

centre lines

NDARC (28)
November 2010

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

issuing forth

A new report quantifies, for the first time, the public health and social impacts of alcohol from others' drinking



Funded by the
National Drug Strategy

ISSN 1034-7259

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In most countries, including Australia, drug law enforcement consumes the largest part of the drug budget – in Australia this amounts to 56 per cent of spending in the illicit drugs area. Yet the amount of research in drug law enforcement is low compared with areas such as harm reduction and prevention.

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Harnessing the media for prevention messages

Disseminating the results of our research to a broad audience through the use of mainstream and online media is a central tenet of this Centre's strategic framework. Yet in the high stress academic cycle, of grant writing, research, publication and more grant writing explaining the results of our research to the media may not always seem like the highest of day to day priorities.

A study recently published by NDARC's Drug Policy Modelling Program (DPMP), and funded by the Federal Government's Department of Health and Ageing, serves as a timely reminder that we should not underestimate the importance of harnessing the media as a vital tool in drug and alcohol prevention messages.

The study of 2,000 young Australians found that far from encouraging use of illicit drugs most media portrayals appeared to reduce interest in illicit drugs by increasing the perceptions of risk and reducing perceptions of acceptability.

News items which focused on the health and social ramifications of drug use – such as the link between cannabis and psychosis or cannabis and poor educational outcomes – were far more likely to have an effect than reports on drug busts and arrests.

Yet ironically these types of articles were significantly under-represented in the Australian media. Of 4,000 newspaper reports referring to illicit drugs, analysed as part of the study, just over half focused on criminal justice and legal issues; only a quarter focused on health and social issues.

As another paper by the same team, published online in *Drug and Alcohol Review*, suggests, media can influence audiences in four key ways. It can set the agenda and define public interest; it can frame interests through selection of specific angles (such as health); it can indirectly shape individual and community attitudes towards risk and it can feed into political debate.

Media interest in drug and alcohol issues showed no sign of waning in 2010 and NDARC research and expert commentary has featured strongly in the coverage. This innovative research stands as a timely reminder that we should keep engagement with the media high on our "to do" list in the coming year.

Marion Downey, Manager Communications and Media NDARC

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

headspace

Drug Law Enforcement Research

Alison Ritter

Drug law enforcement is an essential component of drug policy and sits alongside health responses, prevention responses and harm reduction responses. In most countries, including Australia, drug law enforcement or policing, consumes the largest amount of the drug budget. In Australia, this represents 56 per cent of all government spending in the illicit drugs area (at both federal and state level). Despite this investment, the amount of research conducted in drug law enforcement is significantly less than that conducted in the health, harm reduction and prevention domains.

There are four broad categories of drug law enforcement interventions:

- Source country control, that is intervening offshore where drugs are produced;
- Interdiction, that is border control;
- Policing directed at manufacturing, trafficking and distribution; and
- Local policing.

Each of these different types of drug law enforcement involve different policing organisations. When considered by specific drug types such as methamphetamine, activities such as detecting and dismantling clandestine laboratories become very important. Likewise with the policing surrounding alcohol the focus is largely on local policing concerned with violence and public amenity, and source country control is not relevant.

Of the four broad types of drug law enforcement there is very limited research directed towards source country control, interdiction or policing directed at manufacturing and trafficking. Local policing has received the most research attention. In systematic reviews it appears that the most effective approach with local policing is to engage in what is termed “third party policing”. This means the Police work with other organisations or agencies such as local councils, service providers (eg pharmacies) or health services in order to reduce the harms associated with alcohol and drug use. Perhaps the best example of third party policing is in relation to restrictions on access to pseudoephedrine through developed relationships between pharmacies and the police. The role of regulations in relation to drug law enforcement is also central, as seen in alcohol licensing regulations. These feature as an important strategy in the broad area of supply reduction.

Given the diversity of drug law enforcement strategies there is substantial opportunity for research. Some important research avenues include more research on drug market characteristics including price, purity and criminal organisations. Research on drug market characteristics would contribute to better understanding of trends in use and harm in addition to providing the possibility for the evaluation of drug law enforcement effectiveness. Other drug law enforcement research includes research examining the effectiveness and cost effectiveness of specific drug law enforcement interventions. Evaluation has largely concentrated on criminal justice system interventions, for example the various evaluations of court and other diversion programs. More comparative research would provide useful information to decision makers about the different program characteristics and systems of diversion.

The traditional disciplines that conduct drug law enforcement research include criminology and forensic psychology. We are fortunate at NDARC to have these disciplines represented.

Drug law enforcement research requires effective and ongoing collaboration with police agencies in much the same way as clinical research involves effective and ongoing collaboration with treatment services. Building these relationships is centrally important to advancing drug law enforcement research. **cl**

issuing forth

The Range and Magnitude of Alcohol's Harm to Others

Chris Doran

On behalf of 'Alcohol's Harm to Others' authors (refer to reference 1 for details of full report and author list)

Introduction

A recent project commissioned by the Alcohol Education and Rehabilitation Foundation entitled *The Range and Magnitude of Alcohol's Harm to Others*¹ led by The AER Centre for Alcohol Policy Research at Turning Point Alcohol and Drugs Centre in Melbourne and involving researchers from the National Drug and Alcohol Research Centre (NDARC) and the National Drug Research Institute (NDRI), provides the first attempt to quantify the impact

of alcohol misuse to people other than the drinker themselves. This research provides both a broad overview and detailed insight into the problems the drinking of others has on Australians.

The impacts from the drinking of others vary dramatically. At one end of the spectrum Australians are affected by nuisance inconveniences, such as street noise or having to avoid public parks, or petty costs from damaged property. At the other end harms can be severe, such as child abuse or physical violence or death. The public health impacts of alcohol from others' drinking are of major concern. The Harm to Others project addresses a number of critical questions: How many Australians are affected by others' drinking? Who is affected? What is the relationship between those who have been affected and the drinker? How are Australians affected or harmed? What are the costs for others – in trouble, in time, in money? This report provides a first set of answers to such questions.

