news

US drug and crime researcher to deliver keynote at NDARC Annual Symposium

By Alexandra Pitzing

Angela Hawken, Associate Professor of Economics and Policy Analysis at the School of Public Policy, Pepperdine University, CA, United States will deliver the keynote at the 2015 NDARC Annual Research Symposium.

The Symposium will be held on Tuesday, 15 September 2015 at the John Niland Scientia Building, University of New South Wales, Sydney.

Hawken will speak about opportunities for intervention for methamphetamine within the criminal justice system drawing on her research into a probation based intervention “Hawaii’s Opportunity Probation with Enforcement”, (HOPE) which has since been implemented in 11 US States. The program involves random drug testing of probationers who have been repeatedly violating the terms of their probation as a result of their drug use, with ice being the main drug of concern.

Hawken is the director of BetaGov, a centre for practitioner-led trials that provides tools to conduct experimental tests of operations and policies; the goal is to dramatically increase the pace of learning which innovations are promising – and which are not – in criminal-justice and other policy areas. She has conducted research and advised policymakers in South Africa, Afghanistan, Syria, the country of Georgia, and the United Nations. She is a co-author of Drugs and Drug Policy: What Everyone Needs to Know and Marijuana Legalization: What Everyone Needs to Know (both Oxford University Press).

For more information about the 2015 NDARC Annual Research Symposium, visit the NDARC website.

Translating research into policy

By Rachael Lobo

Insights into how to effectively influence policy from those who have held decision-making posts at the highest level of government are anticipated to be a highlight of the Drugs, Policy and Public Health program being held next month.

The program – running as both a professional development opportunity for people working in the alcohol and other drugs (AOD) sector and a postgraduate unit for students enrolled in higher degrees – aims to give participants a framework to help translate research into AOD policy.

Headlining the event is the ‘Drugs, Policy and Politics’ panel discussion that features former WA Premier Carmen Lawrence and former Government Ministers Judi Moylan and Michael Moore. The program will also cover...
Translating research into policy

many other topics, ranging from alcohol and tobacco advocacy, Aboriginal Australian issues and AOD policy change to the challenges of methamphetamines, prisons and the online environment.

Now Director of the Centre for the Study of Social Change at UWA, Dr Lawrence was at various times: WA Minister for Education and Aboriginal Affairs; the first woman Premier and Treasurer of a State government; Federal Minister for Health and Human Services and Minister assisting the Prime Minister on the Status of Women.

During 20 years as the Federal Member for Pearce, the Hon. Judi Moylan served as Minister for Family Services and Minister for the Status of Women. She is now Independent President and Chair of the Board of Diabetes Australia and Global Coordinator of the International Diabetes Federation’s Parliamentarians for Diabetes Global Network.

Michael Moore is CEO of the Public Health Association of Australia and President Elect of the World Federation of Public Health Associations. A former Minister of Health, he was an Independent member of the ACT Legislative Assembly for 12 years.

Drugs, Policy and Public Health is hosted by the National Drug Research Institute from July 20-24. Visit the event website for more information on the professional development program or the postgraduate unit. Registrations close 19 June, 2015.

New NCETA Methamphetamine Resources

By Tania Steenson

To coincide with the National Methamphetamine Symposium, NCETA developed a series of information sheets that provide an overview of current patterns and trends in methamphetamine use and associated harms in Australia, with a particular focus on ice.

Methamphetamine use in Australia explains what methamphetamine is, the proportion of the Australian population who use methamphetamine, how frequently people use methamphetamine, how people use methamphetamine, and the harms which may be associated with its use.

‘Ice’ and the workplace is a resource aimed at informing workplaces about who uses methamphetamine, how using methamphetamines may impact the workplace, how to recognise the signs of methamphetamine use in employees, and the workplace strategies and responses which may be employed to reduce the risks and harms associated with methamphetamine use.

Another resource, Methamphetamine: Effects and Responses, will be available in late May.

Email NCETA or phone 08 8201 7535 to order hard copies of these resources, or download from the NCETA website.

Continued from page 1

Professor Richard Mattick elected member of the International Narcotics Control Board

By Alexandra Pitzing

NDARC’s Professor Richard Mattick has been elected a new member of the International Narcotics Control Board (INCB) by the Economic and Social Council (ECOSOC).

Professor Mattick was one of three candidates nominated by the World Health Organization, following the resignation of Professor Wayne Hall.

Professor Mattick has worked at NDARC since shortly after it opened in 1986 and is a former Director of Centre. His major current research interests are in clinical trials for management of opioid dependence, psychostimulant substitution therapy, treatment of young drug dependent people, and the effects on cognitive functioning of exposure to psychostimulants and opioids.

He was the coordinator of the federally funded National Evaluation of Pharmacotherapies for Opioid Dependence studying 1500 opioid dependent patients assessing the impact of naltrexone, methadone, buprenorphine and LAAM. He has conducted the largest randomised clinical trial of buprenorphine versus methadone, and this study is a pivotal study for the US FDA registration of buprenorphine.

He is an Editor on the Cochrane Review Group for Drugs and Alcohol, and Assistant Editor and Executive Editor (respectively) on the international journals Addiction and the Drug and Alcohol Review.

Professor Mattick’s membership of the Board is effective immediately until 2017.

By Alexandra Pitzing

NDARC’s Professor Richard Mattick has been elected a new member of the International Narcotics Control Board (INCB) by the Economic and Social Council (ECOSOC).

Professor Mattick was one of three candidates nominated by the World Health Organization, following the resignation of Professor Wayne Hall.

Professor Mattick has worked at NDARC since shortly after it opened in 1986 and is a former Director of Centre. His major current research interests are in clinical trials for management of opioid dependence, psychostimulant substitution therapy, treatment of young drug dependent people, and the effects on cognitive functioning of exposure to psychostimulants and opioids.

He was the coordinator of the federally funded National Evaluation of Pharmacotherapies for Opioid Dependence studying 1500 opioid dependent patients assessing the impact of naltrexone, methadone, buprenorphine and LAAM. He has conducted the largest randomised clinical trial of buprenorphine versus methadone, and this study is a pivotal study for the US FDA registration of buprenorphine.

He is an Editor on the Cochrane Review Group for Drugs and Alcohol, and Assistant Editor and Executive Editor (respectively) on the international journals Addiction and the Drug and Alcohol Review.

Professor Mattick’s membership of the Board is effective immediately until 2017.

