# ncpic

# e-zine

national cannabis prevention and information centre

contents

NCPIC studies currently recruiting participants p2

research publications p2

media stories this issue p3

NCPIC launches new cannabis and driving poster p5

what's **NEW** in cannabis?

# annual poster competition

NCPIC's second, annual poster competition closed on July 28th, with an impressive number of high quality and creative entries submitted. Young people between the ages of 12 and 18 were eligible to enter the competition and have the chance of winning first prize; a combination of \$2,000 for the student and \$1,500 for their school. This year's brief, "to design a poster to increase young people's understanding of how the use of cannabis may impact on relationships", obviously struck a chord with many young people, as reflected by the thoughtful and heartfelt nature of many of the entries.

The winning entry will appear in an upcoming E-zine.

# director's report

Jan Copeland (PhD) (Professor/Director, NCPIC)

It is always fascinating, and at times deeply disturbing, to compare the subeditor's headline with the actual content of the article – particularly when it comes to cannabis-related media. This week's report in the UK Telegraph on Dr Paul Morrison's work on the effects of intravenous THC is a prime example. Dr Morrison was appropriately cautious when quoted discussing the findings of his work, however, the story made an inferential leap from injected THC to the putative effects of "skunk" on mental health. I have included a more lengthy commentary than usual following the summary of this media report to provide some context for this interesting study.

Last month we released the booklet "Helping someone with problem cannabis use: Mental Health First Aid Guidelines" with our consortium partner ORYGEN Youth Health. The guidelines used a rigorous development methodology with contributions from leading academics, senior clinicians from mental health and drug and alcohol, carers and consumers internationally. They are designed to inform members of the community how to recognize when someone's cannabis use has become a problem, how to provide initial support and information, and how to guide the user to seek professional help where appropriate. There was considerable media interest and a significant spike in traffic to our website as copies of the guidelines were downloaded from the site. They are available at http://ncpic.org.au/ assets/downloads/ncpic/news/ncpicnews/helping-someonw-with-problemcannabis-use-mental-health-first-aidguidelines.pdf or by using the search function on our website.

One of the flagship programs for NCPIC is our Cannabis Information and Helpline (CIH). The recent limited radio campaign designed for friends and family of cannabis users has led to an increased average call rate of 450 per month over the past three months. There are no published studies of the impact of participation in an illicit drug call line so we have been very aware of the need to evaluate the CIH. Peter Gates is conducting this work as part of his doctoral thesis. He commenced the process evaluation in February this year. Currently 133 callers to the CIH have been interviewed to ascertain their views of how helpful they found the service, how they used the information, and how satisfied they felt one week after their call to the CIH. Those interviewed were typically female (56%) and educated beyond year 12 (57%) with a mean age of 41 years. Calls were made for counselling (44%), advice (34%), someone to talk to (23%), printed information (21%), or other help (25%). The Client Satisfaction Questionnaire and a subscale of the Combined Alliance Scale were used to rate satisfaction with the service and counsellor. Each scale showed very high levels of satisfaction (28/32 and 37/40 respectively). Perceived helpfulness relating to different aspects of the call had an average score between seven and nine out of ten. These preliminary results are very encouraging and we will publish a full discussion of the results in a NCPIC Bulletin in 2010.

We would like to thank the CIH staff for their openness, and indeed enthusiasm, to participate in any evaluation activity we put to them. This is particularly so for the very challenging study they are about to run with us offering 4 sessions of cognitive behavioural therapy for CIH callers who volunteer to participate. Please see the notice in this E-zine

# NCPIC research studies currently recruiting participants

# Cannabis Information and Helpline Study

NCPIC is conducting a free telephonebased cannabis treatment study. The treatment is based on cognitive behavioural and motivational interviewing strategies and is complimented by a self-help 'quitting cannabis workbook'. The treatment involves four sessions, or calls, over four weeks made by counsellors from the Cannabis Information and Helpline. Anybody interested in participating must; live in Australia, be over 16, be English literate, and want to quit or reduce their cannabis use. Participants will be reimbursed at the end of a three month follow-up study on the treatment outcomes. This is a randomised controlled trial and access to the treatment may be delayed. To take part in this treatment, please phone the Cannabis Information and Helpline service on 1800 30 40 50 or email p.gates@unsw.edu.au