Answers to these questions stem from a variety of data collected by social and health agencies, including police data, road crash morbidity and mortality data, death statistics, hospital records, child protection agency data, and alcohol and drug services and helpline data. Data from previous population surveys are also analysed. And much data in the study comes from a special survey of more than 2,600 Australian adults who answered detailed questions about their experiences and consequences from the drinking of others.

Method

Secondary data sources

The *Harm to Others* project made use of data obtained from numerous sources, ranging from government departments to drug and alcohol treatment agencies. Secondary data sources include national surveys that have been re-analysed to determine harms to others and routinely collected service agency data. Pre-existing surveys used included: GENACIS

(Gender, Alcohol and Culture: an International Study); HILDA (Household Income and Labour Dynamics in Australia Survey); National Drug Strategy Household Survey (NDSHS); Personal Safety Survey, Australian Bureau of Statistics (ABS). Routinely collected agency databases included: Alcohol and Drug Information System (Victorian Department of Human Services); Basic Community Profiles, 2006 Census; Bureau of Crime Statistics and Research; Casualty Crash Database (Australian Transport Safety Bureau); Client Related Information System (Child Protection and Family Services, Victorian Department of Human Services); DirectLine (Turning Point Alcohol and Drug Centre); Mortality Datafile, (ABS); National morbidity data (Australian Institute of Health and Welfare); Assaults Data/Western Australian police reported offence data (Police, WA); and Recorded crime victims (ABS).

Alcohol's harm to others survey

The Alcohol's Harm to Others Survey was based on a national random sample of 2,649 Australians aged 18 years or older who responded to a computer-assisted telephone interviewing (CATI) questionnaire between October and December 2008. Eligibility was restricted to persons living in private households and able to be interviewed in English, with the specific respondent in the household selected by the next-birthday method.

The co-operation rate was 49.7% and the response rate was 35.2%. The sample was generally representative of the national population, although men and young people were under-represented compared with the Australian population.² Data were weighted inversely by sample selection probability and to reproduce the age, sex and geographic composition of the Australian adult population in the 2006 census, with the weighted total number set equal to the unweighted sample size.

The survey instrument consisted of approximately 125 questions and requested information on heavy and episodic drinkers who were family members, household members, friends and work colleagues and, the degree to which the drinking behaviour of these individuals had negatively impacted upon the respondent. From those whose drinking had negatively affected the respondent, the respondent identified one individual whose drinking had the most impact in the last 12 months. A subsequent set of questions were asked concerning this identified drinker which covered social, physical, sexual and financial effects, roles and responsibilities in the family or household, drink driving, property damage and what the respondent had to do because of the drinking of the identified drinker. Other sections of the instrument addressed alcohol-related harm from strangers or people not well known to the respondent, community services used by the respondent due to someone else's drinking, and the identified drinker's and respondent's own socio-demographic information and drinking patterns.

Costing analysis

Throughout the project a range of economic costing methods was utilised. The adopted methodology was predominantly influenced by data availability and the type of harm being costed. In general, two key cost categories were considered. First, costs borne by others and, second, response-institution costs borne mostly, though not entirely, by governments.

The first cost category considers: out of pocket expenses; opportunity cost of time lost/spent; and, intangible costs. Out of pocket expense is valued according to respondents' self-report values from the Alcohol's Harm to Others Survey. Cost of time lost/spent is valued using respondents' self-reported data from the survey, measured in time, multiplied by the average hourly wage rate sourced from the ABS.³ Intangible costs measured in this study relate to the estimated value of the respondents' lost quality of life. This study used the methods developed by Dolan & Peasgood (2007)⁴ to measure economic and social costs of the fear of crime, based on data from the Alcohol's harm to others survey. The method for calculating the value of intangible loss relies on respondents' self-reported reduction in quality of life from the survey multiplied by a value in the generally accepted range for a quality-adjusted life year (QALY): \$50,000 per QALY.

The second cost category considers: hospital/health service costs and child protection costs. Costs related to hospital/service admissions were valued by multiplying each alcohol-attributable hospital separation by the corresponding average cost for the diagnosis; using the Diagnosis Related Groups (DRGs) in the "Cost Report from the National Hospital Cost Data Collection".⁵ Hospital costs also consider the opportunity cost of time each adult patient spends in hospital. It is assumed that the bed days during hospitalisation equate to lost output. Lost output was costed using daily earnings calculated from weekly average earnings, similar to the method described above for costing time lost/spent. Child protection costs were derived using State and Territory Government real recurrent expenditure on child protection, out-of-home care services and intensive family support services, obtained from the Productivity Commission's Report of Government Services 2008, multiplied by the proportion of substantiated cases that were alcohol-related.

Results

Results from social and health systems data across Australia

An estimated 367 people died and near 14,000 people were hospitalised because of the drinking of others in the year studied. In 2005, interpersonal violence resulted in 182 deaths, of which 42% (77 deaths) were estimated to be attributable to another person's drinking; a total of 1,802 potential years of life were estimated to be lost. A total of 277 deaths of people aged 15 years and over were estimated to be due to

another's drinking and driving, with 31 of these being pedestrian deaths.

Estimations from 2005 police data indicate that over 70,000 Australians were victims of alcohol-related assault, among which 24,000 people were victims of alcohol-related domestic violence. Using national child protection data and estimating from Victorian measures of alcohol involvement, almost 20,000 children across Australia were victims of substantiated alcohol-related child abuse in 2006/07.

Results from harm to others survey

The results of the survey revealed that almost three-quarters of the adult Australian population report having been affected in the last year as the result of someone else's drinking. A total of 16% of Australians have been affected by the drinking of someone they live with or are intimate with – a family member or romantic partner. Over one in ten Australians has been affected by a friend's drinking in the past year, and 5% have been affected by a co-worker's drinking. The substantial numbers of people affected and hours spent covering for others who are not at work because of their drinking quickly adds up. Five percent of the entire sample (including people who do not have children) reported that children they live with or have parental responsibility for have been affected by another's drinking.

