NDARC (18)
February 2006

centre lines

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

Funded by the National Drug Strategy
Registered by Australia Post – Print Post Publication No PP236697/00013
ISSN 1034-7259

issuing **forth**

Drinking in Pregnancy: Effects on Fetal and Child Development

edspace

Terminology is a huge part of the alcohol and other drug field. Recently there has been great pressure from policymakers for the term 'party drugs' to be phased out by researchers and workers in the alcohol and other drug field, as there is a belief that it glamourises the use of these substances. This has provided us with one of the greatest challenges we have yet had to face, as how else are we to classify this diverse group of drugs – an entactogen (ecstasy), a stimulant ('crystal'), a dissociative anaesthetic (Ketamine), and a depressant (GHB) – if not why they are used, i.e. to 'party'? The term that has now been agreed on is 'ecstasy and related drugs' or ERDs, hardly a name that is going to capture the imagination of either the media or the average ecstasy user!

Law enforcement no longer use the term 'ecstasy', preferring to now use 'MDMA'. Once again, their reason for doing this is based on the belief that the word ecstasy has positive connotations and that this sends a wrong message to young people and the community in general. What seems to be forgotten in this argument is that MDMA is the substance that ecstasy users are actually looking for, even though it is not always found in ecstasy pills bought in Australia. To take the terminology debate to a whole new level of 'political-correctness', there was a move by some parties for the term 'performance and image enhancing drugs' or PIEDs, to be replaced with 'performance and image destroying drugs'! Hard to believe, but true!

So what do we know about the effect terminology has on potential drug use? Just because a drug's name could be viewed as 'positive' does this automatically mean that this is going to encourage use? To investigate this whole rather 'murky' area, NDARC is currently putting together a research proposal which will examine a range of issues around drug terminology and how different groups (e.g. non-drug users, users, law enforcement personnel and teachers) perceive different terms. If the project gets funded it is hoped that the results will feed into policy decisions around agreed terminology.

Whatever the result, one of the problems that workers in the alcohol and other drug field face is keeping up with the constant change in terminology. Good luck!

Finally, congratulations to both Jan Copeland and Kate Dolan who have both been promoted to Associate Professor. Kate has also written this month's *Headspace*, examining the progress of PIRT and a review of the NDARC Collaborating Centres.

Paul Dillon, Editor

contents

CentreLines is a joint publication from the National Drug and Alcohol Research Centre, Sydney and the National Drug Research Institute, Perth. It is published bi-monthly and produced alternately by each Centre.

headspace

International work and NDARC Collaborating Centres

Kate Dolan

A few years ago the Program of International Research and Training (PIRT) was established at NDARC. One of PIRT's key missions is to work collaboratively with researchers in developing countries with the aim of building their research capacity. One of our main areas of focus is the evaluation of drug treatment programs. Since PIRT's inception we have conducted work in six countries including Indonesia, Taiwan and Iran. We have undertaken over a dozen projects including a rapid assessment of drug use in an Asian prison system, numerous training courses and study tours.

NDARC continues to work with other institutions in Australia and overseas to provide a national and international focus for research in the drug and alcohol field. NDARC is affiliated with a range of research centres with the aim of promoting and encouraging a co-operative effort between centres towards research and development in areas of common interest. The establishment of collaborative relationships also aims to enhance the activities, profiles and reputations of research centres, as well as continuing collaboration with respect to research projects, research training, post-graduate education and access to shared resources.

It is important that Collaborating Centres share NDARC's commitment to research quality, integrity, and the highest ethical standards. Ideally a Collaborating Centre should also provide complementary skills, expertise and resources – intellectual, practical and financial – which will contribute to the quality and success of NDARC's aims and objectives.

Current and past collaborating centres include:

- Queensland Alcohol and Drug Research and Education Centre
- Turning Point
- Drug and Alcohol Services South Australia
- NSW Bureau of Crime Statistics and Research
- Centre for Adolescent Health
- Royal Prince Alfred Hospital
- Aboriginal Health & Medical Research Council
- Imperial College, London and the
- World Health Organisation

One example of a collaborative project with the World Health Organisation includes a recently completed assessment of how an abstinence-based therapeutic community (TC) incorporated harm reduction measures. This project provides an overview of the role of harm reduction in HIV prevention and outlines a series of stages an Australian organisation, We Help Ourselves (WHOS), passed through in their efforts to incorporate harm reduction into their abstinence-based treatment services. NDARC researchers interviewed staff of the TC who worked there at the time when the changes were introduced. It is anticipated that this valuable piece of work will be made available to TCs in Asia for their consideration and assist them in developing their own programs in the future.

