alcohol Review*.

The theme of the 2008 conference was Evidence, Policy and Practice, and the presentations, both from keynote speakers and submitted papers strongly supported this theme in its diversity of considerations. Keynotes ranged from those engaged in treatment approaches to health economists, and included both international and national experts. Symposia and workshops were as diverse in themes as Indigenous issues, mental health emergencies, smoking cessations, drug law enforcement, to name a few.

It seems that each APSAD conference builds on the previous in both quality and quantity of papers and posters. The poster displays increasingly become more significant with dedicated sessions. This year saw the awarding of prizes on each day to the best poster and the winners were both exceptional presentations and presenters. Posters are often a better way to present research data, and it is important to acknowledge that these presentations are no less significant than oral presentations. The two winners of this year’s poster competition: Kiusiang Tay-Teo (co-authored by Rob Carter, Chris Doran and Wayne Hall) whose poster covered the very important issue of evaluating the cost-effectiveness of interventions, and Grant Akesson (co-authored by Gary Kirby) whose paper highlighted community-based interventions in managing alcohol by focusing on the experience of Fitzroy Crossing (see page 23).

The Indigenous focus of APSAD Conferences has also become a proud tradition. In 2008, five delegates were generously sponsored by the Commonwealth Department of Health and Ageing to attend the conference and in particular to participate in the Aboriginal and Torres Strait Islander issues workshop. For Indigenous people to attend these conferences from remote locations, the cost of travel is in itself significant. More importantly, the knowledge that the participants take back to their communities provides a fertile environment to implement evidence based best practice. Two co-chairs, Romlie Mokak and Ted Wilkes, were particularly engaging in their role and topics covered ranged from the evaluation of the Opal fuel initiative (Peter D’Abbs and Gillian Shaw) to the evaluation of the Smoke Check program in NSW (Miranda Rose and Hannah Nancarrow). This Indigenous workshop was well attended and generated substantial discussion. Sponsorship for Indigenous delegates from more diverse sources would enable APSAD to expand this segment of its conference.

The 2008 APSAD Conference was convened by Richard Mattick and James Bell through the National Drug and Alcohol Research Centre (NDARC) at the University of New South Wales, Faculty of Medicine. The organising committee was comprised of a number of dedicated NDARC staff and conjoints who worked tirelessly for many months to bring about this highly successful conference.

The sponsors of the 2008 APSAD Conference were the cornerstone to the capacity of this conference and are thanked through this acknowledgement: Reckitt Benckiser; The Commonwealth Department of Health and Ageing; AER Foundation Limited and Mundi Pharma.

*Richard Mattick and James Bell were co-convenors of the 2008 APSAD Conference.*
Iran, a strict Muslim society, has a long history of opium production and distribution. Over 400 years ago there were Royal orders to restrict drug use (Razzaghi et al. 1999). By 1949 there were 1.3 million regular opium users and 500 opium dens in Tehran. In 1955, Iran introduced laws to prohibit the cultivation and use of opium, but in 1969, with an estimated 350,000 opium users, the law was relaxed to allow for limited use and cultivation for pharmaceutical purposes.

Today there are approximately 70.5 million people in Iran. The official estimated number of people who inject drugs is between 200,000 and 300,000, but other estimates place the figure at 500,000 (Nassirimanesh et al. 2005). Their main drug of choice is opium (60%-75%) followed by heroin and then pharmaceuticals. Stimulant use is uncommon, but cannabis use is widespread, although few people present for treatment for cannabis use. HIV infection among people who live on the street and who generally inject drugs ranges from 25% to 30%. Hepatitis C infection ranges from 70% to 90% in several studies. A Rapid Assessment and Response study found that some people who inject drugs were ill informed about HIV: 20% had not even heard of HIV/AIDS and 20%-30% were unaware that HIV could be transmitted by syringe sharing (Razzaghi et al. 1999).

Little information exists on drug use other than heroin or opium. Under the law, alcohol consumption is forbidden. Although some Iranians do drink, the punishment can be severe, and alcohol is generally a taboo subject.

National approach

Iran began to change its drug policy about 10 years ago when it allowed public health professionals and self-help groups to suggest ideas and new methods of treatment for addiction and mental health. Like many other places, major considerations were HIV among people who injected and the country’s poor responses to drug use in general. So the Ministry of Health then adopted a four-pillar approach to drug policy, focusing on prevention, treatment, harm reduction and law enforcement. This is administered by the Drug Control Headquarters.