By Alexandra Pitzing

NDARC’s Professor Richard Mattick has been elected a new member of the International Narcotics Control Board (INCB) by the Economic and Social Council (ECOSOC).

Professor Mattick was one of three candidates nominated by the World Health Organization, following the resignation of Professor Wayne Hall.

Professor Mattick has worked at NDARC since shortly after it opened in 1986 and is a former Director of Centre. His major current research interests are in clinical trials for management of opioid dependence, psychostimulant substitution therapy, treatment of young drug dependent people, and the effects on cognitive functioning of exposure to psychostimulants and opioids.

He was the coordinator of the federally funded National Evaluation of Pharmacotherapies for Opioid Dependence studying 1500 opioid dependent patients assessing the impact of naltrexone, methadone, buprenorphine and LAAM. He has conducted the largest randomised clinical trial of buprenorphine versus methadone, and this study is a pivotal study for the US FDA registration of buprenorphine.

He is an Editor on the Cochrane Review Group for Drugs and Alcohol, and Assistant Editor and Executive Editor (respectively) on the international journals Addiction and the Drug and Alcohol Review.

Professor Mattick’s membership of the Board is effective immediately until 2017.
Methamphetamine Symposium: Making Research Work in Practice

By Tania Steenson

The National Centre for Education and Training on Addiction (NCETA) hosted the National Methamphetamine Symposium: Making Research Work in Practice on 12 May 2015. The symposium was held:

1. in response to changes in the way methamphetamine is used, particularly ice.
2. to share advances in our knowledge about methamphetamine at both the policy and practice level
3. showcase NCETA’s new program of work aimed at supporting the AOD treatment sector respond to methamphetamine-related issues

The Symposium focused on the identification of current patterns and trends in use, and best practice interventions with a particular emphasis on prevention and early intervention with high risk groups. The importance of early identification and finding ways to assist people to receive treatment early before problems escalate was particularly highlighted.

The Symposium was attended by over 260 participants from a wide variety of alcohol and other drug professions, including frontline health (doctors, nurses, counsellors) and community workers, supervisors and service providers, and policy makers. Feedback provided by attendees about the organisation of the conference, presentations given on the day, and the relevance of the conference to their work environments was extremely positive. Participants commented that presentations given by Associate Professors Rob Hester, Nicole Lee, and Nadine Ezard were especially valuable, and increased their knowledge about the neurological impact of methamphetamine, treatment efficacy and options available for frontline professionals.

Speaker presentations may be downloaded from the NCETA website. The presentations may be downloaded as a pdf and/or listened to via YouTube. A brief overview of key issues covered at the Symposium is also available on the NCETA website. Visit the NCETA website for more information.

Third Contemporary Drug Problems Conference: ‘Encountering alcohol and other drugs’

By Rachael Lobo

Building on the accomplishments of the first two conferences in Italy and Denmark, the international journal Contemporary Drug Problems is holding its third biennial conference in Lisbon, Portugal from 16-18 September 2015.

NDRI is co-hosting the conference along with the European Monitoring Centre for Drugs and Drug Addiction (Lisbon, Portugal), the Centre for Alcohol and Drug Research (Aarhus University, Denmark), the Centre for Population Health (Burnet Institute, Australia), and the Department of Science and Technology Studies (Rensselaer Polytechnic Institute, USA).

The 2015 conference theme is ‘Encountering alcohol and other drugs’, which attracted a record number of abstract submissions.

The conference will bring together leading international researchers in drug use and addiction studies from a range of research disciplines and methods – both qualitative and quantitative.

Keynote speakers include:

• Dr Emmanuel Kuntsche (Addiction Switzerland): ‘Understanding the weekend drinking of young adults from an “events” perspective: The possibilities and limitations of using personal cell phones’
• Dr Eugene Raikhel (University of Chicago): ‘Coding conduct: Hypnosis and the affective economy of Russian addiction medicine’
• Professor Alison Ritter (NDARC, UNSW): ‘The dynamics of drug policy: Relational, emergent and contingent’

Following the conference, Contemporary Drug Problems will publish a special issue featuring selected papers from the conference.

For further details about the conference theme, venue and how to register, please visit http://ndri.curtin.edu.au/events/cdp2015.

South Australian Methamphetamine Forum

By Tania Steenson

In view of the success of the Methamphetamine Symposium, NCETA has partnered with the South Australian Network of Drug and Alcohol Services (SANDAS) to deliver a methamphetamine focused forum in Adelaide.

Date: 24 June 2015
Time: 9am – 4.30pm
Venue
Flinders University Victoria Square
182 Victoria Sq Adelaide, Rms 2.01 & 2.02
Cost
$99 (SANDAS members)
$129 (non-members)

Places are limited. For more information contact:
Sam Raven | sam@sandas.org.au
08 8231 8818

Save the date for five national NDARC conferences

By Alexandra Pitzing

The 2015 NDARC Annual Research Symposium will be held on Tuesday 15 September 2015 at UNSW in Sydney. Entitled Emerging Problems in Drug and Alcohol Use: Current Problems & Future Solutions, the one-day symposium will showcase NDARC research, present latest results from some of our landmark studies and translate the results for clinicians and policy makers. As well as the keynote presentation (see related news story) the program will include results from studies looking at methamphetamine trends in Australia and early intervention and treatment and will close with a discussion panel on ice.

Other sessions include alcohol use from pregnancy to adolescence; and evaluation of heroin treatments. There will be five breakout sessions giving delegates a choice of workshops and short presentations on suicide risk assessment and prevention; cannabis use interventions; mental health and young people; and pharmaceutical opioids. We will have 40 posters of our latest research on display and our popular five-minute poster presentation session will focus on interventions for marginalised and high risk populations. For more information and to register, visit the NDARC website.

The 2015 National Centre of Research Excellence in Mental Health and Substance Use (CREMS) Colloquium Innovative Treatments for Mental and Substance Use Disorders: Psychosis, Depression, and Trauma will be held in conjunction with The Mental Health Services Conference on Tuesday 25 August in Canberra. The one-day colloquium will cover a wide range of topics around substance use and mental health, presented by distinguished researchers from across Australia. For more information, visit the CREMS website.

