

centre lines

NDARC (33)

August 2012

A newsletter from the National Centres for Drug and Alcohol Research
Published this issue by the National Drug and Alcohol Research Centre, Sydney

issuing forth

Development of the Suicide Assessment Kit (SAK): A new resource for frontline drug & alcohol treatment workers



edspace

Suicide, comorbidity and the trauma behind substance use

Suicide is the leading cause of death among people who abuse drugs and alcohol and lifetime prevalence of attempted suicide is well in excess of lifetime prevalence in the general population. Managing that risk is a significant issue for drug and alcohol treatment services.

The cover feature of this month's *CentreLines* describes a three part NDARC project designed to improve the assessment and management of suicide risk in AOD treatment services. The project has led to the development of the Suicide Assessment Kit (SAK) providing readily accessible resources for managers and staff of treatment services. The project is an excellent example of the translation of research into practice – the final stage will be to disseminate and distribute these resources to all AOD services throughout Australia.

Co-morbidity has been a major focus of research at NDARC for many years. The Centre was delighted to receive funding last week to lead a \$2.5 million NHMRC Centre of Research Excellence in targeting co-occurring mental illness and substance use – a debilitating co-morbidity which affects more than 300,000 Australians every year.

The world first Centre of Research Excellence in Mental Health and Substance Use: Translating Innovative Prevention and Treatment will be led by NDARC's Prof Maree Teesson in collaboration with researchers from the University of Newcastle, the University of Sydney and Macquarie University. For more information on the CRE see: <http://ndarc.med.unsw.edu.au/>

Trauma, self medication and treatment is the subject of one of the sessions of the NDARC Annual Symposium on August 28 (see box for more details).

Marion Downey, Manager Media and Communications

NDARC Annual Symposium

Tuesday 28 August 2012 Register Now!

Celebrating 25 Years of Drug and Alcohol Research

Registration Closes Friday 21 August

<http://ndarc.med.unsw.edu.au/content/ndarc-annual-research-symposium-2012>

Funded by the
National Drug Strategy

ISSN 1034-7259

contents

headspace 2

The importance of having public policy and health services informed by research is widely accepted by clinicians, governments, policy makers and researchers. Despite this acceptance, there is enormous untapped potential to move beyond simply utilising what we already know more effectively, writes Associate Professor Anthony Shakeshaft, NDARC's Deputy Director

issuing forth 2

Suicide is the leading cause of death among people who abuse drugs and alcohol and lifetime prevalence of attempted suicide is well in excess of lifetime prevalence in the general population. Managing that risk is a significant issue for drug and alcohol treatment services, writes Dr Joanne Ross

project notes 4

Using evidence to evaluate Australian drug trafficking thresholds

Triple B: Wave III follow-up of preschoolers

Ongoing surveillance of the diversion and injection of medications used in opioid substitution treatment

abstracts 5

recent publications 10

CentreLines is a joint publication from the National Drug and Alcohol Research Centre, Sydney and the National Drug Research Institute, Perth.

headspace

Translating research evidence into policy and practice

Associate Professor Anthony Shakeshaft

The importance of having public policy and health services informed by research is widely accepted by clinicians, governments, policy makers and researchers. This is a significant step in improving the value of the relationship between research, policy and health service delivery, which in turn will improve public health benefits for individuals and communities.

Despite this acceptance, there is enormous untapped potential to move beyond simply utilising what we already know more effectively: every time a new policy is implemented, or a health service changes the way it delivers care, there is also an opportunity to improve our collective knowledge about what works and what doesn't.

The key word in realising this untapped potential is more routine integration between research and policy/clinical practice. Integrated research does not imply a linear relationship from research to policy/clinical practice, but a symbiotic relationship whereby policy and clinical practice are more informed by evidence, and the implementation of

policies and services creates unique evaluation opportunities. This is not to argue that nurturing a symbiotic relationship obviates independent scientific inquiry: academic freedom has been a bedrock of research for which scientists have continually fought. Nor should the implementation of innovative policy and the delivery of health services necessarily be inhibited by a current lack of evidence: Professor David Sackett, arguably the father of evidence-based medicine, explicitly argues for the importance of expert judgement and consensus where evidence is lacking. Nevertheless, there is an opportunity to expand the overlap between evaluation policy and practice that we have not yet fully explored. There are three concepts that are key to successful integrated research: early planning; scientific rigour; and routine implementation.

The basis of any practical mechanism that makes the most of evaluation opportunities created by the roll-out of policies and the delivery of health services will most likely be early planning. Rather than thinking about evaluation after a policy or service has been implemented and established, thinking about evaluation from the outset of policy development or planned improvements in health services is critical because the implementation of policies and health services can be shaped to accommodate research. Critically, it is the implementation that is shaped, not the quality of the policy or health service itself.

For scientific rigour, it might be argued that even if greater integration can be achieved, the outcomes would lack scientific rigour. It is true that greater integration presents new methodological challenges: randomised controlled trials will not always be possible, nor always desirable, and it is highly likely that the use of existing routinely collected data to measure the impacts of changes in policies and health service delivery will need to be improved. And researchers are starting to meet these challenges by articulating the value of alternative, but methodologically adequate, evaluation designs, chiefly multiple baseline designs using interrupted time series analysis.

For routine implementation, the question is not can we do it, but how do we do it more frequently. How do we create a culture between policy makers and researchers where opportunities for generating new knowledge are sought and nurtured, rather than resisted and considered in hindsight? How might governments most effectively contribute and support that process?

The drug and alcohol field has the potential to lead public health in taking up the challenge of integrating research into policy/clinical practice precisely because of the relevance of drug and alcohol to the Australian community and all levels of government. The challenges in achieving greater integration between research and the delivery of public policy and clinical services are not easy, but they are ones worth taking up. **cl**

issuing forth

Development of the Suicide Assessment Kit (SAK): A new resource for frontline drug & alcohol treatment workers

Joanne Ross, Shane Darke and Mark Deady

It is well established that attempted and completed suicides occur at significantly elevated rates among people who abuse drugs and alcohol^[1,2,3]. Indeed suicide is a leading cause of death among this group, with the annual prevalence of attempted suicide being in excess of the lifetime prevalence in

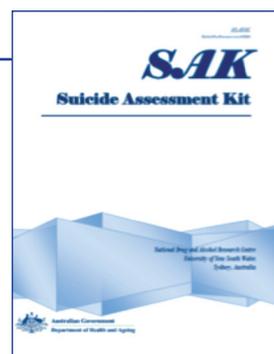
the general population^[4]. How then, do alcohol and other drug (AOD) treatment services assess and manage this risk among their client group? This is a question that we sought to address in the *Suicide Risk Assessment Study*, a world first examination of risk assessment practices in residential rehabilitation services^[5].

The study is a three stage project, funded by the Department of Health and Ageing, designed to improve the assessment and management of suicide risk in AOD treatment services. Stage 1 involved a needs assessment conducted with generalist residential rehabilitation services^[6], the findings of which informed the development of the Suicide Assessment Kit (SAK) in Stage 2. This resource was designed in partnership with the Network of Alcohol and Other Drug Agencies (NADA), specifically for residential rehabilitation services. The SAK provides readily accessible resources for managers and staff of treatment services, to assist them in the identification and management of suicide risk.

In order for this new resource to be taken up by services it is essential that its usefulness be evaluated, and that a plan for its dissemination is implemented (Stage 3). Funding for this crucial third stage is currently being negotiated.

Background

It is estimated that up to 90% of people who die by suicide suffer from a diagnosable mental disorder, most frequently substance use disorders.^[6] Up to 50% of females and 25% of males entering treatment in a drug and alcohol residential rehabilitation service will report a history of attempted suicide.^[7] Similarly, a longitudinal study of treatment outcomes for heroin dependence found that



43% of heroin users entering residential rehabilitation have a lifetime history of attempted suicide, and 32% report current suicidal ideation.^[6] A three year follow-up of the cohort determined that one in four of those with suicidal ideation at treatment entry went on to make an attempt within the follow-up period.^[9] Clearly, there is a need for ongoing suicide risk assessment throughout treatment. The detection of acute suicide risk, and identification of background risk factors within this population, is necessary to help link those at risk with appropriate services and, hopefully, save lives.