## **Quitters Questionnaire**

This online survey looks at the characteristics and strategies of people who are able to guit using cannabis, compared with those who want to guit, but are struggling to do so. From this, we hope to be able to identify important differences between these two groups of people. In addition, we would like to find out some of the strategies people have used in attempting to quit so as to better improve education and treatments for cannabis use. We are looking for people who smoked cannabis regularly (more than once a week) for at least a year, but haven't used any cannabis in the last year or people who currently smoke cannabis more than once a week and have made at least one unsuccessful attempt to quit. As compensation for participants' time, they will receive a gift voucher. Participants must be 18 years or older and have access to the internet. For more information please contact Sally at Quitters@med.unsw.edu.au. or on (02) 9385 0450. The survey may be accessed at the following link: www.ncpic.org.au/ncpic/surveys/

# Mail-based Cannabis Treatment Study

NCPIC is conducting a free, mailbased treatment study for cannabis users. The modalities used in the treatment are cognitive behavioural therapy, motivational interviewing and adherence strategies. There are six treatment modules and three personalised feedback components. Participants need to; live in Australia, be over 18, be English literate, and want to guit or reduce their cannabis use. Participants will be reimbursed for costs incurred. Please phone NCPIC for more information or to confirm eligibility for the study on (02) 9385 0449 or email d.boughtwood@unsw.edu.au

# **Cannabis Withdrawal Study**

This confidential study investigates the experiences associated with cannabis use and quitting. We are interested in learning more about the psychological mechanisms of cannabis use so we can better help people who are having difficulties in reducing or quitting their cannabis use. Participants need to be 18 years or older, have used

continued on page 4

# research publications

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

Agrawal, A., Wetherill, L., Dick, D.M., Xuei, X., Hinrichs, A., Hesselbrock, V., Kramer, J., Nurnberger, J.I. Jr., Schuckit, M., Bierut, L.J., Edenberg, H.J., & Foroud, T. (2009). Evidence for association between polymorphisms in the cannabinoid receptor 1 (CNR1) gene and cannabis dependence. *American Journal of Medical Genetics Part B:*Neuropsychiatric Genetics 150B, 736-740.

**Bernburg, J.G., Thorlindsson, T. & Sigfusdottir, I.D.** (2009). The neighborhood effects of disrupted family processes on adolescent substance use. *Social Science & Medicine 69*, 129-137.

**Boserman, C.** (2009). Diaries from cannabis users: An interpretative phenomenological analysis. *Health* (*London*) 13, 429-448.

**Carter, C.** (2009). Making residential cannabis growing operations actionable: A critical policy analysis. *International Journal of Drug Policy 20*, 371-376.

de Dios, M.A., Vaughan, E.L., Stanton, C.A., & Niaura, R. (2009). Adolescent tobacco use and substance abuse treatment outcomes. *Journal of Substance Abuse Treatment* 37, 17-24.

Ehlers, C.L., Gilder, D.A., Gizer, I.R., & Wilhelmsen, K.C. (2009). Heritability and a genome-wide linkage analysis of a Type II/B cluster construct for cannabis dependence in an American Indian community. *Addiction Biology* 14, 338-348.

Hides, L., Lubman, D.I., Buckby, J., Yuen, H.P., Cosgrave, E., Baker, K., & Yung, A.R. (2009). The association between early cannabis use and psychotic-like experiences in a community adolescent sample. *Schizophrenia Research* 112, 130-135.

Indlekofer, F., Piechatzek, M., Daamen, M., Glasmacher, C., Lieb, R., Pfister, H., Tucha, O., Lange, K., Wittchen, H., & Schütz, C. (2009). Reduced memory and attention performance in a population-based sample of young adults with a moderate lifetime use of cannabis, ecstasy and alcohol. *Journal of Psychopharmacology 23*, 495-509.