The annual Drug Trends Conference will this year be held in conjunction with the annual Drug Policy Modelling Program (DPMP) Symposium on 14-15 October 2015. The Drug Trends conference provides the most up-to-date data and research on drug trends, including availability, market trends and consumption rates. The Drug Policy Modelling Program symposium presents the latest policy research and explores solutions. Bringing these two events together will provide delegates with both the latest trends and the latest solutions to drug related harm. Registration details will be available soon. Watch out for program details and online registration on the NDARC website.

The 2015 National Cannabis Conference will take place at the Rydges Melbourne on 7-9 October 2015. Speakers will address a range of important issues from intervention approaches among Aboriginal communities, to school-based prevention techniques and synthetic cannabinoids. Registrations and program will be available in June 2015. For more details see the website of the National Cannabis Prevention and Information Centre.

Addressing Workplace AOD Issues

By Tania Steenson

Following concerns about AOD use in the fishing industry, Wildcatch Fisheries SA has established a Project Reference Committee to oversee the development of a drug and alcohol workplace policy for the seafood industry in South Australia. The Project Reference Committee is being chaired by the Honourable Dorothy Kotz. In view of his considerable experience in relation to AOD workplace issues, Dr Ken Pidd has been invited to represent NCETA on the Committee.

The Committee is expected to complete its work by the end of August 2015.
NDRI contributes to new drug and alcohol tool for construction industry

*By Rachael Lobo*

Construction workers and their employers have a new tool to tackle alcohol and drug use and help create a safer workplace.

Launched last month, [safeconstruction.org.au](http://safeconstruction.org.au) is designed to guide and educate industry about how alcohol and other drug consumption can drastically affect performance and safety on the construction site.

The website is the direct result of a two-year project *Safety Impacts of Alcohol and Other Drugs in Construction* run by the Sustainable Built Environment National Research Centre (SBEnrc), with project partners from the National Drug Research Institute, the Centre for Accident Research and Road Safety – Queensland (Queensland University of Technology), the National e-Therapy Centre (Swinburne) and lead industry partner John Holland.

A national survey undertaken during the research phase identified a need for the construction sector to be able to access information and tools when dealing with employees who consume alcohol or take drugs. The website provides information as to how organisations and workplaces can develop alcohol and other drug consumption awareness, policies, and practices of overall health, safety and welfare benefits to individual employees. Website participants can complete online modules which identify risks and offer prevention strategies. Although primarily designed for the construction sector, the website is also applicable to other industries.

NDRI’s Professor Steve Allsop was involved in the research and consultation phases of the project and led the content development of the new website. Professor Allsop also presents the opening video on the website.

The research report *Safety Impacts of Alcohol and Other Drugs in Construction* is available on the [SBEnrc website](http://sbenc.org.au).

---

The Social Determinants of Alcohol Use & Alcohol-related Problems

*By Tania Steenson*

There is growing interest in the issue of inequity in society in general, and particularly in relation to health. This interest extends to the relationship between inequity and alcohol use and strategies to address alcohol-related problems.

As one of few investigations examining this important issue, NCETA was commissioned by VicHealth in February 2014 to review the current evidence base regarding the social determinants of alcohol consumption and alcohol-related health outcomes, and identify promising approaches for promoting equity. A detailed report was completed in May 2014 that included an overview of:

- The role social determinants play in shaping health behaviours and outcomes (including alcohol consumption)
- Patterns of alcohol consumption and associated harms in Australia, and the inequities apparent therein
- Factors which influence alcohol consumption and associated harms, including demographic characteristics and environmental factors
- Best practice or promising approaches to reducing inequity in alcohol consumption and alcohol-related health outcomes
- Knowledge gaps and suggestions for future research.

That report was subsequently adapted into a journal article entitled ‘Addressing inequities in alcohol consumption and related harms’, which is in press in the journal, Health Promotion International.

The original NCETA report provided to VicHealth has additionally been synthesised by VicHealth into a shorter summary document, for use by practitioners and policy makers wanting to incorporate an equity focus into their work.

All three documents from this important program of work on the relationship between alcohol and inequity will be publicly available in June 2015 and accessible from the [NCETA website](http://nceta.org.au).
NDARC staff awarded prestigious SMHR Awards

By Alexandra Pitzing

Congratulations to Dr Nicola Newton, Dr Christina Marel and Dr Lexine Stapinski from the NHMRC Centre of Research Excellence in Mental Health and Substance Use (CREMS), based at NDARC, who have been have been awarded prestigious Early Career Researcher Awards from the Society of Mental Health Research.

Nicola Newton, as Director of Prevention at CREMS will use the fellowship to develop new and innovative prevention interventions, evaluating the first integrated online approach for students and their parents to prevent substance use and mental health problems in adolescents.

Christina Marel is leading research to improve clinical pathways for people with heroin dependence. Using Australian data collected over 11 years, the project aims to improve our understanding of the challenging journeys people make through heroin dependence.

Lexine Stapinski is leading innovative research aimed at interrupting the cycle of anxiety and drinking in young adulthood. She will explore how anxiety and alcohol use problems develop and interact, and how we can intervene with young people to reduce their impact and prevent escalation.

PhD news from across the centres

By Rachael Lobo, Tania Steenson and Alexandra Pitzing

In this new section, you can read about the latest PhD news from across the three centres. We will feature our most recently awarded PhDs and their research projects, new PhD candidates and the journey they are embarking on, as well as scholarship opportunities for new candidates.

Awards

At NDARC, Dan Anh Tran was awarded a PhD for her thesis entitled The cost effectiveness of antiretroviral treatment expansion strategies in Vietnam.

In her thesis project, Anh examined the costs and benefits of providing antiretroviral treatment in Vietnam. Using a series of economic models to explore different aspects of the cost-effectiveness of treatment, the research covered a range of specific aspects including structural determinants of access to treatment, the cost-effectiveness of commencing antiretroviral treatment at different thresholds and the characteristics of patients who are lost to follow-up.

Two staff members from NCETA, Alice McEntee and Jane Fischer, were also recently awarded PhDs.

Alice McEntee was awarded a PhD for her dissertation The Association between health literacy, nutritional and physical activity knowledge, dietary and physical activity behaviour and Body Mass Index.

Jane Fischer was awarded a PhD for her dissertation Beyond pleasure: A study into the quality of life of drug users. Jane’s PhD examined the quality of life (QOL) of substance users living and functioning in the broader population, rather than on clinical or treatment populations.

New candidates

NDRI has strengthened its international links with the arrival from Delhi, India of Himanshu Gupta, one of the first recipients of a Curtin University Faculty of Health Sciences International Research Scholarship.

