

# ncpic e-zine

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## national cannabis prevention and information centre

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what's  
new in  
cannabis?

### NCPIC poster and short film competitions

Details of the NCPIC Poster and Short Film Competitions were mailed to every high school and tertiary institution last month. The Poster Competition gives secondary school students between the ages of 12 and 18 years the opportunity to showcase their creative talent and express their thoughts and ideas about cannabis and its impacts upon young people. The Short Film Competition targets those aged between 16 and 25 years.

Entrants to both competitions are to convey a message about cannabis and the importance of seeking help if they or a friend are having problems with the drug in the appropriate medium. The Poster Competition entries must be received by 28 July 2008 and the Short Film entries are due in by 20 October. If you would like any further information on the competitions or flyers to distribute, please go to our website or contact Paul Dillon at [p.dillon@unsw.edu.au](mailto:p.dillon@unsw.edu.au).

### director's report

Jan Copeland  
(Professor/Director, NCPIC)

You may have noticed the recent media attention on the issue of cannabis use among remote indigenous communities. The recent publication in the *Australian Journal of Rural Health* by Kate Senior and Richard Chenhall (discussed later in the E-Zine) highlighted the emergence of cannabis as an apparent replacement for alcohol use in a remote Northern Australian community in the apparently unquenchable thirst for intoxication among Australians of all cultures. While some may argue the actual or potential harms associated with alcohol, petrol sniffing and cannabis use among these isolated communities, it is the community members themselves that are highlighting their concerns about the recent rapid escalation and pervasiveness of cannabis use.

As Alan Clough and colleagues have identified, in remote Indigenous communities in the 'Top End' of the Northern Territory cannabis use was not detected in a 1980s survey in the region. A rapid rise in its use, however, was evident from the mid-1990s due to expansion of local trafficking. In 2001, from 60%-73% of males and 16%-27% of females (aged 13-36 years) in eastern Arnhem Land communities were using cannabis with around three-quarters of these using it at least weekly and 44% smoking it daily.<sup>1</sup> Follow-up studies in 2005-06 in the same communities<sup>2</sup> indicated that these high rates persisted, with 61% of males and 58% of females in these age groups using cannabis at least weekly. The majority of these users (88%) reported symptoms of cannabis dependence. According to Professor Clough's recent discussions with Cape York and Torres Strait people in Far North Queensland, rates of

cannabis use in their communities are likely to be as high as those found in Arnhem Land.

In December 2007 and January 2008, the 28 major communities comprising the Indigenous populations of the Cape York and Torres Strait regions formally agreed to implement strategies to reduce cannabis availability. In these consultations, community spokespersons asked for additional measures to address cannabis use. They highlighted the need to support heavy users who may suffer if cannabis is withdrawn or restricted, to enhance users' understandings of the effects of cannabis, to provide sound reasons why current users should reduce their cannabis use and to encourage their young people to avoid taking it up. NCPIC was pleased to be invited to be part of this study and have joined with Professor Clough's group in submitting a research grant proposal to the National Health and Medical Research Council (NHMRC) to assist in this important work.

A further major NCPIC project in this area is being lead by our consortium partners at the National Drug Research Institute (NDRI). The purpose of this project is to identify, develop, trial and disseminate a range of interventions specifically for use with Indigenous clients with cannabis-related problems in a range of primary health care settings. It will be conducted within a group of four Indigenous community-controlled health services nationally. The approaches developed in this project will inform the dissemination activities for NCPIC's general clinical guidelines for the management of cannabis use disorders that will be completed later this year. We look forward to updating you on the progress of these important studies.

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Finally, the response to our initial announcements on the availability of our national evidence-based training on brief cannabis interventions for adults and adolescents has been very positive, and at times slightly overwhelming! Our Training Managers have their bags packed and are on the road. We apologise if we haven't been able to accommodate you all quite yet but it is an ongoing NCPIC activity and will be available in evolving forms over the life of the Centre so all reasonable requests will be eventually met.

## references

1. **Clough, A.R., Cairney, S., Maruff, P., & Parker, R.** (2002). Rising cannabis use in remote Indigenous communities. *Medical Journal of Australia* 177, 395-6.
2. **Lee, K.S., Clough, A.R. & Conigrave, K.M.** (2007). High levels of cannabis use persist in Aboriginal communities in Arnhem Land, Northern Territory. *Medical Journal of Australia* 187, 594-595.

