

ncpic e-zine

october 2011

national cannabis
prevention and
information centre

- contents
- commentary on research p2
- research publications p3
- media stories this issue p4
- 2011 NCPIC poster competition winner announced p6

what's
new in
cannabis?

Cannabis Facts: Clearing the Smoke

NCPIC's new cannabis information DVD – [Cannabis Facts: Clearing the Smoke](#) – is now available on our online order form. The DVD should be used in conjunction with our educator's kit and PowerPoint presentation as part of an education seminar or workshop.



director's report

Jan Copeland (PhD) – Professor/Director, NCPIC

I can't believe we're planning Christmas parties and summer holidays already; the year is just flying by! The NCPIC end of year celebrations this year will be supported by our Runner's Up cash prize in the Research Awards at the recent international meeting held by the Australian College of Mental Health Nurses. This was a lovely surprise and we congratulate Etty Matalon who presented the clinical training workshop that attracted the award. The plaque is now proudly displayed in the Training Team's office. It goes to show having an evidence-base for our work program pays off in lots of unexpected ways!

This month has seen the launch of two key projects targeted to those working in the alcohol and other drugs and education fields. The first is the cannabis information and awareness package which includes the DVD, 'Cannabis Facts: Clearing the Smoke'. This is [available to order online at no charge](#). The DVD is designed to be used as part of a psycho-education session across sectors of service where particular sections can be used as appropriate to the intended audience. This package also includes a [PowerPoint presentation](#) and an [educator's kit](#), available to download from our website.

This DVD provides up-to-date and accurate information on a range of topics, including cannabis use in Australia, cannabis potency, the impact of cannabis use on mental health, and cannabis dependence. It features interviews with a number of Australian experts in the cannabis field, including Professor Iain McGregor (University of Sydney), Dr Nadia Solowij (University

of Wollongong) and Dr Wendy Swift (National Drug and Alcohol Research Centre). We hope this package proves to be a valuable resource for NCPIC clients.

The second project, [MAKINGtheLINK – parent workshop](#), was produced by NCPIC's Consortium partner, Turning Point Alcohol and Drug Centre. This workshop and associated resources are an accompaniment to the student package developed by Orygen Youth Health – [MAKINGtheLINK: Promoting Help Seeking for Cannabis Use and Mental Health](#). It allows schools to implement a whole-school approach to help-seeking by focusing on parents and their role in assisting young people to seek help for cannabis-related issues. It can also be used as a stand-alone workshop to educate parents about young people's help-seeking behaviour and how to minimise the barriers to seeking help from a professional for cannabis and other substance use problems. Parents also learn about the types of helpers they can access in school and in the community, the meaning of professional confidentiality, and how to talk about substance use problems and seeking help with teenagers. Included in the package are a Trainer's Manual, PowerPoint presentation and four multimedia clips/vodcasts. It is housed on the [Teachers' page](#) of our Workforce section of the website.

Our plans for *The 2nd National Cannabis Conference* to be held at the Brisbane Convention and Exhibition Centre, 19th – 21st September 2012 continue to evolve. We are thrilled that the

continued on page 2

commentary on research do cannabis and urbanicity co-participate in causing psychosis? Evidence from a 10-year follow-up cohort study – a comment on Kuepper and colleagues (2011)

Peter Gates

Cannabis use is known to be a contributing factor to many physical and mental health concerns. In recent years literature regarding these health concerns has brought particular focus to the role that cannabis use plays in the risk of developing psychosis or schizophrenia. This research has culminated in the current opinion that cannabis use, particularly early and frequent use, is likely to be a ‘component cause’, co-dependant on many other influences, in determining risk for psychosis.

The risk of developing psychotic symptoms is thought to be mediated by genetic and environmental factors. The major environmental factors that have been identified to be associated with the link between cannabis use and increased risk of psychosis are exposure to trauma early in life and being raised in urban environments. The association between ‘urbanicity’ and cannabis use is thought to relate to an increase in social ‘fragmentation’ (such as increases in anxiety and negative feelings toward other people) or social maladjustment (such as increases in single parent families and residential instability) present in urban environments.