Seventy per cent of Australians have been affected by strangers' drinking. These harms range from minor annoyances, such as, those who report being kept awake, to more severe harms such as physical violence. Just over 40% of respondents reported that they had been threatened, physically assaulted, or had their property or belongings damaged as the result of a stranger's drinking. In the small time frame of one year, a large proportion of the population have had an adverse experience in one way or another because of others' drinking. A substantial minority reports that they have been adversely affected 'a lot' by the drinking of others. It appears that younger Australian adults bear much of the brunt of the drinking of others: younger women are more likely to report harms from the drinking behaviour of family members, whereas both younger men and younger women were more likely to report harms from the drinking of friends or strangers.

The types of harms experienced by the respondent when the drinker was someone known to them were quite diverse. The most common response (65%) was that the drinker had negatively affected social occasions the respondent was at. More than 50% reported that because of the drinker the respondent had been emotionally hurt or neglected, or involved in serious arguments, or that the drinker had "failed to do something they were being counted on to do". Over a third of those who reported that they had been negatively affected by the drinking of someone they knew reported that they had to stop seeing the person who had most affected them because of their drinking.

When respondents were asked which person, of those they knew, most negatively affected them because of their drinking, the most common answer was a friend or close family relative, and this person was typically a man. Women were more likely than men to report being negatively affected by the drinking of a household member or relative.

How much does others' drinking cost Australians?

The most recent report from Collins and Lapsley (2008) tallies the cost of alcohol's harm in the billions of dollars, from the perspective of costs to the society, including to the drinker.⁶ In this report, alcohol's costs to others around the drinker are tallied for the first time, including many costs which were not included in the estimate by Collins and Lapsley. In terms of tangible costs reported by a representative sample of the Australian population, heavy drinkers have cost others around them in excess of \$13 billion in out-of-pocket costs and in forgone wages or productivity. Hospital and child protection costs to the society due to another's drinking sum to a further \$765 million. In addition, there are large intangible costs, estimated at a minimum of \$6 billion dollars.

Conclusion

The study of 'Alcohol's Harm to Others' provides the most sustained effort anywhere of its kind, drawing on and analysing a wide variety of existing and newly developed data. The work has enumerated the various kinds of harm that can occur due to another's drinking, and the different kinds of relationship that exist between the drinker and the person harmed. Concrete descriptive data have been brought together on the various interactions and events which contribute to the experience of harm from others' drinking.

This study has not only quantified the amount of harm that has occurred because of alcohol in a given year, but has also been able to map the social location of the harm, both for the drinker and for the person adversely affected. This research has also developed novel methods for costing different aspects of alcohol's harm to others, and applied these methods to estimate costs to others from the alcohol-related behaviour of heavy drinkers. These research methods and tools will find further application in future studies.

The picture as seen through the frame of the general population survey is complemented with the pictures that appear through the frames of the social response agencies – the police, health services, treatment agencies, child protection agencies, helplines, and so on. These additional windows of data provide information about emergencies and those who respond to them by picking up and sewing up the pieces, and by counselling and assisting those in trouble.

Next steps

The work of the project has opened up an area of study, charted its scope, and provided a wide variety of first approximations and answers. But the work has also posed new questions and opened up new lines for further work.

There is considerable scope for further analyses of the existing datasets, and for analysis of new ones which are coming on line. The existence of the present study has stimulated others – for instance, a parallel general population survey in New Zealand, a new study in Ireland, and a commitment by the World Health Organisation to promote and organise a collaborative international study on the topic in developing countries. Questions from the 'Alcohol's Harm to

Others' survey, with a parallel series on drugs, has been included in a new study of 16-24-year-olds in Victoria. These diverse initiatives mean that the existing datasets and analyses will acquire new value as comparison points with other data both in Australia and abroad.

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project notes

Randomised control trial of a brief cannabis intervention delivered by telephone

Peter Gates, Jan Copeland, Melissa Norberg and Erol Digiusto

Cannabis remains the Western world's most frequently used illicit drug (UNDOC, 2009), despite links with a myriad of acute and chronic adverse health effects (Hall & Degenhardt, 2009). Although the rate of drug users entering treatment has increased over the last decade in the US (SAMHSA, 2008), most cannabis users in Australia do not seek treatment (AIHW), even though the success and availability of several treatments has been documented (Copeland, 2004).

On a global scale, improving availability and accessibility of drug dependence treatment is of paramount importance (UNDOC, 2008).

Recent research has identified four main barriers to cannabis treatment: (1) the feeling that treatment is not necessary to reduce cannabis use, (2) the opinion that cannabis users are not likely to be considering stopping their use, (3) a lack of awareness of treatment options, and (4) the stigma associated with being labelled a drug user (Gates, Taplin, et al., 2009).

In recent years telephone help lines have shown promise in providing information and easily accessed assistance for individuals with tobacco dependence (Stead, et al., 2006) and for general substance use concerns (FESAT, 2008). It follows that a cannabis specific helpline would address each of the mentioned

barriers to cannabis treatments by providing confidential and easily accessed information on treatment options.

The Cannabis Information Helpline (CIH), established in January 2008, offers an opportunity to research the effectiveness of different brief interventions delivered over the phone and to investigate whether they can overcome the aforementioned obstacles to treatment.

This study comprises a randomised control trial of 120 participants placed into a proactive telephone based counselling service or delayed treatment control group. Participants will be asked a set of questions that cover: their concerns over their cannabis use; emotional well being; and mental health. In addition participants are asked to profile their overall drug use with a particular focus on cannabis.

These questions will then be repeated at one and three month follow up interview. The counselling sessions that take place in the randomised control trial will be conducted by the CIH and are based on cognitive behavioural techniques and is delivered in a motivational interviewing style that is tailored to the participant's needs. The intervention comprises four telephone counselling sessions that are approximately one hour in duration delivered once a week for four weeks. In addition, the counselling will be complemented with mail-out materials based on the cannabis check-up brief intervention for adolescents (Martin et al, 2005). Data collection has commenced and over 100 individuals are participating in the trial to date.

