

ncpic e-zine

october 2009

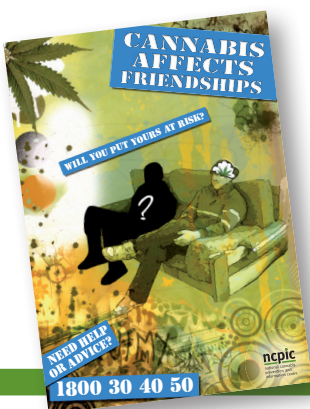
national cannabis
prevention and
information centre

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what's
new in
cannabis?

This year's Poster Competition generated some fabulous entries dealing with the theme of how the use of cannabis may impact on relationships. To see the winning poster, *Cannabis affects friendships*, designed by Elise Yeaman of Huonville High School in Tasmania, along with the four runner-ups, please go to the following URL: <http://ncpic.org.au/ncpic/news/competitions/article/2009-ncpic-poster-competition-winner-announced>

The winning poster may be ordered free from our online order form.



workforce development team report

The Workforce Development Team at NCPIC has been delivering free cannabis training to the alcohol and other drug (AOD), allied health, education, justice and community sectors since December 2007. In that time the team has conducted over 270 workshops and trained approximately 2,200 people in every State and Territory across Australia. Many workshops have also been conducted in rural and remote locations including Palm Island (QLD), Esperance (WA), Albany (WA), Bunbury (WA), Katherine (NT) and Broken Hill (NSW), to name a few.

clinical training

Initially three workshops were offered, two clinical and one educational. The two clinical workshops were targeted to counsellors and those working with people who experience problems with their cannabis use. This included the Adolescent Cannabis Check Up (ACCU), primarily for non treatment seekers and the Quitting Cannabis 1-6 Session for treatment seekers, both of which were based on clinical trials which were effective in the reduction of cannabis use and associated problems.

The three month follow up evaluation showed that 36% of participants who attended the Quitting Cannabis workshop had delivered the evidence-based intervention with an average of 3.8 clients, and 61% of participants who attended the ACCU workshop having delivered the evidence-based intervention with an average of five clients. It was encouraging to note that participants' increase in knowledge and confidence of 7.8% had been maintained three months after having received the training.

The current 2009-2010 Workplan has introduced two new workshops, Train the Trainer and the Clinical Guidelines. It is envisaged that the Train the Trainer workshops will be a more sustainable model for the dissemination of evidence-based treatment. These workshops will be conducted nationally and will include teaching the basic clinical principles of Motivational Enhancement and Cognitive Behavioural Therapy (CBT) on which the interventions are based. Please email training@ncpic.org.au if you would like more information on becoming a trainer for your State or region.

The second free workshop to be offered is one based on the Cannabis Clinical Guidelines, which were developed by NCPIC and designed for those working in clinical settings with cannabis users. These treatment guidelines are particularly useful for healthcare professionals who work either in primary or secondary health care facilities and are evidence-based guidelines that inform best practice. These aim to provide a range of reference points which include assessment, withdrawal, psycho-education and interventions. If you would like an introduction to the Guidelines in relation to their application, as well as receiving a free copy, please contact training@ncpic.org.au to organise a one to two hour workshop in 2010.

community training

A community education session entitled Everything You Need to Know About Cannabis has been rolled out to workers in the mental health (21%),

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commentary on research

cannabis and anxiety: a critical review of the evidence – a comment on Crippa and colleagues (2009)

