

NATIONAL DRUG AND ALCOHOL RESEARCH CENTRE

Annual Report

2003





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About the Centre

The National Drug and Alcohol Research Centre (NDARC) was established at the University of New South Wales in May 1986 with funds provided by the Government of the Commonwealth of Australia to undertake research into the methods of intervention to improve the health of persons affected by drug and alcohol use. NDARC is a multidisciplinary research centre. It collaborates with staff of the schools of medicine, social sciences and other schools of the University of New South Wales, and with other institutions and individuals in Australia and overseas. Facilities at the Centre include a local area computer network accessing a wide-area campus network, a Document Archive with an extensive bibliographic database, and seminar and conference facilities.

In addition to research projects currently being carried out within the Centre, NDARC engages in collaborative projects with other researchers throughout Australia to provide a national focus for research in this field. NDARC also has links with researchers overseas.

Other activities include an Annual Symposium, special conferences, workshops and monthly research seminars, which are open to workers in the field. As well as contributing to scientific journals and other publications, NDARC produces its own Research Monographs and Technical Report Series. In conjunction with the National Drug Research Institute in Perth, it also produces a free quarterly newsletter, CentreLines, to increase communication between the national research centres, other researchers and workers in the drug and alcohol field in Australia.

MISSION STATEMENT.

The overall mission of NDARC is:

“by research and related activities to contribute to the minimisation of the harmful consequences of alcohol and other drug use in Australia by increasing the effectiveness of the Australian treatment response to drug-related problems”.

In order to increase the effectiveness of the Australian treatment response to drug problems, four goals need to be achieved:

The key goals of NDARC are to:

- Improve our understanding of the nature and extent of drug-related harms to which treatment should be directed;
- Increase the range of treatment and intervention methods that are effective in reducing identified forms of drug related harm;
- Increase knowledge among treatment providers about which treatment programs are effective and which patients are most suited to them; and
- Increase the community's knowledge of appropriate and effective treatment programs for drug and alcohol problems.

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Foreword

ONE OF THE MOST significant features of the past year has been the review of our Strategic Plan. The review encompassed contact with a wide range of agencies, stakeholders, collaborating centres, conjoint appointments as well as all members of staff and included several detailed planning sessions.

The input from all levels was very positive and indicated a high level of satisfaction with the Centre's performance to date. Notwithstanding this, areas of adjustment were identified and the plan for the next five years will reflect the need for these changes. Much of the credit for the smooth passage of this process must go to Dr Jan Copeland who managed the review team. I was privileged to be a member of that team and found the process ably led by Peter Kaye, a professional facilitator, to be both informative and enjoyable. I also believe it provided an excellent opportunity for the staff and some of our stakeholders to get to know each other better.

The year also marked the re-establishment of the NDARC Education Trust which has the objective of furthering implementation and communication of the findings of clinical research conducted at or by the Centre for the benefit of the Australian community, the development of training programs and teaching materials, the provision of financial assistance for the employment of staff, the funding of visiting professorships and the furtherance of internationally based research.

I would like to thank the Australian Government, and in particular the Drug Strategy and Health Promotion Branch of the Australian Government Department of Health and Ageing (AGDHA) for its continuing support and for the close and productive level of co-operation that now exists. We are indebted to the close co-operation and personal support of Jenny Hefford, Assistant Secretary AGDHA, and Tess Hill, Acting Director AGDHA.

I would also like to acknowledge the strong support and co-operation of the University of New South Wales and in particular Professor Bruce Downton, Dean of the Faculty of Health and Professor Elspeth McLachlan, Pro Vice Chancellor (Research).

The strategic planning process again highlighted the ever increasing network of agencies and stakeholders with whom we are associated and which contributes greatly to the relevancy of our work. The Centre has rightly earned a place of



The Hon. Kevin Rozzoli
Chairman, NDARC Board of Management

high standing in the international research community as well as amongst its peers in Australia. This is a tribute to our highly dedicated staff and to the progressive and dynamic leadership of our past Directors, Professor Nick Heather, Professor Wayne Hall and currently, Professor Richard Mattick, ably assisted by our Deputy Director, Associate Professor Maree Teesson

As of 31 December 2003 the Centre had a complement of 54, including support staff and part-time staff, conjoint and honorary appointments. This in itself makes demands on each and every person if a working synergy is to be achieved. That this has been achieved is evident from the reports of completed work and work in progress. On behalf of all members of the Board of Management I extend our sincere thanks to them for the outstanding results they continue to achieve.

The continuing commitment of my fellow Board members is greatly appreciated, facilitated as it often is by the vehicle of teleconferencing. All Board members are extremely busy within their own disciplines, but none the less, give their time generously, as and when the need arises. As Chairman I am personally appreciative of their individual and collective contribution.

I once again commend the Annual Report to the attention of all who have an interest in the cutting edge of research in the drug and alcohol field.

Year in Review



Professor Richard Mattick

EXECUTIVE DIRECTOR'S REPORT

The 2003 year has been characterized by progress and growth, as NDARC continues to respond to the wide range of diverse and complex issues that arise from alcohol and drug usage in Australia.

From the early days, the Centre developed a basis for scholarly understanding of the existing literature and without much fear or favour presented this information to governments and other bodies to help to develop policy, and to foreshadow important research directions where research evidence was lacking. This approach continues today as NDARC produces high quality and timely findings under the following research priorities: epidemiology; identification of potential harms; health economics; drug market analysis and supply reduction; prevention and early interventions; treatment and other interventions; and information and training.

Two key NDARC projects that continued through 2003 were the Illicit Drug Reporting System (IDRS) and the Australian Treatment Outcome Study (ATOS). Health economics continued to be a priority area with research being conducted into the cost effectiveness of pharmacotherapies for nicotine and alcohol dependence/abuse. This research will aim to investigate the efficacy and economic value of bupropion and nicotine replacement therapies in smoking cessation; and naltrexone and acamprosate in the management of alcohol dependence.

Work continued on the National Drug Law Enforcement Research Fund (NDLERF) funded project

investigating the causes, the effects and the implications of the heroin shortage in New South Wales, South Australia and Victoria.

A number of projects have been funded to examine the dynamic methamphetamine market. One of these, investigating the more potent forms of the drug aims to develop a better understanding of the availability and use of more pure forms of methamphetamine such as crystal methamphetamine or 'ice'. The project will tie together specialist law enforcement data relating to both the importation and local manufacture of these drugs, with data collected from users themselves relating to the dynamics of the methamphetamine market and the patterns of use and associated harms, and will consider in detail the implications for the health and law enforcement sectors of the increases in Australia in recent years of the availability and use of these forms of methamphetamine.

It is an exciting time for the Centre as the number of projects in progress continues to rise. We are continuing to build upon existing national and international collaborations. The projects mentioned above are but a few of the broad efforts of NDARC staff to respond to new, emerging issues in this important field.

Our Centre is currently engaged in an important aspect of our organisational life – strategic planning. When conducted well, strategic planning is flexible and oriented towards the "big picture". It should also align the organisation with its environment, establish a context for accomplishing goals, and provide a framework and direction to achieve the organisation's desired future. To date, our strategic plan has performed well and following the recent review of the Centre for the Australian Government Department of Health and Ageing, we were very pleased to see that our performance is very well regarded. This indicates that a major shift in direction is not desirable, however, the importance of strategic planning was emphasised in the review findings.

As our current Strategic Plan reaches the end of its life and the next National Drug Strategic Framework is under development it is an appropriate time to reflect on our past and plan strategically for our future. One of the many advantages of being placed at the University of New South Wales (UNSW) is access to the expertise of the UNSW Staff Development Unit. Following discussions with that

Unit we are able to participate in a wider process of developing a training program for strategic and operational planning for research centres at the University. In this program, NDARC will be utilised as a template for strategic planning for a large research centre.

We are currently about half way through our strategic planning process. The first stage was to form a Strategic Planning Committee, chaired by Dr Jan Copeland. The Chair of our Board of Management, (Hon) Kevin Rozzoli also sits on this Committee. In the past we have developed our strategic plan from a one-day internal workshop with a UNSW staff member as facilitator. Those plans focussed more on the business planning of indicative projects related to our goals, than to revisiting our mission and goals per se or to thinking strategically about overarching concepts such as values. This time we are re-examining our mission statements, the arising goals and introducing the concept of values with definitions and performance indicators. Following this process our business or work plan for 2004-5 will be developed including the indicative projects that best serve the strategic plan. While this is a new process, the core features of our emergent model of strategic planning will remain.

In addition to these consultative and collaborative processes to date Kevin Rozzoli has also written to advise our key stakeholders in the community of our strategic planning processes and that they will be contacted in the future for their input. Our website will also announce the stages of our planning and invite community comment. As noted earlier, we do not anticipate any marked change to our strategic directions as these have served us well to date. We may see a slight broadening of our agenda, as reflected in our review, undertaken by the Australian Government Department of Health and Ageing. This broadening will include a larger range of interventions and some investment in the area of prevention.

NDARC is at one of its strongest points in its 15 year history. We currently have the largest staffing and some of the most exciting and challenging projects we have ever had. 2003 has been both a busy and productive year – I expect 2004 to be no different to conduct. The entire staff of NDARC looks forward to continuing to work cooperatively with our collaborating centres and others nationally and internationally.

RESEARCH DISSEMINATION

NDARC has continued to be an effective centre for the media to obtain comment on a wide range of alcohol and other drug issues. The heroin shortage, the medical use of cannabis, the increasing use of more potent forms of methamphetamine and the use of ecstasy and other party drugs are just some of the issues that have continued to make headlines.

The strategy of making the Centre staff available to the media for comment has continued to ensure excellent access to the media when we have wanted to disseminate results of specific research projects to the general public. As in other years, 2003 saw some NDARC projects generate far more media interest than others. The Illicit Drug Reporting System (IDRS) continues to attract attention as has the Party Drugs Initiative (PDI) project.

NDARC's Media Liaison Manager, Mr Paul Dillon, has continued to develop positive relationships with journalists representing a variety of media. He, along with many other members of staff, have conducted many interviews responding to media interest in news stories of the day.

Apart from general media dissemination it remains vital that research findings can be accessed by drug and alcohol workers and policy makers. *CentreLines* has continued to expand its readership across Australia and internationally and is currently being received by almost 1000 subscribers. Some of the topics examined throughout 2003 included comorbidity among heroin users, emerging trends in methamphetamine use and alcohol use disorders.

Our web page has continued to prove to be a valuable tool for a wide audience, including policymakers, alcohol and other drug workers and the general public. It has proven most effective in delivering information on our publications and research projects. Users of the web can find abstracts of many of our Technical Reports and Monographs on-line. During the year we also used the web to launch the *Opioid Overdose Death in Australia: 2002 Edition*, as well as *Cocaine and Methamphetamine Mentions in Accidental Drug-Induced Deaths in Australia, 1997-2002*. Including these publications on the website has ensured that this important data is made available to a potentially large audience quickly and effectively. NDARC's web page is located at <http://ndarc.med.unsw.edu.au/ndarc.nsf>.

Once again, our Annual Symposium proved to be extremely popular with workers from within the alcohol and other drug field. This year the focus was on treatment,

with a special emphasis on one of NDARC's major projects - The Australian Treatment Outcome Study (ATOS). A number of presentations at the Symposium addressed findings on treatment outcome at 3 months, and also a range of major clinical issues emerging from the study.

In response to unprecedented demand we decided to dedicate the final session of the program to issues around methamphetamine, including psychosis, treatment and violence. In addition to Dr Rebecca McKetin from NDARC, we also invited a number of outside speakers including Dr Amanda Baker from the Centre for Mental Studies at the University of Newcastle, Ms Sue Henry-Edwards from the National Expert Advisory Committee on Illicit Drugs and Dr Stephen Jurd from the Herbert Street Clinic.

As the public interest in drug issues continues there has been great pressure on NDARC staff to speak at a variety of different forums. Mr Dillon has spent much of his time giving presentations to schools, community groups and other interested parties on a variety of drug issues. Youth drug use, cannabis and current drug trends have proved the most popular topics with audiences.

NDARC resources continue to be popular with both workers in the field, as well as drug users. New booklets developed this year have included *Inhalants, Alcohol: The Facts* and *Drugs and Bugs*. *Inhalants* examines the different types of inhalants available and the risks associated with their use. It also answers some frequently asked questions on such issues as 'chroming' and petrol sniffing. The alcohol booklet looks at many issues around alcohol and its misuse, as well as giving tips around celebrating safely. It also answers a range of frequently asked questions.

Drugs and Bugs, a resource written with Dr Jeffrey Post from the Department of Pathology at UNSW, is designed to inform injecting drug users about a range of infections which may be linked to injecting drug use. The booklet covers a range of infections including hepatitis C, hepatitis B and hepatitis A, HIV and some other infections. The main aim of this resource is to outline ways to avoid contracting these infections.

STAFFING

As of 31 December 2003, NDARC staff numbered 54, including support staff, part-time staff, conjoint and honorary appointments. A full list of staff and their sources of funding is given in Appendix B.

MANAGEMENT STRUCTURE

NDARC's Board of Management met four times during the year, with Mr Kevin Rozzoli continuing as Chairman.

The Research Committee, the main administrative body of the Centre, comprises: Professor Mattick (Chair); Associate Professor Maree Teesson; Associate Professor Shane Darke; Dr Jan Copeland; Dr Louisa Degenhardt; Dr Kate Dolan; Dr McKetin; Dr Anthony Shakeshaft; Dr Catherine Spooner; Dr Wendy Swift; Dr Joanne Ross; Mr Dillon; Ms Heli Wolk; Ms Amy Gibson (representing NDARC staff) and Ms Katherine Mills (representing PhD students). The Research Committee meets monthly, immediately before the NDARC Staff Meeting, to maintain regular checks on the progress of projects listed in the Strategic Plan, to regularly review the progress of PhD students, and to assess the Centre's success in enacting its Strategic Plan.

The Staff Meeting continues to be held on the first Thursday in every month and members of staff take turns to chair these meetings. The remaining management structure of the Centre (i.e. Computing Committee, Library Committee, Accommodation Committee, and regularly-meeting steering committees for all major projects) remain as in past years.

FUNDING

Allocation for base-line core funding from the Australian Government Department of Health and Ageing for the financial year 2002/03 was \$1,272,334. This was expended as follows:

	2001-02	2002-2003
	\$	\$
Salaries	933,739	930,747
Operational	278,400	324,682
Equipment and Furniture	31,589	16,905
Total	1,243,728	1,272,334

Expenditure during 2003 of funds from external grants awarded to NDARC was \$3,656,568. Details of these grants may be found in Appendix C.

NDARC POSTGRADUATE STUDENTS

NDARC offers both PhD and Masters Degrees by research in a wide variety of topic areas, depending on student background and interest. Congratulations to Dr Sharlene Kaye who was awarded her PhD in 2003. Examples of current PhD projects include:

- Patterns of comorbidity in problem drinkers
- Hepatitis C infection among injecting drug users
- Health service evaluation: The regulation of injecting behaviour in Kings Cross
- Development of a brief multi-dimensional instrument designed to measure outcomes for clients receiving alcohol and other drug treatment
- Best use of health care services to treat alcohol problems in the community: Maximising the value for the treatment dollar
- Adolescent cannabis use disorders, correlates and diagnostic issues

The students have a representative on the Research Committee and meet quarterly with the Director to discuss progress and any issues of concern. The students meet monthly to discuss relevant issues and to offer support and encouragement to each other. Some of these groups constitute more formal seminars, where issues are presented by a staff member or other relevant person.

RESEARCH SUPERVISION

The following undergraduate and postgraduate research supervision was undertaken by Centre staff during 2003.

Burns, L. (1998-present). Relationship between alcohol use disorders, anxiety and depression. Full-time PhD in School of Community Medicine, UNSW. Joint supervision by Dr Teesson and Dr Katy O'Neill. Submitted December 2003.

Day, C. (2000-present). Blood borne viruses and injecting drug use. Full-time PhD in School of Community Medicine, UNSW. Joint supervision by Dr Dolan and Dr Ross. Expected date of submission May 2004.

Donnelly, N. (1995-present). Applied statistical methods in pharmacoepidemiology in primary care. Part-time PhD in School of Community Medicine, UNSW. Supervised by Professor Wayne Hall and Associate Professor Andrea Mant.

Kimber, J. (2000-present). Health services evaluation. Part-time PhD in School of Community Medicine, UNSW. Joint supervision by Dr Dolan and Professor Mattick. Expected date of submission May 2004.

Lawrinson, P. (2000-present). Development of a brief treatment outcome measure for alcohol and other drug treatment services. Full-time PhD in School of Community Medicine, UNSW. Joint supervision by Dr Copeland and Dr Swift. Expected date of submission December 2004.

Martin, G. (2002-present). Brief motivational interventions for adolescent cannabis users. Full-time PhD in School of Community Medicine, UNSW. Joint supervision by Dr Copeland and Dr Swift. Expected date of submission December 2005.

Proudfoot, H. (2000–present). Treatment seeking for alcohol use disorders. Full-time PhD in School of Community Medicine, UNSW. Supervision by Dr Teesson. Expected date of submission December 2005.

Thetford, C. (2001–present). Childbearing decision-making among hepatitis C positive women. Full-time PhD in School of Geography, Australian National University, based at NDARC. Joint supervision by Dr Copeland and Dr

Swift. Expected date of submission August 2004.

Bashford, J. (2002–present). Development of cannabis screening questionnaire. Full-time PhD in School of Psychology, Massey University, New Zealand. Joint supervision by Dr Copeland and Dr Swift. Expected date of submission December 2006.