**Lucas, P.** (2009). Moral regulation and the presumption of guilt in Health Canada's medical cannabis policy and practice. *International Journal of Drug Policy 20*, 296-303.

Raby, W.N., Carpenter, K.M., Rothenberg, J., Brooks, A.C., Jiang, H., Sullivan, M., Bisaga, A., Comer, S., & Nunes, E.V. (2009). Intermittent marijuana use is associated with improved retention in naltrexone treatment for opiate-dependence. *The American Journal on Addictions* 18, 301-308.

Schnell, T., Koethe, D., Daumann, J., & Gouzoulis-Mayfrank, E. (2009). The role of cannabis in cognitive functioning of patients with schizophrenia. *Psychopharmacology (Berl) 205*, 45-52.

Seely, K.A., Levi, M.S. & Prather, P.L. (2009). The dietary polyphenols transresveratrol and curcumin selectively bind human CB1 cannabinoid receptors with nanomolar affinities and function as antagonists/inverse agonists. The Journal of Pharmacology and Experimental Therapeutics 330, 31-39.



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

### throw of the dice

Cosmos: July 1, 2009

The effect of both fathers' and mothers' ages and lifestyle choices on the health of their growing child is discussed in this feature article. A US study mentioned in the article found that male cannabis smokers "have fewer sperm, and these sperm have swimming problems: they move too fast too early, potentially leading to burn-out before they get near an egg."

## no increase in drug use locally

River News: July 1, 2009

Police intelligence from the South Australian region of Waikerie has shown no "increase in drug use locally" but rather "a change in the type of drugs being taken." Senior Constable Danny McGurgan from the Waikerie Police Station notes a decrease in cannabis use by young people but believes this has been "offset by an increase in amphetamine use." He also states that the demographic using cannabis has changed because "people who used to smoke cannabis are still smoking cannabis, but they've got older." He believes cannabis is now seen by young people as a "dirty drug".

# it's drunks versus drug takers

West Australian: July 11, 2009 Israel's Ben Gurion University is comparing drunk drivers with drivers under the influence of cannabis in a traffic simulator study. Participants who smoked cannabis drove more slowly than the drunk participants, who sped and tended to be over-confident in their driving abilities. Despite cannabis smokers seeming to be "more aware of their impairment" and thus attempting to drive more carefully, this feeling was still seen to be a "road hazard". Professor David Shinar from the University's Laboratory for Human Factors in Road Safety said "People who smoke marijuana think they can compensate for the drug's effect but they can't...a detachment from reality is dangerous." Further areas of research that will be pursued include a study on "how double-dosing on marijuana and alcohol affects driving patterns, [and] the effects of marijuana and fatigue on hazard perception."

# don't let anxiety get you down

Port Augusta Transcontinental: July 17, 2009

This article focuses on the debilitating effects of anxiety and offers tips on how to cope. It warns people of the risks of attempting to combat their feelings of anxiety by taking drugs such as cannabis, saying "unfortunately we know that while they may get rid of the symptoms for a few minutes, these drugs actually make things a whole lot worse in the long run." It also mentions the link between cannabis and depression.

# cannabis users targeted

Casterton News: July 22, 2009 Victoria's Transport Accident Commission (TAC) has launched a campaign to "tackle drug driving and reduce road trauma on Victoria's roads." Cannabis is a major focus of the campaign as it is known to cause significant driver "impairment". Victorian premier, John Brumby said "Cannabis and stimulants are the most commonly detected illegal drugs on the road, with around 20 per cent of Victorian drivers killed in 2008 testing positive to these types of drugs." He goes on to point out that cannabis impinges on a driver's ability to "concentrate and react in driving situations" and that someone who has "recently consumed cannabis is at the same risk as having a crash as a driver with an alcohol concentration above o.os."