NDARC has also worked very closely with Turning Point for the NEPOD and APET projects. Both studies involved interviewing a large number of drug users. We also worked with the NSW Bureau of Crime Statistics and Research on the evaluation of the medically supervised injecting room.

Currently PIRT is conducting a survey of prison authorities in three Asian countries about the treatment offered to drug users in prison. After this project, there are plans to assist countries devise guidelines on how best to provide treatment to imprisoned drug users. It is hoped that our collaborative work with agencies both here and abroad will continue to provide valuable information and advice to both policy makers and alcohol and other drug workers. **cl**

issuing forth

Drinking in Pregnancy: Effects on Fetal and Child Development

Delyse Hutchinson

Prenatal exposure to alcohol increases the risk for a range of physical, cognitive and behavioural problems in children[1]. The full range of possible outcomes resulting from maternal alcohol use during pregnancy are referred to as to as Fetal Alcohol Spectrum Disorders (FASD)[2]. The most severe outcome is known as Fetal Alcohol Syndrome (FAS), and the less severe forms are commonly referred to as Partial FAS[3, 4].

The diagnosis of FAS is based on a set of criteria reflecting abnormalities in three main areas: physical abnormalities, growth retardation and central nervous system abnormalities with intellectual impairment[3, 4]. FAS is also associated with a complex pattern of cognitive and behavioural dysfunction. Symptoms can include deficits in attention, memory or judgment, poor impulse control and hyperactivity, language problems in both understanding and speaking, poor problem solving and arithmetic skills, and deficits in abstract thinking, perception and motor development. These effects place children at greater risk of experiencing difficulties in relating to others and in schooling[1, 4]. Less common presentations of FAS include skeletal malformations, cardiac problems, visual and auditory deficits, and altered immune functioning[5].

There is increasing evidence that alcohol consumption in pregnancy can also have detrimental effects on children later in life. Prenatal exposure to alcohol has been associated with attention, memory and information processing deficits in adolescence, as well as antisocial and delinquent behavioural problems[6, 7]. Mental health disorders are also common, with depression being the most frequently reported problem in adults[8]. Prenatal exposure to alcohol is also strongly associated with the development of alcohol use problems. For example, Baer and colleagues conducted a 21-year longitudinal analysis of the effects of prenatal alcohol exposure on young adult drinking[9]. The study found that prenatal alcohol exposure was significantly associated with alcohol problems at age 21 years, independent of the effects of family history of alcohol problems, nicotine exposure, other prenatal exposures, and postnatal environmental factors including parental use of other drugs.

Australian prevalence data on FAS

FAS is now regarded as the leading, preventable cause of non-genetic intellectual handicap in the Western world[10]. In Australia, the available evidence suggests that although the birth prevalence of fetal alcohol syndrome is relatively small in the general community, the syndrome is a particular issue of concern among indigenous communities. In Western Australia (WA), the linking of the Birth Defects Registry and the Rural Pediatric Service database resulted in a comprehensive estimate of the birth prevalence of fetal alcohol syndrome. The estimate from these data sets is 0.02/1,000 births for non-Aboriginal children in WA, and 2.76/1,000 births for Aboriginal children in WA[11]. The prevalence of FAS has also been estimated in the Northern Territory for children born between 1990 and 2000. The estimate is 0.68/1,000 live births for non-indigenous children, and between 1.87 and 4.7/1,000 live births for indigenous children[12]. It has been suggested that current prevalence

statistics may underestimate the true prevalence of FAS due to both under-diagnosis and under-ascertainment of cases[11]. Australian prevalence data is not available for the less severe forms of FAS, however based on international estimates, Partial FAS is likely to be 2-4 times more prevalent than FAS[10].