Current Projects

Epidemiology

TITLE: ESTIMATING THE NUMBER OF METHAMPHETAMINE USERS IN SYDNEY, AUSTRALIA

NDARC Staff: Rebecca McKetin, Jennifer McLaren and Stuart Gilmore

Other Investigators: Matthew Hickman (Imperial College London); Devon Indig (NSW Health Department); and Matthew Law (National Centre in HIV Epidemiology and Clinical Research)

Aims: This project is a collaboration between researchers at NDARC and Imperial College, London, which is being supported by a University of New South Wales John Yu Fellowship to Europe. The aim of this project is to develop techniques to estimate the number of dependent stimulant users (particularly methamphetamine users). Traditionally methods used to estimate the number of dependent or injecting drug users have been applied to heroin users. However, Australia has a substantial and growing population of dependent methamphetamine users. Estimates of the size of this population are crucial to planning services and estimating the coverage of services, however, currently no robust estimates exist. This project aims to explore the feasibility of different prevalence estimation techniques in the context of dependent stimulant use and pilot these techniques in Australia.

Funding: UNSW John Yu Fellowship and the Australian Government Department of Health and Ageing

TITLE: ALCOHOL AND OTHER DRUG USE IN SIX NON-ENGLISH SPEAKING (NESB) COMMUNITIES

NDARC Staff: Jan Copeland

Other Investigators: Michelle Toms, Kelvin Chambers and Richard Taylor

Aim: This study will partially replicate the previous series of studies of NESB community's patterns of alcohol and other

drug use conducted by the Drug and Alcohol Multicultural Education Centre (DAMEC) over the last decade. This series of surveys over three years will determine the prevalence and patterns of alcohol and other drug use in Chinese, Vietnamese, Arabic-speaking, Spanish-speaking, Italian and Pacific Islander communities in NSW.

Funding: Alcohol Education and Rehabilitation Fund

TITLE: NATIONAL ILLICIT DRUG INDICATORS PROJECT

NDARC Staff: Louisa Degenhardt

Aims: The aims of the surveillance project are to improve the understanding of, and systematically track changes in, heroin and psychostimulant use and related harms.

This project will provide a number of benefits, including enhanced dissemination of information on heroin and psychostimulant use and harms, and a greater ability of agencies and policymakers to assess the need for, and outcomes of, policy and other interventions.

Design and Method: The project involves identifying and compiling a large number of state and national data sources and their indicators. Examples of relevant data indicators include: information on population patterns of drug use from national surveys, data on deaths due to drug overdoses, morbidity data, treatment data, indicators of drug purity and seizures, crime data and attitudes. It is envisioned that the data indicators will be updated, analysed and published regularly on a NDARC web page. This will provide an accessible and more complete picture of trends in use and harms over time.

Funding: Australian Government Department of Health and Ageing

TITLE: HEALTH EVALUATION AND RESEARCH OUTCOMES NETWORK (HERON): OPIOID USE IN PREGNANCY STREAM

NDARC Staff: Lucy Burns and Richard Mattick

Other Investigators: Prof Bruce Armstrong, A/Prof Richard Taylor and Prof Judy Simpson (School of Public Health, USyd); Dr Louisa Jorm (NSW Health); Dr Anne Krickler (School of Public Health, USyd); A/Prof Dianne O'Connell (Cancer Council of NSW); Dr Christine Roberts (Centre for Perinatal Health Services Research, USyd); Dr Elizabeth Sullivan (NPSU, UNSW); and Prof Anthony Zwi (PH&CM, UNSW)

Aim: To assess the magnitude and outcomes of opioid use in pregnancy.

Design and Method: The overall aim of HERON is to use population health datasets to explore issues of clinical or policy significance to guide health policy and service provision. In the perinatal stream of this project HERON will provide information for service planning for pregnant drug users. Using retrospective and prospective methods the maternal and neonatal outcomes of babies born to opioid-dependent women and non-opioid dependent women will be explored. Included in this will be the relative outcomes for pregnant women receiving methadone and other pharmacotherapies for opioid dependence. The project will link the Methadone Database with the Midwives Data Collection and other relevant databases.

Funding: National Health and Medical Research Council

Identification of potential harms

TITLE: AN EXPLORATION OF DRUG INJECTORS' UNDERSTANDING OF HEPATITIS C INFECTION AND THE IMPLICATIONS FOR TRANSMISSION (UNDERSTANDING HEPATITIS C PROJECT)

NDARC Staff: Carolyn Day, Kate Dolan, Emma Black, Clare Thetford and Jo Kimber

Other Investigators: Erica Southgate (Centre for Clinical Epidemiology and Biostatistics, University of Newcastle) and Susan McGuckin (New South Wales Users and AIDS Association)

Aims: The aims of the present study are to measure injecting drug users' (IDU) knowledge of hepatitis C, in particular their knowledge and understanding of issues such as:

- virus transmission
- symptoms and clinical markers, e.g. what it means to have antibodies to hepatitis C and confusion with other forms of hepatitis and other blood-borne viruses
- hygiene issues and blood awareness messages, including the conflation of the various health promotion messages

Design and Method: This cross-sectional study will interview 120 injecting drug users across three sites: inner-city, suburban and regional. Groups will draw on those at risk including a sub group of recently released prisoners.

A questionnaire will be designed to examine IDUs knowledge of hepatitis C and their understanding of having the virus including that of clinical terms and symptoms. The questionnaire will also examine IDUs knowledge of hygiene practices.

In depth qualitative interviews will also be conducted with 30 IDUs to gain a greater insight into their understanding of hepatitis C.

Funding: Australian National Council on Drugs

TITLE: SURVEY OF MEDICAL CANNABIS USE

NDARC Staff: Wendy Swift, Peter Gates and Paul Dillon

Aims: The NSW Government recently announced a proposed trial of the therapeutic benefits of cannabis. Cannabis (and other cannabinoids) has been indicated as a potential therapeutic tool for numerous medical conditions, and many people claim relief from symptoms of medical conditions they have been unable to obtain from other sources. One of the recommendations of the recent NSW Working Party on the medical use of cannabis was for Australian surveys on this issue, as there is little relevant local information; this exploratory survey aims to examine people's experiences, behaviours and attitudes surrounding medicinal cannabis use.

Design and Method: Participants will be recruited via media stories, inviting people who use cannabis for its perceived therapeutic value to contact the researchers. Those interested in participating will be mailed a brief, anonymous survey which they will complete and return in a post-paid envelope.

Benefits: This survey may contribute important local information complementary to data from clinical trials and inform the design, scope and feasibility of any Government trial.

Funding: National Drug and Alcohol Research Centre

TITLE: THE NATURE AND EXTENT OF SELF-REPORTED DEPENDENCE ON ECSTASY, GHB AND KETAMINE IN TWO US AND ONE AUSTRALIAN CITY (CD-SLAM)

NDARC Staff: Jan Copeland, Michael Gascoigne, Peter Gates, Saul Gerber, Greg Martin and ETTY Matalon

Other Investigators: Linda Cottler

Aim: This is the international arm of a US study on club drugs and emerging trends that aims to assess the psychometric properties and sources of unreliability in identifying abuse and dependence on club drugs. The Sydney arm will interview 150 ecstasy and other club drug users over two years.

Funding: National Institute of Drug Abuse (NIDA)

TITLE: PATTERNS OF USE AND EXPERIENCES OF RECREATIONAL PHARMACEUTICAL DRUG USE AMONGST 'PARTY DRUG' USERS

NDARC Staff: Paul Dillon, Jan Copeland and Michael Gascoigne

Aims: This survey is designed to examine the patterns of use and experiences of 'party drug' users who combine their drug of choice (ecstasy) with pharmaceutical drugs, including a range of anti depressants and sildenafil citrate (Viagra). These findings will assist in the development of harm reduction strategies among current and potential young party drug users.

Design and Method: One hundred party drug users who have combined their drug of choice with one or more of a range of pharmaceutical products, either to increase intoxication, to lengthen intoxication, to prevent or reduce perceived negative effects of the drug, will be interviewed using a structured face-to-face questionnaire.

Funding: Australian Government Department of Health and Ageing

TITLE: RISKS FOR HEPATITIS C TRANSMISSION: TRANSITION AND INITIATION TO INJECTING DRUG USE AMONG YOUTH IN A RANGE OF INJECTING DRUG USER NETWORKS

NDARC Staff: Jan Copeland

Other Investigators: National Centre for HIV Social Research – Prof Sue Kippax and colleagues; Annie Madden (IV League); and Dr John Howard (Ted Noffs Foundation)

Aims: To document the history of initiation and transition to injecting among a range of current injectors 25 years and under and the relationship between the circumstances of the initial injecting episodes and current risk practices with respect to the transmission of hepatitis C.

Design and Method: A number of cross-sectional surveys of young injecting drug users in Sydney, Brisbane and Dubbo using peer interviewers.

Funding: National Health and Medical Research Council

TITLE: RURAL INJECTOR PROJECT

NDARC Staff: Carolyn Day and Kate Dolan

Aims:

- to examine patterns of drug use and treatment utilisation among rural injecting drug users (IDU)

- to determine the prevalence of blood-borne virus risk behaviours among rural IDU
- to determine the prevalence of HIV and hepatitis C among rural IDU
- to examine patterns of migration from areas with low prevalence of blood-borne viruses to high prevalence areas

Design and Method: Cross-sectional survey of injecting drug users in rural and regional areas of NSW. The survey will also cover a wider range of issues related to treatment and migration between rural and metropolitan areas. To examine the prevalence of HIV hepatitis C finger prick blood samples will be collected.

Funding: Australian Government Department of Health and Ageing and AIDS and Infectious Diseases Branch, NSW Health

TITLE: REVIEW OF CORRECTIONAL SERVICES RESPONSES TO REDUCE THE INITIATION, LEVEL AND IMPACT OF DRUG USE WITHIN AUSTRALIAN PRISONS

NDARC Staff: Kate Dolan and Emma Black

Aim: This research study will collate information about supply reduction and demand reduction programs in Australian prisons throughout all States and Territories. This information will provide sufficient detail to draw conclusions about the estimated prevalence of problematic alcohol and other drug use among Australian prisoners, the types and extent of supply and demand reduction responses to these problems, and the strengths and weaknesses of these responses. The ultimate objective of the study will be to identify gaps in drug strategies in Australian prisons and ways in which these strategies may be improved.

Design and Method: A review of the literature, including both peer-reviewed material and Australian government reports and publications (in particular those relating to prison drug program expenditure and evaluation) will be conducted to assemble the available evidence pertaining to supply and demand reduction strategies in Australian prisons.

The literature review will also focus on gathering evidence on the number and proportion of prisoners in Australia with a history of problematic alcohol and/or other drug use.

A survey of the management of Corrective Services in each State and Territory is required to elicit information about the types of programs in operation, the expenditure and

costs associated with these programs and any evaluative evidence recorded by these authorities.

The survey of prison authorities will comprise two sections, one pertaining to supply reduction and the other to demand reduction strategies.

The supply reduction section will seek to obtain data on:

- range of supply reduction strategies in place
- costs of these supply reduction strategies
- number of drug tests conducted
- results of these drug tests
- drug detection units
- results of drug detection units
- efficacy of testing and other supply reduction strategies in reducing drug use

The demand reduction section will seek to obtain data on:

- range of demand reduction strategies in place
- costs of drug treatment
- the number of treatment places available to prisoners with drug problems
- results of drug treatment
- unmet demand for treatment
- efficacy of treatment in reducing drug use

Funding: Australian National Council on Drugs

TITLE: SUBSTANCE USE, DEPENDENCE AND TREATMENT SEEKING IN THE UNITED STATES AND AUSTRALIA: A CROSS-NATIONAL COMPARISON

NDARC Staff: Maree Teesson

Other Investigators: Michael Lynskey and Barry Manor

Aims: To compare the prevalence of alcohol and other drug use and treatment-seeking in the United States of America and Australia.

Design and Method: Two cross-sectional national surveys assessing substance use and DSM-IV substance dependence in the USA and Australia. Age-matched cohorts (18 - 54 years old) were selected from nationally representative Australian (National Survey of Mental Health and Well-Being, 1997, n = 7570) and American (National Comorbidity Survey, 1992, n = 7423) household surveys.

Both studies utilised a structured interview based on the Composite International Diagnostic Interview (CIDI).

Funding: National Drug and Alcohol Research Centre

Health economics

TITLE: PHARMACOTHERAPIES FOR NICOTINE DEPENDENCE: ECONOMIC CONSIDERATIONS

NDARC Staff: Marian Shanahan, Jenny Stafford, James Shearer, and Richard Mattick

Aims:

- to assess practitioners prescribing patterns of pharmacotherapies for smoking cessation
- to assess impact of pharmacotherapies on consumers smoking cessation attempts
- to evaluate the cost and effectiveness of pharmacotherapies for assisting with smoking cessation

Design and Method: The project will use a number of methods to assess the use and economic impact of the pharmacotherapies for assisting with smoking cessation. Information will be obtained through a survey of medical practitioners done in collaboration with Adelaide University, Department of General Practice, a survey of consumers done with the cooperation of the Pharmacy Guild, and a literature review of outcome and cost effectiveness literature on methods for assisting with smoking cessation.

Benefits: This project will contribute to the government's understanding of the uptake of the pharmacotherapies bupropion and nicotine replacement therapies (NRTs), and the economic impact of the various treatment options in the Australian policy context.

Funding: Australian Government Department of Health and Ageing

TITLE: PHARMACOTHERAPIES FOR EXCESSIVE ALCOHOL USE: ECONOMIC CONSIDERATIONS

NDARC Staff: Marian Shanahan, Amy Gibson, Jenny Stafford, and Richard Mattick

Aims:

- to assess practitioners prescribing patterns of pharmacotherapies for relapse prevention among dependent drinkers
- to assess rate of use of pharmacotherapies among dependent drinkers
- to evaluate the cost and effectiveness of treatments for risky and dependent drinkers

Design and Method: The project will use a number of methods to assess the use and economic impact of the pharmacotherapies for relapse prevention among dependent drinkers. Information was obtained through a survey of

medical practitioners done in collaboration with Adelaide University, Department of General Practice; the evaluation of Health Insurance Commission data on prescriptions for acamprosate and naltrexone, and evaluation of the costs and effects obtained from a literature review treatments for assisting risky and dependent drinkers.

Benefits: This project will contribute to the government's understanding of the uptake of the pharmacotherapies, acamprosate and naltrexone, and the economic impact of the various treatment options for risky and dependent drinkers in the Australian policy context.

Funding: Australian Government Department of Health and Ageing

TITLE: MODELLING THE COSTS AND THE OUTCOMES OF CHANGING GENERAL PRACTITIONER BEHAVIOURS WITH RESPECT TO AT-RISK DRINKING

NDARC Staff: Marian Shanahan, Anthony Shakeshaft and Richard Mattick

Aims: This project aims to conduct economic modelling of various strategies for altering general practitioners' clinical behaviours with respect to screening and providing brief interventions to individuals with risky alcohol consumption. Short and long-term health benefits to risky drinkers, and the resource implications of various strategies for altering general practitioner (GP) behaviours will be modelled. The economic costs of altering GP behaviours and the outcomes will be estimated.

Design and Method: This study will be obtaining effectiveness data from Australian and the international literature on the effectiveness of various strategies to alter GP behaviours; costs used will be Australian. The economic modelling will be done using decision modelling software.

Benefits: This project will provide information to policy makers, clinicians and medical educators in identifying economic costs and benefits of various methods of increasing screening and brief interventions for risky alcohol consumption.

Funding: Alcohol Education Research Fund

Drug market analysis and supply reduction

TITLE: THE ILLICIT DRUG REPORTING SYSTEM (IDRS)

NDARC Staff: Louisa Degenhardt, Courtney Breen, Amanda Roxburgh, and Richard Mattick

Other Investigators: Dr Jeff Ward and Phoebe Proudfoot, School of Psychology, Australian National University (ACT); Chris Moon, Department of Health and Community Services (NT); Jane Fischer, Stuart Kinner and Prof Jake Najman, Queensland Alcohol and Drug Research and Education Centre (QLD); Josephine Weekley, Sophie Pointer and A/Prof Robert Ali, Drug and Alcohol Services Council (SA); Raimondo Bruno and A/Prof Stuart McLean, University of Tasmania (TAS); Rebecca Jenkinson, Peter Miller and Craig Fry, Turning Point Alcohol and Drug Centre Inc. (VIC); James Fetherston and Simon Lenton, National Drug Research Institute (WA)

Aims: To monitor the price, purity, availability and patterns of use of heroin, methamphetamine, cocaine and cannabis; and to identify emerging trends in illicit drug markets in Australia that require further investigation.

Design and Method: The IDRS analyses three main sources of information to document drug trends:

- a quantitative survey of injecting drug users (IDU)
- a semi-structured interview with key informants (KIS), who are professionals working in the illicit drug field, and have regular contact with and/or specialised knowledge of illicit drug users, dealers or manufacture
- a collation of existing indicator data on drug-related issues

Data from these three sources are triangulated against each other to determine the convergent validity of trends detected. The data sources complement each other in the nature of the information they provide. Data from each year's IDRS studies are compared to earlier findings to determine changes in drug trends over time. The strengths of the IDRS are the ability to compare data across jurisdictions as well as over time.

Progress: The IDRS is an ongoing project that is conducted annually in all Australian jurisdictions. In 2003, 970 regular IDU were interviewed across Australia, providing information on their use patterns and drug markets. Three hundred and one KIs provided information on the drug users they had contact with.

Output: The annual National Drug Trends Conference was held in November, where a summary of jurisdictional drug trends findings, as well as a national overview, was presented to relevant health professionals, law enforcement, and policy makers. Throughout the year, quarterly bulletins, outlining current drug trends or issues of interest were also disseminated. These bulletins are available on the National Drug and Alcohol Research Centre (NDARC) website to ensure

broader dissemination. More detailed findings from each jurisdiction, and a national overview, are documented in comprehensive reports.