The assessment and management of suicide risk can be challenging, even for experienced clinicians. While it is acknowledged that there may be considerable variance in the ability of AOD services to respond to risk, it is important that all treatment staff are knowledgeable about suicide risk factors and warning signs, have the resources to conduct a basic risk assessment, and know the procedures to follow once an assessment has been conducted.^[10] An expert consensus panel in the US also deem it essential that *all* AOD treatment services have clearly documented policies and procedures in place outlining how and when suicide risk assessment is to occur, and how referrals are to be managed. Such measures would assist staff to intervene with clients before a crisis point is reached, as well as providing the necessary foundation for managing crisis situations when they arise. To determine the extent to which Australian residential rehabilitation services meet these criteria in relation to staff skills, and agency policies and procedures, Stage 1 of the Suicide Risk Assessment Study was conducted.^[5]

A national snapshot of risk assessment practices in residential rehabilitation services

Interviews were conducted with managers and volunteers from staff in 90% of generalist residential drug and alcohol rehabilitation services across Australia. Manager interviews examined agency policies and procedures in relation to suicide risk assessment, staffing and client capacity, staff training in suicide risk assessment, and perceived needs in terms of assessment tools. Staff interviews assessed knowledge of risk factors, frequency and extent of current screening, personal experiences of managing high risk clients, barriers to risk assessment, and perceived needs with regards to assessment tools and training. The major findings were that:

1. A third of agencies had no documented policy for managing suicide risk;
2. A quarter of staff had never been formally trained in suicide risk assessment;
3. In more than a third of agencies staff were not expected to use structured assessment tools when assessing acute suicide risk;
4. To varying degrees, agencies were gathering information about psychiatric

co-morbidity, but this information did not appear to be routinely integrated into the client's suicide risk assessment; and

5. One in five staff reported having lost a client to suicide.

These findings confirm the challenging role of front-line AOD workers, and highlight the need for three new resources to improve the management of suicide risk in residential drug and alcohol treatment settings. The resources include a Policies and Procedures Pro-forma (**Suicide-PPP**) to assist managers in developing policies and procedures relating to risk assessment, an Acute suicide risk Screen (**Suicide-SS**), and a standardised Suicide Risk Formulation Template (**Suicide-RFT**) to help integrate information about the client's background risk factors into their suicide risk assessment. These resources were subsequently developed in Stage 2 of the project, as part of the SAK.

The Suicide Assessment Kit

The SAK is divided into two broad sections, one dedicated to staff and the other to management. The staff resources (and supporting documents) provide practical tools for dealing with suicidal behaviour at an individual level. The manager resources (and supporting documents) provide the tools for services to manage suicide risk at an organisational level. The key components of the SAK are summarised below.

The *Suicide Risk Screener* is a simple screening tool designed for use at set time points in treatment (e.g. admission, transition points, discharge) and when a staff member suspects the client may be at heightened risk.

Throughout treatment AOD services frequently gather information about their clients that needs to be considered as part of the individual's suicide risk profile. The *Suicide Risk Formulation Template* within this resource package has been designed to assist AOD staff in creating a comprehensive picture of the background factors that may influence suicide risk as well as the client strengths which can be drawn upon in treatment. This information is likely to come from a range of different sources and is often only apparent over time after a relationship has developed between an AOD worker and client. This tool can help staff in communicating their concerns about a client to external support services, as well assisting in the development of the client's treatment plan.

As discussed earlier, agencies should also have policies and procedures in place surrounding timelines of assessment and management of risk, along with record keeping, information sharing and referral procedures. The *Suicide Policies and Procedures Pro-forma* aims to support and facilitate agencies to create such policies and procedures regarding the identification and management of suicide risk. In instances where policies and procedures are already in place, the *Pro-forma* can be used as a means of fine-tuning those documents. Other

supporting documents in the SAK include a list of *Warning Signs for Suicide* risk identification, a list of *Keep Safe Strategies* (for clients), *Safety Plan and Safety Plan on Exit* templates (for clients) and a *Commitment to Treatment* contract outline (for staff and clients to collaboratively agree to). In addition to these staff resources a *Memorandum of Understanding* template is provided to aid management in creating links with external services and a referral guidance section contains a *Letter of Referral* template. It is recommended that services make photocopies of the different resources and have these copies easily accessible for staff.

The SAK was presented at the NDARC Annual Symposium and the Australasian Professional Society on Alcohol and other Drugs Conference last year. The response from treatment agency staff at both venues was overwhelmingly positive, and we have had several treatment agencies contact us independently to indicate their willingness to participate in the evaluation and dissemination of the SAK. Clearly, there is a perceived need among front-line workers for this resource. Any residential rehabilitation services interested in taking part in the evaluation of the SAK are encouraged to contact Dr Joanne Ross on (02) 9385 0235 or email: j.ross@unsw.edu.au. **cl**

References

1. Wilcox HC, Conner KR, Caine ED. (2004). Association of alcohol and drug use disorders and completed suicide: an empirical review of cohort studies. *Drug Alcohol Depend*; 76:S11–19.
2. Harris EC, Barraclough B. (1997). Suicide as an outcome for mental disorders. *British Journal of Psychiatry*; 170:205–28.
3. Pirkis J, Burgess P. (1998). Suicide and recency of health care contacts. A systematic review. *The British Journal of Psychiatry*, 173;462–74.
4. Darke S, Degenhardt L, Mattick R. (2007). Mortality amongst illicit drug users. *Epidemiology, causes and intervention*. Cambridge: Cambridge University Press.
5. Ross, J., Darke, S., Kelly, E. & Hetherington, K. (2012) Suicide risk assessment practices: A national survey of generalist drug and alcohol residential rehabilitation services. *Drug & Alcohol Review*, DOI: 10.1111/j.1465-3362.2012.00437.xdar_437 1.7
6. Conwell Y, Duberstein PR, Cox C, Herrmann JH, Forbes NT, Caine ED. (1996). Relationships of age and axis I diagnosis in victims of completed suicide: a psychological autopsy study. (1996). *American Journal of Psychiatry*, 153; 1001–8.
7. Darke S, Campbell G, Popple G. (2011). Self-harm and attempted suicide among therapeutic community admissions. *Drug Alcohol Rev*; DOI: 10.1111/j.1465-3362.2011.00344.x.
8. Darke, S., Ross, S., Lynskey, M. & Teesson, M. (2004). Attempted suicide among entrants to three treatment modalities for heroin dependence in the Australian Treatment Outcome Study (ATOS): prevalence and risk factors. *Drug and Alcohol Dependence*, 73;1–10.
9. Darke S, Ross J, Williamson A, Mills KL, Havard A, Teesson M. (2007). Patterns and correlates of attempted suicide by heroin users over a 3-year period: findings from the Australian treatment outcome study. *Drug Alcohol Depend*. 87;146–52.
10. Center for Substance Abuse Treatment—CSAT. (2009). Addressing suicidal thoughts and behaviours in substance abuse treatment. A Treatment Improvement Protocol (TIP), Series 50.HHS Publication No. (SMA) 09-4381. Rockville, MD: Substance Abuse and Mental Services Administration.

project notes

Using evidence to evaluate Australian drug trafficking thresholds: proportionate, equitable and just?

Caitlin Hughes, Alison Ritter, Nicholas Cowdery and Benjamin Phillips

One of the key measures in Australia for distinguishing drug users from traffickers and for determining the seriousness of drug trafficking offences is the quantity of drug involved. Yet these tools have been subject to very limited academic scrutiny. Consequently there remains a lack of recognition of the potential risks that drug trafficking thresholds bring (to defendants, prosecutors, courts and the broader community), and the peculiarities of the Australian drug trafficking threshold system that increase the potential for unintended harm. Of equal concern has been the inattention to evaluating the design of these tools.

New research by Hughes and Ritter demonstrates that, assessed against evidence of Australian drug markets, current ACT drug offence thresholds pose risks of unjustifiable or inequitable convictions. This provides troubling although partial evidence that current Australian drug trafficking thresholds may be contributing towards disproportionate sentencing of Australian drug offenders.

The study will extend the ACT study to evaluate, against research evidence, the trafficable threshold throughout all other Australian states and territories, taking into account inter-state differences in legal thresholds and drug markets. This will enable Australian policy makers and legislators to identify whether the problems identified are idiosyncratic to the ACT, or whether as hypothesised they represent a more systemic and wide-spread problem in the design of all or some Australian drug trafficking thresholds.

This project seeks to evaluate whether state and territory threshold quantities, as they apply to five classes of illicit drugs (heroin, meth/amphetamine, cocaine, MDMA and cannabis) allow the judiciary to filter out drug users from traffickers and to enable sanction based on the relative seriousness of the drug trafficking offence, taking into account traders in different controlled drugs. It further seeks to compare and contrast threshold design across Australia taking into account inter-state differences in current legal thresholds and drug markets, and to determine whether the problems identified with the ACT drug trafficking thresholds are common across all other state and territory systems.

This project will utilise data concerning drug use, drug markets and the potential seriousness of a drug trafficking offence to evaluate the relevant trafficable threshold quantities (for heroin, methamphetamine, cocaine, MDMA and cannabis) that operate in each state and territory. Data will be derived from national datasets (including the Illicit Drug Reporting System and the Ecstasy and related Drug Reporting System) and independent research studies.