A particular dataset that has contributed to our knowledge of the links between cannabis use and psychosis is that of the German Early Developmental Stages of Psychopathology (EDSP) longitudinal cohort study. Kuepper and colleagues utilised this data of a random, representative population sample of German adolescents and young adults. It was the authors’ hope to provide greater clarity to the role of cannabis use and urbanicity in regards to developing psychotic symptoms. The sample selected were 14–24 years of age (mean of 18 years) at the time of

their first interview for the EDSP study in 1995. These participants completed three further follow up interviews across an average of 8.4 years (final sample of 1923 individuals, 48% male).

Participants completed the Composite International Diagnostic Interview (CIDI) – a validated tool to assess substance use, dependence and information regarding the onset, duration, and severity of psychotic symptoms. Urbanicity was measured as living in the city of Munich or in surroundings at the time of baseline interview.

The prevalence of psychotic symptoms in the sample at baseline was 23% with an additional 12% during the follow up period. Over two thirds (70%) of participants were living in Munich city. At the baseline interview, participants living in urban surroundings were 1.4 times as likely to have used cannabis (more than 5 times ever). For those participants who had not used cannabis prior to the baseline interview, cannabis use during the follow-up period increased the odds of developing psychotic symptoms by 1.6 times (after adjustment for age, sex, socio-economic status, childhood trauma and use of other drugs). This association was stronger for individuals in the urban environment compared to rural surrounds (increased difference in risk by 6.8%).

These findings come with some limitations highlighted by the authors. First, it was assumed that the cannabis used by individuals in urban environments did not differ to that used in rural environments in regards to potency or factors that may relate to the outcomes observed. Second, two factors reduced the statistical power of the selected sample. That is, the study sample was older than the period of age in which previous research has demonstrated the strongest link between urbanicity and increased cannabis use (5-15 years). Also, although the EDSP study data was weighted to be representative of the German population, only a small number of rural participants reported psychotic symptoms (n=4). Despite this, the authors concluded that as the majority of participants (51-66%) had developed a symptom of psychosis as a “specific synergistic effect” of urbanicity and cannabis use, further

research is needed to determine a “common pathway that both factors may make an impact on”.

Kuepper, R., van Os, J., Lieb, R., Wittchen, H.U., & Henquet, C. (2011). Do cannabis and urbanicity co-participate in causing psychosis? Evidence from a 10-year follow-up cohort study. *Psychological Medicine* 41, 2121-2129.

continued from page 1 director’s report

opening paper will be by Dr Tom Calma. Dr Calma is an inspirational leader. In addition to a range of roles, he is co-chair of the Close the Gap Campaign for Indigenous Health Equality and the National Coordinator, Tackling Indigenous Smoking. He will speak about closing the gap regarding cannabis use and harms among Aboriginal and Torres Strait Islander peoples. To close we will have a “wrap up and where next” perspective on the meeting from Ms Coralie Ober and Prof Steve Allsop. The [call for abstracts](#) opened on 1 November 2011 and closes on 1 March 2012 and we look forward to your submissions.

Very best wishes, Jan



research publications

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

Chimalakonda, K.C., Bratton, S.M., Le, V.H., Yiew, K.H., Dineva, A., Moran, C.L., James, L.P., Moran, J.H., & Radominska-Pandya, A. (2011). Conjugation of synthetic cannabinoids JWH-018 and JWH-073, metabolites by human UDP-glucuronosyltransferases. *Drug Metabolism and Disposition* 39, 1967-1976.

Dinieri, J.A., Wang, X., Szutorisz, H., Spano, S.M., Kaur, J., Casaccia, P., Dow-Edwards, D., & Hurd, Y.L. (2011). Maternal cannabis use alters ventral striatal dopamine d2 gene regulation in the offspring. *Biological Psychiatry* 70, 763-769.

Gjerde, H. & Verstraete, A.G. (2011). Estimating equivalent cut-off thresholds for drugs in blood and oral fluid using prevalence regression: A study of tetrahydrocannabinol and amphetamine. *Forensic Science International* 212, e26-30.

Gorelick, D.A., Goodwin, R.S., Schwilke, E., Schwoppe, D.M., Darwin, W.D., Kelly, D.L., McMahon, R.P., Liu, F., Ortemann-Renon, C., Bonnet, D., & Huestis, M.A. (2011). Antagonist-elicited cannabis withdrawal in humans. *Journal of Clinical Psychopharmacology* 31, 603-612.

