# ncpic

# national cannabis prevention and information centre

# e-zine april 2013

#### contents

commentary on research p2

research publications p2

media stories this issue p3

The Gunja Brain Story Flipchart p4

what's **NEW** in cannabis?

#### what's new in cannabis?

A series of meditation podcasts have been designed by our Consortium partner, Orygen Youth Health, which teach relaxation techniques to improve mood and well-being. With regular practice, these relaxation techniques may help people cope while they are trying to cut down or quit cannabis. They may assist with managing cravings, increasing coping skills, dealing with stress and reducing anxiety. To listen to the podcasts online, please click here.

## director's report

Jan Copeland (PhD) - Professor/Director, NCPIC

As we Southerners feel the chill in the air after a fabulous summer it is time for another NCPIC E-Zine. Our strong commitment to engagement, feedback and evaluation is evident in the report by Clare Le on *The Gunja Brain Story* Flipchart. I won't steal Clare's thunder but it is encouraging to see that it is reaching the target group where cannabis use is seen as a concern and the resource is appropriate. The suggestions for future resources have been noted and many will be considered in future developments.

This month has seen the *Tune In* three meditation podcasts prepared by ORYGEN uploaded to the website, which given the number of staff on leave at the moment, I will definitely find useful. One of those now absent staff is Morag Millington who welcomed (with her partner) a son Thomas James this month – congratulations and we look forward to meeting him. Stand by as there is much more NCPIC baby news to come in the next few months!

I thought I'd share some of the information we collect on our website, which is one of our flagship projects. This quarter it had around 55,000 visits (30,000 being Australian), an increase of 12% for international and 3% for national visits on the same period last year. The majority are driven by Google search with "NCPIC", "cannabis" and "what is cannabis?" as the most popular terms. It is interesting that searching for "nicpic" has increased 1483% which may be as a result of increased radio exposure with interviews run during this time

where the heard acronym NCPIC may lead to this kind of search. This is another way to assess the impact of various activities. The largest increase by country is again from Vietnam at 7208% as the Vietnamese language resources continue to attract attention (well done Clare!).

We are planning a website refresh with improved navigation in the next few months and will be optimising the website for mobile devices as they now represent around 30% of visits with markedly poorer traffic quality due to the sub-optimal experience. Our webbased interventions are being utilised with around 1231 visits and 147 new sign-ups this quarter of *Reduce Your Use* and a further 364 visits and 166 new sign-ups of young people using *Clear Your Vision*.

Our website is also where orders for our resources are placed. Overall, more than 50,000 resources were disseminated last quarter, in addition to 14,162 social marketing items via our website ordering system. There were also 73 copies of the original *MAKINGtheLINK* Student program's DVD ordered. An additional 319 Indigenous-specific materials were ordered via the web, with the 2011 Indigenous Music Competition's CD the most popular.

I hope you enjoy reading this month's E-Zine and find it a useful resource in your work.

#### commentary on research

# Poor sleep quality as a risk factor for lapse following a cannabis quit attempt – A comment on Babson and colleagues (2013)

Peter Gates

Most individuals who attempt to quit cannabis use, whether by accessing professional treatment or by self-quit attempt, will relapse within one year (Moore and Budney, 2003). Importantly, cannabis withdrawal has been consistently shown to be associated with rates of relapse following a quit attempt. The specific aspects of the withdrawal which contribute to possible relapse, however, are less well known. One of the more commonly reported and more intensively experienced aspects of withdrawal is poor sleep quality (Allsop et al., 2011). Although a body of work has identified that approximately 48-77 per cent of cannabis users attempting to quit report relapsing in order to alleviate sleep problems (Copersino et al., 2006, Levin et al., 2010), very little research has investigated the quality of sleep reported by individuals before a quit attempt. As Babson and colleagues (2013) note, sleep quality could be targeted by treatments before a quit attempt and thus directly improve the success rate of the quit attempt.

In order to address this gap in research regarding the investigation of pre-quit sleep quality as a risk factor for relapse, Babson and colleagues investigated data obtained from 55 adult veterans (94.5% male, with a mean age of 51.2 years). The authors highlighted that veterans were of interest as this group typically report elevated cannabis use and are yet to be the subject of research regarding cannabis use and sleep problems. In their study, the veterans completed a subjective measure of sleep quality (the Pittsburg Sleep Quality Index; PSQI) and reported on their cannabis use (30 day frequency and quantity) one day before a self-quit attempt. Reliable measures were also taken to document the veterans' mental health, motivation to quit cannabis, and other substance use. These individuals then returned for a seven day follow-up assessment in order to describe how their self-quit attempt went.