This project is funded by the Australian Institute of Criminology. It will enable Australian policy makers and legislators to identify whether the problems identified to date are idiosyncratic to the ACT, or whether as hypothesised they represent a wide-spread problem in the design of some or all Australian drug trafficking thresholds. By building upon DPMP's existing research and utilising the expertise of one of Australia's top legal minds (Nicholas Cowdery), this project will not only evaluate the potential risks of Australian drug trafficking thresholds, but also ensure reflection on the role drug trafficking thresholds should play in Australian sentencing of serious drug offences, the extent to which legal reform is required and avenues for informing future law reform efforts.

Triple B: Bumps, babies and beyond – Wave III pilot follow-up of preschoolers

Delyse Hutchinson, Richard Mattick, Lucy Burns, Maria Gomez, Judy Wilson, Joanne Cassar, Alexander Aiken, Sarah Brann, Chiara Bucello, Ingrid Honan, Clare McCormack, Hannah Fielder, Genevieve Eckstein, Stephanie Scott-Smith, Stephen Allsop, Professor Ann Sanson, Professor Jake Najman, Susan Jacobs, Craig Olsson and Fiona Shand

The Triple B study (Bumps, Babies and Beyond) is a large NHMRC-funded birth cohort study which examines the effects of substance use in pregnant women and their partners during the prenatal period on infant development and family functioning. The study presently follows families from pregnancy through to infant age 12 months. The objective of Wave III is to examine family functioning and child development when the children reach three years of age.

The Wave III pilot is funded by Australian Rotary Health Research Fund/Mental Health of Young Australian Research and will:

- Pilot the research methodology for a new assessment wave of the Triple B study when the children reach three years of age;
- Examine the outcomes for an existing cohort of families participating in the Triple B study over a longer time-frame, via interview, survey and developmental assessment;
- Test the feasibility of following up families affected by substance use in a longitudinal study; and,
- Establish a protocol for applying for additional Category One funding from NHMRC to follow up the larger birth cohort.

Mothers and partners will be recontacted and invited to participate in Wave III. Those who chose to take part will complete consent forms and questionnaires. Mothers and their partners will be interviewed and surveyed; and the children will take part in a gold standard developmental assessment battery. The commencement of preschool and/or day care is also common around age three and will provide an opportunity for data collection from external sources, such as teachers and carers where relevant.

72 families are involved in the pilot study. At July 2012, 32 families had completed all components of the pilot.

Extension of the Triple B study to age three will greatly improve knowledge of the longitudinal course of the effects of substance use exposure both in utero and through childhood.

Importantly, the findings of this work will lead to improved knowledge of the effects of low to moderate alcohol, tobacco and cannabis use, which are most common in Australia. The results will directly inform the NHMRC guidelines for the use of alcohol and other drugs pre-conception, in pregnancy and whilst breastfeeding. The results will directly inform the development of effective public health prevention and early intervention campaigns which aim to educate parents to make informed choices about their substance use around the time of conception, during the course of pregnancy and whilst raising young children.

The results of the study will also identify the health and social support needs of parents with young children characterised by harmful and/or risky patterns of substance use, which will provide directions for improved treatment and service delivery. Improvements in interventions and treatment services will subsequently lead to reductions in early childhood developmental deficits and parent-child relationship problems in the Australian community. **cl**

Ongoing surveillance of the diversion and injection of the medications used in opioid substitution treatment

Richard Mattick, Louisa Degenhardt, Briony Larance, Nick Linzeris, Robert Ali, Rebecca Jenkinson and Paul Dietze

Minimising the extent of diversion and injection of the pharmaceutical opioids used in opioid substitution treatment (OST) reduces harms to the individual (such as dependence, injection-related injuries and diseases, and overdose) and protects the integrity of the OST program. Reports of buprenorphine or methadone injection can undermine public support for OST. This in turn may limit future investment and development, and hinder efforts to make OST more attractive and accessible.

The ongoing surveillance of the diversion and injection of the pharmaceutical opioids used in OST will build on the post-marketing studies of buprenorphine-naloxone (Suboxone® sublingual *tablets*) conducted by the National Drug and Alcohol Research Centre over the period 2006-2008. The diversion of methadone, buprenorphine and buprenorphine-naloxone (Suboxone® sublingual *tablets and film*) will be monitored to 2013 using a comparable methodology.

The project is supported through funding from Reckitt Benckiser.

Interviews with people who inject drugs, patients in opioid substitution treatment, and key experts commenced in early 2012. The project will:

- Monitor the extent of diversion and injection of the pharmaceutical opioids used in opioid substitution treatment (OST)
- Wherever possible comparisons will be made between methadone, buprenorphine, buprenorphine-naloxone tablets and buprenorphine-naloxone film.

The following data sources (utilised by the original post-marketing surveillance studies) will continue to be collected by the ongoing surveillance studies:

- indicators of availability of OST medications (sales/prescription data);
- interviews with regular injecting drug users (IDU) (via the Illicit Drug Reporting System, or IDRS);
- interviews with OST clients;
- interviews with key experts (KE); and
- population-level indicators of injection (NSP data).

The project will allow policy makers to determine the extent of diversion and injection of pharmaceutical opioids used in OST, and therefore to make decisions to minimise these problems and the harms associated with them. **ci**

abstracts

Comparative patterns of cognitive performance amongst opioid maintenance patients, abstinent opioid users and non-opioid users

Drug and Alcohol Dependence, Advance online publication, 1-7

Shane Darke, Skye McDonald, Sharlene Kaye and Michelle Torok

Background: To compare the cognitive performances of maintenance patients (MAIN), abstinent ex-users (ABST) and healthy non-heroin using controls (CON).

Methods: Case control study of 125 MAIN (94 subjects maintained on methadone, 31 on buprenorphine), 50 ABST and 50 CON. Neuropsychological tests measuring executive function, working memory, information processing speed, verbal learning and non-verbal learning were administered.

Results: There were no differences between the cognitive profiles of those maintained on methadone or buprenorphine on any administered test. After controlling for confounders, the MAIN group had poorer performance than controls in six of the 13 administered tests, and were poorer than the ABST group in five. The MAIN group exhibited

poorer performance in the Haylings Sentence Completion, Matrix Reasoning, Digit Symbol, Logical Memory (immediate and delayed recall), and the Complex Figure Test (immediate recall). There were no differences between the ABST and CON groups on any of the administered tests.

Conclusions: Poorer cognitive performance, across a range of test and domains, was seen amongst maintenance patients, regardless of their maintenance drug. This is a group that might benefit from approaches for managing individuals with cognitive and behavioural difficulties arising from brain dysfunction.

Alcohol, Tobacco, and Prescription Drugs: The Relationship With Illicit Drugs in the Treatment of Substance Users

Substance Use & Misuse, 47, 963-971

Maree Teesson, Philippa Farrugia, Katherine Mills, Wayne Hall and Andrew Baillie

Alcohol, tobacco, prescription drug, and illicit drug use frequently co-occur. This paper reviews the extent of this co-occurrence in both general population samples and clinical samples, and its impact on treatment outcome. We argue that the research base for understanding comorbidity among tobacco, alcohol, prescription, and illicit

drugs needs to be broadened. We specifically advocate for: (1) more epidemiological studies of relationships among alcohol, tobacco, and other illicit drug use; and (2) increased research on treatment options that address the problematic use of all of these drugs.

News media consumption among young Australians: Patterns of use and attitudes towards media reporting

Media International Australia, Incorporating Culture & Policy, 143, 16-27

Kari Lancaster, Caitlin Hughes and Bridget Spicer

Research suggests youth make active choices about how they use and respond to media. Yet publicly available information outlining patterns of youth media consumption and how content is perceived – especially in relation to reporting of issues of pertinence to youth – is limited. Using an online survey of 2296 Australians aged 16-24, we measured news media consumption and perceptions of reporting on illicit drugs. The study concluded that Australian youth are not 'deserting' news media; indeed, they have regular contact with news media. However, youth regard mainstream news as lacking credibility.

A postal intervention for dependent cannabis users

Drug and Alcohol Review, 31, 320-326

Melissa Norberg, Tracey Wright, Karina Hickey and Jan Copeland

Introduction: In Australia, many would-be treatment seekers for problematic cannabis use live in rural and remote areas, thereby limiting their access to face-to-face treatments. In order to address this gap in treatment availability, the present study aimed to assess the feasibility of a mail-based intervention for regular cannabis users.

Methods: Treatment was based upon cognitive-behavioural and motivational interviewing principles, and consisted of six treatment modules posted fortnightly to participants. In addition to the standardised modules, participants received personalised feedback at four points, based upon their mailed-in responses to the modules. Participants were recruited via advertisements in rural newspapers and a Google advertisement.

Results: A total of 268 people expressed interest in this study and 36 participants went on to complete treatment. Treatment completers demonstrated a significant reduction in cannabis use at the 1 month follow-up.