Granjeiro, E.M., Gomes, F.V., Guimarães, F.S., Corrêa, F.M., & Resstel, L.B. (2011). Effects of intracisternal administration of cannabidiol on the cardiovascular and behavioral responses to acute restraint stress. *Pharmacology, Biochemistry and Behavior* 99, 743-748.

Han, E., Choi, H., Lee, S., Chung, H., & Song, J.M. (2011). A comparative study on the concentrations of 11-nor-delta-tetrahydrocannabinol-9-carboxylic acid (THCCOOH) in head and pubic hair. *Forensic Science International* 212, 238-241.

Holland, M.G., Schwoppe, D.M., Stoppacher, R., Gillen, S.B., & Huestis, M.A. (2011). Postmortem redistribution of delta-9-tetrahydrocannabinol (THC), 11-hydroxy-THC (11-OH-THC), and 11-nor-9-carboxy-THC (THCCOOH). *Forensic Science International* 212, 247-251.

Kuepper, R., van Os, J., Lieb, R., Wittchen, H.U., & Henquet, C. (2011). Do cannabis and urbanicity co-participate in causing psychosis? Evidence from a 10-year follow-up cohort study. *Psychological Medicine* 41, 2121-2129.

Lal, S., Prasad, N., Ryan, M., Tangri, S., Silverberg, M.S., Gordon, A., & Steinhart, H. (2011). Cannabis use amongst patients with inflammatory bowel disease. *European Journal of Gastroenterology and Hepatology* 23, 891-896.

Lapoint, J., James, L.P., Moran, C.L., Nelson, L.S., Hoffman, R.S., & Moran, J.H. (2011). Severe toxicity following synthetic cannabinoid ingestion. *Clinical Toxicology (Philadelphia)* 49, 760-764.

Lapoint, J., James, L.P., Moran, C.L., Nelson, L.S., Hoffman, R.S., & Moran, J.H. (2011). Severe toxicity following synthetic cannabinoid ingestion. *Clinical Toxicology (Philadelphia)* 49, 760-764.

Le Strat, Y. & Le Foll, B. (2011). Obesity and cannabis use: Results from 2 representative national surveys. *American Journal of Epidemiology* 174, 929-933.

Schwoppe, D.M., Karschner, E.L., Gorelick, D.A., & Huestis, M.A. (2011). Identification of recent cannabis use: Whole-blood and plasma free and glucuronidated cannabinoid pharmacokinetics following controlled smoked cannabis administration. *Clinical Chemistry* 57, 1406-1414.

Vanhove, W., Van Damme, P. & Meert, N. (2011). Factors determining yield and quality of illicit indoor cannabis (cannabis spp.) production. *Forensic Science International* 212, 158-163.

Wise, L.E., Varvel, S.A., Selley, D.E., Wiebelhaus, J.M., Long, K.A., Middleton, L.S., Sim-Selley, L.J., & Lichtman, A.H. (2011). Delta-9-tetrahydrocannabinol-dependent mice undergoing withdrawal display impaired spatial memory. *Psychopharmacology* 217, 485-494.

Wohlfarth, A., Mahler, H. & Auwärter, V. (2011). Rapid isolation procedure for delta-9-tetrahydrocannabinolic acid A (THCA) from cannabis sativa using two flash chromatography systems. *Journal of Chromatography* 879, 3059-3064.



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

drugs, mental health problems and alcohol lay the pathway to prison

The Australian: October 1, 2011
A new report, *'The Health of Australia's Prisoners'*, produced by the Australian Institute of Health and Welfare, reveals that "two out of three of those who entered prison in late 2010 were drug users." Cannabis "was the illicit drug most commonly used by prison entrants, with 51 per cent reporting they had used it in the past 12 months." Alcohol and Other Drugs Council (ADCA) chief executive, David Templeman, emphasises the importance of providing effective alcohol and other drug programs that support prisoners both while they are in jail as well as when they are released and at risk of taking-up or resuming drug use.

sex party says proposed bong ban racist

The Australian: October 5, 2011
Sex Party President, Fiona Patten says the proposed "bong ban" in Victoria is racist, as it unfairly targets Caucasian and Chinese users of bongs and water pipes but provides exemptions for Middle Eastern communities to use traditional "hookahs", devices used for tobacco smoking. The display of hookahs will however, be restricted.