Correlates and predictors of cannabis exposure and moderation in a community sample of young adults

Edmund Silins, Delyse Hutchinson, Wendy Swift, Tim Slade, Bryan Rodgers and Barbara Toson

Young adulthood is a unique and important developmental period characterised by new found freedoms and changing roles. A notable characteristic of young adulthood is that it is a period when the use of drugs, particularly illicit drugs such as cannabis, is highest. The high prevalence of cannabis use among young adults is particularly concerning given the impact the drug may have on current functioning and future life options. The potential harms associated with cannabis use and the high prevalence of use in young adults supports increased efforts to identify the factors related to cannabis moderation among this group. Efforts to describe different trajectories of cannabis use have increased in recent times but relatively few studies have focused on declining use. Knowledge of the factors associated with cannabis moderation provides important information about what predicts 'coming through the crisis' of problematic use. This is important for preventive work as those factors which are modifiable are good targets for prevention strategies.

The broad aim of this PhD thesis is to investigate the correlates and predictors of cannabis exposure and moderation in a community sample of young adults after the peak age of cannabis initiation. Data were gathered during the course of the PATH Through Life Project. PATH is a community survey of 7485 people aged 20-24, 40-44 and 60-64 years drawn from the electoral roll of Canberra and Queanbeyan (Australia). PATH is a longitudinal survey looking at how lifestyle and social factors influence health.

Several studies make up this investigation and are ongoing. To date, findings indicate that multiple factors were associated with cannabis

moderation and persistence in young adulthood. Increasing role responsibility such as marriage and parenting were associated with a decline in cannabis use. Childhood adversity, alcohol and tobacco use and poorer mental health were associated with later onset of moderation and persistent use through young adulthood. While relatively few of these factors are easily modifiable through prevention programs, initiatives which promote responsible drinking and limit the onset of tobacco use may have greater prospects for success. These findings will inform the development of a multivariate model which aims to model the combination of factors which best predict young adults' pattern of cannabis use. A prospective study will help determine if moderating cannabis use after the peak age of initiation lowers the risk of adverse outcomes relative to persistent users. The involvement of Trish Jacomb and the team at the Centre for Mental Health Research (ANU) is gratefully acknowledged.

Alcohol use disorders in young adults: "Youthful epidemic" or diagnostic bias?

Tim Slade, Maree Teesson, Robert Krueger, Louise Newton and Sonja Mamedovic

Estimates of the prevalence of alcohol use disorders (i.e. abuse and dependence) are consistently higher for younger adults compared to their older counterparts. Nationally representative surveys have indicated that one in five young Australians aged 18-24 years are diagnosed as having an alcohol use disorder, with evidence suggesting that after the age of 24 the prevalence declines rapidly. In response to this finding, the Australian government recently announced a \$55 million initiative aimed at reducing alcohol misuse amongst young Australians. Whilst rates of alcohol use amongst young adults are clearly high, questions remain as to whether this "youthful epidemic" of alcohol use disorders is real or a methodological artifact of the prevailing classification criteria. The current project aims to resolve these questions.

There are a number of reasons to believe that the criteria used to diagnose alcohol use disorders may perform differently across different age groups. Differences between younger and older adults in cortical developmental, personality characteristics, as well as usual patterns and social contexts of alcohol use may produce differences in the applicability of the DSM-IV diagnostic criteria across age groups.

Compared to older adults, adolescents and young adults have higher levels of impulsivity and behavioural disinhibition, personality traits which overlap substantially with diagnostic criteria that reflect use of alcohol in risky situations such as hazard and legal. Young

adults also tend to have shorter drinking histories, and patterns of use tend to involve infrequent, high quantity "binges" in social contexts amongst peers. Thus, the reasons for alcohol use in young adults may be more related to social acceptance and the ability to "hold your drink" rather than the compulsive behaviours intended by criteria such as larger/longer. It has also been suggested that adolescents and young adults may confuse the physiological consequences of binge drinking (for example the symptoms of a "hangover") with the more classic physical symptoms of withdrawal.

These important differences may result in an over-endorsement of some alcohol use disorder criteria among young adults, which in turn leads to unrealistically high prevalence estimates.

The current project seeks to use the novel investigative techniques of cognitive interviewing derived from the converging fields of cognitive science and survey methodology to explore the reasons behind the apparent shortcomings in the alcohol use disorder criteria. These novel techniques quantify an individual's understanding of the diagnostic criteria and signal potentially ambiguous or misunderstood criteria. The results of the current project will provide practical recommendations for modifications to the alcohol use disorders diagnostic criteria in the upcoming revised classification systems.

Working with traumatised clients: How does this affect those working in alcohol and other drug services?

Katherine L Mills, Philippa Farrugia, Maree Teesson, Claudia Sannibale and Ann Roche

Recently, increasing attention has been given to the large number of clients presenting to alcohol and other drug (AOD) services that have experienced some type of psychological trauma and have post traumatic stress disorder (PTSD). Indeed, in this population trauma exposure is almost universal and up to one-third have current PTSD (Farley, Golding, Young, Mulligan, & Minkoff, 2004; Ford, Hawke, Alessi, Ledgerwood, & Petry, 2007; Mills, Teesson, Ross, Darke, & Shanahan, 2005). While many AOD workers interact with clients who have experienced trauma on a regular basis, little is known about the effect these interactions have on AOD workers.

Individuals who are involved in the assessment and treatment of traumatised clients may be at risk of developing secondary traumatic stress (STS). STS has been defined as "the natural consequent behaviours and emotions resulting from knowing about a traumatising event experienced by a significant other—the stress resulting from helping or wanting to help a traumatised or suffering person" (Figley, 1995).