Conclusions: Transposing face-to-face treatments into a mailed format has shown some promise and future research is warranted to determine the efficacy of such treatments in a controlled study.

Subsidising patient dispensing fees: The cost of injecting equity into the opioid pharmacotherapy maintenance system

Drug and Alcohol Review, Advance online publication, 1-7

Jenny Chalmers and Alison Ritter

Introduction: Australian pharmacotherapy maintenance programs incur costs to patients. These dispensing fees represent a financial burden to patients and are inconsistent with Australian health-care principles. No previous work has examined the current costs nor the future predicted costs if government subsidised dispensing fees.

Design and method: A system dynamics model, which simulated the flow of patients into and out of methadone maintenance treatment, was developed. Costs were imputed

from existing research data. The approach enabled simulation of possible behavioural responses to a fee subsidy (such as higher retention) and new estimates of costs were derived under such scenarios.

Results: Current modelled costs (AUS\$11.73m per month) were largely borne by state/territory government (43%), with patients bearing one-third (33%) of the total costs and the Commonwealth one-quarter (24%). Assuming no behavioural changes associated with fee subsidies, the cost of subsidising the dispensing fees of Australian methadone patients would be \$3.9m per month. If retention were improved as a result of fee subsidy, treatment numbers would increase and the model estimates an additional cost of \$0.8m per month. If this was coupled with greater numbers entering treatment, the costs would increase by a further \$0.4m per month. In total, full fee subsidy with modelled behavioural changes would increase per annum government expenditure by \$81.8m to \$175.8m.

Conclusions: If government provided dispensing fee relief for methadone maintenance patients, it would be a costly exercise. However, these additional costs are offset by the social and health gains achieved from the methadone maintenance program.

The impact of comorbid cannabis and methamphetamine use on mental health among regular ecstasy users

Addictive Behaviors, Advance online publication, 1-5

Laura Scott, Amanda Roxburgh, Raimondo Bruno, Allison Matthews and Lucy Burns

Objective: Residual effects of ecstasy use induce neurotransmitter changes that make it biologically plausible that extended use of the drug may induce psychological distress. However, there has been only mixed support for this in the literature. The presence of polysubstance use is a confounding factor. The aim of this study was to investigate whether regular cannabis and/or regular methamphetamine use confers additional risk of poor mental health and high levels of psychological distress, beyond regular ecstasy use alone.

Method: Three years of data from a yearly, cross-sectional, quantitative survey of Australian regular ecstasy users was examined. Participants were divided into four groups according to whether they regularly (at least monthly) used ecstasy only (n = 936), ecstasy and weekly cannabis (n = 697), ecstasy and

weekly methamphetamine (n = 108) or ecstasy, weekly cannabis and weekly methamphetamine (n = 180). Self-reported mental health problems and Kessler Psychological Distress Scale (K10) were examined.

Results: Approximately one-fifth of participants self-reported at least one mental health problem, most commonly depression and anxiety. The addition of regular cannabis and/or methamphetamine use substantially increases the likelihood of self-reported mental health problems, particularly with regard to paranoia, over regular ecstasy use alone. Regular cannabis use remained significantly associated with self reported mental health problems even when other differences between groups were accounted for. Regular cannabis and methamphetamine use was also associated with earlier initiation to ecstasy use.

Conclusions: These findings suggest that patterns of drug use can help identify at risk groups that could benefit from targeted approaches in education and interventions. Given that early initiation to substance use was more common in those with regular cannabis and methamphetamine use and given that this group had a higher likelihood of mental health problems, work around delaying onset of initiation should continue to be a priority.

Training and tailored outreach support to improve alcohol screening and brief intervention in Aboriginal Community Controlled Health Services

Drug and Alcohol Review, Advance online publication, 1-8

Anton Clifford, Anthony Shakeshaft and Catherine Deans

Aim: Aboriginal Community Controlled Health Services (ACCHSs) are often the primary point of contact for Indigenous Australians experiencing alcohol-related harms. Screening and brief intervention (SBI) is a cost-effective treatment for reducing these harms. Factors influencing evidence-based alcohol SBI delivery in ACCHSs have been identified. Evaluations of strategies targeting these factors are required. The aim of this paper is to quantify the effect of training and tailored outreach support on the delivery of alcohol SBI in four Aboriginal Community Controlled Health Services (ACCHSs).

Method: A pre- post- assessment of alcohol information recorded in computerised patient information systems of four ACCHSs.

Results: For ACCHSs combined there was a statistically significant increase in the proportion of eligible clients with an electronic record of any alcohol information (3.2% to 7.5%, $P < 0.0001$) and a valid alcohol screen (1.6% to 6.5%, $P < 0.0001$), and brief intervention (25.75% to 47.7%, $P < 0.0001$). All four ACCHSs achieved statistically significant increases in the proportion of clients with a complete alcohol screen (10.3%; 7.4%; 2%, $P < 0.0001$ and 1.3%, $P < 0.05$), and two in the proportion with a heavy drinking screen (7% and 3.1%, $P < 0.0001$).

Conclusions: Implementing evidence-based alcohol SBI in ACCHSs is likely to require multiple strategies tailored to the characteristics of specific services. Outreach support provided by local drug and alcohol practitioners and a one item heavy drinking screen offer considerable promise for increasing routine alcohol SBI delivery in ACCHSs. Training and outreach support appear to be effective for achieving modest improvements in alcohol SBI delivery in ACCHSs.

Suicide risk assessment practices: A national survey of generalist drug and alcohol residential rehabilitation services

Drug and Alcohol Review, Advance online publication, 1-7

Joanne Ross, Shane Darke, Erin Kelly and Kate Hetherington

Aim: Clients of drug and alcohol treatment services represent a high-risk group for attempted and completed suicide. The current study sought to examine suicide risk assessment practices in Australian generalist residential rehabilitation services.

Method: Semi-structured interviews were conducted with managers of residential rehabilitation services and with volunteers from staff responsible for the case management/treatment of clients.

Results: Ninety per cent of services participated. In total, 64 managers and 142 staff were interviewed. One-third of services had no documented policy for the assessment and management of suicide risk, and one-quarter of staff had never received formal training in risk assessment. In more than one-third of agencies staff were not expected to use a structured suicide risk assessment tool when assessing a client's acute risk. To varying degrees agencies were gathering information about psychiatric comorbidity, but this information did not appear to be routinely integrated into the client's suicide risk assessment.

Conclusion: The development of clearly documented policies, standardised assessment tools and the provision of annual training for all staff would help to address some of the gaps identified in current practice.

Measuring research influence on drug policy: A case example of two epidemiological monitoring systems

International Journal of Drug Policy, Advance online publication, 1-8

Alison Ritter and Kari Lancaster

Background: Assessing the extent to which drug research influences and impacts upon policy decision-making needs to go beyond bibliometric analysis of academic citations. Policy makers do not necessarily access the academic literature, and policy processes are largely iterative and rely on interactions and relationships. Furthermore, media representation of research contributes to public opinion and can influence policy uptake.

In this context, assessing research influence involves examining the extent to which a research project is taken up in policy documents, used within policy processes, and disseminated via the media.

Methods: This three component approach is demonstrated using a case example of two ongoing illicit drug monitoring systems: the Illicit Drug Reporting System (IDRS) and the Ecstasy and related Drugs Reporting System (EDRS). Systematic searches for reference to the IDRS and/or EDRS within policy documents, across multiple policy processes (such as parliamentary inquiries) and in the media, in conjunction with analysis of the types of mentions in these three sources, enables an analysis of policy influence. The context for the research is also described as the foundation for the approach.

Results: The application of the three component approach to the case study demonstrates a practical and systematic retrospective approach to measure drug research influence. For example, the ways in which the IDRS and EDRS were mentioned in policy documents demonstrated research utilisation. Policy processes were inclusive of IDRS and EDRS findings, while the media analysis revealed only a small contribution in the context of wider media reporting.

Conclusion: Consistent with theories of policy processes, assessing the extent of research influence requires a systematic analysis of policy documents and processes. Development of such analyses and associated

methods will better equip researchers to evaluate the impact of research.

Psychometric evaluation of the DSM-IV criterion B mania symptoms in an Australian national sample

Psychological Medicine, Advance online publication, 1-11

Natacha Carragher, Lauren M. Weinstock and David Strong

Background: Although numerous studies have examined the latent structure of major depression, less attention has focused on mania. This paper presents the first investigation outside the USA to evaluate the psychometric properties of the DSM-IV criterion B mania symptoms using item response theory (IRT).

Method: Data were drawn from the Australian 2007 National Survey of Mental Health and Well-Being (NSMHWB, $n=8841$). The psychometric performance of the mania symptoms was evaluated using a two-parameter logistic model. Because substance use disorders (SUDs) frequently co-occur with mania and can influence manic symptom expression, differential item functioning (DIF) between mania respondents with/without a SUD diagnosis was also assessed.