## research publications

Relevant publications examining issues to do with cannabis that have been published in the last month include the following:

**Aldington, S., Harwood, M., Cox, B., Weatherall, M., Beckert, L., Hansell, A., Pritchard, A., Robinson, G., Beasley, R., & Cannabis and Respiratory Disease Research Group.** (2008). Cannabis use and cancer of the head and neck: Case-control study. *Archives of Otolaryngology Head & Neck Surgery* 138, 374-80.

**Caldeira, K.M., Arria, A.M., O'Grady, K.E., Vincent, K.B., & Wish, E.D.** (2008). The occurrence of cannabis use disorders and other cannabis-related problems among first-year college students. *Addictive Behaviors* 33, 397-411.

**Cole, J.C., Goudie, A.J., Field, M., Loverseed, A., Charlton, S., & Sumnall, H.R.** (2008). The effects of perceived quality on the behavioural economics of alcohol, amphetamine, cannabis, cocaine, and ecstasy purchases. *Drug and Alcohol Dependence* 94, 183-190.

**Jones, A.W., Holmgren, A. & Kugelberg, F.C.** (2008). Driving under the influence of cannabis: A 10-year study of age and gender differences in the concentrations of tetrahydrocannabinol in blood. *Addiction* 103, 452-461.

**Macleod, J.** (2008). The natural history of cannabis use by young people and the implications of this for health (Commentary). *Addiction* 103, 450-51.

**Martins, S.S., Storr, C.L., Alexandre, P.K., & Chilcoat, H.D.** (2008). Do adolescent ecstasy users have different attitudes towards drugs when compared to marijuana users? *Drug and Alcohol Dependence* 94, 63-72.

**Milin, R., Manion, I., Dare, G., & Walker, S.** (2008). Prospective assessment of cannabis withdrawal in adolescents with cannabis dependence: A pilot study. *Journal of the American Academy of Child & Adolescent Psychiatry* 47, 174-8.

**Perkonig, A., Goodwin, R.D., Fiedler, A., Behrendt, S., Beesdo, K., Lieb, R., & Wittchen, H.** (2008). The natural course of cannabis use, abuse and dependence during the first decades of life. *Addiction* 103, 439-449.

**Senior, K. & Chenhall, R.** (2008). Lukumbat marawana: A changing pattern of drug use by youth in a remote Aboriginal community. *Australian Journal of Rural Health* 16, 75-79.

**Tirado, C.F., Goldman, M., Lynch, K., Kampman, K.M., & O'Brien, C.P.** (2008). Atomoxetine for treatment of marijuana dependence: A report on the efficacy and high incidence of gastrointestinal adverse events in a pilot study. *Drug and Alcohol Dependence* 94, 254-257.

**Vann, R.E., Gamage, T.F., Warner, J.A., Marshall, E.M., Taylor, N.L., Martin, B.R., & Wiley, J.L.** (2008). Divergent effects of cannabidiol on the discriminative stimulus and place conditioning effects of  $\Delta^9$ -tetrahydrocannabinol. *Drug and Alcohol Dependence* 94, 191-198.

## commentary on research the stability of cannabis use over time

*A comment on Perkonig et al (2008)*

**Anthony Arcuri**

In response to an identified gap in the current knowledge base, Perkonig et al (2008) aimed to determine prospectively the prevalence of various cannabis use patterns, cannabis abuse, and cannabis dependence among adolescents and young adults in the community. Furthermore, they sought to examine how stable these patterns are over time, and the risk factors associated with the stability and variation of these patterns. To achieve these aims, Perkonig et al interviewed 3021 randomly sampled 14 to 24 year olds in Munich, Germany, in 1995, and then re-interviewed them 4 and 10 years later.

At baseline, 34.2% of the young people had used cannabis at least once, 2.8% met criteria for cannabis abuse, and 1.5% were cannabis dependent. At four-year follow-up, the lifetime prevalence of cannabis use increased to 45.1%, and the previous-year prevalence was 25.4%. In addition, the prevalence of cannabis abuse and cannabis dependence increased to 5.3% and 2.2% (including 11.9% and 3.1% of those who had used cannabis at baseline), respectively. At ten-year follow-up (when the participants were 24-34 years old), lifetime cannabis use rose further to 50.7%, but past-year prevalence fell slightly to 22%. Also, the prevalence of cannabis abuse and cannabis dependence again rose slightly, to 6.6% and 3.1% (including 7.5% and 6.1% of those who had used cannabis at baseline), respectively.