Netherlands plans to ban 'strong cannabis'

Aljazeera Net: October 8, 2011
The Dutch government has said it will "move to classify high-potency cannabis alongside hard drugs such as cocaine and ecstasy." This is said to be another step towards the Netherlands' "ongoing reversal of its famed tolerance policies" towards cannabis use. Many of the country's cannabis cafes, otherwise known as "coffee shops", currently sell cannabis with a potency higher than the proposed 15 per cent THC cut-off, meaning that lower potency cannabis will need to replace cafes' current stocks. Some fear that this move will encourage a "black market" for high-potency cannabis, and/or cause users to smoke more of the lower-potency drug to get the same effect. Despite possession of cannabis being "technically illegal in the Netherlands... police do not prosecute people for possession of small amounts." Growers of the drug however are "routinely prosecuted if caught."

study aims to get to the roots of drug link to crime

Sydney Morning Herald: October 8, 2011
NCPIC's Melanie Simpson, who is completing a PhD at the Centre, was featured in this special report. Her research focuses on the "factors contributing to cannabis use among young offenders" and has involved "finding criminal offenders aged 14-21 and designing surveys that drew out their experiences." Melanie says around 300 young people from youth services and detention centres were interviewed about "their drug use, their criminal offending, when they first used cannabis, who it was with and why." Challenges faced in this lengthy data collection process included it taking "up to a year to gain access to some of the respondents, due to strict regulations from governing bodies", and keeping motivated. She hopes the research findings will "feed into early intervention programs" and contribute to our understanding of "how and why cannabis and crime overlap."

cannabis use leads to increased risk of depression in young people with specific genotype

Medical News: October 10, 2011
Research recently published in scientific journal, *Addiction Biology*, suggests that "young people who are genetically vulnerable to depression should be extra careful about using cannabis", as it is said to lead to "an increased risk of developing depressive symptoms." Over five years, 428 Dutch families and their two teenage children were surveyed annually. In young people who had a particular variant of the gene that makes them "sensitive to depression... cannabis use led to an increase of depressive symptoms."

record number of Aust athletes guilty of doping

Canberra Times: October 13, 2011
According to this article, 42 Australian athletes "were found guilty of doping in the past year – the highest figure since the Australian Sports Anti-Doping Authority was established in 2006." Of drugs found however, only five positive tests for cannabis were received.

PNG fears drug, alcohol abuse rising

Australia Network News: October 13, 2011
Professor Robert Power from the Burnet Institute is concerned about the rising use of cannabis and alcohol in Papua New Guinea (PNG) and the mental health ramifications amongst the population. Unlike other areas in the Pacific where injecting drug use is the primary concern, PNG seems to be experiencing more problems with cannabis and home brewed alcohol. There is, however, a paucity of data in the Pacific region and PNG which makes it difficult to be "confident about an increase in prevalence rates."

laws aim to stub out artificial dope

Courier Mail: October 14, 2011
New changes to the law have been introduced in Queensland's State Parliament this week which will make the sale of Kronic and other synthetic drugs "even harder" than it currently is. Attorney-General Paul Lucas said "police would no longer have to prove

continued from page 4
media stories this issue

a substance had the same effect as a banned drug, only that it is intended to have the same effect under the proposed amendments to the Drugs Misuse Act.” This will stop producers of Kronik “from changing the ingredients to escape prosecution.” A proposed new offence has also been introduced under the Act, “which would mean people found in possession of the chemicals used to make illegal drugs could face trafficking charges.”

defence sacks dozens for taking drugs

ABC News: October 14, 2011

Cannabis was the drug most likely to have been used by those discharged from the Army, Air Force and Navy in 2010-11. Positive tests for ecstasy, steroids, cocaine and amphetamines were also returned, according to Defence figures. However, as Defence Personnel Minister Warren Snowdon said, “The rate of positive tests in the Australian Defence Force is significantly lower than in the general Australian community, and has fallen by around 80 per cent since the testing regime was introduced [in 2005].”

sales of drug test kits rise in Queensland as parents use technology to keep tabs on their kids

news.com.au: October 16, 2011

Queensland has seen an increase in the sale of “drug test kits” such as “Hair Confirm”, which “can detect cannabis and other drugs from a hair follicle.” Australian Medical Association Queensland president Dr Richard Kidd stresses however, the importance of parents looking for “outward signs” of cannabis use such as “depression, attention issues, respiratory problems, impaired balance and co-ordination and an increase in risky behaviour.” Dr Kidd goes on to emphasise children’s “unique vulnerability to the regular use” of cannabis due to its effects on brain development.