Breen, C., Degenhardt, L., Roxburgh, A., Bruno, R., Duquemin, A., Fetherston, J., Fischer, J., Jenkinson, R., Kinner, S., Longo, M. & Rushforth, C. (2003). *Australian Drug Trends 2002: Findings of the Illicit Drug Reporting System (IDRS)*. Monograph No. 50. Sydney: National Drug and Alcohol Research Centre.

Bruno, R. & McLean, S. (2003). *Tasmanian Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 148. Sydney: National Drug and Alcohol Research Centre.

Duquemin, A. & Gray, B. (2003). *Northern Territory Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 151. Sydney: National Drug and Alcohol Research Centre.

Fetherston, J. & Lenton, S. (2003). *WA Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 149. Sydney: National Drug and Alcohol Research Centre.

Jenkinson, R., Fry, C. & Miller, P. (2003). *Victorian Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 145. Sydney: National Drug and Alcohol Research Centre.

Kinner, S. & Fischer, J. (2003). *Queensland Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 147. Sydney: National Drug and Alcohol Research Centre.

Longo, M., Christie, P., Ali, R., & Humeniuk, R. (2003). *South Australian Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 146. Sydney: National Drug and Alcohol Research Centre.

Roxburgh, A., Degenhardt, L., Breen, C., & Barker B. (2003). *New South Wales Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 144. Sydney: National Drug and Alcohol Research Centre.

Rushforth, C. (2003). *Australian Capital Territory Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 150. Sydney: National Drug and Alcohol Research Centre.

Expected Completion Date: Ongoing

Funding: Australian Government Department of Health and Ageing

**TITLE: THE PARTY DRUGS INITIATIVE (PDI)**

NDARC Staff: Louisa Degenhardt, Courtney Breen, Bethany White, and Richard Mattick

Other Investigators: Phoebe Proudfoot and Jeff Ward, (Australian National University, ACT); Craig Fry, Jennifer Johnston, Anne-Maree Laslett, Rebecca Jenkinson and Peter Miller (Turning Point Alcohol & Drug Centre, Victoria); Raimondo Bruno and Stuart McLean (University of Tasmania); Josephine Weekley, Sophie Pointer and Robert Ali, (Drug & Alcohol Services Council, South Australia); Françoise Chanteloup and Simon Lenton (National Drug Research Institute, Western Australia); Chris Moon (Northern Territory Department of Health and Community Services); and Jane Fischer, Stuart Kinner, and Jake Najman (Queensland Alcohol Drug Research Education Centre, Queensland)

Aims:

- to describe the characteristics of a sample of current regular ecstasy users interviewed in each capital city of Australia
- to examine the patterns of ecstasy and other drug use of these samples
- to document the current price, purity and availability of ecstasy and other party drugs across Australia
- to examine participant's perceptions of the incidence and nature of ecstasy-related harm, including physical, psychological, financial, occupational, social and legal harms
- to identify emerging trends in the party drug market that may require further investigation

Design and Method: The Party Drugs Initiative (PDI) is coordinated by the National Drug and Alcohol Research Centre, and is conducted by different research institutions in each Australian state and territory.

The PDI uses a similar methodology to the Illicit Drug Reporting System (IDRS). Regular ecstasy users are interviewed as they were identified as a group of party drug users that are able to provide the required information on patterns of party drug use, the current availability, price and purity of party drugs and perceived drug-related health issues associated with party drug use. A semi-structured survey of experts in the field of party drugs (e.g. party promoters, treatment providers, law enforcement personnel) is also conducted and indicator (e.g. purity of drug seizures and overdose rates) is analysed. These data sources are examined together to identify convergent trends in party drug use and markets.

Progress: The PDI was conducted successfully in every state and territory in 2003. Over eight hundred regular ecstasy users were interviewed on their drug use patterns and provided information on drug markets. One hundred and thirty nine key informants provided information on party drug users they had contact with. Indicator data including custom seizures, purity analysis and treatment data was examined.

Output: The preliminary results of the study were presented at the National Drug Trends Conference on November 26th and 27th 2003. The December 2003 Party Drugs Bulletin presents a brief overview of the 2003 results. Detailed state and national reports are being finalised and will be available in 2004.

White, B., Breen, C. & Degenhardt, L. (2003). *NSW Party Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS) Party Drugs Module*. Technical Report No. 162. Sydney: National Drug and Alcohol Research Centre.

Expected Completion Date: Ongoing

Funding: National Drug Law Enforcement Research Fund

TITLE: THE EMERGENCE OF MORE POTENT FORMS OF METHAMPHETAMINE IN SYDNEY: DEVELOPING OUR UNDERSTANDING OF AUSTRALIA'S DYNAMIC METHAMPHETAMINE MARKET

NDARC Staff: Rebecca McKetin, Jennifer McLaren, Erin Kelly and Richard Mattick

Other Investigators: Robert Rushby (Australian Customs Service), and Emily Pritchard and Nerys Evans (NSW Police)

Aims: This project aims to develop a better understanding of the availability and use of more pure forms of methamphetamine such as crystal methamphetamine or 'ice'. The project will tie together specialist law enforcement data relating to both the importation and local manufacture of these drugs, with data collected from users themselves relating to the dynamics of the methamphetamine market and the patterns of use and associated harms, and will consider in detail the implications for the health and law enforcement sectors of the increases in Australia in recent years of the availability and use of these forms of methamphetamine.

Funding: National Drug Law Enforcement Research Fund



TITLE: THE CAUSES, EFFECTS AND IMPLICATIONS OF THE HEROIN SHORTAGE IN THE NSW, SA AND VICTORIA

NDARC Staff: Louisa Degenhardt, Carolyn Day, Rebecca McKetin, Linette Collins, Elizabeth Conroy and Amy Gibson

Other Investigators: Paul Deitze, Craig Fry and Peter Miller (Turning Point) and Paul Christie and Adam Harrison (DASC)

Aims:

- examine the context and parameters of the heroin shortage
- examine the possible causes of the heroin shortage
- determine the effect of the shortage on the price, purity and availability of heroin, distribution and using practises
- assess the effect of the heroin shortage on heroin and other drug use, public health, crime and the work of law enforcement, health and emergency services
- examine the characteristics of those who left the heroin market as a result of the shortage

Design and Method: Existing research will be reviewed and available indicator data analysed. Injecting drug users (IDU) will be interviewed regarding their patterns of drug use prior to, during and subsequent to the heroin shortage. Additional cohorts of IDU who did not inject heroin for at least one month or who entered methadone maintenance treatment (MMT) during the peak period of the shortage, will be interviewed. Data will also be collected on treatment seeking behaviour, overdose, presentation to emergency services and criminal behaviour. A range of key informants from law enforcement, drug treatment and detoxification agencies, NSP, and ambulance services will be interviewed. To examine the causes of the heroin shortage, plausible theories will be collated and assessed according to the available evidence. Following this process, the most plausible model(s) will be developed based on the identified factors.

Funding: National Drug Law Enforcement Research Fund

Prevention and early interventions

TITLE: REDUCING ALCOHOL-RELATED HARM IN RURAL COMMUNITIES

NDARC Staff: Anthony Shakeshaft, Richard Mattick, Chris Doran and Paul Dillon

Other Investigators: Rob Sanson-Fisher, John Wiggers, Catherine D'Este and Don Weatherburn

Aims: This project aims to evaluate the cost-effectiveness of a of a community-wide intervention strategy to reduce alcohol-related harm in rural towns in NSW. The specific interventions that comprise the community-wide approach are random breath testing, computerised screening and brief advice in GP settings, strategies targeted at alcohol licensees, media advocacy, provision of information to high school students and community feedback. The two main outcomes that will be used to measure the success of this strategy are alcohol-related hospital emergency department incidents and alcohol-related criminal incidents

Funding: National Health and Medical Research Council

TITLE: REDUCING ALCOHOL-RELATED HARM IN RURAL COMMUNITIES: A RANDOMISED CONTROLLED TRIAL

NDARC Staff: Anthony Shakeshaft and Richard Mattick

Other Investigators: Rob Sanson-Fisher, Ann Roche, Chris Doran and Catherine D'Este

Aims: The aim of this five-year project is to conduct a cost-benefit analysis of a community action intervention strategy to reduce alcohol-related harm in rural communities in NSW. It represents a comprehensive community action approach, building on an existing minimalist community action project in at least three ways: utilisation of a greater number of intervention strategies; adoption of a randomised controlled study design as the most rigorous methodology available; and the conduct of a cost-benefit economic analysis.

Funding: Alcohol Education and Rehabilitation Foundation

TITLE: STRUCTURAL DETERMINANTS OF YOUTH DRUG ABUSE

NDARC Staff: Catherine Spooner and Michael Gascoigne

Aims:

- to describe current research on societal factors that contribute to youth drug abuse, including the economic, social and physical environment
- to identify ways that societal institutions (in particular, national, state and local government) can contribute to the prevention of youth drug abuse
- to conduct research that will increase knowledge about societal factors that contribute to youth drug abuse and about what societal (particularly government) institutions can do to prevent youth drug abuse

Design and Method: Information from a broad range of disciplines (including public health, sociology, psychology,

and urban design) is being collected from key informant and published and unpublished literature. Much of this information is not specifically concerned with youth drug use. For example, there is currently substantial research and policy interest in the impacts of social capital and socio-economic factors on health, and the importance of early child development for adolescent and adult outcomes but drug use is rarely a key outcome variable. The project is seeking information from these broader fields that is, or could be, relevant to the aetiology and prevention of drug use behaviours.

Benefits: This project will contribute to the government's understanding of how it can prevent youth drug abuse and dependence.

Funding: Australian Government Department of Health and Ageing

TITLE: REVIEW OF THE RELATIONSHIP BETWEEN CANNABIS AND MENTAL HEALTH

NDARC Staff: Wendy Swift and Susannah O'Brien

Aims: The aim of this review is to provide current evidence-based information on the relationship between cannabis and mental health, with a focus on adolescents, for teachers and school counsellors.

Design and Method: A review of the literature will be produced as a resource for teachers and school counsellors. A focus of the review is an examination of the nature of the relationship between cannabis use and psychosis, depression, anxiety and suicide among young people. It will also examine the implications for schools and further research on this issue.

Benefits: This project is part of the New South Wales Drug Summit recommendations which have already led to the production of other cannabis resources for schools. This information may improve the capacity for school personnel to provide support for students and their families affected by this issue and assist in future policy directions.

Funding: NSW Department of Education and Training

TITLE: CLIMATE SCHOOLS: A SCHOOL-BASED INTERACTIVE COMPUTER PROGRAM FOR EDUCATING ADOLESCENTS ON PREVENTATIVE HEALTH ISSUES INCLUDING ALCOHOL RELATED HARMS, ANXIETY, DEPRESSION AND PHYSICAL HEALTH AND NUTRITION

NDARC Staff: Laura Vogl, Maree Teesson and Paul Dillon

Other Investigators: Helen Van Vliet, Prof Gavin Andrews, Prof Mark Dadds and Dr John McCormick

Aim: To develop and evaluate, computer delivered preventative health education programs (CLIMATEschools) for adolescents in Year 8 of high school. CLIMATEschools is being developed in consultation with teachers and clinical psychologists to ensure that it is evidence-based and meets the objectives set out in the PDHPE school-curriculum.

Design and Method: A cluster randomised controlled trial involving 20 schools will be done to assess the feasibility and efficacy of CLIMATEschools. The effectiveness of the interventions will be measured 6 and 12 months post-intervention.

Funding: National Drug and Alcohol Research Centre

TITLE: DRUG INFORMATION NEEDS, SOURCES AND CREDIBILITY AMONG 'PARTY DRUG' USERS

NDARC Staff: Jan Copeland, Paul Dillon and Michael Gascoigne

Aims: This survey is designed to examine the drug information needs, sources of information and their credibility among 'party drug' users. This information will assist in informing a strategy for the dissemination of factual information on party drugs to current and potential users.

Design and Method: One hundred party drugs users in Sydney will be interviewed using a structured face-to-face questionnaire. Questions will cover what information they wish to have on their drug or drugs of choice, where they currently access information from and the credibility of these sources. They will also be asked what type of information they do not believe to be credible and who or what organisations/departments they regard as lacking credibility.

Funding: Australian Government Department of Health and Ageing

Treatment and other interventions

TITLE: DEVELOPING APPROPRIATE INTERVENTIONS FOR METHAMPHETAMINE USERS

NDARC Staff: Rebecca McKetin, Jennifer McLaren, Erin Kelly and Richard Mattick

Aims: This project consists of a series of small inter-linked activities aimed toward improving research on interventions for methamphetamine users. One main activity is the continuation of a forum of experts to discuss issues around providing interventions for methamphetamine use (Australian methamphetamine research forum). The second is exploring where and why methamphetamine users come into contact

with health services through analysis of NSW Health datasets. The third component is development of methods of methods to estimate the number of dependent methamphetamine users.

Funding: Australian Government Department of Health and Ageing

TITLE: SELF-EFFICACY, EXPECTANCY AND ABSTINENCE ACCEPTANCE: OUTCOMES OF A COMMUNITY-BASED FORENSIC DRUG RELAPSE INTERVENTION

NDARC Staff: Jan Copeland

Other Investigators: Susan Wojciechowski and Jeanna Sutton

Aim: This study will investigate the belief in the ability to control drug use, confidence about ability to remain drug free in high-risk situations, the anticipated negative consequences of further drug use and the acceptance of life-long abstinence as a predictor of positive treatment outcome of a drug and alcohol intervention in a community-based program for criminal offenders.

Funding: NSW Department of Corrective Services

TITLE: EVALUATION OF THE ODYSSEY HOUSE AFTERCARE PROGRAM

NDARC Staff: Jan Copeland and Peter Lawrinson

Aim: This project involves the design, staff training, supervision, analysis and write-up of an evaluation of treatment outcome for clients attending an innovative aftercare program provided by Odyssey House following their residential rehabilitation program during 2003.

Funding: Alcohol Education and Rehabilitation Fund

TITLE: ALCOHOL AND OTHER DRUG USE DISORDERS COMORBID WITH PSYCHOSIS, DEPRESSION AND ANXIETY: TREATMENT OUTCOMES

NDARC Staff: Jan Copeland

Other Investigators: Vaughan Carr, Amanda Baker, Margaret Terry, Andrew Taylor, Ulrich Dhall, Richard Clancy, Terry Lewin, Agatha Conrad and Martin Cohen

Aim: This study aims to document and compare conventional drug and alcohol services, mental health services and specialised treatment services for people with comorbid mental illness and drug use problems in terms of the client characteristics, staff attitudes and clinical outcomes.

Funding: National Health and Medical Research Council

TITLE: A DRUGS IN PREGNANCY CONSUMER CONSULTATION

NDARC Staff: Jan Copeland

Other Investigators: Marijke Boers, Merinda Epstei, Louise Clifford and Adam Winstock

Aim: This qualitative project is being conducted in New South Wales to consult with consumers of drugs in pregnancy programs; to conduct focus groups with consumers and health care providers on the needs of this client group and their consultation strategies; and to provide recommendations on models of care to improve the health outcomes of pregnant women and their children that incorporate the views of consumers, service providers and other relevant stakeholders.

Funding: NSW Health

TITLE: ASSESSMENT OF THE PSYCHOMETRIC PROPERTIES OF THE ADULT AND ADOLESCENT VERSIONS OF THE CANNABIS PROBLEMS QUESTIONNAIRES

NDARC Staff: Jan Copeland, Peter Gates and Wendy Swift

Aim: This project will establish the reliability and validity of the adult and adolescent versions of the Cannabis Problems Questionnaires that were developed for use in clinical trials with cannabis using clients at the Centre. The studies will involve interviewing 100 each and adults and adolescents who are recent cannabis users on two separate occasions over one to two weeks. The assessment will also involve examination of the factor structure and internal reliability of the two measures. This study will allow for the publication of these measures for use in clinical and research settings with cannabis using populations.

Funding: Australian Government Department of Health and Ageing

TITLE: THE AUSTRALIAN TREATMENT OUTCOME STUDY (ATOS): HEROIN

NDARC Staff: Maree Teesson, Shane Darke, Joanne Ross, Katherine Mills, Anna Williamson, Alys Havard and Marian Shanahan

Other Investigators: Michael Lynskey (University of Washington, St Louis, USA); Robert Ali, Richard Cooke,



Danielle Bament (Drug & Alcohol Services Council, South Australia); and Alison Ritter, Tracey Holt and Amy Swan (Turning Point Alcohol & Drug Centre, Victoria)

Aims:

- to describe the characteristics of people entering treatment for heroin dependence
- to describe the treatment received
- to examine treatment outcomes (drug use, criminal behaviour and mental health) and costs at 3 and 12 months after the commencement of treatment

In NSW, longer term outcomes (at 24 and 36 months) will also be examined

Design and Method: Heroin users have been recruited on entry to treatment through methadone/ buprenorphine maintenance, detoxification and residential rehabilitation services. The study is being conducted in Sydney (n=535), Adelaide (n=100) and Melbourne (n=110). In NSW an additional 80 heroin users not currently in treatment have been recruited. Using a structured questionnaire, participants were interviewed on entry into treatment for heroin dependence and followed up again at 3 and 12 months post treatment entry. In NSW follow-up has been extended to 24 and 36 months.

A major strength of ATOS is the richness of data being collected on participants at baseline and follow-up. The measures used examine drug use, criminality, treatment history, injection related risk taking behaviour, overdose, general health, health service utilisation, and psychopathology (Major Depression, Post Traumatic Stress Disorder, Anti Social Personality Disorder and Borderline Personality Disorder). The health economist on the project (Marian Shanahan) will provide an evaluation of the health care costs and resource use of the ATOS cohort. Extended follow up of the NSW cohort will provide valuable data on the natural histories of heroin users.

Progress: The three and 12 month follow-up interviews have been completed, with follow-up rates of 89% and 80%, respectively (NSW). Twenty four month interviews are due to be finalised in August 2004, and 36 month follow up has commenced.