Furthermore, those at baseline who had used cannabis repeatedly (i.e., five times or more) were nearly three times more likely to report repeated use during the 12 months before the 10-year follow-up than were those at baseline who had used cannabis fewer times. Regarding risk factors associated with the stability and variation of cannabis use over time, significant predictors of cannabis use at four-year follow-up included peer drug use, distressing life events, antisocial personality disorder, low self-competence, early onset of cannabis use, younger age, and male gender. These predictors, in addition to alcohol dependence, remained significant at ten-year follow-up, with the exception of antisocial personality disorder, low self-competence, and early onset of cannabis use.

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Perkonigg et al (2008) concluded that their results demonstrate that there is a relatively high likelihood that cannabis use persists from adolescence into at least early adulthood, particularly when cannabis is used repeatedly early on and for young people with the risk factors described above. Whether these findings generalise to an Australian context – and to communities that are more demographically diverse than the well-educated and economically stable community examined – is a question that Australian researchers might consider in the future.

## reference

**Perkonigg, A., Goodwin, R.D., Fiedler, A., Behrendt, S., Beesdo, K., Lieb, R., & Wittchen, H.** (2008). The natural course of cannabis use, abuse and dependence during the first decades of life. *Addiction* 103, 439-449.

## drug use in a remote Australian community

*A comment on Senior, K. & Chenhall, R. (2008)*

**John Howard**

This is an observational study over five years where data was collected during a series of structured and unstructured interviews over that period. This rich qualitative data should inform a number of research and policy responses.

There has been much media attention to the Australian Government's 'emergency intervention' in Northern Territory communities. The authors document a changing pattern of drug use in 'River Town' where the introduction of Opal fuel and restriction of alcohol supply appear to be associated with an increase in cannabis use. In addition to the change in the drugs used, other changes were also noted. The authors were not suggesting a mere replacement of one drug (e.g. petrol) for another (e.g. cannabis), but highlight significant changes in perception of drug use, users, and settings for drug consumption. They describe that alcohol was mainly consumed by older members of the community, whereas petrol inhalers were mostly unmarried youth who induce some sympathy from the community members as they were seen as 'lost and lonely' and engaging in a dangerous

activity. These youth tended to cease their use of petrol when they married and had children.

In contrast, cannabis was now being consumed by family members of all ages and 'at home' and is perceived as keeping users 'quiet'. Children in the community have incorporated the activity of selling and using cannabis into their play – lighting pieces of grass, acting as dealers while they 'play ganja'. Cannabis and its use was not perceived as 'unproblematic', and health and economic consequences were well recognised by the community. Users were thought to be preoccupied with obtaining money, drug seeking and use, and of being engaged in a 'selfish and hedonistic' activity. Wives of young families, in particular, expressed their concerns about lack of availability of ability to purchase food and medicines for their children.

Concerns were also expressed by community members about perceived role of cannabis use in behavioural and mental health consequences of use, with attention given to violence during cannabis withdrawal and acute intoxication.

Senior and Chenhall sensibly imply caution in simplistic cause and effect assumptions. Even well-intentioned, responses to complex social phenomena such as child abuse and drug use in remote Aboriginal communities may have unintended negative consequences.

What would be of importance to explore further are the relationships with drug suppliers, both external to and within these communities. The role of kinship networks, as well as how the exchange of commodities is enacted, warrant attention. For example, cannabis produced in rural communities could be traded for heroin more available in large cities via movement of kinship groups between these locations. Likewise, the trade in cannabis transfers available money among various community members, not just to outside suppliers.

It is obvious that there needs to be a combination of culturally appropriate supply, demand and harm reduction/minimisation strategies developed with the community – young and old - to address community concerns. These must be considered alongside various dynamic, systemic and structural

responses to issues such as petrol sniffing, alcohol availability, social and economic inequalities, and how perceptions of cause and effect are construed within remote communities.

## reference

**Senior, K. & Chenhall, R.** (2008). Lukumbat marawana: A changing pattern of drug use by youth in a remote Aboriginal community. *Australian Journal of Rural Health* 16, 75-79.



Each issue we will examine some of the cannabis-related stories that have received media attention across the country. The headlines are listed below in bold, with a short summary and/or commentary regarding the content of the news story beneath.