The toxic effects of alcohol

The literature supports the biological role of alcohol as a 'teratogen', or substance that causes birth defects. A number of mechanisms of the effects of alcohol as a teratogen have been described, including hypoxia (oxygen deficiency), hormonal imbalances and the direct effects of alcohol on cellular processes during the prenatal period[3, 13, 14]. The expression of full FAS is found in children whose mothers have a history of chronic heavy alcohol use or frequent heavy intermittent alcohol use in pregnancy. The impact of heavy alcohol consumption has been shown to vary depending on the timing of exposure on fetal development. The primary teratogenic effects occur during the first eight weeks of gestation, while exposure to alcohol later in pregnancy can affect growth and behavioural and cognitive outcomes[3, 13, 14]. Research suggests that binge drinking is particularly harmful because the fetus may be exposed to high blood alcohol concentration and withdrawal episodes during critical periods of development[15].

Effects of low-to-moderate alcohol consumption

Statistics from the 2004 National Drug Strategy Household Survey show that almost half (47%) of all Australian women who are pregnant and/or breastfeeding drink alcohol[16]. While most women do appear to reduce their alcohol intake in pregnancy (59%)[16], there is evidence to suggest that low-to-moderate levels of alcohol consumption in pregnancy can impact negatively on embryo and fetal development[17]. Although not all studies have produced consistent findings[18], the most likely effects at these levels are abnormalities in the developing embryo and more subtle neuro-behavioural problems that are not associated with immediately recognisable physical abnormalities. For example, some studies report a significant relationship between moderate alcohol intake and decreased psychomotor performance[19], decreased verbal learning and memory[20] and decreased academic achievement in children[21]. Other studies have found that the toxic effects of alcohol can also increase the risk of spontaneous abortion following conception[22].

Establishing a threshold for risk has proved difficult and this difficulty supports the emerging evidence that the risk may differ for different effects. Part of the difficulty in establishing a risk threshold is the fact that a range of factors appear to influence the severity of effects experienced by a child prenatally exposed to alcohol. These factors include:[10, 18]

- Maternal drinking patterns (i.e. frequency, amount and duration of exposure)
- Stage of pregnancy (i.e. gestation, trimester stage)
- Low socioeconomic status and cultural background
- Older age in pregnancy, poor maternal health, nutrition and prenatal care
- Genetic predisposition (i.e. individual sensitivity to alcohol exposure)
- Maternal psychiatric disorders and use of other drugs
- Loss of traditional culture in women from Indigenous communities

To clarify whether there is a clear threshold for risk, it has been suggested that future research would benefit from greater consideration of differences in the dosage and timing of drinking, and the impact of maternal health and psychosocial factors on infant development[18].

Summary of empirical evidence

Alcohol consumption at high levels during pregnancy can lead to a range of adverse outcomes for the fetus including FASD and FAS syndrome. The question of whether there is a safe level of drinking during pregnancy remains to be established. Although low-to-moderate alcohol consumption during pregnancy does not appear to be associated with an increased risk of fetal malformations, it may have adverse behavioural or cognitive consequences. There appears to be some evidence for a dose-response association, however a threshold level below which consumption is not teratogenic has not been established. For these reasons, the current Australian Alcohol Guidelines recommend that women consider abstaining from drinking during pregnancy, and that if they choose to drink, to consume less than seven standard drinks over a 7-day week, and no more than two standard drinks on any one day[23].

Future research directions

While it is clear that prenatal exposure to high levels of alcohol has adverse impacts on fetal and child development, knowledge of the effects of low-to-moderate drinking is more limited. A group of researchers from NDARC, the National Drug Research Institute (NDRI) in Perth, and the Centre for Adolescent Health in Melbourne are planning to conduct research examining the effects of low-to-moderate alcohol consumption in pregnancy. The research aims to determine the impact of alcohol use in pregnancy on subsequent infant development, whilst accounting for a range of other psychosocial and maternal health risks associated with adverse developmental outcomes. By studying the effects of prenatal alcohol exposure on infant outcomes it is hoped that accurate information about alcohol use in pregnancy can be provided to Australian families through health and education initiatives. **cl**

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project notes

Indonesian/Australian Specialised Training Project Phase III (IASTP): Drug Intervention Training (Medical and Psychosocial Aspects) in Australia

Annie Bleeker, Louisa Degenhardt and Paul Dillon

The Indonesia-Australia Specialised Training Project Phase III (IASTP III) is a bi-lateral project administered through AusAID under the Australian Government's development cooperation program with Indonesia. The aim is to provide an identified range of short training courses in Indonesia and/or Australia for participants selected from ministries, state enterprises, and non-government organizations.