Output:

Darke, S., Ross, J., Teesson, M., & Lynskey, M. (2003). Health service utilization and benzodiazepine use among heroin users: findings from the Australian Treatment Outcome Study (ATOS). *Addiction* 98,1129-1135 .

Darke, S., Ross, J., Teesson, M., & Lynskey, M. (In

press). Attempted suicide among entrants to three treatment modalities for heroin dependence in the Australian Treatment Outcome Study (ATOS): prevalence and risk factors. *Drug & Alcohol Dependence*.

Darke, S., Hetherington, K., Ross, J., Lynskey, M., & Teesson, M. (In press). Non-injecting routes of administration among entrants to three treatment modalities for heroin dependence. *Drug & Alcohol Review*.

Darke, S., Williamson, A., Ross, J., Teesson, M., & Lynskey, M. (In press). Borderline personality disorder, antisocial personality disorder and risk taking among heroin users. *Drug & Alcohol Dependence*.

Holt, T., Ritter, A., Swan, A., & Pahoki, S. (2002). *Australian Treatment Outcome Study (ATOS): Heroin. Baseline data report: Victoria*. Turning Point Alcohol and Drug Centre.

Holt, T., Ritter, A., Swan, A., & Pahoki, S. (2003). *Australian Treatment Outcome Study (ATOS): Heroin. Three month follow-up report: Victoria*. Turning Point Alcohol and Drug Centre.

Mills, K., Lynskey, M., Teesson, M., Ross, J., & Darke, S. (2003). *Prevalence and correlates of Post Traumatic Stress Disorder (PTSD) among people with heroin dependence: Findings from the Australian Treatment Outcome Study (NSW)*. NDARC Technical Report No. 169. Sydney: UNSW.

Ross, J., Teesson, M., Darke, S., Lynskey, M., Hetherington, K., Mills, K., Williamson, A., & Fairbairn, S. (2002). *Characteristics of heroin users entering three treatment modalities in New South Wales: Baseline findings from the Australian Treatment Outcome Study (ATOS)*. NDARC Technical Report No.139. Sydney: UNSW.

Ross, J., Lynskey, M., Teesson, M., Darke, S., Havard, A., Mills, K., Williamson, A., Hetherington, K., & Fairbairn, S. (2003). *Three month outcomes for the treatment of heroin dependence: Findings from the Australian Treatment Outcome Study (ATOS)*, New South Wales. NDARC Technical Report No. 159. Sydney: UNSW.

Weekley, J., Cooke, R. & Ali, R. (2002). *Characteristics of heroin dependent individuals in South Australian Drug Treatment. The first report of the South Australian component of the Australian Treatment Outcome Study – Heroin*. DASC Monograph No.13 Research Series.

Weekley, J., Cooke, R. & Ali, R. (2003). *Treatment outcomes at 3 months post admission to drug treatment. The second report of the South Australian component of the Australian Treatment Outcome Study – Heroin*. DASC Monograph No.15 Research Series.



Williamson, A., Darke, S., Ross, J., & Teesson, M. (2003). *Cocaine use among the ATOS NSW sample: Prevalence and related harms*. NDARC Technical Report No.161. Sydney: UNSW.

Benefits: ATOS is the first large-scale longitudinal study of treatment outcome for heroin dependence to be conducted in Australia. The longitudinal nature of the study will enable participant characteristics to be determined at baseline, and their progress to be assessed at three and twelve months. The study will also provide a description of the treatment being received and a measure of the health costs generated by the cohort, including prescribed medications and the use of medical and other health services. Extended follow up of the NSW cohort will provide the first Australian data on the longer term natural histories of heroin users.

Funding: National Health and Medical Research Council, Australian Government Department of Health and Ageing, and Department of Human Services Victoria

TITLE: DEVELOPMENT OF A BRIEF MULTI-DIMENSIONAL INSTRUMENT DESIGNED TO MEASURE OUTCOMES FOR CLIENTS RECEIVING ALCOHOL AND OTHER DRUG TREATMENT: THE BRIEF TREATMENT OUTCOME MEASURE (BTOM)

NDARC Staff: Jan Copeland, Peter Lawrinson and Saul Gerber

Other Investigators: NSW Health Drug Program Bureau: Dr Jennifer Gray, Dr Tony Gill, Devon Indig, and Antoinette Aloï

Aims: To assess the psychometric properties of and clinical-trial a brief multi-dimensional instrument for the ongoing assessment of treatment outcomes for clients receiving alcohol and other drug abuse treatment in NSW. The instrument is designed to investigate the characteristics of persons entering treatment, capture the disability of the client population, document treatment outcomes, inform the planning and development of alcohol and other drug treatment services and aid quality assurance activities.

Design and Method: PILOT: Three hundred (300) clients currently receiving methadone maintenance treatment (MMT) and 300 clients receiving treatment for alcohol and other drug abuse at drug and alcohol treatment agencies will be recruited and interviewed on two occasions 3-7 days apart. The data collected will be used to establish the psychometric properties of the questionnaire.

TRIAL - MMT: Clinical trialing of the BTOM commenced

in selected metropolitan and rural methadone services in November 2000. Participants include all new clients entering methadone maintenance treatment (MMT) from the date of the commencement of the study. The instrument is administered to clients by clinician interview upon induction to MMT and every 3 months thereafter.

TRIAL- Non-MMT: Late last year selected D&A treatment services across NSW were approached to seek their participation in a limited trial of the BTOM for clients receiving counselling, detoxification and rehabilitation services. Agencies agreeing to participate will recruit clients into the study over a 3-4 month period, administering the questionnaire at the commencement of treatment and 3 months thereafter. The second interview will necessitate following up clients who have left treatment in most cases. In order to encourage an unbiased response from clients, these interviews will be conducted either by staff from the same agency, not directly involved in the clients' treatment or by staff from another agency.

From these trials we aim to assess whether the new data items in the non-methadone treatment specific sections meet the needs for data collection and have clinical utility. In addition, it will be important to estimate the additional burden placed on agencies in terms of staff involvement, utilisation of resources and other costs associated with integrating the BTOM into routine clinical practice. Staff involved with the study will be formally surveyed to gain their view of the content, utility and burden of the BTOM. All agencies participating in the BTOM trial will receive a report detailing analysis of their own aggregated, de-identified client data as well as a summary of statewide aggregated data.

At all stages of the study feedback from agency staff is strongly encouraged. We aim to engender ongoing interest and participation by practitioners in the D&A field in the further development of the BTOM, recognising that the successful implementation of the BTOM across treatment services in NSW is contingent upon a broad acceptance of the questionnaire and its aims.

Funding: NSW Health

TITLE: THE PRISON OPIATE DEPENDENCE TREATMENT TRIAL

NDARC Staff: Kate Dolan

Other Investigators: Alex Wodak and Margaret MacDonald

Aims: We propose to compare effects of Naltrexone main-

tenance, methadone maintenance and drug free usual care among heroin using inmates. The main outcome measures will be retention in treatment, heroin use, HIV and HCV incidence, fatal overdose and reincarceration.

Design and Method: In order to enter the study inmates must be opiate free and will be required to undergo detoxification. A drug free wing will be established where inmates reside for at least one week before entering the trial. All inmates will undergo urine testing, be denied contact visits and contact with other inmates. Subjects will be randomised to either Naltrexone (150), methadone (150) or counselling (150). The NH&MRC Clinical Trials Centre Randomisation Service will be used to randomise subjects.

Naltrexone will be administered under supervision at doses of 100 mg on Mondays and Wednesdays and 150 mg on Fridays. Methadone will follow the usual regimen, starting with doses of 20 mgs and increasing by 5 mgs every other day until a stable dose (average of 80 mgs) is achieved.

Subjects will be followed up at 6, 12 and 24 months either by interview or by records. Subjects who have remained in prison or returned to prison will be interviewed. Subjects will be asked to provide contact details for three relatives or friends who will know their whereabouts if they are released from prison. Attempts will be made to interview these subjects in the community. When subjects cannot be located we will check death records and methadone registry. We will also check with the Department of Corrective Services' Offender Record System to calculate rates of reincarceration.

Funding: Corrections Health Service

TITLE: THE ROLE OF COMMERCIAL DRUG INJECTING ROOMS (CDIRS) (SHOOTING GALLERIES) IN THE REGULATION OF PUBLIC INJECTING AND AMENITY IN KINGS CROSS AND THEIR IMPACT ON THE EVALUATION OF THE MEDICALLY SUPERVISED INJECTING CENTRE (MSIC)

NDARC Staff: Jo Kimber and Kate Dolan

Other Investigators: Erica Southgate, Linette Collins, Michael Lynskey and Margaret MacDonald

Aims: To investigate the use of CDIRs in Kings Cross and their role in the regulation of public injecting and amenity in Kings Cross before and after the opening of the MSIC. The study aims to collect current information on the use and characteristics of CDIRs.

Design and Method: Using a pre-post design, the study will use quantitative and qualitative methods including IDU questionnaires and in-depth interviews, key informant interviews, syringe counts and police operations data.

Funding: National Drug and Alcohol Research Centre

TITLE: COMPUTER DELIVERED BRIEF INTERVENTION FOR ALCOHOL PROBLEMS IN GENERAL PRACTICE: A RANDOMISED CLINICAL TRIAL

NDARC Staff: Anthony Shakeshaft, Richard Mattick and Julia Fawcett

Other Investigators: Prof Mark Harris (General Practice, UNSW); Dr Alex Wodak (St Vincents Drug and Alcohol Services); A/Prof Robyn Richmond (Community Medicine, UNSW); and Prof Enrico Coiera (Centre for Health Informatics)

Aims:

- to assess the feasibility of computerised screening for problem drinking in general practitioner (GP) settings
- to evaluate the cost-effectiveness of GP versus computer based brief intervention for problem drinking in metropolitan and rural Australian settings
- to explore the feasibility of a web-based version of computer delivered brief intervention for problem drinking

Design and Method: The study is a RCT with GP surgeries as the unit of randomisation. Patients will be screened in GP waiting rooms by hand-held computer. Of those identified as problem drinkers, half will receive a computer based brief intervention. Patients will be asked questions about their satisfaction with the screening programme and the extent to which they use the internet. The study began in the second half of 2001 and is due for completion in July, 2005.

Funding: National Health and Medical Research Council and Australian Postgraduate Award

TITLE: THE DEVELOPMENT OF AN ADOLESCENT CANNABIS CHECK-UP AND INTERVENTION TRIAL

NDARC Staff: Jan Copeland, Wendy Swift and Greg Martin

Other Investigators: Dr John Howard (Ted Noffs Foundation); Prof Roger Roffman (University of Washington); and A/Prof Robert Stephens (Virginia Polytechnic and State University)

Aims:

- to evaluate the feasibility and effectiveness of a brief “Cannabis Check-up” intervention in enhancing motivation to reduce/cease cannabis use among young people
- to test the additional effectiveness of a one session cognitive behavioural intervention in reducing levels of cannabis use and associated problems, compared to a wait-list control
- to assist the families of young people to learn how to effectively communicate their concern and encourage the young person to make changes in problematic cannabis use

Design and Method: Three hundred young cannabis users aged 14 to 19 years and one or more carers for each participating adolescent will be recruited. Carers are offered an initial session to clarify the nature of their concerns, enhance their skills in effectively communicating them to the young person, and help them consider and practice ways of encouraging them to participate in the Checkup.

Young people can attend up to 3 individual sessions, with the first two comprising the Cannabis Check-up. Session 1 is a thorough assessment of the young person’s cannabis and other drug use, and health, social, family and legal issues. A week later the young person returns and with the clinician, works through a Personal Feedback Report, prepared on the basis of the assessment. After the assessment and feedback sessions, young people may find themselves better appreciating the various positive and negative aspects of their use.

If the young person receives a DSM-IV diagnosis of cannabis abuse or dependence they are offered participation in a randomised-controlled trial. They will be randomly assigned to receive a one session cognitive-behavioural intervention which teaches them practical skills for changing their cannabis use, or a 3 month wait-list control.

Three and six months following their final participation in the study, we will conduct follow-up interviews with the carer and the adolescent. These will gather outcome data on all the relevant aspects of the study (including urinary cannabinoid levels at 3 months). Those in the wait list control group of the RCT will be offered the single session at the 3 month follow-up.

Funding: Australian Government Department of Health and Ageing

Information and training**TITLE: AUSTRALIAN METHAMPHETAMINE INTERVENTIONS RESEARCH FORUM**

NDARC staff: Rebecca McKetin and Richard Mattick

Aims: In 2002 a forum on psychostimulants was held in conjunction with the Inter-Governmental Committee on Drugs (IGCD) meeting to discuss research and treatment priorities between key stakeholders. This initial psychostimulant forum prompted discussion around treatment and research priorities relating to methamphetamine use in Australia. The current forum consists of a smaller group of researchers active in the area of methamphetamine interventions research who will take forward the ideas arising from the initial psychostimulant forum through a series of technical working group meetings. The forum is intended to improve communication between methamphetamine researchers in Australia, support collaborative research initiatives, and enhance comparability of outcome measures and methods used in methamphetamine interventions research.

Funding: Australian Government Department of Health and Ageing

TITLE: DISSEMINATING AND IMPLEMENTING THE GUIDELINES FOR THE TREATMENT OF ALCOHOL PROBLEMS

NDARC Staff: Fiona Shand, Jenny Gates, and Richard Mattick

Aims:

- to ensure that the Guidelines for the Treatment for Alcohol Problems influence and improve the treatment of alcohol dependence and other alcohol problems, by:
- increasing knowledge among treatment providers about which treatments are effective and most suited to their patients’ needs
- increasing the community’s knowledge of appropriate and effective treatments

Design and Method:

- distribution to general practitioners, alcohol and other drug professionals, nurses, psychologists, psychiatrists, and social workers.
- a telephone campaign to all specialist alcohol and drug treatment services to alert them to the distribution of the guidelines and to upcoming workshops in their area, and to assess their training needs with respect to the guidelines

- a series of 100 training workshops across Australia for a range of health professionals
- conference presentations at health conferences across Australia
- negotiating for the inclusion of the guidelines in education curricula
- development of educational materials to support the guidelines
- needs analysis for software which helps clinicians to prepare a treatment plan for each client

Funding: Australian Government Department of Health and Ageing

TITLE: CHOICE HEALTH READER

NDARC Staff: Wendy Swift

Aim: The aim of the NDARC contribution to CHOICE Health Reader is to increase the dissemination of recent alcohol and other drug research findings to the general public.

Design and Method: NDARC contributes a page to each of 10 annual issues, highlighting recent findings in the field.

Benefits: This is an easy to read, informative way of disseminating important research findings to the general public and interested health professionals.

Funding: National Drug and Alcohol Research Centre

TITLE: EVIDENCE-BASED ANSWERS TO CANNABIS QUESTIONS

NDARC Staff: Jan Copeland, Wendy Swift and Saul Gerber

Aim: This project, funded by the Australian National Council on Drugs, will review of the literature on a range of issues associated with the health and psycho-social aspects of cannabis use. This review will be developed into “plain English” materials to inform policy makers, the media and the general community on answers to common questions about cannabis.

Funding: Australian National Council on Drugs

TITLE: PROGRAM OF INTERNATIONAL RESEARCH AND TRAINING (PIRT)

NDARC Staff: Kate Dolan, Carolyn Day, Anthony Shakeshaft and Richard Mattick

Aim: The aim of PIRT is to develop an international arm as part of NDARC’s core business. In order to achieve this aim, NDARC will need to acquire the necessary skills in conducting drug and alcohol research in developing countries. NDARC will cover the costs of several small scale research projects in order to gain sufficient experience. Once NDARC is experienced in such research, we will be in a position to apply for grants.

There are a number of activities to undertake in the research and training aspects for PIRT. In particular these activities are as follows:

Research

- host a meeting in Asia for drug and alcohol professionals from a range of countries
- a survey of Iranian GPs’ knowledge of drug and alcohol treatment and modes of BBVI transmission
- a clinical audit of IDUs and non-IDU patients at GP surgery in Iran. Two hundred records of drug users and injecting drug users will be analysed. Data analysed will include drug use history, drug treatment and prison history
- a survey of Iranian IDUs’ drug use and injecting risk behaviour
- identify drug and alcohol programs in developing countries that may be suitable for evaluation.

Training

- explore the possibility of running a 1 year Certificate Course in research that will target researchers in Asia
- develop generic packaged evaluations for drug treatment programs.

Funding: Australian Government Department of Health and Ageing

Completed Projects

Epidemiology

TITLE: THE EPIDEMIOLOGY OF COMORBIDITY BETWEEN ALCOHOL USE DISORDERS AND MENTAL DISORDERS IN AUSTRALIA

NDARC Staff: Lucy Burns and Maree Teesson

Aim: To establish the prevalence of comorbidity between alcohol use disorders, anxiety and depression in the Australian population and associated disability.

Design and Method: This study used data from the National Survey of Mental Health and Well Being (NSMH&WB). The NSMH&WB is a cross-sectional survey of 10,641 Australian adults conducted in 1997 that measures the prevalence of DSM-IV mental disorders in the previous 12 months and associated disability and health service utilisation. To account for the complex survey design this study adjusted the data using the Jackknife method of replication.

Results: Results show approximately one-third of respondents with an alcohol use disorder (abuse or dependence) met criteria for at least one comorbid mental disorder in the previous twelve months. They were ten times more likely to have a drug disorder, four times more likely to have an affective disorder and three times more likely to have an anxiety disorder. Respondents with an alcohol use disorder and a comorbid mental disorder were significantly more disabled and higher users of health services than respondents with an alcohol use disorder and no comorbid mental disorders.

Benefits: These results reinforce the need for both mental health and drug and alcohol professionals to be provided with education to assist with appropriate identification, management and referral of clients presenting with this complex range of disorders.

Output:

Burns, L., Teesson, M. & Lynskey, M. (2002). *The epidemiology of comorbidity between alcohol use disorders and mental disorders in Australia*. Technical Report No 118. Sydney: National Drug and Alcohol Research Centre.