Only 32.7 per cent of the sample reported that they were able to maintain abstinence. Notably, 20 per cent of the sample lapsed on the first day of their quit-attempt and maintained their use across the week. When controlling for factors associated with sleep quality (including other substance use, as well as levels of depression and anxiety) pre-quit sleep quality was found to significantly predict relapse within the first two days of a quit attempt but not thereafter. Specifically, on a four point scale measuring sleep quality, each additional point toward good sleep more than doubled the chance of a successful quit attempt in these first two days. Interestingly, pre-quit levels of cannabis and alcohol use and aspects of mental health did not significantly predict rates of relapse in this study.

This study was the first to highlight the clinical importance of addressing the sleep quality of individuals prior to their attempts to quit cannabis use. In addition, it was among few studies of cannabis and sleep to include a statistical control for other confounding variables. That said, some important limitations should be recognised. Firstly, as noted by the authors, the sample was not highly generalizable (typical cannabis users are younger and more closely matched by gender). Secondly, the included measures were subjective and only one aspect of the PSQI was found to be a significant predictor of relapse. Further study should include objective measures, such as polysomnography for sleep problems and urinalysis for substance use, and make measurements across multiple time-points throughout the quit attempt and for a longer duration.

**Moore, B.A. & Budney, A.J.** (2003). Relapse in outpatient treatment for marijuana dependence. *Journal of Substance Abuse Treatment 25*, 85-89.

Levin, K.H., Copersino, M.L., Heishman, S.J., Liu, F., Kelly, D.L., Boggs, D.L., & Gorelick, D.A. (2010). Cannabis withdrawal symptoms in non-treatment-seeking adult cannabis smokers. *Drug and Alcohol Dependence* 111, 120-127.

Copersino, M.L., Boyd, S.J., Tashkin, D.P., Huestis, M.A., Heishman, S.J., Dermand, J.C., Simmons, M.S., & Gorelick, D.A. (2006). Cannabis withdrawal among non treatment-seeking adult cannabis user. American *Journal of Addiction 15*, 8-14.

Allsop, D.J., Norberg, M.M., Copeland, J., Fu, S., & Budney, A.J. (2011). The Cannabis Withdrawal Scale development: Patterns and predictors of cannabis withdrawal and distress. *Drug and Alcohol Dependence* 119, 123-129.

#### research publications

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

Aggarwal, S.K., Carter, G., Sullivan, M., Morrill, R., Zumbrunnen, C., & Mayer, J. (2013). Distress, coping, and drug law enforcement in a series of patients using medical cannabis. *Journal of Nervous and Mental Disease 201*, 292-303.

Ameur, S., Haddou, B., Derriche, Z., Canselier, J.P., & Gourdon, C. (2013). Cloud point extraction of  $\Delta$ (9)-tetrahydrocannabinol from cannabis resin. *Analytical and Bioanalytical Chemistry* 405, 3117-3123.

Arendt, M., Munk-Jørgensen, P., Sher, L., & Jensen, S.O. (2013). Mortality following treatment for cannabis use disorders: Predictors and causes. *Journal of Substance Abuse Treatment 44*, 400-406.

Babson, K.A., Boden, M.T., Harris, A.H., Stickle, T.R., & Bonn-Miller, M.O. (2013). Poor sleep quality as a risk factor for lapse following a cannabis quit attempt. *Journal of Substance Abuse Treatment 44*, 438-443.

Bowes, L., Chollet, A., Fombonne, E., Galéra, C., & Melchior, M. (2013). Lifecourse SEP and tobacco and cannabis use. *European Journal of Public Health 23*, 322-327.

Crippa, J.A., Hallak, J.E., Machado-de-Sousa, J.P., Queiroz, R.H., Bergamaschi, M., Chagas, M.H., & Zuardi, A.W. (2013). Cannabidiol for the treatment of cannabis withdrawal syndrome: A case report. *Journal of Clinical Pharmacy and Therapeutics* 38, 162-164.