Since 2000, there has been a massive increase in injecting drug use in Indonesia, with more than one million injecting drug users (IDUs) now estimated in its population of more than 200 million. Risk behaviours for HIV transmission such as the sharing of needles and syringes were identified in rapid situation assessments carried out according to WHO methodology in eight Indonesian provinces in 1999 and 2002.

According to a report by the Indonesian Ministry of Health in 2001, 24 out of 30 provinces have reported HIV infections. Since 1999, 75% of new infections with HIV in Indonesia appear to have been through injecting drug use. In Jakarta and Bali, the HIV epidemic among IDUs appears to be expanding, reaching a seroprevalence between 15-20% in early 2000. Almost 50% of clients admitted to the only drug dependency hospital in Jakarta (RSKO) tested positive to HIV in 2004, this number is now reported to be over 60%. During a Rapid Assessment and Response (RAR) in 2001, it was further revealed that over 50% of inmates at Kerobokan Prison in Bali were HIV positive (Dolan et al, 2004). Rates for hepatitis C infection amongst IDU are thought to be between 60-80% in Indonesia.

Since July 2000, a number of NDARC staff have been involved in the implementation of Drug Information short courses in Indonesia. The 6 day courses have been implemented in eight different provinces in Indonesia and are aimed at up-skilling the Indonesian drug and alcohol and HIV sector.

The IASTP III Drug Intervention Training Course in Australia is an intensive three-month course, which was designed to build on the above rapid assessments by helping police, local authorities and program facilitators to develop practical ways of addressing the problems associated with drug use in Indonesia. The course is designed to assist participants from varied backgrounds to understand the impact of drug-related problems on Indonesian society and to address issues related to drug use in their community, especially among young people and those dependent on drugs. The multi-faceted nature of these problems, including medical, psychosocial, legal, economic and cultural aspects at the individual, group, community and societal level, means that responses need to include a variety of strategies and be inclusive of many sectors of government and community to be effective.

The training delivery is collaboration between UNSW International Projects (with extensive involvement of NDARC researchers) and the Centre for Harm Reduction, Burnet Institute, Melbourne. The sixteen Indonesian participants undertaking this course in 2005, spent a total of 12 weeks in training, from 26 September to 16 December (8 weeks in Sydney and 4 weeks in Melbourne). In Melbourne, the participants learnt primarily about the principles of harm reduction and how this has been implemented internationally, particularly in developing and Islamic countries. On their return to Sydney they received specialised training about drug treatment, rehabilitation and also prevention efforts with young people. A range of leading professionals in the drug and alcohol field and their agencies were invited to present to the group. Site visits were conducted to a variety of drug and alcohol services and HIV/AIDS agencies. Issues such as good governance and gender equity were also addressed in all modules of the training.

Modelling the costs and outcomes of changing general practitioner behaviours with respect to screening for at risk drinking

Marian Shanahan, Anthony Shakeshaft, Julia Fawcett, Chris Doran and Richard P. Mattick

This study which assessed the relative cost effectiveness of various strategies to increase the rates at which general practitioners screen their patients for risky alcohol consumption was funded by the Alcohol Education and Rehabilitation Foundation (AERF). The formulation of the prevention paradox, the notion that the majority of alcohol-related problems in a population stem not from the drinking behaviours of a few highly dependent drinkers but rather from the drinking behaviours of a larger number of low-dependent social drinkers has moved the issue of alcohol-related harms into the realm of public health. Early screening and intervention with at-risk drinkers have been shown to have significant benefits in the prevention of alcohol-related health and social problems. This has meant a shift from primarily treating highly dependent drinkers to attempting to prevent harm among those whose alcohol consumption is typically characterised by low-dependent, or episodic drinking to intoxication. General practitioners are in a strong position to effectively modify behavioural risk factors at the population level but many screen fewer than half their patients for alcohol consumption or issues.

In this study, using economic modelling, we examined the relative cost-effectiveness of four separate strategies (computerised reminder systems, target payments and interactive continuing medical education) to change screening behaviours by GPs with the ultimate objective of decreasing risky drinking behaviours of their patients. As there was a lack of reliable evidence to directly compare the costs and cost effectiveness these strategies, data was obtained from the literature and where possible Australian data was utilised to improve the generalisability of the results. Data used in the model included rates of risky drinking, effectiveness of the treatment (screening and brief intervention), effectiveness of the strategies, the uptake rate of the strategies by practitioners, the number of practices, the number of patients and the prevalence of the condition targeted and the costs of the various components.

