

# ncpic e-zine

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national cannabis  
prevention and  
information centre

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what's  
**new** in  
cannabis?

## Vaporisers – factsheet

NCPIC has recently produced a new factsheet on vaporisers. Topics covered include the history of these smoking devices, risks associated with their use, why some cannabis users choose to use vaporisers instead of bongs or joints, and the differences between cannabis smoke and vapour. [Click here to read.](#)



## director's report

Jan Copeland (PhD) – Professor/Director, NCPIC

This month the community has been re-engaged with the drug policy debate by the Fairfax media mastheads testing the WikiCurve social media framework. As expected, the lobby groups at both poles of the debate have been working and blogging hard, nonetheless it was pleasing to see the debate around cannabis maturing to a degree. I was prompted to overcome my reticence in participating by Dr Matthew Large's commentary on the hazards of attempting to promote evidence-based information in the community on such a controversial topic. As I noted in this article <http://www.smh.com.au/national/the-trouble-with-cannabis-20120523-1z5e3.html> it's a tough time to be an academic in the current climate of anti-intellectualism, where to paraphrase Asimov, 'my personal anecdote is just as good as your science.' Thanks to all those who participated as I think it has highlighted those areas of agreement and has reinforced and contextualised the consensus on known harms.

One of the topic areas largely neglected in the debate about the legal status of existing drugs is the need to respond to emerging drug classes. In our recruitment to the *Sativex* study (<http://ncpic.org.au/static/pdfs/flyer.pdf>) someone came forward seeking assistance to manage their synthetic cannabinoid dependence. While he was not appropriate for the *Sativex* study we have assisted and monitored his withdrawal and will write it up for publication later this year. His is one of a number of such cases we are now starting to hear about and it is an area in great need of systematic research. The 2<sup>nd</sup> National Cannabis Conference

will include a stream on this topic so register now at <http://www.cvent.com/events/2nd-national-cannabis-conference-2012/event-summary-8548c2cd5007462389702ffde079e3cb.aspx>.

There have been a series of jurisdictional policy responses to this issue and recently a change in the relevant Commonwealth legislation. To follow is our understanding of this change.

In response to growing concerns over the potential risk to public health and safety from the misuse of products such as Kronik, which were increasingly being marketed as legal alternatives to cannabis, the Commonwealth placed prohibitions on the most common substances found in synthetic cannabis products in June 2011. This was achieved by the inclusion of eight specific substances in Schedule 9 (Prohibited Substances) of the Commonwealth Poisons Standard (aka the Standard for the Uniform Scheduling of Medicines and Poisons, SUSMP) with effect from 8 July 2011.

To address the issue of new synthetic cannabis-like substances being marketed to circumvent these new controls, the Commonwealth broadened these controls by the addition of eight broad groups of synthetic cannabis-like substances to the Commonwealth Poisons Standard, with effect from May 2012. In addition, a separate general entry for "synthetic cannabinomimetics" was also added. The purpose of this latter entry being to capture all synthetic cannabis-like substances and products not otherwise

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## commentary on research

### Alcohol and cannabis abuse/dependence symptoms and life satisfaction in young adulthood – a comment on Swain and colleagues – (2012)

Peter Gates

An individual's perception of the quality of their overall life, or life satisfaction, can be affected by many different factors. Among these factors, higher rates of both alcohol- and cannabis-related problems have been identified to be individually associated with lower ratings of life satisfaction by young adults. The studies proposing these associations have been criticised, however, for using methods that did not control for other factors that might be associated with both increased rates of substance use and lower levels of life satisfaction.

Swain and colleagues (2012) recently addressed this limitation by using data from a 30 year longitudinal birth cohort survey conducted in New Zealand from 1977, entitled the Christchurch Health and Development Study. Data for this survey was collected from 1265 individuals at birth, 4 months, 1 year and annually to age 16 years, and at 18, 21, 25 and 30 years. The strength of this dataset was that it included a measure of life satisfaction,

a measure of symptoms of alcohol and cannabis abuse and dependence, as well as several other factors associated with life satisfaction. Sufficient data was available from 81 per cent of the original sample (n=1025). Unfortunately, the generalizability of this dataset was somewhat limited given that the measure of life satisfaction was not a validated scale and the nature of the sample was very specific (individuals born in 1977, in New Zealand).

