centre lines

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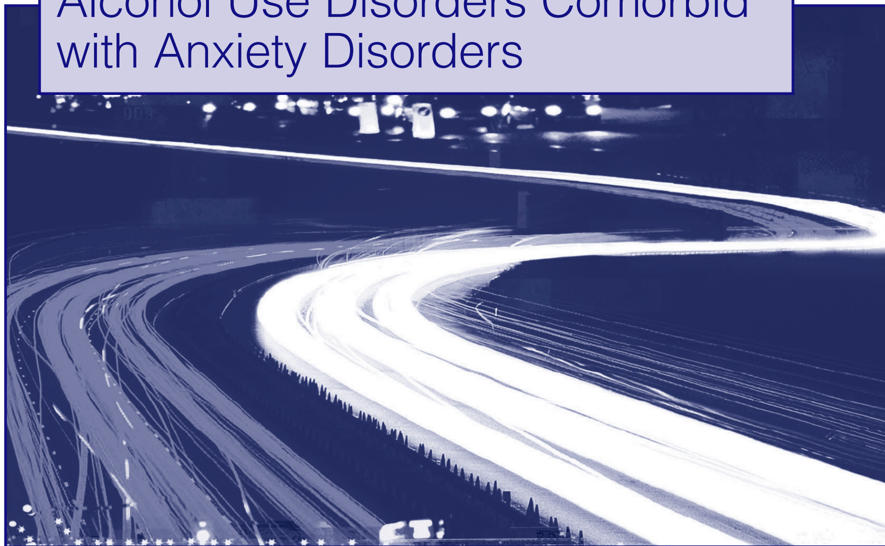
issuing **forth**

Alcohol Use Disorders Comorbid with Anxiety Disorders



ed**space**

Over recent years NDARC has become increasingly involved in the development of information resources. This originally arose from interviews that we conducted with drug users who requested additional information about their drug of choice. This resulted in NDARC staff members developing a series of booklets that examined a range of substances including cannabis, ecstasy, alcohol and speed. We have also developed resources which cover particular issues such as drug use and blood borne viruses, drugs and driving, and drugs and mental health.

Our most recent information resource covers the issue of performance and image enhancing drugs (PIEDs). In 2003 the Ministerial Council on Drug Strategy (MCDS), through the Intergovernmental Committee of Drugs, commissioned the production and distribution of a resource on PIEDs. In 2004, the Australian Government Department of Health and Ageing (AGDHA) contracted NDARC to conduct this work.

As a result NDARC has produced a new resource on PIEDs which features information on a range of substances including human growth hormone (hGH), human chorionic gondaotropin (hCG), insulin growth factor (IGF), erythropoietin (EPO), creatine monohydrate, insulin and clenbuterol. In conjunction with this new booklet, the AGDHA has agreed to fund the dissemination of an already existing NDARC resource, Steroid Facts, to all states and territories.

A dissemination plan was developed and agencies in all jurisdictions have been given an allocation of these two booklets and have agreed to distribute them as widely as possible. If you wish to have an allocation of these two valuable resources, please feel free to contact NDARC directly.

Finally, NDARC is pleased to announce that we are co-hosting Club Health 2005: Sydney which will be held on September 29-30. It has been decided to hold this event in the days prior to the long weekend in October as this is regarded by many as the beginning of the 'party season'. We hope that many of you can join us at Club Health which attracts a wide range of workers from the health, education and law enforcement sectors. You will find further information on this exciting conference contained in a flyer which has been included with this issue of *CentreLines*. The program for this event covers a wide range of topics and for further details please go to the NDARC website which can be found at the following address: **http://ndarc.med.unsw.edu.au/ndarc.nsf**.

Paul Dillon, Editor

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

headspace

Maree Teesson

Comorbidity of mental disorders and substance use disorders is widespread and often associated with poor treatment outcome, severe illness course and high service utilization. This presents a significant challenge with respect to the most appropriate identification, prevention and treatment. The unmet need for treatment among this group is considerable[1] and is the focus of growing research and policy debate.