Himanshu, who completed an undergraduate degree in India before undertaking a Master’s degree in the UK, plans to compare the impact of social media and the use of the internet as a marketing tool on alcohol consumption in India and Australia as the basis of his PhD studies at NDRI. Dr Robert Tait and Professor Simone Pettigrew (Curtin University School of Psychology/WA Cancer Prevention Research Unit) will supervise the project.

Paper on drugs in prison named Highly Commended Paper of 2014

By Alexandra Pitzing

NDARC’s Professor Kate Dolan’s paper “Detection of drugs in Australian prisons: supply reduction strategies” published in International Journal of Prisoner Health has been selected by the journal’s editorial team as a Highly Commended Paper of 2014.

The International Journal of Prisoner Health Editorial Team said it was one of the most impressive pieces of work the team has seen throughout 2014.

The paper examined the range of supply reduction measures in Australian prisons and found that the two main strategies identified were the use of drug detection dogs and urinalysis programs. Despite an extensive use of drug searches and urinalysis, it was found that the detection of drugs was modest for both strategies, indicating that drug use was low in Australian prisons.

Professor Dolan has spent over two decades in drug and alcohol research. Her key research interests include drug treatment and the prevention of blood borne viral infections in prisons; drug injecting and drug treatment in developing countries; and needle and syringe programs, methadone treatment and injecting rooms.

Her work has been published widely in journals including Addiction, Drug and Alcohol Review, The Lancet Infectious Diseases, The International Journal on Drug Policy, Drug and Alcohol Dependence and the European Journal of Epidemiology.
Can the Internet deliver AOD services when and where they are needed?

By Dr Robert Tait, Research Fellow, NDRI

One approach to increasing the reach of AOD services and providing both anonymous and ready access, has been the development of online interventions.

Those seeking treatment for alcohol or other drug (AOD) use problems typically encounter a range of barriers including geographical accessibility of services, social stigma and long-waiting lists. In addition, there is a perception that existing services focus on the needs of alcohol or opiate using clients and may not be appropriate or appealing to users of other substances. One approach to increasing the reach of AOD services and providing both anonymous and ready access, has been the development of online interventions, generally targeting users of specific substances.

Most of the interventions are based either on normative feedback or techniques drawn from cognitive behavioural therapy and motivational enhancement. Internet interventions either take a fully automated (‘unguided’) approach with the client progressing through the program at his or her own pace or use a ‘guided’ format where there is some interaction with a clinician, counsellor or technician via messaging or telephone contact.

The evidence

There have been numerous trials of online interventions for problematic alcohol consumption. Meta-analyses show that outcomes in the general population and in adult samples excluding tertiary students produce effect sizes that are similar to or larger than those for brief face-to-face alcohol interventions. Multiple component interventions produce larger effects than single session (e.g. normative feedback) interventions. Although meta-analyses of guided interventions have produced better outcomes than unguided interventions for those with depression, this has not been demonstrated with AOD programs. Nevertheless, a cost effectiveness evaluation conducted as part of a randomised trial found that although the automated intervention was less expensive to set up and disseminate, greater benefits accrued from the guided intervention for alcohol problems.

To date there has been less research on the effectiveness of online interventions with users of illicit substances, other than cannabis, where there have been small effects demonstrated both in terms of preventing the initiation of cannabis use and in reducing the consumption of cannabis. The data on programs for other drugs including cocaine and amphetamine type stimulants are far more limited.

The research gaps

Psychosocial interventions lie at the heart of AOD treatment, with internet programs well suited to the delivery of this style of intervention. Yet, key questions remain.

Current research

NDRI, in collaboration with NDARC and the Australian National University have just completed a randomised trial to evaluate a three module unguided intervention for users of amphetamine type stimulants (ATS).

The initial results were promising with those who received the intervention having a reduction in days ‘out of role’ and engaging in greater help-seeking for their use of ATS than the control group. We are now seeking further funding to develop the intervention so that it can be made available as a viable treatment option.

See Publication Highlight ‘Ice users help themselves online’ for more information.
**Bibliography**


---

**conversation with**

**Professor Maree Teesson**

*Director, NHMRC Centre of Research Excellence in Mental Health and Substance Use (CREMS) based at NDARC*

**This weekend I will ...**

going to spend some quality time with my gorgeous family, read a book, watch my two fabulous girls play football, manage a football team, go for a run with my dog, hopefully do some gardening, go to a party and work on a grant.

**I’d originally planned to work...**

probably in the local shop on the NSW central coast. I know I didn’t have any idea about going to university. I was the first member of my large supportive extended family to go to university. I was very fortunate at high school to have a bright supportive peer group and we really worked together and supported each other to work hard and aim high. Maybe that’s why I love prevention research with adolescents? Why psychology? When I was quite young I asked a medical specialist I had seen “If you had your time over what would you do?” he said psychology and that set me off on the path. I was lucky.

**The qualities I most value in my colleagues are...**

innovation, creativity, passion, attention to detail and a determination to answer some of life’s most complex questions. It takes a lot of determination to devote your life to research. Every day I count myself very lucky to work with exceptional people who use their skills to make a difference to people’s lives.

**I’ll never forget...**

my colleagues, particularly Kath Mills, Cath Chapman, Frances Kay Lambkin, Nickie Newton, Tim Slade, nominating me for a Eureka Prize for outstanding mentor of young researchers. They did it in secret. We all turned up to the “Oscars of Australian Science” together and waited nervously for the winners to be announced. They were all there with me to share the excitement. To be honest I felt like I had already won regardless of the outcome, that nomination was very special to me. A definite career highlight.

**For my next holiday...**

we are off to Paris to celebrate a significant birthday... followed by a couple of weeks back home sitting on the beach at Hawk’s Nest on the NSW coast.

**Career wise, I’m most proud of...**

all the fantastic researchers, PhD students and academics I have had the pleasure to mentor. The international and national collaborations that have led to new treatments, new prevention interventions and new epidemiological understanding of the problems.

**My big hope for the drug and alcohol sector is...**

more compassion and understanding and exciting new treatments and responses. Harnessing the energy and creativity in today’s researchers, clinician’s and people with lived experience to make as big an impact as possible on tomorrow’s problems.

**The sector’s biggest challenge going forward is...**

the drug and alcohol sector is creative and nimble and exciting, the challenge is to harness this and let the rest of the world know what is possible. Then hopefully we will have the investment needed in the sector.