Burns, L. & Teesson, M. (2002). Alcohol use disorders comorbid with anxiety, depression and drug use disorders: Findings from the Australian National Survey of Mental Health and Well Being. *Drug and Alcohol Dependence* 68, 299-307.

Funding: NSW Health Department PhD scholarship



TITLE: IDU AND HIV/AIDS RISK REDUCTION, PREVENTION AND TREATMENT FOR WOMEN DRUG USERS

NDARC Staff: Carolyn Day and Kate Dolan

Aims: To review the literature on the risk reduction, prevention and treatment measures for women drug users.

Design and Method: Literature review

Results: HIV risk behaviours are typically higher among women than men. Women who inject drugs are often involved in relationships with men who also inject drugs, placing them at greater injecting and sexual risk of HIV transmission. HIV interventions for women typically comprise those for all IDUs such as needle and syringe programs, though few of these programs have been evaluated specifically with regard to their impact on women. There is evidence that at least some women experience barriers in accessing these services. Services which provide a non-punitive, non-judgmental service are likely to be attractive to women and need to be situated in locations accessible and practical while providing anonymity. Improved access to outreach may also benefit women. Methadone maintenance treatment (MMT) has been found to reduce HIV transmission, though there is little known about its role among women who report a number of barriers to treatment. Pregnant women also need to be considered and provided with the same treatment as those who are not pregnant, unless contraindicated. A range of psychosocial interventions have also been found to be effective, though these frequently fail to recognise structural barriers. New interventions, such as supervised injecting centres may be effective in reducing HIV transmission among women.

Benefits: The review can assist treatment providers in dealing with female clients.

Outputs: The review has been published as a chapter in a book.

Funding: Centre for Addiction and Mental Health, Canada

Identification of potential harms

TITLE: TEMAZEPAM PROJECT: INVESTIGATING THE IMPACT OF THE RESTRICTION IN PUBLICLY SUBSIDISED 10MG TEMAZEPAM GEL CAPSULES

NDARC Staff: Courtney Breen, Louisa Degenhardt, Amanda Roxburgh and Richard Mattick

Other Investigators: Barbara Gray and Anthea Duquemin,

Department of Health and Community Services (NT); Jane Fischer, Stuart Kinner and Prof Jake Najman, Queensland Alcohol and Drug Research and Education Centre (QLD); Raimondo Bruno and A/Prof Stuart McLean, University of Tasmania (TAS); Rebecca Jenkinson, Peter Miller and Craig Fry, Turning Point Alcohol and Drug Centre Inc. (VIC)

Aims: To examine the restriction of publicly subsidised 10mg temazepam gel capsules

Design and Method: The project involved (a) interviews with injecting drug users that used benzodiazepines (b) interviews with doctors and pharmacists regarding their contact with benzodiazepine users and (c) analysis of prescription data on benzodiazepines. Data on PBS subsidised medicines and estimates of non-subsidised medicines were examined for changes in prescriptions by benzodiazepine type. General Practice Research Network (GPRN) records on prescribing patterns of a random sample of general practitioners (GPs) were also examined. Two surveys with sentinel groups of IDU in NSW, NT, QLD, TAS and VIC were conducted. The first survey was conducted as part of the IDRS in June 2002 and examined patterns of benzodiazepine use prior to the policy change, and use in the month after the change. Surveys were conducted again in December 2002, six months after the policy change and examined patterns of use in the month prior to interview.

Results: There was a decrease in 10mg temazepam capsule prescriptions and a corresponding increase in 10mg temazepam tablet prescriptions after the policy change. IDU survey data suggested that IDU continued to inject benzodiazepines and temazepam capsules. The frequency of the injection of capsules after the restriction appeared similar to the frequency prior to the change. There was no change in the frequency of injection of tablets. The majority of IDU reported obtaining their benzodiazepines from doctors, with substantial proportions obtaining capsules. About half of IDU reported purchasing benzodiazepines on 'the street'.

Benefits: The information can be used to guide policy makers and health professionals on the use of benzodiazepines and the impact change in policy may have. Limiting the prescription of temazepam capsules may have reduced their injection by some IDU but additional strategies are needed to reduce the misuse among this group. These may include further restriction of capsule preparations, continued education of doctors and injecting drug users, and the examination of prescribing practices of individual doctors.

Outputs: The results are reported in NDARC Technical



Report No. 158. The results were presented at the 2003 International Harm Reduction Conference in Chaing Mai, Thailand. A paper has been submitted for publication.

Breen, C., Degenhardt, L., Roxburgh, A., Bruno, R., Fry, C., Duquemin, A., Fischer, J., Gray, B., & Jenkinson, R. (2003). *The impact of changes in the availability of publicly subsidised 10mg temazepam gel caps in Australia*. Technical Report No. 158. Sydney: National Drug and Alcohol Research Centre.

Funding: Australian Government Department of Health and Ageing

TITLE: INVESTIGATING THE NATURE AND CIRCUMSTANCES OF COCAINE OVERDOSE AMONG INJECTING DRUG USERS (IDU)

NDARC Staff: Sharlene Kaye and Shane Darke

Aims: Sydney has seen an increase in the prevalence and frequency of cocaine use in the last few years, particularly among IDU. Accordingly, there has been an increase in the amount of problems associated with cocaine use. At present, there is little known about the occurrence of overdose among this group. The aims of this study were as follows:

- to investigate the nature and prevalence of cocaine toxicity or "overdose"
- to determine the circumstances of reported overdoses and responses by those present
- to examine risk perceptions of cocaine overdose
- to ascertain the factors associated with cocaine overdose

Design and Method: This study was based on a cross-sectional survey design. 200 IDU were administered a structured questionnaire examining cocaine overdose history, symptoms of cocaine overdose, witness to overdose of others, behavioural responses to overdose, and risk perceptions of overdose.

Funding: Australian Government Department of Health and Ageing

TITLE: PREVALENCE, RISK FACTORS AND BURDEN OF CANNABIS USE IN AUSTRALIA

NDARC Staff: Maree Teesson

Other Investigators: Michael Lynskey, Barry Manor and Andrew Baillie

Aims: Cannabis is the most widely used illicit drug in developed countries, and has a significant impact on mental

and physical health in the general population. However, the validity of common diagnostic schemes and their applicability to cannabis use disorders is poorly understood. This work describes a confirmatory factor analysis of the DSM-IV cannabis abuse and dependence criteria, using general population data.

Design and Method: Data from cannabis users (n = 722) were obtained from a cross-sectional study of a large and representative sample of the Australian general population. The DSM-IV criteria for cannabis abuse and dependence were assessed using the CIDI-AUTO instrument.

Results: Approximately one in twelve Australians (7.1%) had used cannabis more than five times in the past twelve months and 56.5% of these reported at least one DSM-IV cannabis abuse or dependence criteria. Within the adult population, 2.2% met criteria for a cannabis use disorder (0.7% abuse and 1.5% dependence). Confirmatory factor analysis indicated that both a one-factor and two-factor model for cannabis use disorder provided an adequate fit to the data. However, the estimated correlation between the abuse and dependence factors in the two-factor model was extremely high (.99). A one-factor model provided the most parsimonious model of the cannabis abuse and dependence criteria.

Benefits: These results reinforce the need for clarification around the diagnostic classification systems.

Output:

Teesson, M., Lynskey, M., Manor, B., & Baillie, A. (2002). The structure of DSM-IV Cannabis use disorders in the community. *Drug and Alcohol Dependence* 68,255-262.

Funding: National Health and Medical Research Council

TITLE: ILLICIT DRUG USE AND DRIVING AMONG INJECTING DRUG USERS

NDARC Staff: Shane Darke, Joanne Ross and Erin Kelly

Other Investigators: Ms Linette Collins (NSW Police Service)

Design and Method: The project examined the prevalence of drug driving, the prevalence of drug-related motor vehicle accidents, risk perceptions of drug driving, and factors associated with drug driving among injecting drug users. A sample of 300 regular injecting drug users, recruited from the inner, middle and outer areas of the greater Sydney metropolitan area were administered a structured interview addressing the frequency and circumstances of drug driving.

Benefits: The study provided the first detailed data on the extent of intoxicated driving among IDU, the drugs implicated in such behavior, the role of drugs in accidents of IDU, and of factors associated with these behaviours. On the basis of such knowledge, strategies to reduce the incidence and consequences of such behaviours could be informed.

Funding: National Drug Law Enforcement Research Fund

TITLE: INJECTING DRUG USE, HEPATITIS C AND OTHER DRUG RELATED HARMS IN AUSTRALIA: A QUALITATIVE STUDY

NDARC Staff: Carolyn Day, Anne-Maree Weatherall, Jo Kimber and Kate Dolan

Other Investigators: Erica Southgate, Margaret MacDonald, Geoff Woolcock & Susan McGuckin

Aims: To identify the factors that influence injecting behaviours which then may impact on the risk of the transmission of blood-borne virus infections (BBVI) using a variety of qualitative methodologies. Specifically the project aims to examine the context, in terms of space and situation, in which injecting takes place and to identify particularly 'high risk' groups.

Design and Method: The project utilises a variety of qualitative methodologies including: in depth interviews, focus groups and participant observation. Interviews, field work and focus groups are being conducted in inner city Sydney. In depth style interviews and focus groups are also being conducted in Queensland. A series of focus groups will also be conducted nationally. This data will be triangulated against the National NSP Survey.

Conclusion: This research found that risky injecting is as much a social practice as an individual behaviour. Risk is embedded in daily routines and mundane and intimate social relations. Risk is influenced by individual, group, cultural, sub-cultural, environmental, political, legal, historical and economic dynamics. 'Risk' is the sum of these dynamics, not a simple transparent concept, and will therefore be defined differently by health professionals and IDUs.

Output:

Southgate, E., Day, C., Kimber, J., Weatherall, A., MacDonald, M., Woolcock, G., McGuckin, S. & Dolan, K. (2003). *Dealing with risk: A multidisciplinary study of injecting drug use, hepatitis C and other blood borne viruses in Australia*, ANCD Research paper 7. Australian National Council on Drugs, Canberra.

The report can be downloaded from the ANCD's website.

Funding: Australian National Council on Drugs

TITLE: HEALTH EFFECTS OF KETAMINE

NDARC Staff: Jan Copeland and Paul Dillon

Aim: This literature review was commissioned by the New Zealand Police Service to provide advice to the Expert Advisory Committee on Drugs (EACD) on the health effects of ketamine.

Benefits: This review will be used by the Expert Advisory Committee to make recommendations to the New Zealand Government about any possible legislative changes to ketamine that may be deemed necessary.

Outputs: The literature review was completed and provided to the New Zealand Police Service. The authors were also asked to provide a selection of key research projects/articles which could also be provided to EACD members.

Funding: New Zealand Police Service

Health economics

TITLE: A COST ANALYSIS OF A PRISON METHADONE PROGRAM

NDARC Staff: Kate Dolan, James Shearer and Marian Shanahan

Aims: The overall aim of the project is to evaluate the cost effectiveness of prison methadone programs using the program in NSW as a basis.

Design and Method: The economic evaluation builds upon the results of the randomised controlled trial of the effectiveness of a prison-based methadone program. An estimate of the costs of the methadone program in NSW will be based on a description of the program's resources.

Benefits: This study is the first to document the cost of a prison methadone program.

Outputs: A report has been prepared by Centre for Health Economics Research and Evaluation, University of Technology, Sydney.

Funding: National Health and Medical Research Council

Drug market analysis and supply reduction

TITLE: GLOBAL INDICATORS FOR MONITORING THE ILLICIT DRUG ENVIRONMENT IN NSW

NDARC Staff: Bridget Barker, Elizabeth Conroy, Louisa Degenhardt, Jo Kimber and Kate Dolan

Aim: To complete phase 4 of the Office of Drug Policy's evaluation of the 1999 NSW Drug Summit. This involved the creation of a catalogue of indicators and data descriptions that enabled a global evaluation of the illicit drug environment in NSW, with recommendations on the indicators that could be used to conduct an examination of this environment before and after the implementation of the initiatives in the Drug Summit.

Design and Method:

- a review of the relevant literature regarding ideal indicators and public dataset description information
- consultation with relevant service providers and key stakeholders with regards to potential datasets and indicators
- recommending indicators against the 11 sections of the Drug Summit Plan of Action
- making recommendations on the identified indicators based on the available information
- where feasible compare NSW datasets with national datasets
- send 11 sections of volume 1: catalogue of indicators to relevant stakeholders for review and feedback
- send 56 data descriptions to relevant stakeholders for review & feedback

Results: A document that outlined the indicators that could be used to help monitor outcomes in the NSW illicit drug environment that could be potentially related to the 1999 NSW Drug Summit (volume 1). A catalogue of indicators and a catalogue of dataset descriptions (volume 2).

Benefits: The first catalogue of indicators and dataset descriptions in NSW. No author has previously identified all illicit drug-related indicators and datasets in NSW/Australia.

Output:

Barker, B., Conroy, E., Degenhardt, L., Kimber, J., & Dolan, K. (2003). *Report to the NSW Cabinet Office of Drug Policy: Global Indicators for monitoring the illicit drug environment in NSW*. Sydney: National Drug and Alcohol Research Centre.

Funding: NSW Cabinet Office of Drug Policy

Prevention and early interventions

TITLE: INVESTING IN FAMILIES AND CHILDREN: FACILITATING A NATIONAL POLICY APPROACH TO THE EARLY YEARS

NDARC Staff: Catherine Spooner

Other Investigators: Siggins Miller Consultants

Design and Method: The project included a review of national and international literature and national consultations to:

- examine the rationale for a focus on children aged 0 to 8 years
- summarise Australian data on, and performance indicators for, the wellbeing of children
- outline a national policy framework for the early years

Benefits: The study contributed to the development of a national policy framework for the early years.

Funding: NSW Commission for Children and Young People and the Queensland Commission for Children and Young People

TITLE: THE ROLE OF POLICE IN PREVENTING AND MINIMISING ILLICIT DRUG USE AND ITS HARMS

NDARC Staff: Catherine Spooner

Other Investigators: Mark McPherson and Wayne Hall

Design and Method: The project included a review of national and international literature and national consultations.

Benefits: This research project provided information to increase the understanding of Australian police, at the policy, planning and operational levels, of ways in which they can contribute to the outcomes sought by the National Drug Strategy in the following areas:

- preventing and minimising the impact of drug overdoses
- encouraging safer illicit drug-use practices
- encouraging entry into drug-treatment programs
- reducing the demand for illicit drugs (including those strategies aimed at reducing the uptake of illicit drugs)

Funding: National Drug Law Enforcement Research Fund

TITLE: EVALUATION AND MONITORING OF THE COUNCIL OF AUSTRALIAN GOVERNMENTS' INITIATIVES RELATED TO THE NATIONAL ILLICIT DRUGS STRATEGY

NDARC Staff: Catherine Spooner

Other Investigators: Health Outcomes International, Wayne Hall

Aim: To evaluate the Council of Australian Governments (COAG) Illicit Drug Diversion Initiatives.

Design and Method: The evaluation was a multi-method evaluation that used information and data from a wide range of sources. The range of data used in the evaluation included:

- quarterly and annual reports from the States and Territories on each of the components of the COAG-NIDS
- reports from Commonwealth Departments responsible for the implementation of the components of COAG-NIDS
- surveys of State Reference Groups overseeing the implementation of COAG-NIDS in each State and Territory;
- interviews of key informants at the Commonwealth, State/Territory and local levels
- sentinel studies conducted in several States into process and outcomes aspect of the Diversion component of the COAG-NIDS

Benefits: This evaluation study provided information to the Australian Government on the progress of the initiative in its first years of operation. This information contributed to decisions regarding further funding to the Illicit Drug Diversion Initiatives.

Funding: Australian Government Department of Finance and Administration

Treatment and other interventions

TITLE: COMORBIDITY BETWEEN ALCOHOL USE DISORDERS, ANXIETY AND DEPRESSION AND THE IMPACT ON TREATMENT OUTCOMES FOR ALCOHOL DISORDERS

NDARC Staff: Lucy Burns and Maree Teesson

Aim: To determine the impact of comorbid mental health disorders on alcohol treatment outcomes and to provide recommendations for service delivery.

Design and Method: A quasi-experimental pre to post design was employed in this study. Ninety-eight clients seek-

ing treatment for alcohol problems were interviewed on admission to treatment and seventy-five (76% response rate) were followed up over a three month period. The main outcomes of interest were disability (measured by the SF-12 and days taken out of role) and the quantity and frequency of alcohol consumed. Also included were participants' evaluation of treatment and recommendation on how treatments could be improved.

Results: Although participants with comorbid anxiety and/or depression received approximately twice as many treatment sessions and a broader range of interventions than those without these additional disorders, they continued to be significantly more disabled and drank significantly more alcohol at three follow-up. There was, however, no difference between the self-reported degree of satisfaction with services of clients with and without comorbid anxiety and/or depression. Both groups were generally satisfied or very satisfied with the services they received. There was a strong suggestion, however, that services could be strengthened by additional funding to provide crisis intervention and assertive follow-up, particularly for clients with comorbid mental health disorders.

Benefits: This study provides evidence that comorbid mental health disorders are a significant issue in treatment. Results suggest that staff at drug and alcohol treatment agencies should be funded to routinely screen for these comorbid disorders and that a model of care be applied that includes features of mental health service delivery with particular emphasis on matching clients to treatment and the provision of crisis intervention and assertive follow-up.

Outputs: This study forms two chapters of a PhD thesis and will be submitted to a peer reviewed journal.

Funding: NSW Health Department PhD scholarship

TITLE: FEASIBILITY OF CLINICAL TRIALS OF THERAPEUTIC COCAINE VACCINES

NDARC Staff: James Shearer and Richard Mattick

Aims: To assess the feasibility of conducting clinical trials of cocaine vaccines in Australia.