Griffith-Lendering, M.F., Wigman, J.T., Prince van Leeuwen, A., Huijbregts, S.C., & Huizink, A.C. (2013). Cannabis use and vulnerability for psychosis in early adolescence – a TRAILS study. *Addiction 108*, 733-740.



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 Le at clare.le@unsw.edu.au

#### bongs spread TB

It's My Health Website: April 8, 2013 A recent Australian study has found that sharing cannabis "through a makeshift pipe or bong could put young Aussies at risk of a potentially fatal tuberculosis (TB)." Despite this disease being rare in Australia, three cases were reported in the Hunter region of New South Wales. One man was diagnosed with the disease and suffered a "productive cough, night sweats and weight loss" over a period of months. This led health workers to screen 65 of his contacts, 26 of whom were found to have latent TB. The researchers believe that "sharing bongs could contribute to the transmission of TB because it mimicked the breathing of second-hand smoke, which has been historically associated with the spread of TB." Cannabis has also been linked to lowered immunity, according to the researchers. All three

## more artificial cocaine and cannabis users in rehab

they "no longer share bongs."

The Maitland Mercury: April 9, 2013

patients recovered and reported that

The Glen Drug and Rehabilitation Centre in the Hunter region, New South Wales, has reported a sharp rise in the number of clients seeking help for dependence on "synthetic drugs" such as synthetic cannabis. In the last two years, use of the substances among clients has increased from virtually none, to one in four.

# new study: cannabis pill soothes pain better than smoking

Daily Telegraph: April 23, 2013 Neuroscientists in the United States have conducted a study comparing the efficacy of both cannabis and a pill containing synthetic delta-9-tetrahyrdrocannabinol (THC) (Dronabinol) in relieving pain. Thirty daily cannabis smokers underwent a pain test after either smoking cannabis, taking the pill containing THC or being given a placebo pill. It was found that those who smoked cannabis or took the THC pill reported "decreased pain sensitivity and boosted tolerance to pain compared with the placebo." The pill containing THC however was more effective for "long-lasting decreases in pain" than the smoked cannabis.

### heroin favoured by unemployed ex-crims

The Courier Mail: April 23, 2013

A study conducted by the National Drug and Alcohol Research Centre at UNSW has found that among the drug users interviewed, a significant proportion had used cannabis recently, with many reporting daily use. Smoking cannabis in "cones was more common that joints." Also found was that approximately two thirds "reported using heroin in the last six months with more than a quarter using it daily." The study, the 'Illicit Drug Reporting System 2012', surveyed 924 participants nationwide.

## continued from page 2 research publications

Louis, M., Ricketson, J. & Wishart, I. (2013). What is the accuracy of screening instruments for alcohol and cannabis misuse disorders among adolescents and young adults in the emergency department? Annals of Emergency Medicine 61, 404-406.

Mayet, A., Esvan, M., Marimoutou, C., Haus-Cheymol, R., Verret, C., Ollivier, L., Meynard, J.B., Michel, R., Boutin, J.P., Deparis, X., & Migliani, R. (2013). The accuracy of self-reported data concerning recent cannabis use in the French armed forces. *European Journal of Public Health 23*, 328-332.

Molnar, A., Lewis, J. & Fu, S. (2013). Recovery of spiked  $\Delta(9)$ -tetrahydrocannabinol in oral fluid from

polypropylene containers. *Forensic Science International 227*, 69-73.

**Notcutt, W.G.** (2013). A questionnaire survey of patients and carers of patients prescribed Sativex as an unlicensed medicine. *Primary Health Care Research and Development 14*, 192-199.

**Ogata, J., Uchiyama, N., Kikura-Hanajiri, R., & Goda, Y.** (2013). DNA sequence analyses of blended herbal products including synthetic cannabinoids as designer drugs. *Forensic Science International* 227, 33-41.

Piontek, D., Kraus, L., Bjarnason, T., Demetrovics, Z., & Ramstedt, M. (2013). Individual and country-level effects of cannabis-related perceptions on cannabis use: A multilevel study among adolescents in 32 European countries. *Journal of Adolescent Health 52*, 473-479.

Rabin, R.A., Zakzanis, K.K., Daskalakis, Z.J., & George, T.P. (2013). Effects of cannabis use status on cognitive function, in males with schizophrenia. *Psychiatry Research* 206, 158-165.