**Professor Maree Teesson is an NHMRC Principal Research Fellow at NDARC and Director of the NHMRC Centre of Research Excellence in Mental Health and Substance Use. She is a ministerial appointed member of the NHMRC Health Care Committee and Professorial Fellow at the Black Dog Institute, UNSW, and was recently awarded the Australian Museum Eureka Prize for Outstanding Mentor of Young Researchers.**

Maree has made a major contribution to Australia’s health and medical research effort in the field of mental health and substance use. She was elected as inaugural fellow of the Australian Academy of Health Sciences in 2015.
Interventions to reduce the risks of an alcohol or other drug exposed pregnancy can take place across the continuum from preconception, pregnancy and after birth. A framework to prevent exposed pregnancies and to minimise harm during pregnancy was developed to address risks across this continuum.

The primary focus of the project was to identify strategies to identify and assist pregnant women who use or are dependent on alcohol or other drugs. In addition to assisting already pregnant women it is important to highlight that unintended pregnancy is associated with increased risk of exposure to alcohol or other drugs due to later pregnancy recognition, later access to antenatal care and higher likelihood of risky consumption patterns [1, 2].

Many unintended pregnancies occur due to inconsistent contraceptive use and therefore all women of reproductive age who use alcohol and other drugs should be provided with information and advice about effective contraception.

Substance use during pregnancy can be associated with significant harm to mother and baby. Health care professionals can make a substantial difference to the health of women and their babies by identifying and supporting women who use substances during pregnancy. It is important to remember that pregnant women who use substances are women who are dealing with all the complexities of substance use who become pregnant.

Pregnancy may be a window of opportunity to motivate change and improve outcomes with the appropriate support and treatment. There is substantial stigma associated with substance use in pregnancy and this is a barrier for women accessing support [3].

Evidence suggests access to early antenatal care and access to specialist alcohol and drug treatment improves outcomes and therefore it is important to identify women that may need additional support as soon as possible [4]. Alcohol and drugs are used by women across the population, from a wide range of backgrounds and ages.

A safe and non-judgemental approach is required to encourage disclosure and enable assistance with psychosocial and pharmacological treatment as required. Although evidence for universal screening is limited, guidelines recommend asking pregnant woman about their substance use within a discussion of their health [5]. Disclosure may occur as rapport is built and patterns of use may change over time, so it is important to continue to have this discussion throughout the pregnancy.

Moving beyond a focus on alcohol or drug use alone towards comprehensively addressing a range of factors improves outcomes [6] [7]. These include addressing early access to antenatal care, poor nutrition, mental health, domestic violence and unstable housing. Central...
to successful treatment responses are recognition of women's experiences, including potential trauma, and provision of a compassionate model of care [8].

Women may require psychosocial and/or pharmacological treatment depending on their individual needs. The type of treatment required varies by drug type. Clinical information by drug type is available from recently updated NSW Clinical Guidelines for the Management of Substance Use during Pregnancy, Birth and the Postnatal Period [9].

Best practice support of pregnant women who use substances:

- Routinely ask women about their alcohol and other drug use throughout the pregnancy.
- Avoid stigma and judgement. Engaging women in treatment requires sensitivity and provision of a culturally safe and accessible service.
- Identify high-risk cases early and refer for specialist antenatal care and treatment, or consultation.
- Address the range of needs including psychosocial factors, health and mental health issues and practical realities.
- Maintain up-to-date knowledge of treatment interventions.
- Identify referral pathways to specialist antenatal services, consultation and community organisations.
- Identify a case coordinator to coordinate a multidisciplinary or interagency team.
- Organise paediatric assessment, assertive follow-up and support for mother and baby post birth.
- Provide contraception and information to prevent future unintended pregnancy.

Best practice approach

It is time and resource-intensive to support pregnant women with problematic alcohol or drug use, however health professionals can make a substantial difference to the outcomes of women and their babies.

<table>
<thead>
<tr>
<th>Skills which can support women's engagement in care include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Understanding that alcohol or drug dependence is a health care issue and refraining from moral judgements.</td>
</tr>
<tr>
<td>• Being aware that alcohol and other drug use occurs in context of other health, family, cultural and psychosocial factors.</td>
</tr>
<tr>
<td>• Acknowledging that disclosing alcohol and other drug use during pregnancy can be difficult.</td>
</tr>
<tr>
<td>• Reflecting on one's personal values.</td>
</tr>
<tr>
<td>• Building a trusting relationship over time.</td>
</tr>
<tr>
<td>• Acknowledging women's experiences and feelings.</td>
</tr>
<tr>
<td>• Creating a safe, private and confidential environment.</td>
</tr>
<tr>
<td>• Providing a culturally safe environment.</td>
</tr>
<tr>
<td>• Understanding and addressing barriers to women accepting care.</td>
</tr>
<tr>
<td>• Being committed to providing optimum care.</td>
</tr>
<tr>
<td>• Booking longer appointments or flexibility with appointment times.</td>
</tr>
<tr>
<td>• Anticipate missed appointments and follow up appropriately.</td>
</tr>
<tr>
<td>• Be opportunistic and arrange appointments with multiple disciplines for the same visit.</td>
</tr>
<tr>
<td>• Refer for a range of services to address practical issues such as transport, or be prepared to see women in range of community settings.</td>
</tr>
</tbody>
</table>

In addition the guide provides suggestions for service providers such as documenting information on local resources, referral

Psychosocial interventions

- There is a lack of high-quality research into psychosocial interventions with pregnant women who use alcohol and other drugs.
- Treatment should be trauma informed. Pregnant women with substance use disorders are a vulnerable population and many women may have a history of trauma.
- Cognitive Behavioural Therapy may assist with identifying and challenging dysfunctional thoughts and developing better coping strategies around substance use.
- There is some evidence for Motivational Interviewing reducing alcohol use in pregnant women.
- Developing relapse prevention skills may be particularly important for use in the postpartum period.
- There is some evidence for the use of contingency management in contributing to retention in treatment and reduction of drug use.

- Cognitive Behavioural Therapy may assist with identifying and challenging dysfunctional thoughts and developing better coping strategies around substance use.
- There is some evidence for Motivational Interviewing reducing alcohol use in pregnant women.
- Developing relapse prevention skills may be particularly important for use in the postpartum period.
- There is some evidence for the use of contingency management in contributing to retention in treatment and reduction of drug use.