Design and Method: Review of the literature and an assessment of the progress of current clinical trials in humans including unpublished reports and data.

Results: The cost associated with the production of cocaine vaccines is considerable and several vaccine candidates have failed due to difficulties in achieving commercial scale production. The burden of disease in Australia associated with

cocaine-related disorders may not be sufficient to justify the substantial investment required to conduct large scale original research studies into cocaine vaccines. Research into vaccines targeted towards other drugs of dependence such as nicotine may be more viable in the Australian context. Vaccines are unlikely to completely block cocaine effects or act as stand-alone treatments, but they may be a valuable additional therapeutic pathway in conjunction with psychosocial and pharmacological approaches.

Outputs:

Shearer, J. & Mattick, R.P. (2003). *Feasibility, rationale and prospects for therapeutic cocaine vaccines*. Technical Report No 168. Sydney: National Drug and Alcohol Research Centre.

Funding: Australian Government Department of Health and Ageing

TITLE: HIV/HCV CLUSTERS IN NSW PRISONS

NDARC Staff: Kate Dolan

Other Investigators: NCHECR and Corrections Health Service

Aims: To collect baseline and follow-up information on all those who presented with a history of recently sharing injecting drug equipment at the MRRC in order to answer the following questions:

- did HIV seroconversions occur after the high-risk exposure in people prescribed or not prescribed PEP?
- what is the efficacy of PEP in a very high-risk setting?
- what is the context and nature of this potential HIV exposure in the prison setting?
- among people prescribed PEP:
 - what proportion of prison inmates prescribed PEP take the full four-week course?
 - what is the incidence of side effects of PEP in this population group?

Design and Method: We proposed a 26-week cohort study of all 146 men who admitted to recent needle-sharing in a NSW Corrections Centre in November 2000 in order to document any HIV seroconversions and their experience of PEP against HIV. The 146 inmates in Corrections Centres who self-identified as recently sharing drug-injecting equipment were asked for their verbal consent for data collection. The existing PEP study had ethical approval to use verbal consent since this means that people are not required to identify themselves with an illegal activity (injecting drug use) and the anonymity of subjects can be protected. For those people giving consent, medical records were obtained from the Joint Records Centre.

The Research Officer then attended the relevant Corrections Centres and collected the following data from the medical records:

- at baseline: issues related to exposure and source, PEP prescription and HIV status prior to this exposure
- 4–6 weeks post exposure: PEP compliance, side effects and HIV status
- 12–26 weeks post exposure: data on HIV status and any ongoing risk activity. While data collection will be based on the forms used in the current PEP study these forms will be adapted for this study

Benefits: The potential use of PEP was assessed in a prison setting

Outcomes:

O'Sullivan, B.G., Levy, M.H., Dolan, K.A., Post, J.J., Barton, S.G., Dwyer, D.E., Kaldor, J.M., & Grulich, A.E. (2003). Hepatitis C transmission and HIV post-exposure prophylaxis after needle- and syringe-sharing in Australian prisons. *Medical Journal of Australia* 178, 546-549.

TITLE: FOLLOW-UP STUDY OF THE SUBJECTS IN THE RCT OF THE NSW PRISON MMT

NDARC Staff: Kate Dolan, James Shearer and Bethany White

Aims: The study assessed the impact of methadone treatment for all 384 subjects by checking the records of all subjects to estimate the rates of:

- reincarceration
- retention in treatment
- mortality (and cause of death)

The study also assessed the impact of methadone treatment for subjects located and interviewed on:

- HIV and HCV incidence
- heroin use

Design and Method: Prison and death records were checked nationally. NSW treatment records were checked. Subjects were contacted in prison, via methadone clinics or probation and parole offices and re-interviewed. Hair and blood samples were collected for testing for heroin and HIV and HCV, respectively.

Results: 236 subjects were re-interviewed (119 treated, 117 controls). Subjects who received long periods of methadone treatment experienced a significant delay to their next reincarceration after being released compared to those who received short or no treatment. HCV seroconversion was associated with experiencing short periods of treatment and



short periods in prison. Subjects currently in methadone treatment were significantly less likely to have used heroin, injected any drug or shared a syringe in the last two months compared to those not in treatment.

Benefits: This study is the first to document the long-term effects of methadone treatment for prisoners. Prison methadone reduced reincarceration, heroin use, injecting drug use and needle and syringe sharing. Few Australian states or other countries operate prison methadone programs yet the treatment is effective in a range of ways.

Outputs: Several conference presentations have been made and a paper is under review.

Funding: National Health and Medical Research Council

TITLE: IMPROVING THE QUALITY OF HEALTH CARE: IDENTIFYING STRATEGIES TO ACHIEVE BEHAVIOUR CHANGE AMONG PROVIDERS OF HEALTH CARE SERVICES

NDARC Staff: Anthony Shakeshaft

Other Investigators: Prof Michele Tansella, Prof Mirella Ruggeri, Dr Antonio Lasalvia and Dr Giovanni Salvi (University of Verona)

Aims: This project aimed to identify strategies for improving clinical practice in community mental health service settings by analysing existing outcome data sets that derive from standardised assessments of both clinicians' and patients' views and behaviours.

Design and Method: The South Verona Outcome Project (SVOP), established and implemented by the Section of Psychiatry, University of Verona, has an internationally recognised record in developing and implementing innovative measures related to patient outcomes in the context of community-based psychiatric care services, including patient satisfaction and quality of care. This project reviewed the progress of this work to date, attempting to identify the most promising opportunities to further integrate these measures into the provision of routine psychiatric clinical care.

Results: The contribution SVOP has made to the field of community psychiatry, particularly in terms of recognising the importance of patients' satisfaction with care and the involvement of patients' significant others in their treatment, is highlighted by this review. The potential for greater integration of relevant measures into the provision of routine clinical care was explored.

Benefits: This project has combined the strengths of SVOP

and NDARC staff in order to produce a paper of international interest, as well as initiate the potential for a joint grant application to facilitate continued collaborative research.

Output: A paper for publication reporting the findings from this review and possibilities for further work is currently being drafted. A feasibility of a joint grant application for funding to evaluate the effectiveness of greater implementation of these measures into the delivery of routine clinical care in psychiatry is currently under consideration.

Funding: National Health and Medical Research Council of Australia Fellowship

TITLE: MODELS FOR PROMOTING BEHAVIOUR CHANGE AMONG HEALTH CARE PROVIDERS

NDARC staff: Anthony Shakeshaft

Other Investigators: Prof Richard Grol and Dr Annelies Jacobs (University of Nijmegen)

Aims: This project aimed to examine a current theoretical model to promote health-provider behaviour change and to identify implications for Australian GP settings.

Design and Method: Staff at the Centre for Quality of Care Research (WOK), University of Nijmegen, The Netherlands, have developed an internationally recognised model for promoting and evaluating behaviour change among health care providers. This project enabled Dr Shakeshaft to examine this process in the context of a European-wide tobacco control project, principally by contributing to a paper for publication in the international literature.

Results: The importance of developing and utilising reliable and valid measures in evaluating behaviour change was clarified in the conduct of this paper. The particular difficulties of developing standardised measures to be utilised in multi-site and multi-national evaluations were explored.

Benefits: This project combined Dr Shakeshaft's expertise in psychometric evaluation of measures with WOK's experience in evaluating behaviour change at a multi-national level, within the framework of a theoretically sound model.

Output: A paper for publication examining the construction and validation of an assessment tool for the treatment of tobacco dependence is currently being drafted. Possibilities for further co-operation are being explored in a number of content areas in which collaboration would be most likely to be of mutual benefit, including improving health care



provided by general practitioners, tobacco control measures and appropriate methodologies for evaluation of complex interventions.

Funding: National Health and Medical Research Council of Australia Fellowship and The Academy of the Social Sciences in Australia (Australian Academy of the Humanities, Australia-The Netherlands Exchange Scheme)

TITLE: ANALYSIS OF THE 2000-2001 NEW SOUTH WALES MINIMUM DATASET FOR CLIENTS OF ALCOHOL AND OTHER DRUG TREATMENT SERVICES

NDARC Staff: Jan Copeland

Other Investigators: Devon Indig (NSW Health)

Aims: To examine patterns of treatment seeking in clients of treatment agencies participating in the New South Wales Minimum Data Set Collection.

Design and Method: An on-going data set that is collected by the NSW Health Department, a subset of which is provided to the National Minimum Data Set for Clients of Alcohol and Other Drug Treatment Services.

Results: There were 33,459 closed episodes of care in New South Wales in the 2000/2001 financial year. The majority of clients (69%) were male and the mean age was almost 34 years. The majority of treatment is sought for problems related to alcohol (37%) and heroin (33%) use. More than a third (40%) of clients were new to drug and alcohol treatment. Half of the clients had a history of injecting drug use with 6.3% of those with heroin as their principal drug of concern never having injected. The most common main service provided was inpatient withdrawal (26%). Multivariate logistic regression revealed that being older, not homeless, non-indigenous and having heroin as the principal drug of concern predicted receiving outpatient withdrawal management.

Output:

Copeland, J. & Indig, D. (in press). Patterns and correlates of service provision: findings from the 2000-2001 NSW Minimum Dataset of Clients of Alcohol and Other Drug Treatment Services. *Drug and Alcohol Review*

TITLE: INTERNATIONAL SURVEY OF SUPERVISED INJECTING CENTRES (SICS)

NDARC Staff: Jo Kimber and Kate Dolan

Other Investigators: Alex Wodak

Aims: When this study was planned in mid 1999, three Australian jurisdictions were considering trials of SICs. Governments, potential service providers, researchers, and public health advocates involved in the discussion were keen to know more about the benefits and costs of these facilities. Limited published information was available in English and the need for more information in English about the operation and outcomes of SICs in Europe was apparent. The aim of this study was to collate information about the operation and outcomes of SICs based on a survey of all known SICs.

Design and Method: A 60-item survey was developed. Questions related to staffing levels, number and types of rooms, hours of operation, provision of places for clients to smoke drugs, rules and procedures, overdose management, provision of and referral to ancillary services, client load, rates of adverse events, research and evaluation, and funding. Contact details were obtained from the authors' professional networks for 39 centres across the Netherlands, Switzerland, Germany and Spain identified as operating SICs. The survey was sent by post, facsimile, or e-mail between October 1999 and July 2000. Six surveys were completed as face-to-face structured interviews.

Results: Most Centres are located close to the drug scene and receive between 100-200 visits a day. All injections are supervised by professional staff in a separate, designated room. All centres provide information and advice on safer use, operate a needle and syringe program, and facilitate referral to drug treatment and other forms of assistance. Most centres also provide onsite primary medical care, counselling, a café serving free or cheap food and shower and laundry facilities. All centres have explicit rules and procedures, in particular prohibiting drug dealing or violence.

Benefits: The first study of injecting centres was conducted. This collation of information will assist authorities who wish to establish such facilities.

Outcomes:

Kimber, J., Dolan, K., & Wodak, A. (2001). *International Survey of Supervised Injecting Centres (1999-2000)*. Technical Report No. 126. Sydney: National Drug and Alcohol Research Centre.



TITLE: THE DEVELOPMENT OF AN ADOLESCENT CANNABIS CHECK-UP AND INTERVENTION TRIAL

NDARC Staff: Jan Copeland, Wendy Swift and Greg Martin

Other Investigators: Dr John Howard (Ted Noffs Foundation); Prof Roger Roffman (University of Washington); and A/Prof Robert Stephens (Virginia Polytechnic and State University)

Aims: The aims of the study were:

- to evaluate the feasibility and effectiveness of a brief "Cannabis Check-up" intervention in enhancing motivation to reduce/cease cannabis use among young people
- to test the additional effectiveness of a one session cognitive behavioural intervention in reducing levels of cannabis use and associated problems, compared to a wait-list control
- to assist the families of young people to learn how to effectively communicate their concern and encourage the young person to make changes in problematic cannabis use

Design and Method: Young cannabis users aged 14 to 19 years and one or more carers for each participating adolescent were to be recruited. Carers were offered an initial session to clarify the nature of their concerns, enhance their skills in effectively communicating these concerns to the young person, and help them consider and practice ways of encouraging the young person to participate in the Check-up.

Young people attended up to 3 individual sessions, with the first two comprising the Cannabis Check-up. Session 1 was a thorough assessment of the young person's cannabis and other drug use, and health, social, family and legal issues. A week later the young person returned and with the clinician, worked through a Personal Feedback Report, prepared on the basis of the assessment. It was intended that after the assessment and feedback sessions, young people may find themselves better appreciating the various positive and negative aspects of their use.

If the young person received a DSM-IV diagnosis of cannabis abuse or dependence they were offered participation in a randomised-controlled trial. They were randomly assigned to receive a one session cognitive-behavioural intervention which teaches them practical skills for changing their cannabis use, or a 3 month wait-list control. Three

and six months following their final participation in the study, we conducted follow-up interviews with the carer and the young person.

Results: Results were encouraging. Three quarters of the sample (78%) reported voluntarily reducing or stopping their cannabis use during the 90 days to follow-up, and 16.7% reported total abstinence during this time. In addition, significant reductions were found on measures of both quantity and frequency of use. These reductions in use were reflected in changes in levels of cannabis dependence, with a marked drop in the proportion of the sample meeting criteria for dependence, and a significant reduction in the numbers of dependence criteria being endorsed by participants. These reductions were maintained at 6-month follow-up.

Funding: Australian Government Department of Health and Ageing

TITLE: A TRIAL OF TWO BRIEF INTERVENTIONS FOR CANNABIS PROBLEMS AMONG YOUNG OFFENDERS IN NSW

NDARC Staff: Jan Copeland, Wendy Swift and Ety Matalon

Other Investigators: Dr John Howard (Ted Noffs Foundation); Prof Roger Roffman (University of Washington); A/Prof Robert Stephens (Virginia Polytechnic & State University); Mr Tim Keogh (NSW Department of Corrective Services); and Dr Don Weatherburn (NSW Bureau of Crime Statistics and Research)

Aims: The main aims of this project were to:

- test the effectiveness of the "Cannabis Check-up" intervention in the reduction of cannabis-related criminal activity amongst young offenders who come to the attention of the NSW legal system
- to inform the implementation of similar interventions in other legal jurisdictions within Australia

Design and Method: A target sample of 460 young people aged 14-19 years old were to be randomly assigned to receive one of two interventions, the Cannabis Check-up and the Cannabis Check-up Plus (each n=230). Eligible participants had to meet a variety of legal and research requirements. The most important legal requirement was eligibility for a non-custodial sentence. Participants were recruited in four main ways: (i) the NSW Children's Court, (ii) the NSW Department of Juvenile Justice - Community Services and Youth Justice Conferencing, (iii) the NSW



Police Cautioning Scheme, and (iv) legal defence teams. All participants provided informed consent.

Young people assigned to the Cannabis Check-up received a single session of approximately 90 minutes, comprising a thorough assessment of their cannabis and other drug use, health, social and family functioning and legal issues. The session concluded with a focused feedback of the findings.

Those assigned to the Check-up Plus received 3 sessions. The first comprised a thorough assessment. About one week later the young person and clinician together reviewed a Personal Feedback Report, prepared on the basis of the assessment. The final session focused on providing strategies for quitting, including goal setting, coping with craving and withdrawal and behavioural self-management. The young person was given a booklet which they worked through in this session.

The young person was followed up six months after their last participation in the Check-up.

Results: Due to severe recruitment difficulties, data collection for this project was concluded in December 2003. In an 18 month period, 29 young people were recruited – 26 from the NSW Department of Juvenile Justice and three from the NSW Children's Courts. At the request of the NSW Department of Juvenile Justice, the Check-up materials were developed into a training package for their staff, and three workshops were delivered during May, 2003. The background, methodology and preliminary results of this study and the Check-up manual and materials are being prepared as a NDARC Technical Report. In addition, a paper is being prepared on the issues related to conducting clinical trials within the correctional context.

Funding: NSW Attorney General's Department and the Commonwealth Government's National Crime Prevention Program.

TITLE: IDU AND HIV/AIDS RISK REDUCTION, PREVENTION AND TREATMENT MEASURES FOR PRISON POPULATIONS

NDARC Staff: Kate Dolan

Aims: To review the literature on the risk reduction, prevention and treatment measures for prison populations.

Design and Method: Literature review

Results: The two most common HIV prevention strategies for inmates are condoms and bleach provision. Sufficient

information exists to support a number of recommendations. These include reducing the size of prison populations (and especially IDUs prisoners), providing methadone maintenance treatment, condoms, bleach, hepatitis B vaccinations and voluntary testing for HIV, hepatitis B, hepatitis C and sexually transmissible infections.

Benefits: This review can assist prison authorities to respond to HIV in the prison setting.

Outputs: The review has been published as a chapter in a book.

Funding: Centre for Addiction and Mental Health, Canada

TITLE: COLLECTION OF INFORMATION ON INJECTING DRUGS AND HIV IN PRISON IN DEVELOPING COUNTRIES

NDARC Staff: Kate Dolan, Ben Kite and Emma Black

Aim: To review the literature on HIV infection in prison in developing and transitional countries

Design and Method: Literature review

Results: 149/165 countries had information on the size of prison populations. HIV prevalence data were obtained for 78/165 countries. Limited information was found on the proportion of drug users (and IDU) among prisoners (29 countries). The highest proportion of IDU prisoners was found in Russia (e.g. in 1999, 58% of prisoners at Kresti prison, St Petersburg were IDU). Information on the prevalence of HIV positive IDUs in prison was found for only 18 countries. Information on HIV transmission in prison was found for eight developing and transitional countries.

Benefits: This is the first review of its kind. IDU/HIV is found in all global sectors, however information on IDU and HIV/IDU in prisons is scarce. At present few developing and transitional countries run systematic prison HIV surveillance programmes. IDU, HIV and prevalence of HIV among IDUs in prison, is a neglected issue in most countries.