Dr Melissa M Norberg

Although there has been considerable focus on the relationship between cannabis use and psychosis in the literature, much less attention has been paid to the association between anxiety and cannabis use. Given that anxiety is the most prevalent mental disorder (Kessler et al., 2005), Crippa and colleagues found it imperative to develop an understanding of the relationship between anxiety and cannabis use. The authors critically evaluated the published literature and found that 20-30% of users show brief

acute anxiety reactions, much like a panic attack, after smoking cannabis. Such reactions are more likely to occur at high doses and in drug-naïve individuals. On the other hand, long-term users typically report that smoking leads to a reduction in anxiety. In fact, relaxation and tension relief are the most common reasons for using cannabis. In addition, frequent cannabis users tend to have higher levels of anxiety than the general population, without necessarily representing an anxiety disorder. When anxiety is severe enough to warrant a diagnosis, it tends to be for panic and social anxiety disorder. Data suggest that anxiety disorders often precede cannabis dependence, suggesting that some users may be using cannabis for anxiolytic effects. Other data, however, suggest that cannabis use may increase a person's risk for anxiety (e.g., a symptom associated with cannabis withdrawal). These paradoxical findings

in the literature suggest that more research needs to be done in order to develop a better understanding of the relationship between anxiety and cannabis use. Specifically, the authors recommended that longitudinal studies that examine environmental, social, and neurobiological factors be conducted.

Crippa, J.A., Zuardi, A.W., Martín-Santos, R., Bhattacharyya, S., Atakan, Z., McGuire, P., & Fusar-Poli, P. (2009). Cannabis and anxiety: A critical review of the evidence. *Human Psychopharmacology: Clinical and Experimental* 24, 515-523.

Kessler, R., Berglund, P., Demler, O., Jin, R., Merikangas, K., & Walters, E. (2005). Lifetime prevalence and ago-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry* 62, 593-602.

research publications

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

Baker, A., Turner, A., Kay-Lambkin, F.J., & Lewin, T.J. (2009). The long and the short of treatments for alcohol or cannabis misuse among people with severe mental disorders. *Addictive Behaviors* 34, 852-858.

Benyamina, A., Bonhomme-Faivre, L., Picard, V., Sabbagh, A., Richard, D., Blecha, L., Rahioui, H., Karila, L., Lukasiewicz, M., Farinotti, R., Picard, V., Marill, C., & Reynaud, M. (2009). Association between ABCB1 C3435T polymorphism and increased risk of cannabis dependence. *Progress in Neuro-Psychopharmacology & Biological Psychiatry* 33, 1270-1274.

Cappelli, F., Valente, S. & Gensini, G.F. (2009). Is it time to consider cannabis smoking a cardiovascular risk factor? *Journal of Cardiovascular Medicine* 10, 745-746.

Crippa, J.A., Zuardi, A.W., Martín-Santos, R., Bhattacharyya, S., Atakan, Z., McGuire, P., & Fusar-Poli, P. (2009). Cannabis and anxiety: A critical review of the evidence. *Human Psychopharmacology* 24, 515-523.

D'Souza, D.C., Sewell, R.A. & Ranganathan, M. (2009). Cannabis and psychosis/schizophrenia: Human studies. *European Archives of Psychiatry and Clinical Neuroscience* 259, 413-431.

Feng, B.J., Khyatti, M., Ben-Ayoub, W., Dahmoul, S., Ayad, M., Maachi, F., Bedadra, W., Abdoun, M., Mesli, S., Bakkali, H., Jalbout, M., Hamdi-Cherif, M., Boualga, K., Bouaouina, N., Chouchane, L., Benider, A., Ben-Ayed, F., Goldgar, D.E., & Corbex, M. (2009). Cannabis, tobacco and domestic fumes intake are associated with nasopharyngeal carcinoma in North Africa. *British Journal of Cancer* 101, 1207-1212.

Fitzgerald, P.B., Williams, S. & Daskalakis, Z.J. (2009). A transcranial magnetic stimulation study of the effects of cannabis use on motor cortical inhibition and excitability. *Neuropsychopharmacology* 34, 2368-2375.

Gallant, M., Odei-Addo, F., Frost, C.L., & Leventhal, R.A. (2009). Biological effects of THC and a lipophilic cannabis extract on normal and insulin resistant 3T3-L1 adipocytes. *Phytomedicine* 16, 942-949.

Hester, R., Nestor, L. & Garavan, H. (2009). Impaired error awareness and anterior cingulate cortex hypoactivity in chronic cannabis users. *Neuropsychopharmacology* 34, 2450-2458.