- Reflecting on one's personal values.
- Building a trusting relationship over time.
- Acknowledging women's experiences and feelings.
- Creating a safe, private and confidential environment.
- Providing a culturally safe environment.
- Understanding and addressing barriers to women accepting care.
- Being committed to providing optimum care.
- Booking longer appointments or flexibility with appointment times.
- Anticipate missed appointments and follow up appropriately.
- Be opportunistic and arrange appointments with multiple disciplines for the same visit.
- Refer for a range of services to address practical issues such as transport, or be prepared to see women in range of community settings.

In addition the guide provides suggestions for service providers such as documenting information on local resources, referral.
pathways and to consider auditing the use of resources and clinical guidelines and putting quality improvement processes in place. Clarification of pathways between services and disciplines may be useful.

An Australian study evaluated the implementation of a clinical pathway which aimed to improve outcomes for infants in families affected by alcohol or other drug use [16]. The pathway was multidisciplinary, with shared responsibilities and clearly articulated roles and responsibilities. Interventions focused on harm minimisation for substance use, parent-infant relationship, community support, mental health, wellbeing and stress management. The pathway appeared to facilitate a better therapeutic alliance between staff and families, improved engagement of women who were more likely to have an assessment, discuss substance use and have a safety plan regarding domestic violence. The intervention group remained engaged with the service longer than the control group [16].

To ensure women get the appropriate support ongoing training of health professionals is required. There is lack of information and evaluation of the impact of education on practice. There is limited evaluation research of programs that treat pregnant women that use substances in Australia.

Despite the availability of guidelines on screening and intervention for substance use in pregnancy, there is limited information on current practice or the extent to which guidelines are disseminated and implemented. Often funding is provided in stages and resource development occurs but the evaluation to determine the extent to which the guidelines and resources are used and their impact is not undertaken. This is an area that requires further attention to ensure that resources are being used effectively and women who use substances are supported throughout their pregnancy and beyond.

The project resources include:
- a fully referenced report,
- a practical guide for health professionals that contains information and links for resources including specialist antenatal clinics, guidelines, screening, assessment and intervention tools, domestic violence and contraception advice, Indigenous and youth specific resources, and
- a two-page reference sheet.

The project resources are available at https://ndarc.med.unsw.edu.au/resources.

Acknowledgments

Consultation network: The members of the consultation network, a range of professionals with interest and expertise in substance use in pregnancy, for their valuable input. They provided information on services available in their state, clinical practice in the identification and treatment of pregnant women who use substances, and workforce development needs. They gave input into the development of the resource, including its content, formatting and dissemination strategies.

Funding: The National Drug and Alcohol Research Centre, UNSW Australia, received funding for the Substance Misuse in Pregnancy Resource Development Project from the Australian Government.

Pharmacological treatment

There is a lack of high quality research into pharmacological interventions with pregnant women who use alcohol and other drugs [10, 11]. Due to this lack of rigorous research, the safety and efficacy of many treatments that are available to the general population are not known for pregnant women.

Alcohol

The need for withdrawal management for alcohol may be an indication for inpatient admission and treatment. Pregnant women who are withdrawing from alcohol need to be monitored by appropriate health professionals and supported with medication (such as benzodiazepines), nutritional and vitamin supplementation. They should be provided with access to appropriate maternal and fetal monitoring [9, 11].

Benzodiazepines

Ideally benzodiazepines should be avoided in pregnancy but they may be used in the short term for the treatment of alcohol withdrawal or anxiety while awaiting onset of a safer drug. Long acting benzodiazepines should be avoided in pregnancy if possible.

Tobacco

Nicotine Replacement Therapy should be considered when a pregnant woman is otherwise unable to quit, and when the likelihood and benefits of cessation outweigh the risks of NRT and potential continued smoking. It is recommended that pregnant women who smoke use intermittent (gum, lozenge, inhaler, tablet) rather than continuous (patches) NRT preparations and use the lowest dose possible. NRT should be used in consultation with a health professional [9].

Opioids

Withdrawal from opioids is not routinely encouraged in pregnancy. Opioid Treatment Programs (methadone or buprenorphine maintenance) are recommended to stabilise and maintain opioid dependent pregnant women. Methadone and buprenorphine maintenance have been shown to reduce maternal illicit opiate use and fetal exposure, enhances compliance with obstetric care and are associated with improved neonatal outcomes such as increased birth weight [12-15].

Cannabis, Cocaine and Amphetamine Type Stimulants

There are no recommended pharmacological treatments for cannabis, cocaine, amphetamine type stimulant use in pregnancy.
References


Poole, N., Bringing a Women’s Health Perspective to FASD Prevention, in Fetal Alcohol Spectrum Disorder. 2010, Wiley-VCH Verlag GmbH & Co. p. 161-173.


new projects

Investigating methamphetamine use and harms in the Western Region of Melbourne

Staff:
NDRI: Dr Robyn Dwyer

Other investigators: Associate Professor Craig Fry, Victoria University
Associate Professor Debra Kerr, Victoria University
Caroline Clark, Victoria University

Project description: Recent reports from drug and alcohol experts and the media suggest growing problems with methamphetamine use and harms in the Western Region of Melbourne. However, reliable region specific data is limited, which means there is currently almost no understanding of the extent, nature and impacts of these emerging trends.

This pilot project, a collaboration between Victoria University and NDRI, will gather evidence on methamphetamine use and harms in the Western Region through interviews with methamphetamine consumers and with professionals whose work brings them into contact with methamphetamine consumers, to provide a more informed and relevant evidence base from which to develop targeted and effective responses to this potentially significant public health problem. The project is funded and led by Victoria University.

National Impairment Policy and Procedures for the Construction Industry

Staff:
NCETA: Dr Ken Pidd, Victoria Kostadinov, Professor Ann Roche

Other investigators: A/Prof Jillian Dorrian & Dr Siobhan Banks, Brain and Body at Work Group, Centre for Sleep Research, University of South Australia

Project description: NCETA has been funded to work in collaboration with the University of South Australia to develop a nationally consistent ‘fit for work’ policy and associated procedures to address AOD and fatigue related risk in the workplace.

The project will involve a comprehensive review of research on the management of AOD and fatigue related risk in the workplace will be undertaken to ensure that the policy and procedures are evidence-based, focused on ‘best’ practice, and contribute to the health and wellbeing of all employees.