STS can have detrimental effects on individuals, both professionally and personally, including a decrease in productivity and the inability to focus (Ford, et al., 2007) and has been referred to as an occupational hazard for those working with trauma survivors (Figley, 1999). To our knowledge, only one US study has examined the prevalence of STS among counsellors in the AOD workforce, finding that 19% had STS (Bride, Smith Hatcher, & Humble, 2009). The

degree to which STS is suffered by AOD workers in Australia is unknown.

The National Drug and Alcohol Research Centre (NDARC), in collaboration with the National Centre for Education and Training on Addiction (NCETA), is looking for AOD workers (i.e., all those who work in AOD settings such as nurses, medical practitioners, psychiatrists, psychologists, counsellors, social workers, and other AOD workers) from across Australia to

participate in a study which aims to examine the impact of working with traumatised clients.

Participation involves completion of an anonymous online survey that takes approximately 15 minutes to complete. If interested in completing the survey, or you would like further information, please visit the NDARC website (<http://ndarc.med.unsw.edu.au>) and click on the appropriate link. **cl**

abstracts

Optimal targeting of Hepatitis C virus treatment among injecting drug users to those not enrolled in methadone maintenance programs

Drug and Alcohol Dependence, 110 (3), 228-233

Irmgard Zeiler, Trevor Langlands, John M. Murray and Alison Ritter

Background: This work used mathematical modelling to explore effective policy for Hepatitis C virus (HCV) treatment in Australia in the context of methadone maintenance treatment (MMT).

Method: We consider two models to depict HCV in the population of injecting drug users (IDU) within Australia. The first model considers the IDU population as a whole. The second model includes separate components for those that are or are not enrolled in MMT. The impact of different levels of HCV treatment and its allocation dependent on MMT status were then determined in terms of the steady state levels of each of these models.

Results: Although increasing levels of HCV treatment decrease chronic infection prevalence, initially numbers of acutely infected can rise. This is caused by the high rate of reinfection. We find that no matter the extent of HCV treatment, HCV prevalence cannot be eliminated without limiting risk behaviour. Assuming equal adherence to HCV therapy between MMT and non-MMT, over 84% of HCV treatment should be allocated to those not in MMT. Only if adherence to HCV therapy in non-MMT patients falls below 44% of that in MMT then treatment should be preferentially directed to those in MMT.

Conclusions: Contrary to generally held beliefs regarding HCV treatment the majority of therapy should be allocated to those that are still actively injecting. This is due to rates of reinfection and to the high turnover of individuals in MMT. Higher adherence to HCV therapy in MMT would need to be achieved before this changed.

Illicit drugs and the media: Models of media effects for use in drug policy research

Drug and Alcohol Review, 2010, Doi: 10.1111/j.1465-3362.2010.00239.x

Kari Lancaster, Caitlin E. Hughes, Bridget Spicer, Francis Matthew-Simmons and Paul Dillon

Issues: Illicit drugs are never far from the media gaze and although identified almost a decade ago as 'a new battleground' for the alcohol and other drug (AOD) field there has been limited research examining the role of the news media and its effects on audiences and policy.

Approach: This paper draws together media theories from communication literature to examine media functions. We illustrate how each function is relevant for media and drugs research by drawing upon the existing literature examining Australian media coverage during the late 1990s of escalating heroin-related problems and proposed solutions.

Key Findings: Media can influence audiences in four key ways: by setting the agenda and defining public interest; framing issues through selection and salience; indirectly shaping individual and community attitudes towards risk; and feeding into political debate and decision making. Each has relevance for the AOD field. For example, media coverage of the escalating heroin-related problems in Australia played a strong role in generating interest in heroin overdoses, framing public discourse in terms of a health and/or criminal issue and affecting political decisions.

Implications and Conclusion: Media coverage in relation to illicit drugs can have multifarious effects. Incorporating media communication theories into future research and actions is critical to facilitate understanding of the short- and long-term impacts of media coverage on illicit drugs and the avenues by which the AOD field can mitigate or inform future media debates on illicit drugs.

Stepping through treatment: Reflections on an adaptive treatment strategy among methamphetamine users with depression

Drug and Alcohol Review 29 (5), 472-482

Frances J Kay-Lambkin, Amanda L. Baker, Rebecca McKetin and Nicole Lee

Introduction and Aims: Stepped-care has been recommended in the alcohol and other drug field and adopted in a number of service settings, but few research projects have examined this approach. This article aims to describe a pilot trial of stepped-care methods in the treatment of methamphetamine use and depression comorbidity.

Design and methods: An adaptive treatment strategy was developed based on recommendations for stepped-care among methamphetamine users, and incorporating cognitive behaviour therapy/motivational intervention for methamphetamine use and depression. The adaptive treatment strategy was compared with a fixed treatment, comprising an extended integrated cognitive behaviour therapy/motivational intervention treatment. Eighteen participants across two study sites were involved in the trial, and were current users of methamphetamines (at least once weekly) exhibiting at least moderate symptoms of depression (score of 17 or greater on the Beck Depression Inventory II).

Results: Treatment delivered via the adaptive treatment (stepped-care) model was associated with improvement in depression and methamphetamine use, however, was not associated with more efficient delivery of psychological treatment to this population relative to the comparison treatment.

Discussion and conclusions: This pilot trial attests to the potential for adaptive treatment strategies to increase the evidence base for

stepped-care approaches within the alcohol and other drug field. However, in order for stepped-care treatment in this trial to be delivered efficiently, specific training in the delivery and philosophy of the model is required.

Transition to and from injecting drug use among regular ecstasy users

Addictive Behaviours, 35 (10), 909-912

Matthew Dunn, Louisa Degenhardt and Raimondo Bruno

Abstract: There is a scant amount of research investigating injecting drug use among people not selected on the basis of their injecting behaviour, and less attention has been given to stimulant users who may have a different experience with injecting drug use than opioid users who are more commonly studied. The current study aimed to investigate initiation to, and transition from, injecting drug use among a sentinel sample of regular ecstasy users in Australia. Participants were regular ecstasy users recruited across Australia in 2007 who were administered a structured interview that contained questions regarding initiation to injecting, reasons for injecting cessation, and likelihood of future injecting. Among those with a history of injecting drug use, injecting first occurred at a similar age to that of first ecstasy use. The majority did not inject themselves at the first occasion, and two-fifths were under the influence of other drugs at the time. Two-fifths of injectors had not injected in the past 6 months, with many relating this to concerns surrounding stigma. Route of drug administration is clearly not static, and the findings from this study suggest that some who have ceased injecting may still be at risk for future injecting.