The computerised reminder system and academic detailing appear to be most effective methods in achieving a decrease in grams of alcohol consumed among risky drinkers. Regardless of the assumptions made, the targeted payment strategy appears to be the least cost effective method to achieve a decrease in risky alcohol consumption while the other three strategies appear reasonably comparable in terms of cost effectiveness.

Two concurrent randomised placebo controlled trials of modafinil in methamphetamine and cocaine dependence

James Shearer, Richard Mattick, Shane Darke, Rebecca McKetin (NDARC), Alex Wodak (St Vincent's Hospital), Ingrid van Beek (Kirketon Road Centre), and John Lewis (Pacific Analytical Laboratory Medicine)

Psychostimulant dependence is a growing public health problem for which few effective and safe treatments are available. No

pharmacotherapy has been identified that can effectively block (antagonise) or mimic (agonise) stimulant effects without unacceptable side effects. Modafinil is a novel wake promoting agent which may have potential in the treatment of amphetamine and cocaine dependence by reducing stimulant withdrawal symptoms including low mood, excessive sleepiness and poor concentration thereby preventing relapse. Early case and open label studies have been encouraging and suggest that modafinil is well tolerated and may suppress stimulant use and cravings. Modafinil offers several important advantages including a low side effect profile with few identified drug interactions. Modafinil cannot be dissolved in water and is destroyed at high temperature, and so cannot be injected or smoked, reducing the risk of misuse.

Sixty amphetamine users and 30 cocaine users will be recruited concurrently over 12 months and randomised equally to two groups. The experimental groups will receive modafinil (maximum dose 200 mg/day) and four sessions of cognitive behavioural therapy tailored for psychostimulant users. The control groups will receive placebo under equivalent conditions. Treatment effectiveness will be evaluated by between group comparison of the proportion of urine samples negative for amphetamine or cocaine over 10 weeks. Outcomes in health and psychosocial harms (dependence, drug craving, HIV risk taking, psychological and social adjustment, housing, employment, criminal behaviour, illicit drug expenditure) will also be compared. Subjects in treatment will be reviewed on a weekly basis for side effects, potential drug interactions and other adverse events. Three month post treatment follow up will examine relapse predictors including study group and any longer terms benefits of treatment. Treatment retention and compliance to medication and counselling components will also be compared.

The Australian Government Department of Health has funded these trials which represent an important on-going collaboration between NDARC, the Kirketon Road Centre and Rankin Court in the area of psychostimulant treatment. The trials are expected to commence recruitment early in 2006. First results are expected in early 2007. **cl**

abstracts

The definition of opioid-related deaths in Australia: implications for surveillance and policy

Drug and Alcohol Review 24, 401-409

Marianne Jauncey, Lee Taylor and Louisa Degenhardt

The reported number of deaths caused by opioid use depends on the definition of an opioid-related death. In this study, we used Australian Bureau of Statistics (ABS) mortality data to illustrate how choice of classification codes used to record cause of death can impact on the statistics reported for national surveillance of opioid deaths. Using International Classification of Diseases version 10 (ICD-10) codes from ABS mortality data 1997–2002, we examined all deaths where opioids were reported as a contributing or underlying cause. For the 6-year period there was a total of 5839 deaths where opioids were reported. Three possible surveillance definitions of accidental opioid-related deaths were examined, and compared to the total number of deaths where opioids were reported for each year. Age restrictions, often placed on surveillance definitions, were also examined. As expected, the number of deaths was higher with the more inclusive definitions. Trends in deaths were found to be similar regardless of the definition used; however, a comparison between Australian states revealed up to a twofold difference in the absolute numbers of accidental opioid-related deaths, depending on the definition. Any interpretation of reported numbers of opioid deaths should specify any restrictions placed on the data, and describe the implications of definitions used.

The structure of alcohol dependence in the community

Drug and Alcohol Dependence 81, 21-26

Heather Proudfoot, Andrew J. Baillie and Maree Teesson

Background: Although dependence on alcohol appears to be a reliable unitary construct, abuse has not found a similar level of support as a separate construct. This paper describes a confirmatory factor analysis of the DSM-IV alcohol abuse and dependence criteria in a general population sample.