Alcohol consumption as a collective phenomenon – unpacking recent Australian trends

Staff:
NDARC: Dr Michael Livingston
NDRI: Prof Tanya Chikritzhs

Other investigators: Prof Robin Room, School of Population Health of the University of Melbourne
A/Prof Belinda Lloyd, Turning Point Alcohol and Drug Centre
Prof Paul Dietze, Burnet Institute

Project description: This project attempts to explain puzzling recent trends in alcohol consumption and harm in Australia. Measures of population drinking have been broadly stable over the past fifteen years, while many measures of alcohol-related harm have increased sharply. This represents either a failure of the key theory underpinning public health approaches to alcohol policy or a failure of data collection.

The study will use quantitative methods on a range of pre-existing data sources (including population surveys and administrative data from health and social agencies) to assess competing explanations for these diverging trends.

Fighting, alcohol and offending: Interventions targeting Aboriginal girls

Staff:
NDRI: Dr Mandy Wilson, Jocelyn Jones, Dr Julia Butt & Associate Professor Ted Wilkes

Other collaborators: Aboriginal Alcohol and Drug Service, Perth

Project description: This study focuses on the experiences of Aboriginal girls in the Perth metropolitan area around fighting, drinking and offending behaviours. Research has shown a strong association between alcohol use and violence among Aboriginal and non-Aboriginal people, and between violent offending among Aboriginal women and their increasing involvement with the criminal justice system today. A similar pattern is now emerging among Aboriginal girls. Despite this and speculation in the media that girls (in general) are becoming more criminal
and violent, there is very little Australian research around this phenomenon and even less exploring Aboriginal girls’ understandings of and involvement in fighting, drinking and offending. Without a knowledge base it is difficult to know the most effective ways to intervene in and prevent these behaviours.

The project concept arose out of findings from a Healthway-funded project, Drinking in the suburbs: the experiences of Aboriginal young people, which revealed an alarming rate of harms experienced by participants; harms brought about by fighting, drinking and offending. While there were similarities in experiences between girls and boys, important differences were noted.

This current research seeks to generate knowledge about Aboriginal girls’ experiences of and attitudes towards fighting, drinking and offending, and to identify intervention points and strategies for preventing the progress of behaviours that increase the potential for negative consequences among this group. By interviewing Aboriginal girls between the ages of 10-18 years (involved and not with the criminal justice system) and empowering them to take a lead role in promoting health messages, the project will create a comprehensive picture of Aboriginal girls’ experiences.

Findings will inform the development of a training package to improve service provider and community knowledge about issues facing the girls, and provide a framework to guide future health promotion initiatives targeting this group; the package will potentially be transferrable to other settings. It is intended that use of the training package will endure after the life of the project and result in continual improvements in the health status of Aboriginal girls.

**Motor Vehicle Crash Data**

**Staff:**
NCETA: Professor Ann Roche, Roger Nicholas, Jane Fischer & Dr Alice McEntee

**Project description:** NCETA was awarded a grant by Flinders University to undertake a data linkage project to examine the impact of prescribed Schedule 8 opioid and stimulant use on car crashes.

**Public awareness campaigns about recreational cannabis: Evidence Check**

**Staff:**
NDARC: Prof Jan Copeland & Ms Amanda McDonald, National Cannabis Prevention and Information Centre (NCPIC)

**Project description:** This Evidence Check forms a background document for the NSW Government public awareness strategy to reinforce the Government’s message that cannabis use is not supported. The goal of the program is to highlight the associated harms and the range of support services available to people who wish to stop using cannabis as well as to reinforce the prevention strategies for cannabis use.

The project aims to address how to use appropriate communication channels to:
- raise public awareness of the health risks and legal consequences associated with cannabis use; and
- to influence individuals’ behaviour and prevent and reduce cannabis use.

**Trending: Social media analysis to monitor cannabis and synthetic cannabinoid use**

**Staff:**
NDARC: Dr Monica Barratt

**Other investigators:**
Associate Professor Raminta Danilaityte, Wright State University, Ohio, United States
Professor Edward W. Boyer, University of Massachusetts Medical School, United States
Professor Robert G. Carlson, Wright State University, Ohio, United States
Associate Professor Silvia Martins, Columbia University, New York, United States
Assistant Professor Ramzi W. Nahhas, Wright State University, Ohio, United States
Professor Amit Sheth, Wright State University, Ohio, United States
Professor Krishnaprasad Thirunarayan, Wright State University, Ohio, United States

**Project description:** Cannabis remains one of the most commonly used psychoactive substances in the United States, and current epidemiological studies indicate broadening acceptability. This aim of this project is to decrease the burden of psychoactive substance use in the US.

The three-year study will develop and deploy eDrugTrends, an innovative platform for semi-automated processing of social media data, to track trends in cannabis and synthetic cannabinoid use, identify opinion leaders and assess differences across US regions with varying cannabis legalization policies.

Social media data sources will include Twitter and at least five web forums. The study will integrate quantitative and qualitative methods, and will employ targeted, anonymous surveys on web forums to complement and triangulate analysis of user-generated content.
publication highlights

‘Ice’ users help themselves online


Why did we undertake this research?

Regular methamphetamine users, and in particular users of ‘ice’, are likely to experience harms such as dependence and mental health problems, and early intervention is important to prevent problems becoming severe. However, as the current treatment for methamphetamine use relies on intensive psychotherapy, access is extremely limited, particularly outside of major cities.

What did we do?

This paper reports on the randomized controlled trial of an online treatment program designed to help people who use amphetamine-type stimulant drugs like methamphetamine. The six-month study evaluated the effectiveness of a self-guided web-based intervention, “breakingtheice” for amphetamine-type stimulant users via a free-to-access site.

What did we find?

The trial found that online treatment is promising. People who received the online treatment were more likely to seek help for their drug use, and were more engaged in their usual day-to-day activities, than people who did not receive the online treatment.

The research was conducted by a collaboration between researchers at NDRI, NDARC, the Australian National University and the Black Dog Institute. The research collaboration is now seeking further funding to develop the intervention so that it can be made available as a viable treatment option.

View report: [Go to website](#).

Prisoners forced to withdraw from methadone less likely to seek community treatment


This study published in *The Lancet* by US researchers and NDARC NHMRC postdoctoral fellow Dr Sarah Larney has provided further evidence for the effectiveness of methadone maintenance treatment in prisons.

What did we find?