# new anti-cannabis campaign targets youth

Portland Observer: July 24, 2009

Orygen Youth Health has recently launched a new campaign, "Will your high get you low?" that aims to inform young people about the "impacts of cannabis use on the brain." Four animated films feature on the website www.highsnlows.com.au, which is the "centrepiece of the campaign" developed in collaboration with the Australian Drug Foundation and the Department of Human Services, Victoria. The "experiences of four young people with cannabis" are the focus of the films whose aim is to "encourage young people to think about how their mental health and wellbeing may be affected by cannabis use, with themes of making choices, getting the facts and seeking help."

# cannabis "can cause psychosis in healthy people"

UK Telegraph: July 27, 2009

A recent study by the Institute of Psychiatry in King's College, London, has been reported as finding that 'skunk', a "highly potent form of cannabis, can cause healthy people to develop psychotic illnesses." After injecting "22 healthy men...with THC - a major component of 'skunk'...the scientists found a link between THC and psychosis, in which hallucinations and delusions leave sufferers unable to judge what is real or imagined."

### **NCPIC** comment:

The findings of this study are available online<sup>1</sup> and video of the methodology is featured in a BBC documentary "Should I smoke dope?" that can be viewed on YouTube. As noted, 22 young, healthy males took part in this study conducted by Dr Paul Morrison and colleagues at King's College, London. Participants were intravenously injected with either an inactive placebo or 2.5mg tetrahydrocannabinol (THC), the predominant psychoactive component of cannabis. Dr Morrison concluded that "these findings confirm that cannabis can (emphasis added) induce a transient acute psychological reaction in psychiatrically well individuals." The novel aspect of the study was that the propensity to experience such a reaction was not related to

continued on page 4

continued from page 3

## media stories this issue

the degree of pre-existing anxiety or cognitive impairment.

While the newspaper headlines would lead one to assume that all participants experienced this reaction to injected THC, at 30 minutes post injection 50% of those receiving THC endorsed the psychosis-like symptoms of the scale. This alone suggests that this is a far more complex phenomenon than direct causality between THC exposure and the development of psychotic symptoms.

While more potent cannabis hybrids such as "skunk" typically contain higher levels of THC than other strains/ cultivars, based on the findings of this study, it is a leap of logic to infer that "skunk" directly causes psychosis in healthy individuals as implied in the article headlines. Dr Morrison appropriately concluded that the findings provided "additional evidence that [THC] can elicit temporary psychotic-like effects in some people".

The association between cannabis use and psychosis has been recognised since the middle of the nineteenth century and evidence of similar psychosis-like reactions to cannabis consumption, that is dose-dependent. are well described.<sup>2</sup> There is, however, mixed evidence of a specific and distinct psychopathological condition of toxic cannabis psychosis that can be defined as a unique reaction to cannabis or cannabinoids.3 While such subtleties of diagnosis are of interest to those researching and treating mental health conditions - the evidence that cannabis use, particularly in adolescence and in high doses, is a significant risk factor in the development and course of psychotic disorders remains the important message.2

1 **Morrison, P.D., Zois, V., McKeown, D.A., et al.,** (in press). The acute effects of synthetic intravenous Δ9 –tetrahydrocannabinol on psychosis, mood and cognitive functioning. *Psychological Medicine*, 1-10.

- 2 **D'Souza, D.P., Sewell, A.S. & Ranganathan, M.** (in press). Cannabis and psychosis/schizophrenia:
  Human studies. *European Archives of Psychiatry and Clinical Neuroscience* (published online 16th July, 2009).
- 3 **Leweke, F.M., Gerth, C.W. & Klosterkötter, J.** (2004). Cannabisassociated psychosis. *CNS Drugs*18(13), 895-910.

### take a closer lock

Geelong Advertiser: July 30, 2009

A Californian company, Confirm Biosciences, has released a drug testing kit HairConfirm, that tests human hair. The kit is being marketed to parents who want to find out if their children are taking drugs. Once a hair sample is collected and sent back to the lab, results can show "the type of drugs and the frequency of use over the previous three months." Drugs that can be identified include cannabis, amphetamines, methamphetamines, ecstasy and cocaine, amongst others. Concern about the breaking of trust between parents and children and the potential damage to their relationship was voiced by Geelong psychologist Chris Mackey.