In Australia about one in four persons with an anxiety, affective or substance use disorder also have at least one other mental disorder. This means that they had two or more different classes of disorder, such as an anxiety and affective disorder, or an anxiety and a substance use disorder. A small proportion of men (0.8%) and women (0.8%) had all three types of disorder (i.e. an anxiety, affective and substance use disorder)[2].

Comorbidity is of particular concern for young adults aged 15-24 years. The recent Australian Burden of Disease and Injury Study found that nine out of the ten leading causes of burden in young males and eight out of ten leading causes in young females were substance use disorders or mental disorders. Thus, apart from the burden resulting from road traffic accidents (and asthma in females), the disease burden in this group is the result of alcohol dependence, suicide, bipolar affective disorder, heroin dependence, schizophrenia, depression, social phobia, borderline personality disorder, generalised anxiety disorder and eating disorders[3]. Comorbidity of these disorders is high with over 50% having comorbid disorders.

One prevention opportunity, which is fairly unique to mental health, builds on comorbidity. Evidence from epidemiological research suggests that prevention of comorbidity would reduce a substantial proportion of all lifetime psychiatric disorders and an even greater proportion of ongoing disorders. Research also suggests that it is plausible to intervene with primary disorders to prevent secondary ones developing. However, prevention of mental disorders has a low priority in the health care agendas of most countries. This is despite the fact that there has been a substantial growth in the knowledge about both environmental and genetic risk factors for mental disorders and substance use disorders, and a number of promising models for early intervention now exist.

While prevention is crucial, so too is investing in treatments that work. Alcohol dependence in the presence of a comorbid disorder may be more severe[4]. Recent work from NDARC certainly shows it affects outcome, with those comorbid starting less well and ending less well than their counterparts without comorbidity[5]. Yet, very few interventions have been trialled with individuals with comorbid disorders. Dr Claudia Sannibale (AERF Research Fellow) and colleagues at NDARC are developing a CBT intervention for alcohol and anxiety disorders and this project is discussed in this month's *Issuing Forth*.

Those people who have comorbid conditions see themselves as much more disabled than those with a single substance use or psychiatric disorder; hence their over-representation in health services. However, they are usually in treatment for a single disorder, and the services are usually not enabled to tackle their comorbidity. Research on service delivery is scarce, turf wars are common and people with comorbid mental disorders and substance use disorders often fall through the cracks in the separate service systems.

Comorbidity is common, yet insufficient research and funding have been directed towards explicating and alleviating the serious problems associated with comorbidity. The research outlined by Dr Sannibale in *Issuing Forth* is aimed at addressing this gap. **cl**

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issuing forth

Alcohol Use Disorders Comorbid with Anxiety Disorders

Claudia Sannibale

Alcohol use disorders and anxiety disorders are highly prevalent mental health problems in the community. People affected by each disorder are at greater risk of developing the other than are people with neither disorder. Many individuals are affected by both disorders, with consequent functional impairment, and are less likely to respond to the treatment of either disorder. This creates an undue burden in terms of individual, healthcare, social and economic costs.

Despite the major advances over the last two decades in our ability to treat people with either an alcohol use disorder or an anxiety disorder, our knowledge and skill in treating people with both disorders have remained limited. There is a dearth of literature to guide clinicians and services in their choice of treatment for these clients. As a consequence, specialist services may be under-diagnosing and possibly under-treating these co-occurring disorders. This article highlights the scope of the problem and describes one initiative in this developing area of research.

Background

Anxiety disorders and alcohol use disorders are, independently, common mental health problems in the community, with approximately one in seven adults experiencing an alcohol use disorder and one in six an anxiety disorder in their lifetime[1]. They have also been found to have significant lifetime and concurrent comorbidity in population and clinical samples[2,3]. In population samples, between one-third and one-half of people with an anxiety disorder experience an alcohol use disorder and between one-fifth and one-third of those with an alcohol use disorder (especially dependence) have an anxiety disorder in their lifetime[4-7].