Results: Factor analysis supported a unidimensional trait underlying mania. The grandiosity symptom displayed the highest discrimination whereas discrimination was lowest for decreased need for sleep. Relatively speaking, grandiosity tapped the severe end and increased goal-oriented activities tapped the mild end of the mania severity continuum. The symptoms generally performed equivalently between those with/without a SUD diagnosis, with one exception; the activities with painful consequences symptom was endorsed at lower levels of severity, and hence more frequently, by those with a SUD diagnosis versus those without a SUD diagnosis.

Conclusions: Accurate conceptualization of latent structure has crucial theoretical, statistical and clinical implications. The symptoms generally performed well in distinguishing between respondents with differing levels of liability, but others did not, suggesting modification is warranted to ensure optimal use in epidemiological samples. Given the dearth of psychometric evaluation studies of mania, further research replicating these results is necessary.

Maintenance drugs to treat opioid dependence

British Medical Journal, 244, 1-5

Michael Farrell, Alex Wodak and Linda Gowing

This article is intended for practitioners who occasionally manage patients with opioid dependence. Methadone, a mu opioid agonist, and buprenorphine, a partial agonist, are the main drug treatments for dependence on opioids (which include heroin, morphine, and oxycodone, as well as the other pharmaceutical opioids) for detoxification, maintenance, and ultimately abstinence. Treatment with maintenance goals is referred to as opioid substitution treatment or opioid agonist pharmacotherapy. Such treatment is reserved for patients with clearly established opioid dependence and prolonged daily opioid use (by either smoking or injecting). In some countries the combination of buprenorphine and naloxone is preferred (and is now becoming available as a film taken sublingually). Prescription heroin, known in the United Kingdom as heroin assisted treatment or injectable opiate treatment, is used in some countries but is not discussed in this article. Naltrexone blocks the effects of heroin on the mu receptor, but oral naltrexone treatment has had low adherence and high discontinuity rates. Use of naltrexone in the form of implants and extended release injection is currently in the research and development phase and is outside the scope of this paper.

Emerging psychoactive substance use among regular ecstasy users in Australia

Drug and Alcohol Dependence, 124, 19-25

Raimondo Bruno, Allison J Matthews, Matthew Dunn, Rosa Alati, Fairlie McIlwraith, Sophie Hickey, Lucy Burns and Natasha Sindich

Background: The past decade has seen the development of an array of emerging psychoactive substances (EPS), however, there is minimal information on the extent of their use outside Europe. This study aimed to determine the extent of use of EPS from stimulant (such as mephedrone) and psychedelic classes (such as 5-methoxydimethyltryptamine [5-MeO-DMT]) among an Australian sample of regular ecstasy users (REU). Further, to determine if consumers of these drugs represent a distinct subgroup of REU.

Methods: Australian national cross-sectional surveys of 693 regular (at least monthly) ecstasy users conducted during 2010.

Results: More than one quarter (28%) of REU had used an EPS in the past six months, most commonly from the stimulant class (20%, typically mephedrone, 17%) rather than the psychedelic class (13%). Demographics and risk behaviours of REU that used stimulant EPS were largely no different from non-EPS consuming REU. Those using psychedelic EPS were distinct, initiating ecstasy use earlier, more frequently using multiple substances (cannabis, inhalants, GHB, ketamine) and more commonly experiencing legal, psychological and social problems.

Conclusions: Psychedelic EPS use appears largely restricted to a distinct subset of REU with high-level non-injecting polydrug use, but use appears generally limited. The demographic similarity of stimulant EPS consumers with 'mainstream' REU, in conjunction with positive responses to the psychoactive effects of these drugs and declining ecstasy purity, suggests strong potential for stimulant EPS to expand further into ecstasy markets. Such drugs may have a greater public health impact than ecstasy, and merit careful monitoring into the future.

Cost per incident of alcohol-related crime in New South Wales

Drug and Alcohol Review, Advance online publication, 1-7

Joshua Byrnes, Christopher Doran and Anthony Shakeshaft

Aims: The purpose of this paper is to provide a per incident of crime cost measure for New South Wales that is suitable for the use within cost-effectiveness studies of interventions aimed at reducing the burden of alcohol. This paper seeks to quantify the individual cost of an assault, property damage, sexual offence and disorderly conduct in New South Wales.

Method: Costs regarding the criminal act, police involvement, prosecution in criminal courts and incarceration are estimated and then using a four-stage probability analysis, the expected cost per incident is calculated.

Results: It is found that expected cost per incident for assault, sexual offence, property damage and disorderly conduct (in 2006 dollar values) is \$3982, \$5976, \$1166 and \$501 respectively.

Discussion and Conclusions: A large total cost figure is a powerful policy motivator; however, for the purpose of economic analysis it is often more useful to estimate the per incident cost. This research furthers the existing research on cost of crime estimates

and facilitates future cost-effectiveness and other economic analysis of interventions that reduce alcohol-related crime.

Cannabis and depression: An integrative data analysis of four Australasian cohorts

Drug and Alcohol Dependence, Advance online publication, 1-10

L. John Horwood, David M. Fergusson, Carolyn Coffey, George C. Patton, Robert Tait, Diana Smart, Primose Letcher, Edmund Silins and Delyse Hutchinson

Background: This study presents an integrative data analysis of the association between frequency of cannabis use and severity of depressive symptoms using data from four Australasian cohort studies. The integrated data comprised observations on over 6900 individuals studied on up to seven occasions between adolescence and mature adulthood.

Method: Repeated measures data on frequency of cannabis use (not used/<monthly/≥monthly/≥weekly) and concurrently assessed depression scores were pooled over the four cohorts. Regression models were fitted to estimate the strength of association between cannabis use and depression. Fixed effects regression methods were used to control for confounding by non-observed fixed factors.

Results: Increasing frequency of cannabis use was associated with increasing depressive symptoms ($p < 0.001$). In the pooled data weekly users of cannabis had depression scores that were 0.32 (95%CI 0.27–0.37) SD higher than non-users. The association was reduced but remained significant ($p < 0.001$) upon adjustment for confounding. After adjustment depression scores for weekly users were 0.24 (95%CI 0.18–0.30) SD higher than non-users. The adjusted associations were similar across cohorts. There was a weak age x cannabis use interaction ($p < 0.05$) suggesting that the association was strongest in adolescence. Attempts to further test the direction of causality using SEM methods proved equivocal.

Conclusions: More frequent cannabis use was associated with modest increases in rates of depressive symptoms. This association was stronger in adolescence and declined thereafter. However, it was not possible from the available data to draw a definitive conclusion as to the likely direction of causality between cannabis use and depression.

Health of the world's adolescents: a synthesis of internationally comparable data

The Lancet, 379, 1665-1675

George Patton, Carolyn Coffey, Claudia Cappa, Dorothy Currie, Leanne Riley, Fiona Gore, Louisa Degenhardt, Dominic Richardson, Nan Astone, Adesola O Sangowawa, Ali Mokdad and Jane Ferguson

Summary: Adolescence and young adulthood offer opportunities for health gains both through prevention and early clinical intervention. Yet development of health information systems to support this work has been weak and so far lagged behind those for early childhood and adulthood. With falls in the number of deaths in earlier childhood in many countries and a shifting emphasis to non-communicable disease risks, injuries, and mental health, there are good reasons to assess the present sources of health information for young people. We derive indicators from the conceptual framework for the Series on adolescent health and assess the available data to describe them. We selected indicators for their public health importance and their coverage of major health outcomes in young people, health risk behaviours and states, risk and protective factors, social role transitions relevant to health, and health service inputs. We then specify definitions that maximise international comparability. Even with this optimisation of data usage, only seven of the 25 indicators, covered at least 50% of the world's adolescents. The worst adolescent health profiles are in sub-Saharan Africa, with persisting high mortality from maternal and infectious causes. Risks for non-communicable diseases are spreading rapidly, with the highest rates of tobacco use and overweight, and lowest rates of physical activity, predominantly in adolescents living in low-income and middle-income countries. Even for present global health agendas, such as HIV infection and maternal mortality, data sources are incomplete for adolescents. We propose a series of steps that include better coordination and use of data collected across countries, greater harmonisation of school-based surveys, further development of strategies for socially marginalised youth, targeted research into the validity and use of these health indicators, advocating for adolescent-health information within new global health initiatives, and a recommendation that every country produce a regular report on the health of its adolescents.

Study protocol: a dissemination trial of computerized psychological treatment for depression and alcohol/other drug use comorbidity in an Australian clinical service

BMC Psychiatry, 12, 1-13.