The randomised controlled trial of 283 US inmates in prison for six months or less found that prisoners receiving methadone on release were seven times more likely than those not on methadone to seek community based treatment in the first month following release from prison. Conversely those prisoners forced to withdraw from methadone were likely to delay receiving community treatment on release or cease treatment altogether. The forced withdrawal group were also more likely to return to injecting drug use following release and more likely to participate in behaviours putting them at risk of HIV and hepatitis.

The study also found that medical costs, such as hospital ED presentations, for prisoners who stayed on methadone were lower in the month after release even after accounting for cost of methadone.

What does it mean?

Dr Larney who worked on the study with lead author Professor Josiah Rich as an NMHRC postdoctoral research fellow at Brown University Rhode Island said the results provided further support for the Australian policy of offering methadone treatment in prisons which is available in all states and territories apart from Queensland.

“In the US 90 per cent of prisoners stop methadone treatment while in prison,” said Dr Larney. “The results of this study are of particular concern because other cohort studies have shown that there is increased risk of death in the first few weeks after release from prison. This is significantly reduced if prisoners continue on methadone in prison and following release.

“As well there is substantial evidence of public health and social benefits of methadone treatment in prison and the community including reduced rates of communicable disease; lower rates of reincarceration and lower crime rates.”

An accompanying editorial in *The Lancet* describes the American policy on...
methadone in prisons as “unusual and cruel”.

View paper: Go to website.

One billion smokers and 240 million people with alcohol use disorder worldwide


This new study, commissioned by the journal Addiction, has compiled the best, most up-to-date evidence on addictive disorders globally. It shows that almost 5% of the world’s adult population (240 million people) have an alcohol use disorder and more than 20% (1 billion people) smoke tobacco. Getting good data on other drugs such as heroin and cannabis is much more difficult but for comparison the number of people injecting drugs is estimated at around 15 million worldwide.

What did we find?
The Global Statistics on Addictive Behaviours: 2014 Status Report goes further in showing that the harm to society from legal drugs is many times the harm from illicit drugs. For example, alcohol use is estimated to result in loss of 257 disability adjusted life year per 100,000 of population compared with just 83 for illicit drugs.

There are huge regional differences in use of addictive drugs. The heaviest drinkers are in Eastern Europe where 13.6 litres of alcohol is consumed per head of population each year, followed by Northern Europe at 11.5 litres. Central, Southern and Western Asia have the lowest consumption at 2.1 litres.

Eastern Europe also has the most smokers at 30.0% of adults, closely followed by Oceania at 29.5% and Western Europe at 28.5%. This compares with Africa at 14%. North and Central America with the Caribbean have the highest rates of injecting drug use at 0.8%, which is more than twice the rate in Northern Europe at 0.3%.

What does it mean?
The authors of the report note that there are important limitations to the data, more so for illicit than legal drugs, but believe that putting all this information in one place will make it easier for governments and international agencies to develop drug and alcohol policies.

View paper: Go to website.

Alcohol use among workers in male-dominated industries: A systematic review of risk factors


Why did we undertake this research?
Although there is a growing body of work regarding alcohol use and the workplace, little work has been conducted on risk factors for alcohol use in male-dominated industries. In the working population, risky alcohol consumption and alcohol use problems result in significant health, social, and economic costs.

Particular subgroups of the working population have higher prevalence of alcohol use and misuse, including males, younger workers, and Indigenous employees. However, the available evidence on risk factors for work-related alcohol use and associated harms has not been systematically reviewed within male-dominated industries. Such a focus is required to inform intervention and prevention strategies that target these industries.

What did we find?
This study reports the findings of a systematic review of risk factors for alcohol use and alcohol use problems in male-dominated industries. Dominant risk factors found to be associated with problematic alcohol use included being male, middle aged, having a high stress job, or a job that resulted in burnout, being a blue collar, unskilled or manual/worker, or working in an environment with permissive drinking norms. Many of these factors may be influenced by policy or intervention strategies that can prevent or reduce alcohol related risks and problems among workers in male-dominated industries.

What does it mean?
Alcohol primary prevention strategies and future research that targets specific high risk industries may be necessary to address workplace drinking norms, reduce job workloads and stress, and improve workplace support. Multi-pronged, tailored strategies are needed in male-dominated industries that reflect the needs of high risk groups as well as targeting environmental, social, and contextual factors.

View paper: Go to website.
Cannabis use and quality of life of adolescents and young adults: Findings from an Australian birth cohort


Why did we undertake this research?  
Cannabis is the most widely used illicit drug in the world. It is most frequently used by young adults, who, arguably, use cannabis to improve their quality of life (QOL). To-date, whether cannabis use improves QOL in the medium and/or longer term is undetermined. With increasing interest in psychosocial outcomes from cannabis use, it is becoming increasingly important to have better understandings of the relationships between:  
1. QOL and cannabis use  
2. the QOL of cannabis users prior to commencement of use.  

Although QOL may be measured using subjective (individual perceptions) or objective measurements (perceptions of external observers), this study conceptualises QOL as encapsulating subjective wellbeing, that is happiness and satisfaction.

What did we do?  
This study examined data from a prospective longitudinal study to assess the extent to which QOL predicts the age of onset of cannabis use, and whether cannabis use produces positive changes in the user’s QOL.  

It aimed to examine the temporal relationship between cannabis use and QOL between adolescence (14 years of age) and young adulthood (21 years of age) in an Australian birth cohort. The study investigated whether respondents with a lower QOL prior to cannabis use are more likely to use cannabis, and whether cannabis use is associated with QOL after use has started.

What did we find?  
Findings from the study indicate that poor QOL is associated with subsequent onset of cannabis use in adolescents. In addition, despite young people’s motivations for using cannabis, cannabis does not seem to improve their QOL. Comprehensive programs targeted at improving adolescent wellbeing may prevent or reduce early onset of cannabis use and it may be useful to inform young adults that rather than improve their QOL, cannabis use may have a detrimental impact.

View paper: Go to website.

What is happiness and satisfaction?  
Happiness is generally considered a measure of short-term affect, of how much people enjoy their lives. It is also an assessment of hedonism.  

Hedonism is the extent to which a person’s subjectively perceived needs are satisfied.  

Satisfaction encompasses an individual’s broader aspirations, achievements, and perceived reality in comparison to peers and societal norms.
Resources


Monographs and Technical Reports


Journal articles and book chapters


The national centres are supported in funding from the Australian Government under the Substance Misuse Prevention and Improvements Grant Fund.