Outputs: A report for UNAIDS has been written and an abstract submitted to the International AIDS conference in Bangkok, 2004.

Funding: Imperial College of Science, Technology and Medicine, London

Information and training

TITLE: THE MANAGEMENT OF ALCOHOL DEPENDENCE PROJECT

NDARC Staff: Fiona Shand, Jenny Gates, Julia Fawcett and Richard Mattick

Aims: To develop evidence-based clinical and consumer guidelines for the management of alcohol dependence and problems.

Design and Method: The project involved (a) a review of the available evidence regarding efficacy; and (b) the input of an expert panel of alcohol specialists. The procedure used to identify research involved searching relevant databases for published clinical trials, reviewing reference lists of collected literature, searching website bibliographies, advertising for unpublished research, and contact with major research centres for unpublished research. The National Health and Medical Research Council levels of evidence hierarchy was used to classify the quality of the evidence available in each

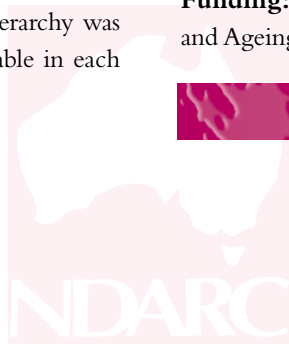
treatment area.

Results: The guidelines cover the treatment process from screening and assessment through to withdrawal management, brief intervention, residential rehabilitation, psychosocial interventions, relapse prevention, pharmacotherapies for relapse prevention, and extended care.

Benefits: The guidelines can be used to guide treatment, education, and professional development for health professionals.

Outputs: In addition to the guidelines, the project resulted in the publication of a literature review. Summary guidelines for GPs, hospital staff, alcohol and drug professionals, drinkers, and young people are currently being finalised. A team from NDARC are travelling around Australia in 2004 running workshops for health professionals on the guidelines.

Funding: Australian Government Department of Health and Ageing



Appendices

GLOSSARY

AGDHA	Australian Government Department of Health and Ageing
ANCD	Australian National Council on Drugs
DETYA	Department of Education, Training and Youth Affairs
NDLERF	National Drug Law Enforcement Research Fund
NHMRC	National Health and Medical Research Council
NSW AGD	NSW Attorney General's Department
NSW CO	NSW Cabinet Office
NSW CHS	NSW Corrections Health Service
NSW DEAT	NSW Department of Education and Training
NSWH	NSW Health
TP	Turning Point Alcohol and Drug Centre
WHO	World Health Organisation

APPENDIX A

SEMINARS

IN-HOUSE SEMINARS

- February 13 A/Prof Shane Darke
Health service utilisation and benzodiazepine use among heroin users: Findings from ATOS
- February 27 Carolyn Day
Using the NDARC template for technical reports and monographs: an exercise in procrastination
- March 20 Stuart Gilmour
Baron von Munchhausen's revenge: Bootstrapping and its uses at NDARC
- April 9 Fiona Shand
An overview of a workshop on the management of alcohol dependence guidelines
- April 24 Katherine Mills
Playing with fire: Young people presenting for treatment of heroin dependence
- May 8 Paul Dillon
Media: Manipulated or manipulator?
- May 22 Julia Fawcett
Use of hand-held computers in GP surgeries
- May 29 Rebecca McKetin
Methamphetamine: The current picture
- June 19 Saul Gerber
Trialling the Brief Treatment Outcome Measure (BTOM) in detoxification, counselling and rehabilitation services
- July 17 Courtney Breen
The impact of a restriction in publicly subsidised temazepam gel caps on IDUs
- August 14 Chris Doran
Health economics at NDARC: where to next?
- August 21 Michael Gascoigne
Patterns of use and experiences of recreational pharmaceutical drug use amongst 'party drug' users
- September 11 Richard Mattick
The evaluation of the Medically Supervised Injecting Centre

- September 18 Fiona Shand
Implementing the guidelines for the treatment of alcohol problems
- October 9 James Shearer
Drug strategies within Australian prisons
- October 16 Jennifer McLaren
Update on the Methamphetamine Markets project
- October 23 Shane Darke
Drugs and Driving Study
- November 13 Elizabeth Conroy
The impact of the heroin shortage on substance using pregnant women

INVITED SEMINARS

- February 6 Ecstasy epidemiology, neurobiology and dependence liability – Prof Linda Cottler, University of Washington, St Louis, USA
- March 13 School of Public Health and Community Medicine and NDARC: scope for enhancing alignment – Prof Anthony Zwi, Head of School, School of Public Health and Community Medicine
- April 10 What are those freaks doing now? – Michael Lodge, NSW Users and AIDS Association
- April 29 Mycoherbicides and their role in the eradication of opium and coca plants – Prof David Sands, Department of Plant Sciences and Plant Pathology, Montana State University
- May 13 The ALIVE Study – the natural history of HIV infection among injection drug users – Prof David Vlahov
- May 29 NHMRC funding for drug and alcohol research – Prof Janet Greeley, Executive Dean, Faculty of Social Sciences, James Cook University
- August 28 Treatment of hepatitis C among current injecting drug users – Dr Greg Dore, Head of Viral Hepatitis Program, National Centre for HIV Epidemiology and Clinical Research



APPENDIX C GRANTS FROM EXTERNAL SOURCES

PROJECT TITLE	FUNDING SOURCE	TOTAL AWARD (\$)	EXPENDITURE 2002	EXPENDITURE 2003
Illicit Drug Reporting System	AGDHA	553,113 (2 years)*	290,380	302,429
Illicit drug statistical analysis	AGDHA	316,102 (2 years)*	206,034	154,617
Research support	DETYA	357,395 (2 years)*	204,880	152,515
Follow-up study of subjects in a randomized controlled trial of methadone treatment in prison	NHMRC	121,246 (3 years)	60,027	25,212
A cost-effectiveness analysis of prison methadone programs in Australia	NHMRC	61,157	38,171	22,986
Extension of addiction treatment outcome study	AGDHA	615,587 (3 years)	156,425	222,751
Addiction treatment outcome study	NHMRC	430,264 (3 years)	161,206	78,149
Adolescent cannabis check up and intervention trial	AGDHA	330,257 (3 years)	83,494	74,409
The development of a comorbidity monograph	AGDHA	99,849	32,646	979
A trial of two brief interventions for cannabis problems among young offenders in NSW	NSW AGD	313,207 (3 years)	97,140	67,077
Randomized controlled trial of naltrexone, methadone, alcohol and other drug treatment programs in NSW prisons	NSW CHS	259,176 (3 years)	75,803	84,818
Evaluation of the Medically Supervised Injecting Centre	NSW H	300,312 (3 years)	116,925	104,629
Risks of injecting: infectious disease	ANCD	92,920	46,770	24,709
Development of a brief multi-dimensional instrument to measure outcomes of alcohol and other drug treatments	NSW H	343,700	135,045	130,601
Development of appropriate interventions for amphetamine users	AGDHA	211,522 (2 years)*	94,554	91,092
Quality assurance in the treatment of alcohol dependence	AGDHA	160,604 (1.5 years)	94,210	66,394
Cost analysis of pharmacotherapies for nicotine and alcohol dependence	AGDHA	427,109 (2 years)*	151,920	205,786
Drug use and HIV HCV prevalence among rural injecting drug users	AGDHA	20,000 (1.5 years)	14,776	4,268
Physical and psychological health of cocaine users	AGDHA	93,851 (2 years)*	36,828	43,216
Monitoring of global drug indicators for NSW	NSW CO	63,416 (2 years)	27,656	23,936



PROJECT TITLE	FUNDING SOURCE	TOTAL AWARD (\$)	EXPENDITURE 2002	EXPENDITURE 2003
Review of correctional services responses to reduce the initiation level and impact of drug use within Australian prisons	ANCD	49,000	13,127	35,873
Extension of IDU survey of the Illicit Drug Reporting System	NDLERF	325,850 (2 years)	36,108	183,721
The causes, effects and implications of the heroin drought in ACT, NSW and Vic	NDLERF	367,585	106,532	261,053
Illicit drug use and driving among injecting drug users	NDLERF	75,553	47,530	28,023
The emergence of potent forms of methamphetamine in Sydney	NDLERF	245,781	0	53,378
NEPOD dissemination strategy	AGDHA	99,752 (1.5 years)	60,095	39,477
Study of temazepam injecting in Australia	AGDHA	55,497 (1.5 years)	30,305	25,192
Program of International Research and Training (PIRT)	AGDHA	124,000 (2 years)	0	91,305
Validity and reliability of a cannabis questionnaire	AGDHA	20,000	0	20,000
Recreational pharmaceutical drug use amongst party drug users	AGDHA	49,956	6,891	43,065
Information about party drugs	AGDHA	49,956	6,781	43,175
An examination of the feasibility of conducting Australian trials of therapeutic cocaine vaccines	AGDHA	20,000	6,855	13,145
Patterns of injecting drug use, risk behaviours and blood-borne viral incidence following changes in the drug market	NSW H	49,843	0	16,058
Adolescents' beliefs about psychostimulants and psychostimulant drug education	NSW DEAT	34,598	0	12,388
Effectiveness of HIV prevention and care interventions for young and new injecting drug users	WHO	6,580	0	5,477
Identifying strategies to achieve behaviour change among providers of health care services	NHMRC	12,500	0	3,570
Monitoring party drug markets in Australia	NDLERF	801,224 (2 years)	0	186,123
Estimating the number of heroin users in NSW and Australia	NSW CO NSW H	32,900	0	25,258
Evidence-based answers to cannabis questions	ANCD	55,937.27	0	24,204
Pharmacology of amphetamine abuse	HT	9,090.91	0	1,480
Alcohol action in rural communities	NHMRC	126,000 (3 years)	0	12,956
Modelling the costs and the outcomes of changing general practitioner behaviours with respect to at risk drinking	AERF	37,878	0	7,738

PROJECT TITLE	FUNDING SOURCE	TOTAL AWARD (\$)	EXPENDITURE 2002	EXPENDITURE 2003
Review of national and international literature for consideration of clinical trial of sustained release naltrexone	AGDHA	12,360	0	12,360
Club drugs study: USA/Australia	NIH	64,787	0	23,540
Implementation of the guidelines for the treatment of alcohol problems	AGDHA	161,690	0	37,977
Structural determinants of drug use	AGDHA	150,000	0	29,226
Review of the relationship between cannabis use and mental health	NSW DEAT	21,533	0	0
Exploration of drug injectors' understanding of hepatitis C infection and implications for transmission	NSW H	79,973	0	7,153
A prospective cohort study of mortality, abstinence, criminality and psychiatric comorbidity	NHMRC	411,500	0	0
SUB TOTALS FOR PROJECTS (OVER 1 TO 5 YEARS)		8,721,931.18	2,439,114	3,123,488
INFRASTRUCTURE	FUNDING SOURCE	TOTAL AWARD (\$)	EXPENDITURE 2002	EXPENDITURE 2003
Support for research infrastructure	DETYA	543,870 (2 years)*	259,887	283,983
SCHOLARSHIPS	FUNDING SOURCE	TOTAL AWARD (\$)	EXPENDITURE 2002	EXPENDITURE 2003
Postgraduate scholarship	NSW H	131,700 (3 years)	28,846	18,939
Postgraduate scholarships (2)	AGDHA	92,266 (2 years)*	35,630	43,539
Post Doctoral Research Scholarship: Computer delivered brief intervention for alcohol abuse	NHMRC	221,516 (4 years)	59,880	49,763
Neil Hamilton Fairley Fellowship: Examining pharmacotherapy treatment systems for heroin dependence	NHMRC	366,838 (4 years)	124,601	136,856
SUB-TOTALS FOR SCHOLARSHIPS (OVER 3 TO 4 YEARS)		812,320	248,957	249,097
GRAND TOTALS OF AWARDS TO NDARC (OVER 1 TO 4 YEARS)		10,078,121.18	2,947,958	3,656,568

* continuing project

APPENDIX D PUBLICATIONS

MONOGRAPHS

150. Breen, C., Degenhardt, L., Roxburgh, A., Bruno, R., Duquemin, A., Fetherston, J., Fischer, J., Jenkinson, R., Kinner, S., Longo, M., & Rushforth, C. (2003). *Australian Drug Trends 2002: Findings of the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

TECHNICAL REPORTS

139. Ross, J., Teesson, M., Darke, S., Lynskey, M., Hetherington, K., Mills, K., Williamson, A., & Fairbairn, S. (2003). *Characteristics of heroin users entering three treatment modalities in New South Wales: Baseline findings from the Australian Treatment Outcome Study (ATOS)*. Sydney: National Drug and Alcohol Research Centre.

144. Roxburgh, A., Degenhardt, L., Breen, C., & Barker B. (2003). *New South Wales Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

145. Jenkinson, R., Fry, C. & Miller, P. (2003). *Victorian Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

146. Longo, M., Christie, P., Ali, R., & Humeniuk, R. (2003). *South Australian Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

147. Kinner, S. & Fischer, J. (2003). *Queensland Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

148. Bruno, R. & McLean, S. (2003). *Tasmanian Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

149. Fetherston, J. & Lenton, S. (2003). *WA Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

150. Rushforth, C. (2003). *Australian Capital Territory Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

151. Duquemin, A. & Gray, B. (2003). *Northern Territory Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

152. Darke, S., Kelly, E. & Ross, J. (2003). *Drug use and driving among injecting drug users*. Sydney: National Drug and Alcohol Research Centre.

153. Kelly, E., Darke, S. & Ross, J. (2003). *Drug use and driving: epidemiology, impairment, risk factors and risk perceptions*. Sydney: National Drug and Alcohol Research Centre.

154. Dolan, K., Rees, V., Peters, R., & Wodak, A. (2003). *A Brief Cognitive Behavioural Intervention for Alternatives to Injecting: Therapist's Manual*. Sydney: National Drug and Alcohol Research Centre.

155. Dolan, K., Shearer, J., White, B., & Wodak, A. (2003). *A randomised controlled trial of methadone maintenance treatment in NSW prisons*. Sydney: National Drug and Alcohol Research Centre.

156. Lawrinson, P., Copeland, J. & Indig, D. (2003). *The Brief Treatment Outcome Measure: Opioid Maintenance Pharmacotherapy (BTOM) Manual*. Sydney: National Drug and Alcohol Research Centre.

157. Teesson, M., Sannibale, C., Reid, S., Proudfoot, H., Gournay, K., & Haber, P. (2003). *Manual for Compliance Therapy in Alcohol Pharmacotherapy*. Sydney: National Drug and Alcohol Research Centre.

158. Breen, C., Degenhardt, L., Roxburgh, A., Bruno, R., Fry, C., Duquemin, A., Fischer, J., Gray, B., & Jenkinson, R. (2003). *The impact of changes in the availability of publicly subsidised 10mg temazepam gel caps in Australia*. Sydney: National Drug and Alcohol Research Centre.

159. Ross, J., Lynskey, M., Teesson, M., Darke, S., Havard, A., Mills, K., Williamson, A., Hetherington, K., & Fairbairn, S. (2003). *Three month outcomes for the treatment of heroin dependence: Findings from the Australian Treatment Outcome Study (ATOS), New South Wales*. Sydney: National Drug and Alcohol Research Centre.

160. Martin, G. & Copeland, J. (2003). *Web-based substance use intervention: literature review and assessment of feasibility in Australia*. Sydney: National Drug and Alcohol Research Centre.

161. Williamson, A., Darke, S., Ross, J., & Teesson, M. (2003). *Cocaine use among the ATOS NSW sample: Prevalence and related harms*. Sydney: National Drug and Alcohol Research Centre.



- 162. White, B., Breen, C. & Degenhardt, L.** (2003). *NSW Party Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS) Party Drugs Module*. Sydney: National Drug and Alcohol Research Centre.
- 163. Barker, B. & Degenhardt, L.** (2003). *Accidental drug-induced deaths in Australia 1997-2001*. Sydney: National Drug and Alcohol Research Centre.
- 164. Barker, B. & Degenhardt, L.** (2003). *Accidental and suicidal drug-induced deaths in Australia 1997-2001*. Sydney: National Drug and Alcohol Research Centre.
- 165. Lawrinson, P., Gerber, S., Copeland, J., & Indig, D.** (2003). *The Brief Treatment Outcome Measure: Detoxification, Rehabilitation and Counselling Manual*. Sydney: National Drug and Alcohol Research Centre.
- 166. Swift, W., Matalon, E., Copeland, J., & Howard, J.** (2003). *The Adolescent Cannabis Check-Up for Young Offenders*. Sydney: National Drug and Alcohol Research Centre.
- 167. Gibson, A., Degenhardt, L., Topp, L., Day, C., Hall, W., Dietze, P., & McKetin, R.** (2003). *Global and Australian heroin markets*. Sydney: National Drug and Alcohol Research Centre.
- 168. Shearer, J. & Mattick, R.P.** (2003). *Feasibility, rationale and prospects for therapeutic cocaine vaccines*. Sydney: National Drug and Alcohol Research Centre.
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APPENDIX E CONFERENCE PRESENTATIONS

Black, E. *Drug strategies within Australian prisons*. Presentation at ANZ Society of Criminology Conference, Sydney, October 1.

Collins, L. *A study of police attendance and activity at heroin overdoses*. Presentation at the 14th International Conference on the Reduction of Drug Related Harm, Chiang Mai, Thailand, 6-10 April.

Collins, L. *Use of the timeline follow-back interview technique with IDUs*. Poster presentation at the 14th International Conference on the Reduction of Drug Related Harm, Chiang Mai, Thailand, 6-10 April.

Copeland, J. *Cannabis: who is at risk, how might you know, and what can you do?* Presentation at the 1st International

Alcohol, Tobacco and Other Drugs Nursing and Midwifery Conference, Adelaide, 15-17 April.

Copeland, J. *Application of brief interventions to cannabis use*. Presentation at Australian Professional Society on Alcohol Drugs (APSAD) National Conference, Brisbane, 19 November.