Teesson and colleagues found similarly high rates of comorbidity among the 10,641 Australian adults who participated in the National Survey of Mental Health and Well Being[3,8,9]. Using 12-month prevalence rates, these authors found that 14.9% of people with an alcohol use disorder (20% of those with dependence) also had a clinically significant anxiety disorder (specifically, generalised anxiety disorder, post-traumatic stress disorder, social phobia, panic disorder with or without agoraphobia, agoraphobia without panic disorder or obsessive-compulsive disorder), and 16% of those with an anxiety disorder had an alcohol use disorder. The odds ratio of the association between alcohol use disorder and any anxiety disorder was 3.3 (95% confidence interval 2.3-4.8)[8]. Those respondents who had an alcohol use disorder and comorbid mental health problem (anxiety, affective or other substance use) were also significantly more disabled (in terms of days out of role) and were

more likely to use health services (particularly specialist) than respondents who had an alcohol use disorder but no comorbidity[8].

As may be expected, these disorders occur at even higher rates in clinical than population samples[10-13]. Although some studies have been criticised for their poor diagnostic methods and inflated rates of comorbidity, there is increasing evidence that at least some anxiety disorders reported in alcohol treatment samples are substance-independent, that is, not associated with intoxication or withdrawal processes[14,15]. This is well illustrated by a study by Schuckit et al[16] who compared 2,713 alcohol dependent participants (recruited to a study of the genetics of alcohol use disorders) to 919 non-alcohol dependent controls. These authors found that the alcohol dependent sample, relative to the control group, had a three-fold or higher increased risk of lifetime panic disorder and social phobia that were independent of alcohol use. Furthermore, there are consistent findings from large scale studies that among people with alcohol use disorders, the onset of anxiety disorders usually precedes that of alcohol use disorder, often by many years[17].

The clinical implications of comorbid alcohol use disorders and anxiety disorders, that is the impact of each disorder on the prognosis and treatment response of the other, have been the subject of limited research. The available evidence suggests that a coexisting anxiety disorder in people with alcohol dependence seeking treatment predicts a poorer treatment outcome[18]. Research into the effect of treating anxiety on the alcohol consumption of people seeking treatment for anxiety problems remains at best exploratory.

Psychosocial treatment for these comorbid problems

There are now several efficacious psychosocial interventions for alcohol use disorders that are supported by empirical evidence and have demonstrated cost-effectiveness[19]. However, it remains unclear whether these interventions can produce clinically significant improvement in people with these more complex comorbid disorders[20].

The psychological treatment for anxiety disorders with empirically supported efficacy is cognitive behaviour therapy (CBT). CBT has been found to be efficacious with all anxiety disorders. However, because the anxiety research treatment samples usually exclude individuals with substance use disorders, the efficacy of the tested anxiety treatment cannot be assumed to generalise to individuals with comorbid substance use disorders.

This is clearly illustrated by the inconsistent results of the few published randomised controlled trials of CBT based treatment of anxiety disorders in alcohol dependent patients[21-25]. For example, in one study, the addition of CBT for panic disorder to a residential treatment program produced no benefits over the standard treatment alone[21]. In another study, there were reductions in anxiety but not in drinking outcomes[24]. In the only study that resulted in significant and sustained improvements in both domains, CBT for obsessive compulsive disorder was added to the standard program in a therapeutic community[23].

In a more recent study, Randall and colleagues[25] allocated people with alcohol dependence and social phobia to 12 weeks of individual CBT treatment for alcohol dependence or treatment for both alcohol and social phobia. Both groups improved significantly on social phobia measures, but the combined treatment sample had a significantly worse outcome on some alcohol measures. This unexpected result was partly attributed to the use of two separate manualised treatments, which were implemented in parallel rather than as a unified, single intervention addressing both disorders.

In summary, although the problem of comorbidity has been well researched and articulated in the literature, the development of appropriate treatment for these more complex disorders, particularly anxiety comorbid with substance use disorders, has been a neglected area of research.

Development of an integrated treatment for alcohol use disorder and co-existing social anxiety disorder

A group of NDARC and Macquarie University researchers (Professor Ron Rapee, Dr Andrew Baillie and Jonathan Gaston) are currently developing a manual-based integrated intervention for alcohol use disorder and social anxiety disorder. The CBT based intervention, which will be piloted over the next 18 months, will address both problem domains simultaneously and will assist participants to develop a unified repertoire of coping strategies. **cl**

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project notes

A survey of Australian medical cannabis users

Wendy Swift, Peter Gates and Paul Dillon

In late 2003, the NSW Government 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 2001 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 examined people's experiences, behaviours and attitudes surrounding medicinal cannabis use.