Frances Kay-Lambkin, Amanda Baker, Alison Healey, Samantha Wolfe, Aaron Simpson, Michelle Brooks, Jenny Bowman, Steve Childs and Mary Joy

Background: The rise of the internet and related technologies has significant implications for the treatment of complex health problems, including the combination of depression and alcohol/other drug (AOD) misuse. To date, no research exists to test the real world uptake of internet and computer-delivered treatment programs in clinical practice. This study is important, as it is the first to examine the adoption of the SHADE treatment program, a DVD-based psychological treatment for depression and AOD use comorbidity, by clinicians working in a publicly-funded AOD clinical service. The study protocol that follows describes the methodology of this dissemination trial.

Method: 19 clinicians within an AOD service on the Central Coast of New South Wales, Australia, will be recruited to the trial. Consenting clinicians will participate in a baseline focus group discussion designed to explore their experiences and perceived barriers to adopting innovation in their clinical practice. Computer comfort and openness to innovation will also be assessed. Throughout the trial, current, new and wait-list clients will be referred to the research program via the clinical service, which will involve clients completing a baseline and 15-week follow-up clinical assessment with independent research assistants, comprising a range of mental health and AOD measures. Clinicians will also complete session checklists following each clinical session with a client, outlining the extent to which the SHADE computer program was used. Therapeutic alliance will be measured at intake and discharge from both the clinician and client perspectives.

Discussion: This study will provide comprehensive data on the factors associated with the adoption of an innovative, computer-delivered evidence-based treatment program, SHADE, by clinicians working in an AOD service. The results will contribute to the

development of a model of dissemination of SHADE, which could be applied to a range of technological innovations.

Maternal and Neonatal Complications of Substance Abuse in Iranian Pregnant Women

Acta Medica Iranica, 50, 411-416.

Soraya Saleh Gargari, Masoumeh Fallahian, Ladan Haghighi, Maryam Hosseinneshad-Yazdi, Elahe Dashti and Kate Dolan

There is an increased prevalence of maternal substance abuse during pregnancy in younger women in all socioeconomic classes and races. Our aim was to determine the prevalence and correlates of self-reported substance abuse among pregnant women and obstetric complications or neonatal outcomes in Iran. This retrospective cohort study is covering a five year period on medical records of pregnant women attending the maternity unit of four major hospitals (Mahdieh, Taleghani, Imam Hossein and Akbarabadi Hospitals). Women who reported using opium, heroin, crack, cannabis or methamphetamine were compared with women with no reported history of drug abuse for obstetric complications and prenatal morbidity and neonatal mortality. From 100,620 deliveries substance abuse was recorded for 519 women giving a prevalence of 0.5%. Opium was the most prevalent substance abused followed by crack (a mix of heroin and amphetamines). The exposed group had significantly more obstetric complications including preterm low birth weight and postpartum hemorrhage than the non-exposed group. The exposed group had significantly worse prenatal outcomes including more admissions to intensive care unit and higher infant mortality than the non-exposed group. None of the women in the exposed group was on methadone treatment at time of delivery. Risks of maternal and neonatal complications were increased in substance using pregnant women, especially preterm birth and low birth weight. We recommend a multidisciplinary team to provide methadone maintenance therapy for substance using pregnant women and urinary screen of all pregnant women presenting to hospital. **cl**

recent publications

NDARC Technical Report

- 320. Taplin, S., & Mattick, R.** (2011). *Child protection and mothers in substance abuse treatment*. Sydney, NSW: National Drug and Alcohol Research Centre, University of New South Wales.
- 321. Vogl, L., Newton, N., Teesson, M., Swift, W., Karageorge, A., Deans, C., McKetin, R., Steadman, B., Jones, J., Dillon, P., Havard, A., Andrews, G.** (2012). *Climate Schools: universal computer-based programs to prevent alcohol and other drug use in adolescence*. Sydney, NSW: National Drug and Alcohol Research Centre, University of New South Wales.

Australian Drug Trends Series

- 73. Stafford, J., Burns, L.** (2012). *Australian Drug Trends 2011: Findings from the Illicit Drugs Reporting System (IDRS)*. Sydney, NSW: National Drug and Alcohol Research Centre, University of New South Wales.
- 74. Phillips, B., Burns, L.** (2012). *NSW Drug Trends 2011: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney, NSW: National Drug and Alcohol Research Centre, University of New South Wales.
- 75. Arora, S., Burns, L.** (2012). *ACT Drug Trends 2011: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney, NSW: National Drug and Alcohol Research Centre, University of New South Wales.
- 76. Kirwan, A., Dietze, P., & Lloyd, B.** (2012). *Victorian Drug Trends 2011: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney, NSW: National Drug and Alcohol Research Centre, University of New South Wales.
- 77. de Graaff, B., Bruno, R.** (2012). *Tasmanian Drug Trends 2011: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney, NSW: National Drug and Alcohol Research Centre, University of New South Wales.
- 78. Sutherland, R., Burns, L.** (2012). *SA Drug Trends 2011: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney, NSW: National Drug and Alcohol Research Centre, University of New South Wales.
- 79. Rainsford, C., Lenton, S.** (2012). *WA Drug Trends 2011: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney, NSW: National Drug and Alcohol Research Centre, University of New South Wales.
- 80. Rysavy, P., Moon, C.** (2012). *NT Drug Trends 2011: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney, NSW: National Drug and Alcohol Research Centre, University of New South Wales.

81. Mcllwraith, F., Hickey, S., & Alati, R. (2012). *Queensland Drug Trends 2011: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney, NSW: National Drug and Alcohol Research Centre, University of New South Wales.

82. Sindicich, N., Burns, L. (2012). *Australian Trends in Ecstasy and Related Drug Markets 2011: Findings from the Ecstasy and Related Drugs Reporting System (EDRS)*. Sydney, NSW: National Drug and Alcohol Research Centre, University of New South Wales.

Other NDARC/NCPIC Publications

- Dillon, P., & Copeland, J.** (2012). Synthetic cannabinoids: The Australian experience. *NCPIC Bulletin*, 13 (March), 1-10.
- Howard, J., Butt, J., Wright, T., Norberg, M., Copeland, J. & Wilkes, T.** (2012). Raising awareness about cannabis, its use and impact on health and wellbeing among Indigenous Australians. *NCPIC Bulletin*, 14, 1-13.
- Kirwan, A., Reddel, S., & Dietze, P.** (2012). Licit and illicit quetiapine use among IDRS participants. *Drug Trends Bulletin*, July, [1-4].
- Mcllwraith, F., Hickey, S. & Alati, R.** (2012). Benzodiazepine update: alprazolam and other benzodiazepine use among people who inject drugs. *Drug Trends Bulletin*, April, 1-5.
- Ritter, A., & Matthew-Simmons, F.** (2012). What does the research evidence tell us about what Australians think about the legal status of drugs? *DPMP Bulletin Series, Bulletin No. 21*, 1-2.
- Sutherland, R., L. Burns, L.** (2012). Criminal activity among regular ecstasy users in Australia: Prevalence and predictors. *EDRS Drug Trends Bulletin*, July, [1-6].
- Van Buskirk, J., Phillips, B., & Burns, L.** (2012). Recruiting a sample of regular ecstasy users (REU) in Australia's remote Top End: price, population and seasonal variability. *EDRS Drug Trends Bulletin*, April, 1-4.

Published articles, chapters and books

- Agrawal, A., Nelson, E. C., Littlefield, A. K., Bucholz, K. K., Degenhardt, L., Henders, A. K., Madden, P. A. F., Martin, N. G., Montgomery, G. W., Pergadia, M. L., Sher, K. J., Heath, A. C., Lynskey, M. T.** (2012). Cannabinoid receptor genotype moderation of the effects of childhood physical abuse on anhedonia and depression. *Archives of General Psychiatry*, 69(7), 732-740.
- Brooks, M., Kay-Lambkin, F., Bowman, J., & Childs, S.** (2012). Self-compassion amongst clients with problematic alcohol use.

Mindfulness, Advance online publication, 1-10.

Bruno, R., Matthews, A. J., Dunn, M., Alati, R., Mcllwraith, F., Hickey, S., Burns, L., Sindicich, N. (2012). Emerging psychoactive substance use among regular ecstasy users in Australia. *Drug and Alcohol Dependence*, 124(1-2), 19-25.

Bujarski, S. J., Norberg, M. M., & Copeland, J. (2012). The association between distress tolerance and cannabis use-related problems: The mediating and moderating roles of coping motives and gender. *Addictive Behaviors*, 37(10), 1181-1184.

Byrnes, J. M., Doran, C. M., & Shakeshaft, A. P. (2012). Cost per incident of alcohol-related crime in New South Wales. *Drug and Alcohol Review, Advance online publication*, 1-7.