Methods: Data from alcohol drinkers (n = 7746) were obtained from a cross-sectional study of a large, representative sample of the Australian general population. One- and two-factor solutions for the DSM-IV criteria for abuse and dependence (assessed by CIDI-Auto) were compared using confirmatory factor analysis.

Results: Approximately 74% of Australians had used alcohol 12 or more times in the past year and 19% met at least one DSM-IV alcohol abuse or dependence criterion. Overall 6% met criteria for an alcohol use disorder (1.9% abuse, 4.1% dependence). More men than women met criteria for an alcohol use disorder and the prevalence of alcohol use disorders decreased with increasing age. Both one- and two-factor solutions from the confirmatory factor analyses provided an adequate fit to the data for the overall sample. The correlation between the abuse and dependence factors in the two-factor model was extremely high (0.95).

Conclusion: Alcohol abuse and dependence criteria were most parsimoniously described by a single continuous construct incorporating all eleven abuse and dependence criteria.

The characteristics of heroin users entering treatment: findings from the Australian Treatment Outcome Study (ATOS)

Drug and Alcohol Review 24, 411-418

Joanne Ross, Maree Teesson, Shane Darke, Michael Lynskey, Robert Ali, Alison Ritter and Richard Cooke

The current study aimed to describe the characteristics (demographics, drug use, mental and physical health) of entrants to treatment for heroin dependence in three treatment modalities; and to compare these characteristics with heroin users not in or seeking treatment. Participants were 825 current heroin users recruited from Sydney, Adelaide and Melbourne: 277 entering methadone/ buprenorphine maintenance treatment (MT), 288 entering detoxification (DTX), 180 entering drug-free residential rehabilitation (RR) and 80 not in treatment (NT). Treatment entrants were generally long-term heroin users with previous treatment experience. The majority of the sample (55%) were criminally active in the month preceding interview. Injection-related health problems (74%) and a history of heroin overdose (58%) were commonly reported. There were high degrees of psychiatric co-morbidity, with 49% reporting severe psychological distress, 28% having current major depression, 37% having attempted suicide and 42% having a lifetime history of post-traumatic stress disorder. Personality disorders were also prevalent, with 72% meeting criteria for antisocial personality disorder and 47% screening positive for borderline personality disorder. Striking similarities were noted between the non-treatment and treatment groups in length of heroin use career, drug use and treatment histories.

Non-fatal heroin overdose, treatment exposure and client characteristics: Findings from the Australian Treatment Outcome Study (ATOS)

Drug and Alcohol Review 24, 425-432

Shane Darke, Anna Williamson, Joanne Ross and Maree Teesson

The relationship between treatment exposure, drug use, psychosocial variables and non-fatal heroin overdose was examined among a cohort of 495 heroin users, re-interviewed at 12 months. The 12-month overdose rate declined from 24% to 12%, and the proportion administered naloxone declined from 15% to 7%. There were significant reductions in overdose among those who entered maintenance therapies (22% to 4%) and residential rehabilitation (33% vs. 19%) at baseline, but not among those who entered detoxification or were not entering treatment. The total number of treatment days received over the follow-up period was associated independently with a reduced risk of overdose. Each extra treatment day was associated with a 1% reduction in risk of overdose over the follow-up period. By contrast, more treatment episodes were associated with an increased risk of overdose (OR 1.62). Other independent predictors of overdose over follow-up were more extensive polydrug use (OR 1.40), and having overdosed in the year preceding the study (OR 7.87).

Cycling in and out of treatment; participation in methadone treatment in NSW, 1990–2002

Drug and Alcohol Dependence 81, 55-61

James Bell, Tracy Burrell, Devon Indig and Stuart Gilmour

Background: There are few descriptions of patterns of long-term participation in methadone treatment. There has been progressive expansion of methadone maintenance treatment (MMT) in Australia in the last 15 years, and by international standards Australia has a high participation rate in MMT, and has accumulated extensive data on participation.

Aim: (1) To analyse predictors of retention in treatment (a proxy measure of treatment effectiveness) in three cohorts of people entering public and private methadone treatment, in 1990, 1995, and 2000 in the state of New South Wales (NSW), and to compare retention rates with those reported from recent clinical trials; and (2) to describe the pattern of participation in subsequent treatment and predictors of re-entry.