A total of 128 people responded to media stories presented opportunistically over an approximately 12-month period. To be eligible for the study, participants had to be living in Australia and to be using/have used cannabis for medicinal purposes. Interested people were screened on the phone and posted a questionnaire, adapted from a survey developed by the Medical Cannabis Information service in Nimbin, in its study of members. It covered a variety of issues, including medical conditions/symptoms from which relief was sought, patterns of medical cannabis use over time, symptom relief/benefits/side effects of use, comparison of cannabis use to other medications, source, concerns over use, others' opinion of use, and interest in participating in a trial of medicinal cannabis. The final version incorporated comments from researchers and clinicians interested in this issue. All questionnaires were completed anonymously and returned by mail.

Data are currently being analysed and a report should be completed by August.

While there has been no further commitment from the NSW State Government to conduct a trial, this survey may contribute important local information complementary to data from clinical trials and inform the design, scope and feasibility of any future trial.

This study was funded by NDARC and received ethics approval from the UNSW Social/Health Human Research Ethics Advisory (HREA) Panel.

NSP Information Kit Update

Kate Dolan, Alex Wodak, Edmund Silins and John Ryan (Anex)

Needle and Syringe Programs (NSPs) have been implemented in Australia since 1986 and continue to be at the centre of much public debate. The weight of evidence in favour of NSPs is compelling. In order to disseminate this evidence as widely as possible, an NSP Information Kit was produced in 2000. NDARC is now in the process of updating this highly successful resource.

The two-booklet kit provides a summary of the scientific evidence for NSPs in a quick-reference question and answer format. The target audience includes: Federal, State and Territory Parliamentarians; Resident Action Groups in areas of highly visible drug use; Local Government Councillors; Health Department Officers; pharmacies providing needles and syringes; NSP workers; and journalists. In a survey to evaluate the existing Kit, most respondents found it easy to understand, comprehensive, accurate and increased their knowledge of NSPs. An attitude change towards support for NSPs was reported by one in twenty respondents.

Up to date information about NSPs is important as they are a critical part of strategies aimed at preventing the spread of blood borne viral infections. The existing Kit will be revised and an extensive literature review will be undertaken covering NSPs and blood borne viral infections; NSPs and illicit drug use; NSPs and discarded injecting equipment in public places; blood borne viral infections after injury with a discarded needle; cost-effectiveness; global implementation; strength of support by scientific and religious bodies; consistency with Australia's national drug policy; community opinion; NSPs in correctional environments; referrals to drug treatment or primary health care through NSPs; vending machines; injecting rooms; and legal aspects of NSPs. The target audience for the Kit will include: Federal, State and Territory Parliamentarians; Resident Action Groups in areas of highly visible drug use; Local Government Councillors; Health Department Officers; pharmacies providing needles and syringes; NSP workers; and journalists.

A steering committee to inform the project will include members from the Australian Government Department of Health and Ageing (AGDHA) , NSW Health, Australian National Council on Drugs (ANCD), ANEX, Australian Intravenous League (AIVL) and the National Centre National Centre in HIV Epidemiology and Clinical Research (NCHECR). The design of the updated Kit will remain the same but it will incorporate a new colour scheme to distinguish it from the old version. The initial print run will be 4000 copies and distribution will be during August. The NSP Information Kit will also be available online.

Alcohol Action in Rural Communities (AARC)

Anthony Shakeshaft, Richard Mattick, Courtney Breen, Rox De Luca, Elissa Wood and Paul Dillon

In 1922, the Danish physicist Niels Bohr won a Nobel prize for applying Planck's theory of quantum mechanics to Rutherford's theory of the structure of atoms. When asked to predict the application of this work, he famously replied: "Prediction is very difficult, especially about the future." The impending first anniversary of the AARC project provides a timely opportunity to reflect on progress to date and to bravely ignore Bohr's warning by predicting what may be in store for the next twelve months.