Byrnes, J. M., Petrie, D. J., Doran, C. M., & Shakeshaft, A. P. (2012). The efficiency of a volumetric alcohol tax in Australia. *Applied Health Economics & Health Policy*, 10(1), 37-49.

Byrnes, J. M., Shakeshaft, A. P., Petrie, D., & Doran, C. M. (2012). Can harms associated with high-intensity drinking be reduced by increasing the price of alcohol? *Drug and Alcohol Review, Advance online publication*, [1-4].

Calabria, B., Clifford, A., Shakeshaft, A. P., & Doran, C. M. (2012). A systematic review of family-based interventions targeting alcohol misuse and their potential to reduce alcohol-related harm in Indigenous communities. *Journal of Studies on Alcohol and Drugs*, 73(3), 477-488.

Calabria, B., Swift, W., Slade, T., Hall, W., & Copeland, J. (2012). The perceived health risks of cannabis use in an Australian household survey. *Drug and Alcohol Review, Advance online publication*, 1-4.

Chalmers, J., & Ritter, A. (2012). Subsidising patient dispensing fees: The cost of injecting equity into the opioid pharmacotherapy maintenance system. *Drug and Alcohol Review, Advance online publication*, [1-7].

Charlson, F. J., Steel, Z., Degenhardt, L., Chey, T., Silove, D., Marnane, C., & Whiteford, H. A. (2012). Predicting the impact of the 2011 conflict in Libya on population mental health: PTSD and depression prevalence and mental health service requirements. *PLoS ONE*, 7(7), 1-11.

Clifford, A., Shakeshaft, A., & Deans, C. (2012). Training and tailored outreach support to improve alcohol screening and brief intervention in Aboriginal Community Controlled Health Services. *Drug and Alcohol Review, Advance online publication*, 1-8.

Connolly, J. M., Kavanagh, D. J., Baker, A. L., Kay-Lambkin, F. J., Lewin, T. J., Davis, P. J., & Quek, L. H. (2012). Craving as a predictor of

treatment outcomes in heavy drinkers with comorbid depressed mood. *Addictive Behaviors, Advance online publication*, [1-8].

Darke, S., & Burns, L. (2012). Commentary on Friguls et al. (2012): Illicit drugs and pregnancy – testing is not a substitute for good clinical rapport. *Addiction, 107*(8), 1480–1481.

Darke, S., Deady, M., & Duflou, J. (2012). Toxicology and characteristics of deaths involving Zolpidem in New South Wales, Australia 2001–2010. *Journal of Forensic Sciences, Advance online publication*, 1-4.

Darke, S., Kaye, S., & Torok, M. (2012). Age-related patterns of drug use initiation among polydrug using regular psychostimulant users. *Drug and Alcohol Review, Advance online publication*, 1-6.

Darke, S., McDonald, S., Kaye, S., & Torok, M. (2012). Comparative patterns of cognitive performance amongst opioid maintenance patients, abstinent opioid users and non-opioid users. *Drug and Alcohol Dependence, Advance online publication*, 1-7.

Darke, S., McDonald, S., Kaye, S., & Torok, M. (2012). Prevalence and correlates of traumatic brain injury amongst heroin users. *Addiction Research and Theory, Advance online publication*, 1-7.

Donato-Hunt, C., Munot, S., & Copeland, J. (2012). Alcohol, tobacco and illicit drug use among six culturally diverse communities in Sydney. *Drug and Alcohol Review, Advance online publication*, 1-9.

Farrell, M., Wodak, A., & Gowing, L. (2012). Maintenance drugs to treat opioid dependence. *BMJ, 244*(e2823), 1-5.

Gargari, S. S., Fallahian, M., Haghghi, L., Hosseinnazhad-Yazdi, M., Dashti, E., & Dolan, K. (2012). Maternal and neonatal complications of substance abuse in Iranian pregnant women. *Acta Medica Iranica, 50*(6), 411-416.

Horwood, L. J., Fergusson, D. M., Coffey, C., Patton, G. C., Tait, R., Smart, D., Letcher, P., Silins, E., Hutchinson, D. M. (2012). Cannabis and depression: An integrative data analysis of four Australasian cohorts. *Drug and Alcohol Dependence, Advance online publication*, 1-10.

Hughes, C. E., & James, S. (2012). Performance monitoring of Australian drug law enforcement agencies: impediments to and prospects for reform. *Current Issues in Criminal Justice, 23*(3), 295-312.

Islam, M. M., Topp, L., Day, C. A., Dawson, A., & Conigrave, C. M. (2012). The accessibility, acceptability, health impact and cost implications of primary healthcare outlets that target injecting drug users: A narrative synthesis of literature. *International Journal of Drug Policy, 23*(2), 94-102.

Islam, M. M., Topp, L., Day, C. A., Dawson, A., & Conigrave, K. M. (2012). Primary healthcare outlets that target injecting drug users:

opportunity to make services accessible and acceptable to the target group. *International Journal of Drug Policy, 23*(2), 109-110.

Kay-Lambkin, F., Baker, A. L., Healey, A., Wolfe, S., Simpson, A., Brooks, M., Bowman, J., Childs, S., Joy, M. E. (2012). Study protocol: a dissemination trial of computerized psychological treatment for depression and alcohol/other drug use comorbidity in an Australian clinical service. *BMC Psychiatry, 12*(77), [1-13].

Kelly, P. J., Baker, A. L., Deane, F. P., Kay-Lambkin, F. J., Bonevski, B., & Tregarthen, J. (2012). Prevalence of smoking and other health risk factors in people attending residential substance abuse treatment. *Drug and Alcohol Review, Advance online publication*, 1-7.

Lancaster, K., Hughes, C. E., & Spicer, B. (2012). Media ownership and content diversity: reporting of illicit drug issues in metropolitan daily newspapers. *Australian Journalism Review, 34*(1), 53-66.

Lancaster, K., Hughes, C. E., & Spicer, B. (2012). News media consumption among young Australians: Patterns of use and attitudes towards media reporting. *Media International Australia, 143*(May), 16-27.

Lee, N., Pennay, A., Hester, R., McKetin, R., Nielsen, S., & Ferris, J. (2012). A pilot randomised controlled trial of modafinil during acute methamphetamine withdrawal: Feasibility, tolerability and clinical outcomes. *Drug and Alcohol Review, Advance online publication*, 1-8.

McBride, N., Carruthers, S., & Hutchinson, D. (2012). Reducing alcohol use during pregnancy: Listening to women who drink as an intervention starting point. A formative intervention research study. *Global Health Promotion, 19*(2), 6-18.

McKetin, R., Dunlop, A. J., Holland, R. M., Sutherland, R. A., Baker, A. L., Salmon, A. M., & Hudson, S. L. (2012). Treatment outcomes for methamphetamine users receiving outpatient counselling from the Stimulant Treatment Program in Australia. *Drug and Alcohol Review, Advance online publication*, 1-8.

McKetin, R., Najman, J. M., Baker, A., Lubman, D. I., Dawe, S., Ali, R., Lee, N. K., Mattick, R. P., Mamun, A. (2012). Evaluating the impact of community-based treatment options on methamphetamine use: findings from the methamphetamine Treatment Evaluation Study (MATES). *Addiction, Advance online publication*, 1-25.

Meltzer, H., Bebbington, P., Brugha, T., Farrell, M., & Jenkins, R. (2012). The relationship between personal debt and specific common mental disorders. *The European Journal of Public Health, Advance online publication*, 1-6.

Mission Australia (2012). *The Michael Project, 2007-2010: New perspectives and possibilities for homeless men*. Sydney: Mission Australia.

Mission Australia, Murdoch University, National Drug & Alcohol Research Centre, University of New South Wales. (2011). How homeless men are faring: some initial outcomes of the Michael Project. *Snapshot, 2011*, 1-12.

Norberg, M. M., Wright, T., Hickey, K., & Copeland, J. (2012). A postal intervention for dependent cannabis users. *Drug and Alcohol Review, 31*(3), 320–3263159.

Patton, G. C., Coffey, C., Cappa, C., Currie, D., Leanne Riley, L., Gore, G., Degenhardt, L., Richardson, D., Astone, N., Sangowawa, A. O., Mokdad, A., Ferguson, J. (2012). Health of the world's adolescents: a synthesis of internationally comparable data. *The Lancet, 379*(9826), 1665–1675.

Plüddemann, A., Flisher, A. J., McKetin, R., Parry, C. D., & Lombard, C. J. (2012). Methamphetamine use and sexual risk behavior among high school students in Cape Town, South Africa. *Journal of Child and Adolescent Substance Abuse, 21*(2), 181-191.

Rooke, S. (2012). World wide weed: global trends in cannabis cultivation and its control: [book review]. *Drug and Alcohol Review, 31*(3), 361-362.