Method: Sequential first admissions to MMT for the month of February during 1990, 1995, and 2000, were identified from the NSW Health database. Initial treatment setting (public or private) was identified. Pattern of subsequent participation in treatment of all subjects was also extracted. Descriptive statistics were generated, and predictors of retention in treatment and re-entry to treatment were analysed.

Results: The sample comprised 342 subjects commencing in private and 135 in public settings. Retention did not differ between settings. At 6 months, 51% in the current study were retained, compared to 48% in pooled clinical trials from Australia. There was a significant cohort effect; at 3 months retention was significantly better in the 1990 cohort, but by 12 months, differences between the year-cohorts were not statistically significant. Most people who left treatment dropped out; two-thirds subsequently re-entered MMT, often having multiple episodes. Participation in non-continuous treatment was around 45% for the 5 years after first entering treatment. Using multiple logistic regression, the significant predictors of re-entry to treatment were age, and duration of first treatment episode; specifically, older people and those with >12 months continuous treatment were significantly less likely to re-enter.

Conclusion: Retention in treatment in practice, across a range of settings, appears comparable to treatment delivered in clinical trials. Participants cycle in and out of treatment, and this recycling appears to have increased as the program has expanded and access to treatment has increased.

Characteristics of treatment provided for amphetamine use in New South Wales, Australia

Drug and Alcohol Review 24, 433-436

Rebecca McKetin, Erin Kelly and Devon Indig

The purpose of this study was to examine the types of treatment services provided for amphetamine use, the characteristics of amphetamine treatment clients and the geographic areas most affected by amphetamine treatment provision within New South Wales (NSW), Australia. Data on completed amphetamine treatment episodes were extracted from the NSW Minimum Data Set for Alcohol and Other Drug Treatment Services for the year 2002/03 (n = 4337). The geographic area of treatment presentations was based on the location of the treatment service, and was categorized as metropolitan, regional or rural. Treatment disproportionately affected regional and rural NSW, and treatment clients often presented with concurrent cannabis and/or alcohol problems. Clients were overwhelmingly injecting drug users with poor socio-demographic characteristics. Counselling was the most common treatment service provided, followed by detoxification and residential rehabilitation. Detoxification was usually provided in an in-patient setting, particularly within metropolitan NSW. Compliance with residential rehabilitation was notably poor. In conclusion, the development of appropriate interventions for amphetamine use needs to consider that the majority of treatment recipients will be based in a regional or rural setting, and treating amphetamine users will often involve treatment of concurrent cannabis and alcohol problems. The nature and appropriateness of treatment services provided for amphetamine use needs to be reviewed in detail, and further research is needed into the nature of problematic amphetamine use and factors affecting treatment demand in regional and rural NSW.

Risk and benefit perceptions of party drug use

Addictive Behaviors 31, 137-142

Bethany White, Louisa Degenhardt, Courtney Breen, Raimondo Bruno, Jaclyn Newman and Phoebe Proudfoot

A cross-sectional survey of 372 regular ecstasy users was conducted to examine the benefits and risks perceived to be associated with the use of party drugs. A wide range of benefits and risks were reported across six drug types with some considered drug-specific. Commonly perceived risks included physical and psychological harms that were consistent with current harm reduction messages. Harm reduction campaigns may need to acknowledge benefits of drug use to ensure health promotion messages are considered credible and acceptable to users.

The Cannabis Problems Questionnaire: Factor structure, reliability and validity

Drug and Alcohol Dependence 80, 313-319

Jan Copeland, Stuart Gilmour, Peter Gates and Wendy Swift

Aim: To develop a multi-dimensional valid and reliable measure of cannabis-related problems.

Method: The Cannabis Problems Questionnaire (CPQ) was developed from the Alcohol Problems Questionnaire to measure cannabis treatment outcome. The CPQ was administered on two occasions 1 week apart to a stratified sample of adults who had used cannabis at least once in the previous 3 months. Exploratory factor analyses were conducted and the relationship between items of the CPQ and measures of daily use and dependence assessed. The reliability of the CPQ was also assessed using a test–retest and inter-rater reliability methodology.

Results: Exploratory factor analyses revealed a three factor solution best described the data accounting for 57% of the variance in the larger item set. The CPQ is highly reliable with test–retest tetrachoric correlations of between 0.92 and 1.00 and inter-rater reliability correlations between 0.74 and 1.00. The total CPQ score classified DSM-IV cannabis dependence with 84% specificity and sensitivity and daily cannabis use with 83% specificity and 55% sensitivity.