cash for cannabis prison study

Cairns Post: October 19, 2011

Professor Alan Clough of James Cook University and Professor Jan Copeland of NCPIC have been awarded a \$279,000 National Health and Medical Research Council (NHMRC) grant to “study cannabis withdrawal symptoms in indigenous male inmates at Lotus Glen prison”, a correctional centre in Far North Queensland. The 18-month investigation has “the potential for significant benefits for indigenous people in Queensland’s prisons and remote communities.” Prof Clough says, “We hope it will address an unmet need for support to help manage withdrawal symptoms in indigenous individuals, as well as provide much-needed data on mental health impacts of heavy cannabis use in this population.”

‘greater threat’ to teens than grog’

Sunday Tasmanian: October 23, 2011

According to Australian Medical Association Tasmania spokesman Dr Hamely Perry, “cannabis use is a bigger long-term problem than alcohol abuse among Tasmanian teenagers.” Dr Perry believes teenagers with mental health problems “self-medicate” with cannabis to cope. “Social pressure” is also a contributing factor. In addition, he says that “long-term use can lead to feelings of anxiety and paranoia, and cause a loss of co-ordination,” while “heavy or frequent use is associated with increased levels of mental health problems – including depression, memory loss and lack of motivation – leading to a decline in school performance and poor employment opportunities.”

Bridget tackles cannabis problem

Geelong Advertiser: October 24, 2011

The winner of NCPIC’s 2011 Poster Competition, Bridget O’Halloran, was featured in this article. Her poster, ‘Get your kicks on the field. Not on the sidelines’ won her the first prize of \$2000 and \$1500 for her school, Clonard College, in Geelong, Victoria. This year’s competition focused on the negative impact of cannabis use on sporting performance. Clonard College Assistant Principal, Richard Jones says “We’re very happy with her promoting positive messages in such a creative way...and the kids think it’s a good way of getting the message across to this age group.” Bridget will purchase a new Canon camera with her prize money as well as give a portion of the money to her brother who featured in the poster. The school will use their portion to “upgrade their design equipment.” To order a copy of Bridget’s poster [please click here.](#)

pot can mimic brain changes seen in schizophrenia

Newsday: October 26, 2011

A new study from the University of Bristol in the United Kingdom has found that cannabis “causes disruptions in concentration and memory similar to those that occur in people with schizophrenia.” The psychoactive ingredient in cannabis was found to “completely disrupt the coordinated brain waves across the hippocampus and prefrontal cortex...[which are areas of the brain] essential for memory and decision-making and play a key role in schizophrenia.” Study author, Michal Kucewicz says “These results are an important step forward in our understanding of how rhythmic activity in the brain underlies thought processes in health and disease.”

2011 NCPIC poster competition winner announced

The annual NCPIC Poster Competition has once again received a large number of creative, thoughtful and cleverly executed posters on the theme of the negative impact of cannabis use on young people’s sporting performance. Year 12 student Bridget O’Halloran of Clonard College, Geelong, was this year’s winner with her poster ‘*Get your kicks on the field. Not on the sidelines*’. Bridget has won \$2,000 for herself and \$1,500 for her school, and plans to buy a new Canon camera with her winnings. Her school will purchase new design equipment.

An excerpt from Bridget’s explanation of her poster reveals both her maturity and insight into the issues young people face around cannabis use:

“Physical health, fitness and sport are important in maintaining a healthy body and lifestyle. However, cannabis and its effects can impact on one’s health and wellbeing. I chose to emphasise a concept of choices and consequences as they might be in a football match. I hope to encourage cannabis users to consider their choices deeply and how ‘using’ might impact on their lifestyle and health. I also want to encourage other individuals to consider sport as an outlet and social activity. Whilst employing the ‘game’ concept, my deep intent is to suggest that cannabis use is not a game, but rather a serious and life impacting matter. I want to encourage individuals to follow their dreams and achieve their goals, whether that be on the sporting field or not.”

This year’s winning poster is now available to order, free of charge, via our online order form:

<http://ncpic.org.au/workforce/alcohol-and-other-drug-workers/cannabis-information/order-posters/>



Photograph: Leanne Churchill, Geelong Advertiser

Winner of this year’s poster competition, Bridget O’Halloran, with her poster ‘*Get your kicks on the field. Not on the sidelines*’.



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