Hides, L., Cotton, S.M., Berger, G., Gleeson, J., O'Donnell, C., Proffitt, T., McGorry, P.D., & Lubman, D.I. (2009). The reliability and validity of the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) in first-episode psychosis. *Addictive Behaviors* 34, 821-825.

Hjorthøj, C., Fohlmann, A. & Nordentoft, M. (2009). Reprint of "Treatment of cannabis use disorders in people with schizophrenia spectrum disorders: A systematic review". *Addictive Behaviors* 34, 846-851.

Izzo, A.A., Borrelli, F., Capasso, R., Di Marzo, V., & Mechoulam, R. (2009). Non-psychotropic plant cannabinoids: New therapeutic opportunities from an ancient herb. *Trends in Pharmacological Sciences* 30, 515-527.

Jutras-Aswad, D., DiNieri, J.A., Harkany, T., & Hurd, Y.L. (2009). Neurobiological consequences of maternal cannabis on human fetal development and its neuropsychiatric outcome. *European Archives of Psychiatry and Clinical Neuroscience* 259, 395-412.

Lutz, B. (2009). From molecular neurodevelopment to psychiatry: New insights in mechanisms underlying cannabis-induced psychosis and schizophrenia. *European Archives of Psychiatry and Clinical Neuroscience* 259, 369-370.

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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 Clare Chenoweth at c.chenoweth@unsw.edu.au

schizophrenia

Australian Pharmacist: October, 2009

This feature on schizophrenia deals with various features of the illness, including epidemiology, aetiology, mental and physical comorbidities and management. It is mentioned in the article that “several studies have found an association between cannabis use and the risk of isolated psychotic episodes or schizophrenia. It has also been found that the greater the exposure to cannabis, the greater the risk of developing schizophrenia.”

new take on the use of drugs and alcohol

Northern Star: October 6, 2009

A 47-year-old man’s experiences with schizophrenia and drug use were featured in this article about Mental Health Week in Lismore. He hoped that by sharing his experiences he would help “create awareness for Mental Health Week.” He says, “I don’t know exactly what caused my condition, but I suppose a number of things contributed at the time, like alcohol and marijuana.” The article also covers the work of *The Buttery*, an alcohol and other drug rehabilitation centre near Bangalow, in northern New South Wales. Outreach counsellor Thelia Franco explains the Centre’s work “We have dual diagnosis groups which are directed at helping people with a mental illness who might also be using drugs and alcohol as a way of coping.”

athletes avoid drugs

Herald Sun: October 9, 2009

A number of articles appeared in the media about results from an NDARC study which found that “elite athletes are less likely to use illicit drugs than people in mainstream society, fearing an adverse impact on their performance.” The study surveyed approximately 1000 athletes between 20-29 years of age from a variety of different sports, and found that “only 3.7 per cent of the elite athletes admitted using cannabis in the preceding year, compared with about 20 per cent of the wider community.”

cannabis clinics judged to be ‘very effective’

Byron Shire Echo: October 13, 2009

A year after the establishment of the Cannabis Treatment Clinics by the North Coast Area Health Service (NCAHS), they have been deemed “very effective, showing a high rate of program completion.” Approximately 240 clients have been seen over the last year, with clients reporting “at completion...a significant reduction in relation to their concerns such as cannabis dependence, other drug use, anxiety and depression. In addition, 87% of clients completing the program reduced or ceased use.”

mulling over a dope habit

Daily News: October 14, 2009

North Coast Area Health and the University of New South Wales are currently recruiting for a study investigating the relationship between tobacco and cannabis. Annie Banbury, research project officer at Kingscliff Health Centre, said that they are looking in particular, at “the process of mulling” which is the “mixing of tobacco and cannabis.” The research team hopes to “interview 15 non-Indigenous men and 10 Indigenous men to find out when they started smoking tobacco and cannabis.” The interviews are qualitative and will “use grounded theory to analyse the thoughts, meanings and process of why men smoke.” Further, the study “aims to understand why the North Coast has higher than usual numbers of men in the 25-34 age group who smoke cigarettes.”

well done to Huonville graphic design students!