Conclusions: The 22-item CPQ is a valid, reliable and sensitive measure of cannabis-related problems for use with clinical and research populations of current cannabis users.

The management of alcohol, tobacco and illicit drug use problems by general practitioners in Australia.

Drug and Alcohol Review 24, 499-506

Louisa Degenhardt, Stephanie Knox, Bridget Barker, Helena Britt and Anthony Shakeshaft

The aim of this study was to document the frequency of the management of illicit drug, alcohol and tobacco problems in general practice in Australia. Data from the Bettering the Evaluation and Care of Health (BEACH) study of general practice, April 1998 to March 2003, were analysed. BEACH is an ongoing national study of general practice in Australia. Each year a random sample of approximately 1000 general practitioners (GPs) participate, each providing details of 100 patient encounters. Samples are drawn from the Medicare data held by the Health Insurance Commission. Patient demographic breakdowns, medication, other treatment, referrals and other medical procedures ordered were examined for all problems labelled by GPs as illicit, alcohol and tobacco problems. Annually in Australia, it was estimated that 615 000 GP encounters-or 0.6% of all encounters-involved the management of illicit drug use problems presumably most commonly for problematic heroin use. Despite a much higher population prevalence of use and use disorders, the management of alcohol or tobacco use problems was less common, with 0.4% and 0.3% of encounters, respectively, comprising treatment of these problems. Clear demographic differences existed across the groups. The management of problems also differed, with illicit drug use problems more likely to involve provision of medication, and alcohol and tobacco treatment more likely to involve counselling and/or health advice. Despite higher rates of alcohol and tobacco use problems among patients seeing GPs in Australia, the rate of treatment for such problems was relatively lower than it was for illicit drug use problems. More efforts need to be directed towards assisting GPs to identify and target problematic alcohol and tobacco use among their patients. **cl**

recent **publications**

For more information on or copies of these publications, please contact the relevant researcher

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Staff as of 1 February, 2006

Richard Mattick	Director, Professor
Maree Teesson	Deputy Director, Associate Professor
Shane Darke	Associate Professor
Jan Copeland	Associate Professor
Kate Dolan	Associate Professor
Louisa Degenhardt	Senior Lecturer
Lucy Burns	Lecturer
Joanne Ross	Lecturer
Wendy Swift	Lecture
Delyse Hutchinson	Research Fellow
Rebecca McKetin	Research Fellow
Katherine Mills	Research Fellow
Claudia Sannibale	Research Fellow
Anthony Shakeshaft	Research Fellow
Eva Congreve	Archivist
Paul Dillon	Media Liaison/ Information Manager
Stuart Gilmour	Statistical Officer
Marian Shanahan	Health Economist
Heli Wolk	Professional Officer
Courtney Breen	Senior Research Officer
Elizabeth Conroy	Senior Research Officer
Cathy Finney Lamb	Senior Research Officer
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Cherie Kam	Senior Research Officer
Sharlene Kaye	Senior Research Officer
Greg Martin	Senior Research Officer
Jen McLaren	Senior Research Officer
Susannah O'Brien	Senior Research Officer
Heather Proudfoot	Senior Research Officer
Amanda Roxburgh	Senior Research Officer
Fiona Shand	Senior Research Officer
James Shearer	Senior Research Officer
Jenny Stafford	Senior Research Officer
Devon Indig	Doctoral Candidate
Laura Vogl	Doctoral Candidate
Maria Agaliotis	Research Officer
Emma Black	Research Officer
Matthew Dunn	Research Officer
Peter Gates	Research Officer
Alys Havard	Research Officer
Kate Hetherington	Research Officer
Grace Ho	Research Officer
Erin Kelly	Research Officer
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Sarah Stewart	Research Officer
Michelle Torok	Research Officer
Elissa Wood	Research Officer
Rox DeLuca	Administrative Assistant
Julie Hodge	Administrative Assistant/ Receptionist
Josephina Kim	Personal Assistant to Director
Carla Santos	Administrative Assistant/ Receptionist

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James Bell	Associate Professor
Andrea Mant	Associate Professor
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Adam Winstock	Senior Lecturer
Alex Wodak	Senior Lecturer
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