If you are interested in obtaining a copy of a particular story, please contact Paul Dillon at [p.dillon@unsw.edu.au](mailto:p.dillon@unsw.edu.au).

## **cannabis bongs to be banned**

*Courier Mail: February 14, 2008*

The sale of drug paraphernalia such as bongs will be banned in South Australia after the major political parties agreed to support new laws. State parliament's upper house passed a bill from independent Legislative Counsellor Ann Bressington with support from Labor government and Liberal opposition members. It now goes before the lower house for final approval. The bill will prevent the sale of cannabis pipes, bongs, cocaine kits, ice pipes and other drug taking paraphernalia. Under current laws, using the equipment to take drugs is illegal, but actually buying or selling it is not.

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## Australia's alcohol toll described as a national disaster

*Herald Sun: February 25, 2008*

A new report released by the Australian National Council on Drugs (ANCD) received widespread coverage across the country. The report titled 'Supporting the families of young people with problematic drug use' received attention due to the figure that one in 10 young people aged 12 to 17 had abused alcohol in the past week. A number of the stories also quoted figures around cannabis use, including that one in seven, or 237,000, secondary school students have used cannabis in the past year and 78,000 children live in houses where at least one adult uses cannabis daily.

## ganga and grog used to beat the boredom

*The Australian: February 26, 2008*

This article, linked to a coroner's report into 22 deaths that occurred in the Kimberley area of Western Australia, discusses some of the problems faced in indigenous communities around the country. The young man interviewed in the story found it difficult to explain why his people have been drawn into drug and alcohol use, but mentioned that there was "nothing to do in the community unless you are lucky enough to have one of the handful of jobs at the school or the shop."

## Pitlands drug use ignored

*Adelaide Advertiser: February 29, 2008*

The South Australian Opposition claimed that the State Government was ignoring the chronic use of cannabis and abuse of alcohol in the Anungu Pitjantjatjara Lands. A report released by the Nganampa Health Council found that from 1615 people aged between 10 and 41 surveyed in 2006, 44.8% of men and 20% of women were smoking cannabis.

## marijuana minister defended

*Hobart Mercury: March 3, 2008*

The story that Federal Treasurer Wayne Swan admitted to "an experience with marijuana" in the 1970s attracted headlines around the country. This story discussed the fact that both Labor and Liberal politicians defended the Treasurer. Prime Minister Kevin Rudd was quoted as saying - "I don't think anyone in this Government has ever pretended to be some sort of paragon of moral virtue, least of all, yours truly." Opposition Leader, Dr Brendan Nelson said "If Mr Swan or anybody else chose to smoke marijuana in their earlier lives, then that's their business."

## bans lead users to change substance

*The Australian: March 4, 2008*

According to a study published in the *Australian Journal of Rural Health*, alcohol bans in Aboriginal communities and the roll-out of unsmellable petrol may be doing "more harm than good", with large numbers of indigenous people switching to cannabis. Co-author Richard Chenhall, Senior Research Fellow at the Menzies School of Health Research in Darwin was reported as saying - "Marijuana is becoming widespread, and I think the social consequences are at least as significant as the health consequences."

## they used to play 'drunks', now they play a game called ganja

*Northern Territory News: March 6, 2008*

Based on the same report, but handled in a slightly different way, this story is based on a report quoting a member of a remote Aboriginal community as saying: "Kids play at selling ganja, they fill empty bags with grass and pretend to sell them. Before they used to play drunks with empty cans and bottles, but now they're playing ganja."

## bipolar disorder medication helps addicts quit cannabis

*Sydney Morning Herald: March 7, 2008*

A study conducted by researchers at Corella Drug Treatment Services and the National Drug and Alcohol Research Centre (NDARC) has found

that a common medication used to treat people with bipolar disorder, lithium, could help users quit cannabis without suffering withdrawal symptoms. This was based on a small open-label pilot study and requires more rigorous research prior to its acceptance as an evidence-based pharmacotherapy.

## pot may stub out smokes habit

*Sunday Times: March 9*

Cigarette smokers trying to quit the habit could do it with the help of "cannabis-based" medicines according to new research conducted by scientists at the University of Nottingham in the UK. Cannabis-like compounds called endocannabinoids could have a crucial link to addictive behaviour according to researchers. The article also reported that the medicines could be used to treat other conditions such as obesity, diabetes and depression.