Iran employs mandatory drug screening of people planning to marry, obtaining driving licences and applying for government jobs. In 1998, 1.3% of 768,525 people planning to marry or work in a government job tested positive for illicit drug use (Razzaghi et al. 1999).

Drug treatment

Key organisations providing treatment are the Ministry of Health, welfare and non-government organisations (NGOs), GPs and private clinics. From 1974 to 1977, a detoxification program treated about 30,000 patients (Spencer & Agaho, 1990). Following the 1979 Revolution, a tough anti-drug campaign was launched and heroin use increased significantly. Even in 1999, over 100,000 users were detoxed annually. But questions about the effectiveness led to a search for new approaches including harm reduction. The first maintenance substitution program began in 1999 and dispensed buprenorphine tablets to over 3000 clients (Nassirimanesh 2003). The next year, the first methadone pilot project opened and there are now about 50,000 patients in methadone maintenance treatment. There are also about 10,000 on opiate maintenance. Therapeutic communities operate abstinence-based groups for heroin users with 90% being referred by the courts. Critics of these centres claim they resemble overcrowded prisons (Razzaghi et al. 1999). Narcotics Anonymous and other self-help groups are popular in Iran, while drop-in centres were established in 2000 for people who live on the streets and use drugs. In 2007, Australia’s NDARC and Iranian NGO Persepolis jointly opened a clinic for women who use drugs in Tehran.
Needle and syringe programs

Needle and syringe programs (NSPs) are widely accepted and operate from all public health centres. Recent high level support for needle and syringe programs came from the head of the Iranian judiciary (Nassirimanesh et al. 2005). Research has indicated that needle and syringe programs were reducing syringe sharing among people who inject (Vazirian et al. 2005).

Drugs in prison

In 2004-05, Iran’s incarceration rate of 490 prisoners per 100 000 of the population placed it in the top six countries in the world. Two HIV outbreaks are thought to have occurred about seven years ago in two Iranian prisons which prompted much action (Razzaghi et al. 1999). A Rapid Situation Assessment in prisons found 54% of inmates had a history of opiate abuse and 31% reported using drugs in prison. Sexual activity was estimated at 10%, with condoms available for conjugal visits only. Between 10% and 50% of female inmates were using drugs, but injection was very low. Methadone and NSPs are provided in prisons but details are limited. In 2001, HIV infection was identified among people who injected in ten Iranian prisons, with 63% of people who inject drugs being HIV positive in one institution (UNODC 2004).

Law enforcement

In 2000, policing of drug trafficking along Iran’s border resulted in 1532 shoot-outs where 142 law enforcement officers and 904 drug traffickers were killed. Possession of up to 50 grams of cannabis or opium can result in a fine of $US450 and up to 50 lashes. Punishment for dealers can be up to $US675 plus 70 lashes. In 2000, over 80 000 people were incarcerated for drug related crimes, while nearly three-quarters of people who inject report a history of imprisonment (Razzaghi et al. 1999). As drug use is considered a medical problem, there are provisions within the law to permit people who enter drug treatment to be immune from penal punishments, although no diversion programs are in operation. In 2007, at least 155 people were executed for a range of offences including rape, murder and drug trafficking.

Evaluation

The Iranian National Centre for Addiction Studies coordinates research activities, and supervises training and clinical interventions. It is also a think-tank for experts in the field.

Conclusion

While Iran has made significant progress in addressing HIV and drug problems, it still has a number of issues to address. The number of people who inject is increasing and HIV is spreading. Coverage needs to be expanded for the real benefits of the progress to be seen.

Key references


For a full list of references, email editor@ancd.org.au.

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London, UK
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Working well together. Diversity in the desert conference
Alice Springs, NT
Email: dcem@deslens.com.au

25 – 27 May 2009
Australian Winter School 2009. Research, policy, practice
Brisbane, QLD
www.winterschool.info

27 – 28 May 2009
Reconnexion National Conference 2009
Melbourne, Vic
Education & Training Manager
janet@reconnexion.org.au
or phone 03 9886 9400
www.reconnexion.org.au

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European Federation of Therapeutic Communities Conference (EFTC)
Hague, Netherlands
www.eftc-bepartofthesolution.eu

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Drug & Alcohol Nurses of Australasia 2009 Conference
Surfers Paradise, QLD
www.danaconference.com.au

26 June 2009
National Drug & Alcohol Awards Gala Dinner
Canberra, ACT
www.drawingwards.org.au

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Drug Action Week
For more information visit:
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