Huon News: October 14, 2009

An article celebrating the success of two Huonville High School students in

our recent Poster Competition appeared in this local paper. Year 10 student Elise Yeaman, took out first prize with her poster titled *Cannabis affects friendships*, and Ben Phelps, of Year 9, received a runner-up prize with his thoughtful entry, *Cannabis – Wiping out relationships*. The article covered other successes of the school’s students in a range of competitions, with the school Principal, Alison Grant commenting “National projects, challenges and competitions provide extension and enrichment for many of our students in all grades.” The posters can be viewed at the following link: <http://ncpic.org.au/ncpic/news/competitions/article/2009-ncpic-poster-competition-winner-announced>

sex goes to pot

Adelaide Advertiser: October 15, 2009

A study conducted by La Trobe University which found that “men who regularly smoke cannabis may be prematurely stubbing out their sex lives” received widespread media attention across Australia. Daily cannabis smokers were “found to be four times more likely to have trouble reaching orgasm” than those who don’t use cannabis. Other issues included “premature ejaculation at nearly three times the rate of non-smokers.”

notion of excess is too much

Joondalup Weekender: October 15, 2009

An article by Western Australian Minister for Mental Health, Dr Graham Jacobs, discusses the recent results of the Australian School Students Alcohol and Drug Survey results. A reduction in the rate of cannabis use among Western Australian high school students was noted, along with the fact that “80 per cent of students had never tried illegal drugs, up from 75.3 per cent in 2005.”

aussies high on drug list

Adelaide Advertiser: October 17, 2009

A review of cannabis use trends worldwide, conducted by NDARC’s Professor Louisa Degenhardt and the University of Queensland, has found that “Australians rank among the world’s top cannabis users” with over eight per cent of Australians using cannabis “at least once a year – a rate matched only by North America and our

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media stories this issue

trans-Tasman neighbours.” The findings of the review appeared in *The Lancet* and “includes data that estimates cannabis was used by 166 million people worldwide during 2006.”

family dinners work wonders

Sunday Telegraph: October 18, 2009

A University of Columbia study has found a relationship between teenagers sitting down with the family for dinner and their drug use. The study found that “teens who have three or less family meals a week are twice as likely to use tobacco or marijuana; more than one-and-a-half times more likely to use alcohol; and twice as likely to try drugs.”

alcohol the main drug people seek treatment for: report

AAP Newswire: October 23, 2009

A recently released report about treatment seeking among Australian drug users by the Australian Institute of Health and Welfare, received widespread media coverage across Australia. Forty-four percent of those seeking help for drug dependence in 2007/08 named alcohol as their “principal drug of concern”, followed by cannabis at 22 per cent of treatments. Despite alcohol being the “biggest problem for most age groups, teenagers cite...[cannabis] as their principal drug of concern.” In terms of treatment type received, counselling is “the most common form of treatment, followed by withdrawal management.”

high time for reality call on MP drug tests

West Australian: October 23, 2009

This opinion piece criticises the suggestion by Western Australian Liberal MP Joe Francis, that politicians should be drug tested. Statistics available on the NCPIC website are referred to in the article including: “over a third of Australian adults have tried ...[cannabis] and 200,000 adults are believed to be dependent on the drug.”

house backs new stance on drugs

Augusta Margaret River Times: October 23, 2009

Barry House, a Western Australian parliamentarian, “welcomed a Liberal Party repeal of the Cannabis Control Act 2003, which would lead to stronger penalties for possession of cannabis.” He believes the previous government’s cannabis laws are “soft” and supports the introduction of “tougher penalties for drug possession, cultivation and for the sale of drugs to children.” He is concerned about the “mental health risks associated with cannabis” use.