AARC is a community-wide project that aims to strategically co-ordinate, and more efficiently utilise, all available resources in rural communities in an attempt to reduce the extent to which the whole community, as distinct from individuals within the community, experience alcohol-related harm. As is invariably the case in behavioural research, this conceptually straight-forward and easily achieved ideal is, in practice, neither straight-forward nor easily achieved. Setting aside the myriad of unavoidable and arcane administrative procedures that threaten to engulf multi-site research (and are largely dealt with by the tireless Ms Rox De Luca), the most significant progress for AARC in the first 12 months has been resolving the problem of how to measure the impact of the community-wide interventions: there is little point implementing interventions without the capacity to confidently gauge the value of this effort. Ms Courtney Breen and Mr Dennis Petrie (University of Queensland) have devised appropriate measures with which to assess community attitudes and ideas, levels of alcohol-related harm and the economic costs associated with such harms. These measures represent a combination of autonomous surveys and creative utilisation of existing data sources which, when used in combination, provide both a methodologically rigorous baseline assessment of harm, against which to measure the effect of the community-wide intervention, as well as a unique and intellectually stimulating contribution to the international research literature.

Additional progress in the AARC project to date includes the provision of training sessions to GPs in rural communities, provided by a number of clinical drug and alcohol specialists from Sydney, Melbourne and Brisbane: Professors John Saunders, Greg Whelan,

Robert Batey and Jonathan Chick; Associate Professors Kate Conigrave and Paul Haber; and Drs Adam Winstock and Tony Gill. Their generosity in giving up their time to travel to rural communities and provide expert training seminars represents a significant contribution to AARC, matched by the willingness of Mr Paul Dillon to provide expert seminars to senior high school students in the AARC communities, evaluating this activity in conjunction with the NSW Department of Education and Training.

Further intervention activities are currently being planned, in which we hope to complement ongoing input from the clinical drug and alcohol specialists and Paul Dillon, with a range of additional interventions in the second 12 month period, including feedback of survey results to each community, workplace interventions (being co-ordinated by Dr Ken Pidd and Professor Ann Roche at Flinders University) and employing a more qualitative methodology to explore apparent resource differences between communities (Ms Elissa Wood will be utilising her knowledge in applied sociology).

As the AARC project embarks on its second 12 months of work, we are confident of expanding our emerging expertise from community-wide measures to community-wide interventions. Lest we be accused of gratuitous grandstanding, I hasten to once again call on the wisdom of Niels Bohr by invoking his reflection that expertise is nothing more than having "… made all the mistakes that can be made in a very narrow field." Perhaps we will adopt Niels as AARC's figurehead. **cl**

abstracts

What's in a virus? Folk understandings of hepatitis C infection and infectiousness among injecting drug users in Kings Cross, Sydney

International Journal for Equity in Health 4:5

Erica Southgate, Anne Maree Weatherall, Carolyn Day and Kate A. Dolan

Background: To explore folk understandings of blood borne virus infection and infectiousness among injecting drug users in Kings Cross, Sydney.

Method: Observational fieldwork was conducted in Kings Cross over a four month period. In-depth interviews with 24 current injectors and 4 key informants recruited from Kings Cross were undertaken.

Results: Hepatitis C (HCV) generated different meanings from HIV, HIV was considered "the dreaded" and generated fear of infection and ire disease progression. Whereas HCV was considered non-desirable but less threatening than HIV. The risks of transmitting HCV through sharing injecting paraphernalia was poorly understood. Some believed HCV infection was linked to poor hygiene and dirty water. Jaundice was mistakenly thought to indicate HCV infection and was used to gauge infectiousness. Many were confused about their current hepatitis C serostatus. Some participants thought they had a "dormant antibody" or that they had a "mild case" of infection. Participants were unsure what this meant for their own health or for their potential to infect others.