# survey shows our ignorance

Cowra Guardian: July 31, 2009

As part of Drug Action Week, Cowra Commuity Health conducted a survey of 100 shoppers in Cowra, asking questions about drug use, including a question about cannabis and tobacco: "Which is more dangerous to your health, tobacco or cannabis?" Of those surveyed, almost half "believed that tobacco was worse for your health. A little less than half thought cannabis was worse with a small number being unsure." According to the article, "Except for nicotine, cannabis and tobacco produce the same ingredients and quantities of chemicals known to be toxic to our lungs. When cannabis and tobacco are both smoked, the health effects are obviously worse."

continued from page 2

# NCPIC research studies currently recruiting participants

# **Cannabis Withdrawal Study cont.**

cannabis on average five days per week during the last 6 months, be prepared to go 'cold turkey' and quit smoking cannabis for a period of two weeks, live in Sydney, and have daily access to the internet. We will provide information, support, and referrals to assist you with achieving abstinence. Participants will be reimbursed for their involvement in the study. For more information please contact Dr David Allsop at d.allsop@unsw.edu.au or on (02) 9385 0448.

# **Web-intervention Study: Reduce Your Use**

NCPIC is in the process of launching a free, web-based treatment for cannabis use and related problems and is conducting a study that will test the effectiveness of the new treatment. The confidential, online delivery attempts to make assistance more accessible for those in need and uses established counselling practices. It is available world-wide to participants who are 18 years or older, want to guit or reduce their cannabis use and have regular access to the internet. This study is a randomised, controlled trial and access to the treatment may be delayed. For more information, please email reduceyouruse@med.unsw.edu.au

continued from page 1

# director's report

regarding all of the important evaluation studies exploring modes of cannabis intervention delivery we are currently offering. We hope you can refer any clients or friends who are unable to access traditional treatment services to one of these innovative interventions.

As mentioned last month, our poster session for the 1st National Cannabis Conference is now so full we will have a different display on each of the days of the conference. Early bird registrations are now closed and the registration numbers are growing. Having run a number of conferences we know many leave it to the last minute to register but please do so as soon as possible as we'd hate for you to be disappointed.

Best wishes, Jan

# NCPIC launches new cannabis and driving poster

NCPIC is pleased to announce the launch of a new poster tackling the issue of cannabis and driving. The poster was developed by advertising agency, Loud, who received a brief from NCPIC and came up with an engaging and powerful message: Smoke and drive and you're as good as drunk: Don't dope and drive. NCPIC decided to produce the poster after recognising a gap in the public's awareness about the risks associated with driving while under the influence of cannabis. Research has confirmed that cannabis and driving don't mix, as the chance of having an accident increases by up to 300% if driving stoned.

Fifteen thousand posters will be distributed nationally to a variety of organisations and government departments including GPs, road and traffic authorities, education departments, libraries, police departments and youth/community centres. The free posters will also be available to order on the NCPIC website, via an online order form accessible at the following link: <a href="https://www.ncpic.org.au/youngpeople/cannabis-and-driving/">www.ncpic.org.au/youngpeople/cannabis-and-driving/</a>.

Another key strategy we have chosen to ensure we reach as wide an audience as possible, is to produce an *Avant Card* postcard based on the poster design. Fifty thousand postcards began their distribution around Australia on August 12th, targeting the student and youth demographic in universities, TAFEs, high schools and student-frequented venues.

Promotional items such as key rings, mouse mats and bumper stickers will shortly be available to order via our online order form.





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

### Street address:

National Cannabis Prevention and Information Centre (NCPIC) UNSW Randwick Campus NDARC UNSW R1 Level 1 22-32 King Street Randwick NSW 2031

### Postal address:

National Cannabis Prevention and Information Centre (NCPIC) PO Box 684 Randwick NSW 2031