Epidemiology of alcohol-related burden of disease among indigenous Australians

Australian and New Zealand Journal of Public Health, 2010; 34, S47-51

Bianca Calabria and Chris M. Doran

Objective: To compare the burden of alcohol-related harm and underlying factors of this harm, by age and sex, for Indigenous and general population Australians.

Methods: Population attributable fractions are used to estimate the disability adjusted life years (DALYs) for alcohol related disease and injury. The DALYs were converted to rates per 1,000 by age and sex for the Indigenous and general populations.

Results: Homicide and violence rates were much higher for Indigenous males: greatest population difference was for 30-44 years,

Indigenous rate 8.9 times higher. Rates of suicide were also greater: the largest population difference was for 15-29 years, Indigenous rate 3.9 times higher. Similarly, for Indigenous females, homicide and violence rates were much higher: greatest population difference was for 30-44 years, Indigenous rate 18.1 times higher. Rates of suicide were also greater: the largest population difference was for 15-29 years, Indigenous rate 5.0 times higher.

Conclusions: Alcohol consumption and associated harms are of great concern for Indigenous Australians across all ages. Violent alcohol-related harms have been highlighted as a major concern.

Implications: To reduce the disproportionate burden of alcohol related harm experienced by Indigenous Australians, targeted interventions should include the impact on families and communities and not just the individual.

The effect of methamphetamine and heroin price on polydrug use: A behavioural economics analysis in Sydney, Australia

International Journal of Drug Policy, 21 (5), 381-389

Jenny Chalmers, Deborah Bradford and Craig Jones

Background: A key aim of supply-side drug law enforcement is to reduce drug use by increasing the retail price of drugs. Since most illicit drug users are polydrug users the effectiveness of this strategy depends on the extent to which drug users reduce their overall consumption of drugs. The literature shows that drug users do reduce their consumption of a drug when its price increases. However the extent of that decrease and the implications for the use of other drugs vary across studies.

Methodology: A sample of 101 Australian methamphetamine users was surveyed using a behavioural economics approach. Participants were given a hypothetical fixed drug budget, presented with a range of drug price lists and asked how many units of each drug they would purchase. Methamphetamine and heroin prices were varied independently across trials.

Results: While demand for both methamphetamine and heroin was found to be price elastic, elasticity estimates were influenced by the nature of participants' drug dependence. The group least responsive to changes in methamphetamine price were those dependent only on methamphetamine, while the group most responsive were dependent only on heroin. Similar findings emerged in relation to changes in heroin price. Cross-price elasticity analysis showed limited substitution into other drugs as the price of methamphetamine increased. In contrast, for heroin, there was

significant substitution into pharmaceutical opioids and to a lesser extent, benzodiazepines and methamphetamine. However, for the most part, the decreases in methamphetamine or heroin consumption outweighed any substitution into other drugs.

Conclusion: The reduction in overall drug consumption and expenditure in response to price increases in heroin and methamphetamine observed in this sample lend support to supply-side enforcement strategies that aim to increase retail drug price. Notably, this analysis highlights the importance of accounting for the nature of users' drug dependence in estimating price responsiveness.

Retail price as an outcome measure for the effectiveness of drug law enforcement

International Journal of Drug Policy, 21 (5), 359-363

David A. Bright and Alison Ritter

Abstract: One outcome measure of law enforcement effectiveness is the reduction in drug consumption which occurs as a result of law enforcement interventions. A theoretical relationship between drug consumption and retail price has promoted the use of retail price as a surrogate measure for consumption. In the current article, retail price is examined as a potential outcome measure for the effectiveness of law enforcement. The predictions regarding the relationship between law enforcement intensity and price are only partially supported by research. Explanations for the disconnect between the drug law enforcement activity and retail price include: rapid adaptation by market players, enforcement swamping, assumptions of rational actors, short-run versus long-run effects, structure of the illicit market, simultaneous changes that affect price in perverse ways, the role of violence in markets, and data limitations. Researchers who use retail price as an outcome measure need to take into account the complex relationship between drug law enforcement interventions and the retail price of illicit drugs. Viable outcome measures which can be used as complements to retail price are worth investigation.

Theoretical and Observed Subtypes of DSM-IV Alcohol and Cannabis-Use Disorders in the Australian Population

Journal of Studies on Alcohol and Drugs, 71 (4), 597-606

Orla McBride, Maree Teesson, Tim Slade and Andrew Baillie

Objective: Using a polythetic combinatorial approach to diagnosing substance-use

disorders according to Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), criteria inevitably leads to substantial clinical heterogeneity in the manifestation of these disorders. Not all theoretically possible combinations of symptoms are found in reports from North American samples. Cross-cultural differences in substance use and dependence make it important to consider patterns of problematic use in other countries.

Method: The heterogeneity of DSM-IV alcohol- and cannabis-use disorders in Australia was explored by calculating the number of theoretically possible subtypes for these disorders based on the DSM-IV diagnostic criteria and identifying which of these subtypes are observed in the 1997 National Survey on Mental Health and Wellbeing.

Results: Of the theoretically possible subtypes, 55.6% were observed for alcohol dependence, 73.3% for alcohol abuse, 61.9% for cannabis dependence, and 53.3% for cannabis abuse. Four subtypes, containing only one criterion each, accounted for 87.5% of individuals with alcohol abuse. Fourteen subtypes characterized 70% of participants with alcohol dependence. One subtype, use in physically hazardous situations, accounted for 75.7% of individuals with cannabis abuse. Eight subtypes represented 72.3% of individuals with cannabis dependence.