mixed views on pot laws

Fremantle Cockburn Gazette: October 27, 2009

This article discusses the upcoming changes in cannabis-related legislation in Western Australia, including banning the sale of “cannabis smoking implements” and “prosecution under the new laws... apply[ing] to possession of more than 10g of cannabis – at present 30 grams.” State Government politicians are divided in opinion about these changes, with some believing a tougher stance is positive, while others such as Alfred Cove MLA Janet Woollard saying “prevention and treatment services still needed to be improved. The focus should be on reducing drug use...The single approach of locking people up is not the way; it is just one component.”

poster girl for anti-drug stance

St George & Sutherland Shire Leader: October 29, 2009

One of the runner-ups for this year’s NCPIC Poster competition, Amelia Evans, of Port Hacking High School, is featured in this article. She hopes to encourage teenagers to “think before they act” and says, “I wanted teenagers to be aware of how cannabis can affect relationships.”

grog, cigs rank high

MX: October 30, 2009

The debate continues in the United Kingdom around the relative harms of drugs including cannabis. Prof David Nutt, whose article for the Centre for Crime and Justice Studies was deemed particularly controversial, was recently made redundant from the Centre.

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research publications

Morel, L.J., Giros, B. & Daugé, V. (2009). Adolescent exposure to chronic delta-9-tetrahydrocannabinol blocks opiate dependence in maternally deprived rats. *Neuropsychopharmacology* 34, 2469-2476.

Morrison, P.D., Zois, V., McKeown, D.A., Lee, T.D., Holt, D.W., Powell, J.F., Kapur, S., & Murray, R.M. (2009). The acute effects of synthetic intravenous delta-9-tetrahydrocannabinol on psychosis, mood and cognitive functioning. *Psychological Medicine* 39, 1607-1616.

Rahn, E.J. & Hohmann, A.G. (2009). Cannabinoids as pharmacotherapies for neuropathic pain: From the bench to the bedside. *Neurotherapeutics* 6, 713-737.

Schneider, M. (2009). Cannabis use in pregnancy and early life and its consequences: Animal models. *European Archives of Psychiatry and Clinical Neuroscience* 259, 383-393.

Stokes, P.R., Mehta, M.A., Curran, H.V., Breen, G., & Grasby, P.M. (2009). Can recreational doses of THC produce significant dopamine release in the human striatum? *NeuroImage* 48, 186-190.

Zammit, S., Thomas, K., Thompson, A., Horwood, J., Menezes, P., Gunnell, D., Hollis, C., Wolke, D., Lewis, G., & Harrison, G. (2009). Maternal tobacco, cannabis and alcohol use during pregnancy and risk of adolescent psychotic symptoms in offspring. *The British Journal of Psychiatry: The Journal of Mental Science* 195, 294-300.

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workforce development team report

AOD treatment (14%), youth (11%), allied health (11%), corrections, law enforcement and education sectors. The two-three hour interactive session provides participants with the latest evidence-based information and peer reviewed research on cannabis.

Satisfaction with the workshops has been very high with 98.2% of participants either agreeing or strongly agreeing to all five of the training satisfaction variables such as ‘the session was well prepared’ or ‘there was a good cross section of information presented.’ A 10 question baseline cannabis knowledge test improved from a mean score of 4.95/10 to 8.23/10 representing a 33% knowledge increase. Moreover, participants had retained most of their knowledge after three months.

The Community Workplan for 2009-2010 includes the development of a DVD on cannabis that will be accompanied by a training guide designed to maintain sustainability of cannabis knowledge in the sector. It is anticipated that Train the Trainer workshops on cannabis knowledge will be rolled out in the second half of 2010. For further information about the availability of the Train the Trainer workshops related to community education, email training@ncpic.org.au

youth training

In 2009, Dr John Howard began presenting a one day Young People and Cannabis workshop aimed at youth workers and those who work in supported accommodation or youth refuges with young people at risk. The workshop seeks to: enhance participants’ understanding of why young people do and do not use drugs; enhance participants’ knowledge of cannabis itself; explore the particular needs of young people who may use cannabis; explore motivational enhancement to assist those who wish to change their cannabis use; and encourage good practice procedures from workers in the field.