## being drunk isn't quite as dangerous as getting stoned

*Sydney Morning Herald: March 13, 2008*

A very 'interesting' opinion piece written by columnist Miranda Devine where she claims that research has shown that cannabis is "much worse" for the "plastic adolescent brain" than alcohol. She goes on to ask Prime Minister Rudd "so where is the \$53 million campaign against cannabis?"

## former premier jumps to defence of state cannabis laws

*The Australian: March 14, 2008*

Former South Australian Premier John Bannon attacked moves to wind back his government's legislative reforms of 1987 that decriminalized cannabis in that state. Under the current laws, people with up to five "traditionally-grown plants" (down from an initial 10 plants) for personal use receive an expiation notice, with a possible maximum fine of \$500. An amendment bill passed in the state's upper house seeks to remove the "personal use" clause and increase possible penalties to \$10,000 fines and up to two years' imprisonment.

## cannabis and dependence: what do we know?

Typically, people who use cannabis do not progress to using the drug regularly for the rest of their lives. Most will experiment every now and then with cannabis during adolescence and early adulthood and stop using once they are in their mid to late 20s. However, some people will use cannabis for longer and more often, and become dependent on the drug. Historically, cannabis was not seen as a drug of dependence in the same way as heroin or alcohol, but these days cannabis dependence is well recognised in the scientific community.

It was estimated in 1997 that there were at least 200,000 people dependent on cannabis in Australia. About one in ten people who have tried cannabis at least once in their lifetime will become dependent on the drug. The more often you use cannabis the more likely you are to become dependent. If someone uses cannabis everyday, then they have a 50/50 chance of becoming dependent. Young people develop cannabis dependence more quickly than adults.

Dependence on cannabis means that the person needs to use cannabis just to feel 'normal'. In order to get a diagnosis of cannabis dependence, a person needs to experience at least three of the following in the one year:

- tolerance to the effects of cannabis, meaning that more cannabis is needed to get the same effect
- withdrawal from the effects of cannabis, such as irritability, trouble sleeping and depressive symptoms



- using more cannabis than was intended
- persistent desire to stop taking cannabis or to cut down and being unsuccessful at this
- spending lots of time obtaining, using or recovering from the use of cannabis
- giving up important activities in favour of using cannabis, and/or
- using cannabis even when it is known that it causes problems

People who are dependent on cannabis are at a higher risk of suffering from negative consequences of using the drug, such as short-term memory impairment, mental health problems and respiratory diseases (if cannabis is smoked). Regular use can also lead to problems with finances, conflict in relationships with family and friends, and employment problems.

## cannabis and aggression: what do we know?

When cannabis is taken it typically has a sedating effect on a person, which makes it less likely to cause violence in users than other drugs such as alcohol and stimulants (amphetamines and cocaine). Sometimes, however, cannabis can cause fear, anxiety, panic or paranoia in a person which can result in an aggressive outburst while they are intoxicated. For most people, once the effects of the drug wear off, their behaviour gradually improves.

Studies show that violence can occur more often among people who use cannabis regularly, rather than those who use it occasional or not at all. It is unclear why this is the case, but it may be because people with violent tendencies can also have a range of other psychosocial problems and may be more likely to use cannabis in the first place. Cannabis is also part of the illegal drug market, which may increase the chances of violence occurring in some social interactions.

Research also shows that cannabis users who commit violent acts usually have a history of violence before they start using the drug. It is important to note that when people are withdrawing from cannabis they can be irritable, which can result in abusive or aggressive behaviour.

When people stop using cannabis they may experience a variety of withdrawal symptoms including sleep disturbances, irritability and anxiety. Experiencing any of these symptoms can make a person angry, which is an emotional response to feeling threatened or frustrated. Anger ranges from mild irritation to violent rage. Some people can express their anger in a controlled and constructive way while others lash out in an aggressive, uncontrolled way, either immediately or letting their feelings build up. This can lead to intimidating, violent or bullying behaviour endangering them, other people and property.

Individuals that experience significant aggression during withdrawal require additional support, and may benefit from inpatient withdrawal management.



NCPIC is a consortium led by the National Drug and Alcohol Research Centre and is an Australian Government Department of Health and Ageing initiative

For further information on NCPIC, its work and activities please contact Paul Dillon on (02) 9385 0226

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