Conclusion: Participants displayed confusion about transmission risks for hepatitis C, conflating blood awareness and hygiene health promotion messages. Participants' reliance on the symptom of jaundice to gauge serostatus places them at risk of transmitting and contracting HCV. Participants were confused about what a positive HCV diagnosis meant for their own health and their ability to infect others. Education is needed to debunk misconceptions about jaundice and clarify medical terms such as 'antibody' at the time of diagnosis. Further clarification of message about injecting hygiene and blood awareness are also required.

Post-traumatic stress disorder among people with heroin dependence in the Australian Treatment Outcome Study

Drug and Alcohol Dependence 77, 243-249

Katherine L. Mills, Michael Lynskey, Maree Teesson, Joanne Ross and Shane Darke

This study documents the prevalence and correlates of post-traumatic stress disorder (PTSD) among Australian individuals with heroin dependence. Data was obtained from a cohort of 615 people dependent on heroin, 535 entering treatment for their heroin dependence and 80 individuals not in treatment. Trauma exposure (92%) and lifetime PTSD (41%) were highly prevalent. PTSD was prevalent across all treatment modalities, most commonly residential rehabilitation (52%) followed by maintenance therapies (42%), and detoxification (37%). The lowest prevalence was reported among those not in treatment (30%). Although men and women were equally likely to have experienced trauma (93% vs. 89%), women were more likely to develop lifetime PTSD (61% vs. 37%). For the large majority of those with PTSD, the condition was chronic (84%), with symptoms continuing for an average of 9.5 years. Those with PTSD had more extensive polydrug use histories, poorer general physical and mental health, and more extensive health service utilisation. It is concluded that PTSD is highly prevalent among individuals with heroin dependence, presenting a significant challenge to treatment providers.

Evaluating explanations of the Australian 'heroin shortage'

Addiction 100, 459-469

Louisa Degenhardt, Peter Reuter, Linette Collins and Wayne Hall

Aims: In this paper we outline and evaluate competing explanations for a heroin shortage that occurred in Australia during 2001.

Methods: We evaluated each of the explanations offered for the shortage against evidence from a variety of sources: government reports, police and drug law enforcement documents and briefings, key informant (KI) interviews, indicator data and research data.

Results: No similar shortage occurred at the same time in other markets (e.g. Vancouver, Canada or Hong Kong) whose heroin originated in the same countries as Australia's. The shortage was due most probably to a combination of factors that operated synergistically and sequentially. The heroin market had grown rapidly in the late 1990s, perhaps helped by a decline in drug law enforcement (DLE) in Australia in the early 1990s that facilitated high-level heroin suppliers in Asia to establish large-scale importation heroin networks into Australia. This led to an increase in the availability of heroin, increasingly visible street-based drug markets, increased purity and decreased price of heroin around the country. The Australian heroin market was well established by the late 1990s, but it had a low profit margin with high heroin purity, and a lower price than ever before. The surge in heroin problems led to increased funding of the Australian Federal Police and Customs as part of the National Illicit Drug Strategy in 1998-99, with the result that a number of key individuals were identified and large seizures occurred during 1999-2000, probably increasing the risks of large-scale importation. The combination of low profits and increased success of law enforcement may have reduced the dependability of key suppliers of heroin to

Australia at a time when seized heroin was becoming more difficult to replace because of reduced supplies in the Golden Triangle. These factors may have reduced the attractiveness of Australia as a destination for heroin trafficking.

Conclusion: The Australian heroin shortage in 2001 was due probably to a combination of factors that included increased effectiveness of law enforcement efforts to disrupt networks bringing large shipments of heroin from traditional source countries, and decreased capacity or willingness of major traffickers to continue large scale shipments to Australia.

Depressive symptoms during buprenorphine vs. methadone maintenance: findings from a randomised, controlled trial in opioid dependence

European Psychiatry 19, 510-513

Angela J. Dean, James Bell, Macdonald J. Christie and Richard P. Mattick

Research suggests that buprenorphine may possess antidepressant activity. The Beck Depression Inventory was completed at baseline and 3 months by heroin dependent subjects receiving either buprenorphine or methadone maintenance as part of a larger, pre-existing, double blind trial conducted by NDARC (Australia). Depressive symptoms improved in all subjects with no difference between methadone and buprenorphine groups, suggesting no differential benefit on depressive symptoms for buprenorphine compared to methadone.