Conclusions: Alcohol and cannabis abuse appear to be homogeneous disorders, whereas alcohol and cannabis dependence are heterogeneous disorders, in Australia. All of the DSM-IV diagnostic criteria for substance dependence contributed to understanding the symptoms associated with these disorders among Australians. The importance of not making major decisions regarding the type and number of diagnostic criteria for a given disorder based on analysis of data from a single country was highlighted.

Infant mortality among women on a methadone program during pregnancy

Drug and Alcohol Review, 29 (5), 551-556

Lucy Burns, Elizabeth Conroy and Richard P. Mattick

Introduction and Aims: The rate and correlates of infant death in those born to opioid-dependent women are unclear. This study aims to determine the infant mortality rate of infants born to women on a methadone program during pregnancy and to identify any modifiable risk factors.

Design and Methods: A retrospective study of live births to all women in New South Wales, Australia during the period 1995–2002. Using record linkage four groups were compared: (i)

live births to women on a methadone program during pregnancy who subsequently died during infancy; (ii) live births to women not on a methadone program who subsequently died during infancy; (iii) live births to women on a methadone program during pregnancy who did not die during infancy; and (iv) live births to women not on a methadone program who did not die during infancy.

Results, Discussion and Conclusion: The infant mortality rate was higher among infants whose mothers were on methadone during pregnancy (24.3 per 1000 live born infants in group 1 and 4.0 per 1000 live born infants in group 2) compared with infants of all other mothers. The single main cause of death for all infants was Sudden Infant Death Syndrome. There was a higher rate of smoking among women on methadone. The findings suggest that methadone and non-methadone infant-mother pairs have different symptom profiles, diagnostic procedures and/or different patterns of access to care.

Cardiovascular disease risk factors and symptoms among regular psychostimulant users

Drug and Alcohol Review; 29 (4), 371-377

Shane Darke, Michelle Torok, Sharlene Kaye and Johan Dufrou

Introduction and Aims: The aim of this study is to determine the prevalence of risk factors and possible symptoms of cardiovascular disease among regular psychostimulant users.

Design and Methods: A total of 239 regular psychostimulant users were administered a structured interview on health and cardiovascular disease symptoms.

Results: Thirty per cent had a family history of cardiovascular disease, 37% had sought treatment for possible symptoms of cardiovascular disease and 14% had been prescribed medications for symptoms of possible cardiovascular problems. The most commonly reported severe symptoms were: chronic shortness of breath (17%), chest pains (15%), palpitations (14%), chronic fatigue (13%) and dizziness/loss of consciousness (11%). Chest pains had been experienced on at least a weekly basis in the past 12 months by 13%. All symptoms occurred at significantly higher levels after the initiation of psychostimulant use. Higher levels of psychostimulant dependence were positively correlated with the number of frequently occurring symptoms ($r = 0.23$). Independent correlates of higher levels of frequently occurring symptoms were higher level of psychostimulant dependence, higher levels of alcohol dependence, a family history of cardiovascular disease and a diagnosis of cardiovascular disease.

Discussion and Conclusions: While a great deal of clinical attention has been given to

the sequelae of psychostimulant use, such as psychosis, the potential effects upon the cardiovascular systems of users are worthy of specific public health attention.

Prevalence and patterns of problematic alcohol use among Australian parents

Australian and New Zealand Journal of Public Health 34 (5), 495-501

Elizabeth Maloney, Delyse Hutchinson, Lucy Burns and Richard P. Mattick

Objective: Limited research data exists on the prevalence, and characteristics associated with parental alcohol use, particularly in Australia. This study aims to examine the drinking patterns of Australian parents, and to determine whether the drinking pattern differs by family type. The characteristics associated with regular parental alcohol use were also assessed.

Methods: Data from a representative sample of 23,356 Australians were analysed from the 2007 National Drug Strategy Household Survey.

Results: The study found that parents were less likely to drink at levels defined as risky. Additionally, single mothers were more likely to report monthly and weekly binge drinking, compared to other mothers. Four predictors of risky parental alcohol use were identified: male; a current tobacco smoker; reporting higher levels of psychological distress; and lower levels of education.

Conclusions: Although this study found that parents were less likely to consume alcohol at risky levels, population estimates suggest a considerable number of Australian children live in households where risky parental alcohol use occurs.

Implications: This study provides the first step to extending the knowledge base on the prevalence of parental alcohol use which will help to inform public health policy and early intervention programs.

Cannabis use while driving: a descriptive study of Australian cannabis users

Drugs: education, prevention and policy, 17 (5) 573-586

Wendy Swift, Craig Jones and Neil Donnelly

Aims: There is a limited literature and policy response to the issue of driving under the influence of cannabis. This paper focuses on attitudes, beliefs and driving strategies among cannabis users to improve our understanding of the motivations for this behaviour and potential ameliorative strategies.

Methods: Participants were 320 recent cannabis users in New South Wales, Australia. A structured interview assessed self-reported driving behaviour, attitudes, risk perceptions and harm reduction strategies associated with driving under the influence of cannabis (DUIC), cannabis and any alcohol (DUICA) and cannabis and other drugs (DUICO).

Findings: Last year DUIC was reported by 78% of participants, with 27% doing so at least weekly. Approximately one third reported DUICA (29%) and DUICO (30%), typically less than weekly. While participants strongly believed that driving under the influence of alcohol and DUICA increased accident risk (>97%), fewer believed their own (53%) or others' (68%) risk was increased by DUIC. The most common strategies for reducing DUIC-related risk involved compensating for perceived impairments, whereas strategies involving forward planning were more frequently implemented for DUICA. Cannabis dependence was related to greater DUIC frequency, permissive attitudes towards DUIC and a tendency not to implement driving risk reduction strategies.

Conclusions: These findings suggest that attempts to address DUIC face significant challenges, particularly using non-deterrence-based strategies.