Rasic, D., Weerasinghe, S., Asbridge, M., & Langille, D.B. (2013). Longitudinal associations of cannabis and illicit drug use with depression, suicidal ideation and suicidal attempts among Nova Scotia high school students. *Drug and Alcohol Dependence* 129, 49-53.

Sartor, C.E., Agrawal, A., Lynskey, M.T., Duncan, A.E., Grant, J.D., Nelson, E.C., Madden, P.A., Heath, A.C., & Bucholz, K.K. (2013). Cannabis or alcohol first? Differences by ethnicity and in risk for rapid progression to cannabis-related problems in women. *Psychological Medicine* 43, 813-823.

Toennes, S.W., Schneider, K., Wunder, C., Kauert, G.F., Moeller, M.R., Theunissen, E.L., & Ramaekers, J.G. (2013). Influence of ethanol on the pharmacokinetic properties of  $\delta 9$ -tetrahydrocannabinol in oral fluid. *Journal of Analytical Toxicology* 37, 152-158.

Tosato, S., Lasalvia, A., Bonetto, C., Mazzoncini, R., Cristofalo, D., De Santi, K., Bertani, M., Bissoli, S., Lazzarotto, L., Marrella, G., Lamonaca, D., Riolo, R., Gardellin, F., Urbani, A., Tansella, M., Ruggeri M., & Picos-Veneto Group. (2013). The impact of cannabis use on age of onset and clinical characteristics in first-episode psychotic patients. Data from the Psychosis Incident Cohort Outcome Study (PICOS). Journal of Psychiatric Research 47, 438-444.

# The Gunja Brain Story Flipchart

#### Feedback from those using the resource

Six months since the launch of the Gunja Brain Story Flipchart, we have distributed over 1500 flipcharts to Aboriginal Medical Services (AMS) and other community and health organisations around the country. Each flipchart was sent out with a feedback questionnaire inside the front cover and we are very pleased to have received over 40 of these completed surveys from those using the resource with their clients or students. This feedback has enabled us to gather information about how people received the flipchart, what sector they work in, relevant information about their clients, their main concerns about cannabis use in their community and/or amongst their clients, how they use the flipchart and suggested changes or improvements to the resource.

Gunja Brain
Story

Story

Control
Cont

Overwhelmingly, the flipchart has been received very favourably and has been accessed by those working with a high proportion of Indigenous clients and students. It is evident that among their Indigenous clients and students, cannabis use is a significant concern for workers. Some of the main areas of concern are the negative impact of cannabis on educational attainment, mental health and young people's development. Workers have been using the flipchart with a wide age-range of Aboriginal and Torres Strait Islander clients and students, showing that it is relevant beyond the original target group of young people. The resource is primarily being used in either a one-onone or small group setting, with other means of delivery being in a classroom, with school nurses, in juvenile justice and as a resource for students studying health.

Congratulations to Marilla Spencer of Toowoomba who won the \$100 gift voucher for completing our feedback questionnaire. We greatly appreciate the time taken by all those who filled out the questionnaire – it has provided us with useful and practical feedback. We look

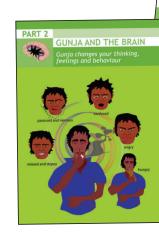
forward to continuing to provide relevant and culturally appropriate resources to the Aboriginal and Torres Strait Islander community and rely on feedback such as this to ensure we can do this.

#### How to order the resource

After the popularity of the original printrun of the A3-sized flipchart, we recently reprinted an additional 2000 copies of the resource but in a smaller, A4 size. We hope this will make transporting and using the flipchart easier for workers. It can be ordered free-of-charge from our online order form: <a href="https://ncpic.org.au/indigenous/the-gunja-brain-story/">https://ncpic.org.au/indigenous/the-gunja-brain-story/</a>

In addition, The Gunja and the Brain playing cards continue to be available to order online and feature health promotion messages taken from the flipchart. They are designed for use with people who may not be engaged with educational or health care organisations such as school, TAFE, their local GP or AMS etc. and who therefore may not be exposed to such messages.

Thank you once again to everyone who sent in their questionnaires – your feedback has been fantastic.









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 Le on (02) 9385 0218 info@ncpic.org.au

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