Short-term outcomes of five heroin detoxification methods in the Australian NEPOD Project

Addictive Behaviours 30, 443 - 456

Erol Digiusto, Nicholas Lintzeris, Courtney Breen, Jo Kimber, Richard P. Mattick, James Bell, Robert Ali, John B. Saunders and The NEPOD Group

This study included 380 participants in five heroin detoxification trials whose data were pooled to enable direct comparison of five detoxification methods in the Australian National Evaluation of Pharmacotherapies for Opioid Dependence (NEPOD). Rapid detoxification achieved similar initial abstinence rates with either anaesthesia or sedation (average 59%) which were higher than was achieved by inpatient detoxification using clonidine plus other symptomatic medications (24%), which in turn was higher than outpatient detoxification using either buprenorphine (12%) or clonidine or other symptomatic medications (4%). Older participants and those using more illicit drugs were more likely to active abstinence. Entry rates into ongoing postdetoxification treatment were as follows: buprenorphine outpatient (65%), sedation (63%), anaesthesia (42%) symptomatic outpatient (27%), and symptomatic inpatient (12%). Postdetoxification treatment with buprenorphine or methadone was preferred over naltrexone. Participants with more previous detoxification attempts were more likely to enter postdetoxification treatment. Given that outpatient detoxification was more effective with buprenorphine than with symptomatic medications and that rapid detoxification was more effective than the symptomatic inpatient method, the roles of the symptomatic methods should be reconsidered.

The impact of illicit drug market changes on health agency operations in Sydney, Australia

Journal of Substance Abuse Treatment 28, 35-30

Amy Gibson, Carolyn Day and Louisa Degenhardt

At the end of 2000, in Sydney, Australia, there was a dramatic reduction in heroin availability. This study examines how health agencies treating clients for drug and alcohol related issues were able to respond to the changes that took place in their clients and their treatment needs. Key informant interviews were conducted with 48 staff from a wide range of health services in Sydney to provide the data for a thematic analysis. Changes experienced by health agencies included changed patterns of drug use in their clients, increased aggressive incidents, changed numbers of clients accessing treatment services, and a need for more assistance from outside agencies. A strong evidence base for a range of drug treatment options, support of staff development in aggression management skills, and development of good interagency links between mental health, drug and alcohol, and law enforcement services would make health services better prepared for future changes in the drug use of their clients.

An overview of systematic reviews of the effectiveness of opiate maintenance therapies: available evidence to inform clinical practice and research

Journal of Substance Abuse Treatment 28, 321-329

Laura Amato, Marina Davoli, Carlo A. Perucci, Marica Ferri, Fabrizio Faggiano and Richard P. Mattick

Aim: To summarize the major findings of the five Cochrane reviews on substitution maintenance treatments for opioid dependence.

Method: We conducted a narrative and quantitative summary of systematic review findings. There were 52 studies included in the original reviews (12,075 participants, range 577-5894): methadone maintenance treatment (MMT) was compared with methadone detoxification treatment (MDT), no treatment, different dosages of MMT, buprenorphine maintenance treatment (BMT), heroin maintenance treatment (HMT), and L-a-acetylmethadol (LAAM) maintenance treatment (LMT).

Measurements: Outcomes considered were retention in treatment, use of heroin and other drugs during treatment, mortality, criminal activity, and quality of life.

Findings: *Retention in treatment:* MMT is more effective that MDT, no treatment, BMT, LMT, and heroin plus methadone. MMT proved to be less effective than injected heroin alone. High doses of methadone are more effective than medium and low doses. *Use of heroin:* MMT is more effective than waiting list, less effective than LAAM, and not different from injected heroin. No significant results were available for mortality and criminal activity.

Conclusions: These findings confirm that MMT at appropriate doses is the most effective in retaining patients in treatment and suppressing heroin use but show weak evidence of effectiveness toward other relevant outcomes. Future clinical trials should collect data on a broad range of health outcomes and recruit participants from heterogeneous practice settings and social contexts to increase generalizability of results. **cl**

recent **publications**

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

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