Ross, J., Darke, S., Kelly, E., & Hetherington, K. (2012). Suicide risk assessment practices: A national survey of generalist drug and alcohol residential rehabilitation services. *Drug and Alcohol Review, Advance online publication*, 1-7

Scott, L. A., Roxburgh, A., Bruno, R., Matthews, A., & Burns, L. (2012). The impact of comorbid cannabis and methamphetamine use on mental health among regular ecstasy users. *Addictive Behaviors, 37*(9), 1058-1062.

Tait, R. J., McKetin, R., Kay-Lambkin, F., Bennett, K., Tam, A., Bennett, A., Geddes, J., Garrick, A., Christensen, H., Griffiths, K. M. (2012). Breakingtheice: A protocol for a randomised controlled trial of an internet-based intervention addressing amphetamine-type stimulant use. *BMC Psychiatry, 67*, [1-17].

Teesson, M., Farrugia, P., Mills, K., Hall, W., & Baillie, A. (2012). Alcohol, tobacco, and prescription drugs: the relationship with illicit drugs in the treatment of substance users. *Substance Use & Misuse, 47*(8-9), 963-971.

Torok, M., Darke, S., & Kaye, S. (2012). Attention Deficit Hyperactivity Disorder and severity of substance use: the role of comorbid psychopathology. *Psychology of Addictive Behaviors, Advance online publication*, 1-7.

Watkins, R. E., Elliott, E. J., Mutch, R. C., Latimer, J., Wilkins, A., Payne, J. M., Jones, H. M., Miers, S., Peardon, E., McKenzie, A., D'Antoine, H. A., Russell, E., Fitzpatrick, J., O'Leary, C. M., Halliday, J., Hayes, L., Burns, L., Carter, M., Bower, C. (2012). Health professionals' perceptions about the adoption of existing guidelines for the diagnosis of fetal alcohol spectrum disorders in Australia. *BMC Pediatrics, 12*(69).

staff list

National Drug and Alcohol Research Centre

Staff as of 27 July 2012

Office of the Director

Michael Farrell – Professor, Director
Alison Ritter – Professor, Assistant Director, Director, DPMP
Anthony Shakeshaft – Associate Professor, Assistant Director
Karen Hill – Centre Operations Manager
Marion Downey – NDARC Communications Manager

Academic Staff

David Allsop – Lecturer, NCPIC
Emma Barrett – Research Associate
Deborah Bradford – Doctoral Research Fellow
Courtney Breen – Research Fellow
Lucy Burns – Senior Lecturer
Natacha Carragher – Post-Doctoral Research Fellow
Jenny Chalmers – Senior Research Fellow
Catherine Chapman – Senior Research Fellow
Jan Copeland – Professor, Director, NCPIC
Ryan Courtney – Post Doctoral Research Fellow
Shane Darke – Professor, Convenor Research Staff Professional Development Program
Louisa Degenhardt – Professor and Senior NHMRC Research Fellow
Kate Dolan – Professor
John Howard – Senior Lecturer, NCPIC/NDARC
Caitlin Hughes – Research Fellow
Delyse Hutchinson – Senior Research Fellow
Amy Johnson – Research Associate/Doctoral Candidate
Sharlene Kaye – Research Fellow
Frances Kay-Lambkin – Senior NHMRC Research Fellow
Christina Marel – Post-Doctoral Research Fellow
Francis Matthew-Simmons – NHMRC Post-Doctoral Research Fellow
Richard Mattick – Professor
Katherine Mills – Senior Lecturer
Nicola Newton – UNSW Vice-Chancellor's Post-Doctoral Research Fellow
Melissa Norberg – Senior Lecturer, National Clinical Services & Evaluation Manager, NCPIC
Sally Rooke – Research Fellow, NCPIC
Joanne Ross – Senior Lecturer
Marian Shanahan – Senior Lecturer/Health Economist
Tim Slade – Senior Research Fellow
Janette Smith – UNSW Vice-Chancellor's Post-Doctoral Research Fellow
Matthew Sunderland – Research Associate
Wendy Swift – Senior Lecturer
Stephanie Taplin – Research Fellow
Maree Teesson – Professor and Senior NHMRC Research Fellow
Judy Wilson – Post-Doctoral Research Fellow

Professional and Technical Staff – Research

Alexandra Aiken – Research Officer
Lucy Albertella – Research Officer, NCPIC
Dion Alperstein – Research Officer, NCPIC
Ansari Bin Jainullabudeen – Senior Research Officer
Emma Black – Senior Research Officer
Elissa Bowey – Research Assistant
Sarah Brann – Research Assistant
Danya Braunstein – Research Assistant
Chiara Bucello – Research Officer
Kerryn Butler – Research Officer
Bianca Calabria – Senior Research Officer/Doctoral Candidate
Gabrielle Campbell – Senior Research Officer
Joanne Cassar – Research Officer
Katrina Champion – Research Assistant
Mark Deady – Senior Research Officer
Genevieve Eckstein – Research Assistant
Philippa Ewer – Research Officer
Hannah Fiedler – Research Assistant
Peter Gates – Senior Project Coordinator, NCPIC/Doctoral Candidate
Maria Gomez – Senior Research Officer
Rachel Grove – Research Officer
Karina Hickey – Research Officer, NCPIC
Bianca Hoban – Research Assistant
Ingrid Honan – Research Assistant
Erin Kelly – Research Psychologist
Laila Khawar – Research Assistant, NCPIC
Kari Lancaster – Research Officer
Briony Larence – Senior Research Officer
Lynne Magor-Blatch – Doctoral Candidate, NCPIC (Offsite)
Tim McSweeney – Doctoral Candidate (Offsite)
Kristie Mammen – Doctoral Candidate
Anika Martin – Research Assistant
Clare McCormack – Research Assistant
Cameron McPhedran – Intern. Student
Sonja Memedovic – Research Officer
Paul Nelson – Research Officer/ Doctoral Candidate
Benjamin Phillips – Research Officer
John Redmond – Research Assistant, NCPIC
Julia Rosenfeld – Research Psychologist
Larissa Rossen – Research Officer/ Doctoral Candidate
Amanda Roxburgh – Senior Research Officer
Laura Scott – Research Officer
Stephanie Scott-Smith – Research Assistant
Edmund Silins – Senior Research Officer
Natasha Sindich – Senior Research Officer
Jenny Stafford – Senior Research Officer

Rachel Sutherland – Research Officer
Dam Anh Tran – Senior Research Officer/ Doctoral Candidate
Joe Van Buskirk – Research Assistant-NCPIC
Michelle Tye – Senior Research Officer/ Doctoral Candidate
Thu Vuong – Research Assistant/Doctoral Candidate
Monika Wadolowski – Research Officer/Doctoral Candidate
Joanne White – Research Assistant
Elizabeth Whittaker – Research Assistant Doctoral Candidate

Professional and Technical Staff – Support and Communications

Tori Barnes – Administrative Officer, NCPIC
Jasmin Bartlett – Administrative Assistant
Clare Chenoweth – Communications Officer, NCPIC
Chris Coombes – IT Support Officer
Crisanta Corpus – Finance Manager
Paul Dillon – National Communications Manager, NCPIC
Jackie Du – Finance Officer NCPIC/NDARC
Colleen Faes – Administrative Officer, DPMP
Carly Harris – Executive Assistant, NCPIC
Julie Hodge – Administrative Officer
Mary Kumvaj – Librarian
Etty Matalon – National Clinical Training Manager, NCPIC
Morag Millington – Communications Officer, NCPIC
Erin O'Loughlin – Communications Officer
Ursula Perry – National Clinical Trainer, NCPIC
Jemma Sale – Executive Assistant to Director
Carla Santos – Administrative Officer

Conjoint Staff

Amanda Baker – Professor
Katherine Conigrave – Associate Professor
Johan Duflou – Associate Professor
Matthew Dunn – Senior Lecturer
Paul Haber – Professor
Wayne Hall – Professor
Alys Harvard – Lecturer
Trevor King – Lecturer
Andrea Mant – Associate Professor
Mark Montebello – Lecturer
Catherine Spooner – Senior Lecturer
Ingrid Van Beek – Senior Lecturer
Deborah Zador – Senior Lecturer

Visiting Academic Staff

John Lewis – Visiting Fellow
Rebecca McKetin – Visiting Fellow

Adjunct Staff

Claudia Sannibale – Adjunct Lecturer

feedback & subscriptions

The NDARC edition of *CentreLines* is now being published online only.
If you wish to be added to our mailing list or to change your details
please email: Ndarc21@unsw.edu.au

Curtin
University of Technology

National Drug Research Institute
Curtin University of Technology
GPO Box U1987 Perth WA 6845
www.ndri.curtin.edu.au

UNSW
THE UNIVERSITY OF NEW SOUTH WALES

National Drug and Alcohol Research Centre
University of New South Wales
Sydney NSW 2052
www.ndarc.med.unsw.edu.au