Computer-delivered interventions for alcohol and tobacco use: a meta-analysis

Addiction, 105 (8), 1381-1390

Sally Rooke, Einar Thorsteinsson, Anne Karpin, Jan Copeland and David Allsop

Aims: To quantify the overall effectiveness of computer-delivered interventions for alcohol and tobacco use.

Methods: Meta-analysis of 42 effect sizes from randomized controlled trials, based on the responses of 10 632 individuals.

Results: The weighted average effect size (d) was 0.20, $P < 0.001$. While lower effect sizes were associated with studies addressing tobacco use ($d = 0.14$) this may well reflect differences in the types of outcome measure used. Effect sizes did not vary significantly as a function of treatment location, inclusion of entertaining elements, provision of normative feedback, availability of a discussion feature, number of treatment sessions, emphasis on relapse prevention, level of therapist involvement or follow-up period.

Conclusion: Findings of the meta-analysis suggest that minimal contact computer-delivered treatments that can be accessed via the internet may represent a cost-effective means of treating uncomplicated substance use and related problems.

The risk of psychotic symptoms associated with recreational methamphetamine use

Drug and Alcohol Review 29 (4), 358-363

Rebecca McKetin, Karina Hickey, Kristina Devlin and Kerri Lawrence

Introduction and Aims: To determine whether recreational methamphetamine use is associated with an increased risk of psychotic symptoms.

Design and Method: A cross-sectional survey of 157 people attending dance events in Sydney, Australia. Participants were assessed for psychotic symptoms in the past year using items from the Psychosis Screen. Participants with and without psychotic symptoms were compared on methamphetamine use, polydrug use and other demographic factors. An ordinal logistic regression was used to determine the probability of psychotic symptoms by methamphetamine use and level of polydrug use.

Results: Psychotic symptoms in the past year were predicted by methamphetamine use and heavier polydrug use in the past year, and a history of a psychotic disorder (schizophrenia, schizoaffective or bipolar affective disorder). After removing participants with a history of a psychotic disorder ($n = 16$) and adjusting for polydrug use, methamphetamine use increased the probability of two or more psychotic symptoms (indicative of psychosis risk) from 9% to 21%. There was a non-significant increase in the risk of psychotic symptoms with higher levels of polydrug use. Methamphetamine use was typically monthly or less often (83%), and most users described their use as recreational (85%).

Discussion and Conclusions: Within the context of polydrug use, recreational methamphetamine use is associated with a twofold to threefold increase in the probability of psychotic symptoms.

Brief intervention resource kits for Indigenous Australians: generally evidence-based, but missing important components

Australian and New Zealand Journal of Public Health, 34 (S1), S80-86

Anton Clifford, Lisa Jackson Pulver, Robyn Richmond, Anthony Shakeshaft and Rowena Ivers

Objective: Little is known about the content and quality of brief intervention kits specifically targeting SNAP risk factors (smoking, poor nutrition, alcohol misuse

or physical inactivity) among Indigenous Australians. This paper reviews the type and quality of these kits.

Methods: Brief intervention kits were primarily identified by contacting 74 health-related organisations in Australia between 1 February 2007 and 4 March 2007.

Results: Ten brief intervention kits met inclusion criteria: four targeted smoking; three targeted alcohol; one targeted alcohol, smoking and other drugs; one targeted alcohol, other drugs and mental health; and one targeted all SNAP risk factors. Brief intervention kits were reviewed using criteria developed from clinical guidelines for SNAP risk factors and guidelines for evaluating health promotion resources. Three kits met all review criteria. Five kits were consistent with evidence-based guidelines, but lacked a training package, patient education materials and/or behavioural change strategies. All kits used images and language identifiable with Indigenous Australia, however, their cultural appropriateness for Indigenous Australians remains unclear.

Conclusions and implications: The specific content of the missing components should be guided by the best-available evidence, such as established mechanisms for health care provider feedback to patients as a behaviour change strategy, as well as the needs and preferences of health care providers and patients. **cl**

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Emma Barrett – Research Officer/Doctoral Candidate
Rob Battisti – Senior Research Officer, NCPIC

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Emma Black – Senior Research Officer
Delphine Bostock Matusko – Research Officer
Courtney Breen – Senior Research Officer/Doctoral Candidate
Chiara Buccello – Research Officer
Joshua Byrnes – Senior Research Officer/Doctoral Candidate
Bianca Calabria – Senior Research Officer/Doctoral Candidate
Gabrielle Campbell – Senior Research Officer
Joanne Cassar – Research Officer
Catherine Chapman – Research Officer
Elizabeth Conroy – Senior Research Officer/Doctoral Candidate
Mark Deady – Research Officer
Laura Dewberry – Research Officer
Pip Farrugia – Research Officer
Peter Gates – Senior Project Coordinator/Doctoral Candidate, NCPIC
Jenny Geddes – Project Officer (Offsite)
Amy Gibson – Senior Research Officer (maternity leave)
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Rachel Grove – Research Officer
Thea Gumbert – Research Officer
Karla Heese – Research Officer
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Laila Khawar – Research Assistant, NCPIC
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Stephanie Love – Senior Research Officer
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Sonya Memedovic – Research Officer
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Sally Rooke – Senior Research Officer, NCPIC
Amanda Roxburgh – Senior Research Officer
Karen Schneider – Research Officer
Laura Scott – Research Officer
Megan Sety – Senior Research Officer
Marian Shanahan – Health Economist/Doctoral Candidate
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Melanie Simpson – Senior Research Officer/Doctoral Candidate, NCPIC
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Bridget Spicer – Research Officer
Jenny Stafford – Senior Research Officer

Rachel Sutherland – Research Officer
Johanna Thomas – Research Officer
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Tori Barnes – Executive Assistant, NCPIC
Jasmin Bartlett – Administrative Assistant
Annie Bleeker – National Community Training Manager, NCPIC
Clare Chenoweth – Communication Officer, NCPIC
Crisanta Corpus – Finance Manager
Paul Dillon – National Communications Manager, NCPIC
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Jackie Du – Finance Officer, NCPIC/NDARC
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