In 2009, 20 workshops have been conducted nationally and participants reported that the most valuable aspect of the youth training related to the motivational enhancement component. The content of the workshop will be available in a self-directed format within the NCPIC site in the near future, and a Train the Trainer package developed for 2010. In addition a short video demonstrating a brief motivational enhancement-oriented conversation has been finalized to be used in future workshops, and will also be available from the NCPIC site. A more ‘youth friendly’ version of the do-it-yourself ‘Quitting Cannabis’ booklet is being developed with young people not engaged in school and home settings and will be available in 2010.

For further information about NCPIC training, please call John Redmond, (02) 9385 0451 or email training@ncpic.org.au

drug driving in New Zealand: a survey of community attitudes, experience and understanding.

New Zealand Drug Foundation, August 2009

commentary by Dr David Allsop

Cannabis has the dubious distinction of being New Zealand's most widely used illegal drug, with an estimated 13% - 18% of the adult population classed as users. However, very little was known about the prevalence of driving under the influence of cannabis (or other drugs) in New Zealand when the government decided to introduce new drug driving enforcement measures in June 2009. So the New Zealand Drug Foundation decided to conduct an online study to fill in the gaps in knowledge around drug driving. The research aimed to assess the public's knowledge, attitudes and behaviours around drug driving. One of their motivations was to find out whether people were turning to drug driving in order to avoid being caught drink driving. To gather their data the New Zealand Drug Foundation performed an internet-based survey with 1200 members of the public. Survey respondents were either non drug users (classed as the general population for the purposes of the study N = 604), or comprised people who fit into a particular "drug of choice group" (cannabis users comprised 410 people in the survey).

The study found that cannabis was the most common drug for driving under the influence (with 25% of respondents driving whilst on cannabis). When they surveyed within specific drug user groups, the prevalence of driving on their drug of choice was higher than drug driving rates for the general population,

with between 50% and 87.5% of drug users driving under the influence. Within these drug user groups, an alarming 70% of cannabis users reported driving under the influence of cannabis within the last year.

Within the cannabis using group, those people who reported as having never driven under the influence rated the practice of drug driving as more risky than did the cannabis users who admitted to having driven whilst stoned. This pattern was mirrored in all of the other substance using groups, with those who had driven under the influence rating the act as being less risky. The authors of the study propose that this finding highlights that attitudes towards drug driving predict drug driving behaviour. When asked whether random roadside testing for drug impairment would improve road safety in New Zealand, 70% of respondents agreed that it would.

International research has demonstrated that drugs do cause driving impairment, and that driving whilst under the influence of drugs is a threat to road safety. However, when drug drivers have been surveyed, the general trend is that they thought they were minimally impaired when they last drove under the influence of drugs, but this did depend on the substances used. Thus research shows that awareness of drug driving impairment is low amongst those people engaged in the behaviour – which suggests that drug driving education campaigns need to think carefully about aligning with the target audience's experiences. In general however, there was a lack of

knowledge around the effects of drugs on driving. Despite the knowledge that cannabis is an impairing substance, survey respondents perceived it to be the least dangerous drug for driving. This indicates a level of misinformation around cannabis and driving that should be targeted as a priority in future countermeasures.

The current research made several recommendations for tackling drug driving issues in the future. The report found that the most effective initiatives combined law enforcement with public education aspects, including increasing perceived and actual risks of getting caught whilst driving under the influence of psychoactive drugs such as cannabis. Other findings suggest that there is very little existing evidence around how accurate the available drug tests are for testing for *drug impairment* on the roadside, suggesting this would be a very important area for future research. Survey respondents did perceive roadside testing to be an effective method of improving road safety, however it seems clear that such testing should be researched further to ensure it is effective in testing for drug impairment, as well as being accompanied by public information and education campaigns aimed at changing perceptions and attitudes towards drug driving. The survey respondents demonstrated a preference for impersonal sources of drug driving information – such as the media, internet or pamphlets, which is a probable reflection of the illicit nature of drug use, and offers potential guidance towards the format of future education campaigns.



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 Clare Chenoweth on (02) 9385 0218

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