Copeland, J. *Drug information needs, sources, and credibility among 'club drug' users*. Presentation at Australian Professional Society on Alcohol Drugs (APSAD) National Conference, Brisbane, 17 November.

Degengardt, L. *New drugs, new risks*. Presentation at the 14th International Conference on the Reduction of Drug Related Harm, Chiang Mai, Thailand, 6-10 April.

Degengardt, L. *Restriction of benzodiazepine capsules in Australia*. Presentation at the 14th International Conference on the Reduction of Drug Related Harm, Chiang Mai, Thailand, 6-10 April.

Dillon, P. *Current hot topics*. Invited presentation at the Association of Independent Schools of NSW Years 7-10 PDHPE Conference: Getting Ahead ... In Leaps and Bounds, Homebush, March 20.

Dillon, P. *Drug information needs, sources and credibility among 'party drug' users*. Presentation at the 14th International Conference on the Reduction of Drug Related Harm, Chiang Mai, Thailand, 6-10 April.

Dillon, P. *New drugs, new risks: The current state of play in Australia*. Presentation at the 1st International Alcohol, Tobacco and Other Drugs Nursing and Midwifery Conference, Adelaide, 15-17 April.

Dillon, P. *Cannabis. What's the Story?* Workshop at the YAPA NSW Youth Work Conference, Sydney, 20 April.

Dillon, P. *Party drugs. What's the Story?* Workshop at the YAPA NSW Youth Work Conference, Sydney, 20 April.

Dillon, P. *Drug information needs, sources and credibility amongst 'club drug' users*. Poster presentation at College on Problems of Drug Dependence (CPDD), Miami Beach, Florida, 17 June.

Dillon, P. *The media: manipulator or manipulated?* Workshop presented at From Rhetoric to Reality. The Mental Health Services Conference, Canberra, 3-5 September.

Dillon, P. *Health Professionals and the Media: Swimming with Sharks?* Keynote presentation at Mental Health Occupational Therapy Conference, Brisbane, 10 October.

- Dillon, P.** *Current hot topics.* Presentation at the Association of Independent Schools Drug Education Conference, Sydney, 3 November.
- Dillon, P.** *Waverley College: A case study.* Presentation at the Association of Independent Schools Drug Education Conference, Sydney, 3 November.
- Dolan, K.** *Incidence of HCV and risk behaviours in prison hits.* Presentation at the 14th International Conference on the Reduction of Drug Related Harm, Chiang Mai, Thailand, 6-10 April.
- Dolan, K.** *An overview of the NSW prison methadone program and the research conducted.* Keynote presentation at the 3rd UK Harm Reduction Conference, Cardiff, Wales 11 June.
- Doran, C.** *General practitioners' role in preventive medicine: scenario analysis using alcohol as a case study.* Presentation made at the International Research Symposium – Preventing substance use, risky use and harm: What is evidence based policy? Fremantle, February 24-27.
- Gascoigne, M.** *Recreational pharmaceutical drug use amongst party drug users.* Poster presentation at the 14th International Conference on the Reduction of Drug Related Harm, Chiang Mai, Thailand, 6-10 April.
- Gates, J.** *Treating alcohol problems: National evidence based guidelines.* Workshop presentation at the Winter School in the Sun Conference, Brisbane, 30 June-3 July.
- Gerber, S.** *Tracking the progress of clients through treatment.* Poster presentation at the 14th International Conference on the Reduction of Drug Related Harm, Chiang Mai, Thailand, 6-10 April.
- Harvard, A.** *Depression and heroin use.* Presentation at Australian Professional Society on Alcohol Drugs (APSAD) National Conference, Brisbane, 18 November.
- Martin, G.** *The Australian Adolescent Cannabis Check-up.* Presentation at College on Problems of Drug Dependence (CPDD), Miami Beach, Florida, 17 June.
- Mattick, R.** *Reduction in the availability of heroin in Australia.* Invited presentation at the United Nations Office on Drugs and Crime (UNODC) Experts Group on Technical Challenges to the Drug Community, Vienna International Center, Vienna, Austria, March 3-5.
- Mattick, R.** *The evidence speaks: New treatments for opiate dependence.* Invited plenary presentation at the 1st International Alcohol, Tobacco and Other Drugs Nursing and Midwifery Conference, Adelaide, 15-17 April.
- Mattick, R.** *Alcohol abuse and dependence: Treatment and rehabilitation.* NSW Summit on Alcohol Abuse, Sydney, 26-29 August.
- Mattick, R.** *Guidelines for treating alcohol problems 1993-2003: what's changed?* Presentation at Australian Professional Society on Alcohol Drugs (APSAD) National Conference, Brisbane, 17 November.
- Mattick, R. & Gates, J.** *Guidelines for treating alcohol problems 1993-2003. What's changed?* Presentation at Australian Professional Society for Alcohol and Other Drugs (APSAD) Conference, Brisbane, November 17.
- McKetin, R.** *Assessing the burden of methamphetamine use in the Asia-Pacific region.* Presentation at the 14th International Conference on the Reduction of Drug Related Harm, Chiang Mai, Thailand, 6-10 April.
- Mills, K.** *Young people presenting for treatment of heroin dependence: Findings from the Australian Treatment Outcome Study (ATOS).* Presentation at the 4th International Conference on Drugs and Young People, Wellington New Zealand, 26 May.
- Mills, K.** *The impact of posttraumatic stress disorder on short-term treatment outcomes for heroin dependence.* Presentation at Australian Professional Society on Alcohol Drugs (APSAD) National Conference, Brisbane, 19 November.
- Shakeshaft, A.** *Implementing research findings into practice: is systems change the thing?* Presentation made at the International Research Symposium – Preventing substance use, risky use and harm: What is evidence based policy? Fremantle, February 24-27.
- Shand, F.** *What works: Guidelines for the management of alcohol dependence.* Workshop presentation at the 1st International Alcohol, Tobacco and Other Drugs Nursing and Midwifery Conference, Adelaide, 15-17 April.
- Shand, F.** *Treating alcohol problems: National evidence based guidelines.* Workshop presentation at the Northern Territory Alcohol and Other Drug Conference, Darwin, 7 May.
- Shand, F.** *Adolescence, alcohol and angst: Managing adolescents' alcohol problems.* Presentation at the 4th International Conference on Drugs and Young People, 26-28 May.
- Shearer, J.** *Cost effectiveness of prison methadone.* Presentation at ANZ Society of Criminology Conference, Sydney, October 3.

Shearer, J. *NSW Prison Naltrexone Program.* Presentation at Australian Professional Society for Alcohol and Other Drugs (APSAD) Conference, Brisbane, November 17.

Shearer, J. *Substitution therapy for psychostimulant dependence: the Australian experience.* Presentation at Australian Professional Society for Alcohol and Other Drugs (APSAD) Conference, Brisbane, November 19.

Spooner, C. *The role of police in harm reduction and demand reduction the need to recognise strengths and improve practice.* Presentation made at the International Research Symposium - Preventing substance use, risky use and harm: What is evidence based policy? Fremantle, 24-27 February.

Spooner, C. *The structural determinants of youth drug use: How changeable are they?* Presentation made at the International Research Symposium - Preventing substance use, risky use and harm: What is evidence based policy? Fremantle, 24-27 February.

Swift, W. *Cannabis and psychosis.* Invited presentation at From Rhetoric to Reality. The Mental Health Services Conference, Canberra, 3-5 September.

Teesson, M. *Cannabis and Psychosis: A review of the evidence.* Presentation at Australian Professional Society for Alcohol and Other Drugs (APSAD) Conference, Brisbane, 17 November.

Teesson, M. *What are the short-term outcomes of treatment for heroin dependence? Findings from the Australian Treatment Outcome Study (ATOS).* Presentation at Australian Professional Society for Alcohol and Other Drugs (APSAD) Conference, Brisbane, 18 November.

Teesson, M. *Australian Treatment Outcome Study.* APSAD/ADCA Workshop at Australian Professional Society for Alcohol and Other Drugs (APSAD) Conference, Brisbane, November 17.

White, B. *Findings from a four year follow up study of subjects in a randomised controlled trial of the NSW prison methadone program.* Presentation made at the Public Health Association of Australia Incarceration Conference, Brisbane, 2 April.

White, B. *Findings from a four year follow up study of subjects in a randomised controlled trial of the NSW prison methadone program.* Australian and New Zealand Society of Criminology Conference, Sydney, 3 October.

White, B. *Findings from a five year follow up study of subjects in a randomised controlled trial of the NSW prison methadone program.* Australian Society for HIV Medicine Conference, Cairns, 24 October.

Williamson, A. *The effect of cocaine use on short-term outcomes for heroin dependence.* Presentation at Australian Professional Society for Alcohol and Other Drugs (APSAD) Conference, Brisbane, 18 November.

APPENDIX F EXTERNAL LECTURES, WORKSHOPS, PRESENTATIONS

Barker, B. *Ecstasy: patterns of use and harms in Australia.* Paper presented at NDARC Party Drug Symposium, Sydney, February 20.

Copeland, J. *An early intervention approach to managing drug and alcohol problems in the workplace.* Invited paper to the Drugs and Alcohol in the Workplace Forum, Australian Centre for Industrial Relations, University of Sydney, July 29.

Copeland, J. *Brief Interventions for Cannabis Use Disorders* An intervention training workshop. St George Hospital: Sydney, August 7..

Copeland, J. *The Adolescent Cannabis Check-up.* An intervention training workshop. St George Hospital: Sydney, August 14.

Copeland, J. *Intervention Issues for Women with Substance Use Disorder.* Alcohol, Tobacco and Other Drug Services Workshop: Cairns, August 29.

Copeland, J. & Matalon, E. *Brief Interventions for Cannabis Use Disorder.* An intervention training workshop. Rydes Hotel: Cairns, August 29.

Copeland, J. & Matalon, E. *The Adolescent Cannabis Check-up.* An intervention training workshop. Alcohol, Tobacco and Other Drug Services Workshop: Cairns, August 29.

Darke, S. *Suicide among entrants to treatment for heroin dependence.* Presentation at NDARC Annual Symposium, Sydney, 31 July.

Day, C. *Pharmacotherapies for Opioid Dependence.* Invited seminar at 1st Iranian Workshop on Harm Reduction in Prison. Tehran, Iran, September 16-18.



- Day, C.** *Needle and syringe exchange in Australia and internationally and their effectiveness in reducing HIV and Hepatitis C transmission.* Invited seminar at 1st Iranian Workshop on Harm Reduction in Prison. Tehran, Iran, September 16–18.
- Degenhardt, L.** *Party drug use in NSW, 2002.* Paper presented at NDARC Party Drug Symposium, Sydney, February 20.
- Degenhardt, L.** *Crystal: is it a passing fad or a continuing phenomenon?* Paper presented at NDARC Party Drug Symposium, Sydney, February 20.
- Degenhardt, L.** *GHB: an overview.* Paper presented at NDARC Party Drug Symposium, Sydney, February 20.
- Dillon, P.** *New drugs, new risks: the current state of play in Australia.* Paper presented at NDARC Party Drug Symposium, Sydney, February 20.
- Dillon, P.** *Ketamine: patterns of use and harms associated with non-medical ketamine use.* Paper presented at NDARC Party Drug Symposium, Sydney, February 20.
- Dillon, P.** *Cannabis: what's the story?* Workshop presented at Coffee, Cake and Cannabis, Springwood, March 3.
- Dillon, P.** *New drugs, new risks: The current state of play in Australia.* Presentation at the National Police Drug and Alcohol Coordinator's Committee Meeting, Brisbane, 4 April.
- Dillon, P.** *New drugs, new risks: The current state of play in Australia.* Presentation at the National Advisory Committee on School Drug Education, Darwin, 16 April.
- Dillon, P.** *Update of drug trends of drug use in Australia.* Presentation at TAFE Counsellors Meeting, Sydney, 5 May.
- Dillon, P.** *Overview of current alcohol and other drug treatment approaches.* Presentation at TAFE Counsellors Meeting, Sydney, 5 May.
- Dillon, P.** *Current drug trends.* Presentation at NIDA, Sydney, 8 May.
- Dillon, P.** *New drugs, new risks: The current state of play in Australia.* Presentation at Kirketon Road Centre, Sydney, 27 May.
- Dillon, P.** *Ecstasy and other club drugs: the current state of play in Australia.* Presentation to Anthropology students at Macquarie University, Sydney, 3 June.
- Dillon, P.** *Information dissemination and youth issues.* Presentation at NDARC Seminar, Canberra, 2 September.
- Dillon, P.** *Waverley College.* Presentation to Drug Education Section, Canberra, 2 September.
- Dillon, P.** *Waverley College presentation.* Presentation at DEST Drug Education Meeting, Sydney, 27 November.
- Dillon, P.** *Current drug trends.* Presentation at Drug Court of NSW Annual Team Conference, Sydney, 28 November.
- Dillon, P.** *Amphetamines – an overview: How they work and who is using what and how.* Presentation at “Full Speed Ahead: What does the increase in amphetamine use mean for South Australian Services?”, Adelaide, 12 December.
- Dolan, K.** *A Randomised Control Trial of the New South Wales Prison Methadone Program.* Invited presentation at the Drugs Roundtable Forum, Perth 13 February.
- Dolan, K.** *An overview of NDARC and PIRT.* Presentation at Program of International Research and Training Meeting, Chiang Mai, Thailand, 11 April.
- Dolan, K.** *Estimating the number of dependent heroin users.* Presentation to IASTP Drug Surveillance Course, Melbourne, 30 May.
- Doran, C. & Shakeshaft, A.** *NDARC and PIRT: an overview.* Presentation to the Secretariat of Pacific Communities, Noumea, New Caledonia, May 5.
- Havard, A.** *Depression and treatment seeking in heroin dependence.* Presentation at NDARC Annual Symposium, Sydney, 31 July.
- Lawrinson, P.** *Routine measurement of treatment outcomes in detoxification services.* Presentation at the NDARC Annual Symposium, Sydney, July 31.
- Lawrinson, P.** *The Brief Treatment Outcome Measure (BTOM).* Presentation to Seminar at Drug and Alcohol Services Council (DASC), Adelaide, August 19.
- Lawrinson, P.** *Progress in the implementation of routine treatment outcome monitoring in opioid maintenance pharmacotherapy services in NSW.* Presentation to Seminar, Drug Programs Bureau, NSW Health, March 26.
- Lawrinson, P.** *Clinical Genetics & Genetic Counselling.* Lecture to 3rd year Biological Science Students, University of NSW, June 11.
- Lawrinson, P.** *Towards routine measurement of treatment outcome in detoxification services: Report on BTOM clinical trial.* Presentation at NDARC Annual Symposium, Sydney, 31 July.



Lawrinson, P. *The Australian National Minimum Data Set.* Presentation to United Nations Office on Drugs and Crime, Expert Group Meeting on Treatment Demand Indicators, Vienna International Centre, Vienna, Austria, December 2.

Lawrinson, P. *Global Workshop on Treatment Demand Indicators: What kind of data should be collected? Main issues and problems.* Presentation to United Nations Office on Drugs and Crime, Expert Group Meeting on Treatment Demand Indicators, Vienna International Centre, Vienna, Austria, December 3.

Lawrinson, P. *Possible responses to date in relation to concerns with the BTOM: BTOM Concise.* Presentation at the Outcome Measures Forum, NSW Health, Sydney, December 12.

Matalon, E. *Motivational interviewing revisited.* Workshop presented at Occupational Therapists Professional Development Day, Sydney, March 14.

Matalon, E. *Brief intervention for cannabis dependent clients.* Three workshops presented for AOD workers at the Alcohol Drug Association, Christchurch, NZ, April 3-5.

McKetin, R. *Methamphetamine use in Australia.* Presentation to the Australian Parliamentary Group for Drug Law Reform, ACT Legislative Assembly, Canberra, May 2.

McKetin, R. *Epidemiology of methamphetamine use: implications for interventions.* Presentation at NDARC Annual Symposium, Sydney, 31 July.

Mills, K. *Young people presenting for treatment of heroin dependence: Findings from the Australian Treatment Outcome Study (ATOS).* Presentation at the NDARC Annual Symposium, Sydney, July 31.

O'Brien, S. *Methadone, buprenorphine, and other pharmacotherapies for young people: How do they work? Are they effective? Opinions and debates.* The Ted Noffs Foundation and The Australian Drug Foundation's Centre for Youth Drug Studies, Sydney Branch, May 8.

Ross, J. *Australian Treatment Outcome Study: NSW overview and three months findings.* Presentation at NDARC Annual Symposium, Sydney, 31 July.

Shakeshaft, A. *Alcohol: use, guidelines and interventions.* Presentation to Health Psychology post-graduate students, UNSW, Sydney, May 14.

Shakeshaft, A. *Community-based interventions: What? Why? How? Do they work?* Presentation to School of Applied Psychology, Griffith University, Gold Coast, Queensland, May 16.

Shakeshaft, A. *The National Drug and Alcohol Research Centre and research careers.* School of Psychology, University of New South Wales, Sydney, July 28.

Shakeshaft, A. *Getting research evidence into practice: which methodologies?* The Centre for Quality of Care Research, University Medical Centre, University of Nijmegen, The Netherlands, December 15.

Shand, F. *Treating alcohol problems.* Presentation at the Auburn Alcohol Summit, Sydney, August 1.

Shearer, J. *Cocaine vaccines: mechanism, rationale and feasibility.* Presentation at NDARC Annual Symposium, Sydney, 31 July.

Swift, W. *Cannabis.* Lecture given to Master of Public Health students, University of Sydney, August 20.

Teesson, M. *Detoxification for heroin dependence: preliminary findings at three months.* Presentation at NDARC Annual Symposium, Sydney, 31 July.

Williamson, A. *Cocaine use among heroin users.* Presentation at NDARC Annual Symposium, Sydney, 31 July.