The authors conducted a sophisticated two-step analysis to control for a wide range of variables and examined whether alcohol or cannabis abuse and dependence were associated with life satisfaction from the age of 18 years to 30 years. The first step of the analysis was conducted to determine which factors were significantly associated with life satisfaction. As expected, these variables included alcohol and cannabis abuse and dependence. The additional variables of gender, maternal reports of shy, anxious, or withdrawn behaviours at ages 7-9 years, quality of parental attachment and self-esteem at age 15 years, current paid employment, current cohabiting partner relationship, serious relationship problems in last year, sexual or physical violence victimisation in last year, and major depression or anxiety since last interview, were also found to be associated with life satisfaction. The second step was conducted to determine if the association between

increased symptoms of substance abuse or dependence and decreased life satisfaction remained when accounting for the other possibly confounding variables.

Prior to controlling for these variables, it was clear that individuals who had no symptoms of substance abuse or dependence rated their life satisfaction approximately 7 per cent higher than those who had three or more symptoms. However, this association was not found to be significant when accounting for the other confounding variables. This finding suggests that the association between substance use and life satisfaction may be explained by several other variables such as maintaining employment and a satisfying relationship. Unfortunately it was out of the scope of this study to determine whether substance use was in fact ultimately responsible for the decreased life satisfaction by increasing the likelihood of mental health concerns and by disrupting relationship and employment success. Regardless, as the authors describe, efforts to improve life satisfaction would benefit by addressing partner relationships, employment concerns, and co-morbid anxiety and depression rather than focussing on substance use alone.

**Swain, N.R., Gibb, S.J., Horwood, L.J., & Fergusson, D.M.** (2012). Alcohol and cannabis abuse/dependence symptoms and life satisfaction in young adulthood. *Drug and Alcohol Review* 31, 327-333.

## research publications

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

**Cascini, F.** (2012). Investigations into the hypothesis of transgenic cannabis. *Journal of Forensic Sciences* 57, 718-721.

**Caulkins, J.P., Kilmer, B., Maccoun, R.J., Pacula, R.L., & Reuter, P.** (2012). Design considerations for legalizing cannabis: Lessons inspired by analysis of California's Proposition 19. *Addiction* 107, 865-871.

**Gates, P., Copeland, J., Swift, W., & Martin, G.** (2012). Barriers and facilitators to cannabis treatment. *Drug and Alcohol Review* 31, 311-319.

**Gieringer, D.** (2012). Practical experience with legalized cannabis. *Addiction* 107, 875-876.

**Levendal, R.A., Schumann, D., Donath, M., & Frost, C.L.** (2012). Cannabis exposure associated with weight reduction and  $\beta$ -cell protection in an obese rat model. *Phytomedicine* 19, 575-582.

**Muccio, Z., Wöckel, C., An, Y., & Jackson, G.P.** (2012). Comparison of bulk and compound-specific  $\delta(13)$  C isotope ratio analyses for the discrimination between cannabis samples. *Journal of Forensic Sciences* 57, 757-764.

**Nicolson, S.E., Denysenko, L., Mulcare, J.L., Vito, J.P., & Chabon, B.** (2012). Cannabinoid hyperemesis syndrome: A case series and review of previous reports. *Psychosomatics* 53, 212-219.

**Norberg, M.M., Wright, T., Hickey, K., & Copeland, J.** (2012). A postal intervention for dependent cannabis users. *Drug and Alcohol Review* 31, 320-326.

**Potter, D.J. & Duncombe, P.** (2012). The effect of electrical lighting power and irradiance on indoor-grown cannabis potency and yield. *Journal of Forensic Sciences* 57, 618-622.

**Steinmetz, A.B., Edwards, C.R., Vollmer, J.M., Erickson, M.A., O'Donnell, B.F., Hetrick, W.P., & Skosnik, P.D.** (2012). Examining the effects of former cannabis use on cerebellum-dependent eyeblink conditioning in humans. *Psychopharmacology (Berl)* 221, 133-141.

**Swain, N.R., Gibb, S.J., Horwood, L.J., & Fergusson, D.M.** (2012). Alcohol and cannabis abuse/dependence symptoms and life satisfaction in young adulthood. *Drug and Alcohol Review* 31, 327-333.

**Van Ours, J.C.** (2012). The long and winding road to cannabis legalization. *Addiction* 107, 872-873.

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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](mailto:c.chenoweth@unsw.edu.au)

### **synthetic cannabis banned Australia-wide**

*Mandurah Mail: May 1, 2012*

Mental Health Minister in Western Australia, Helen Morton, has “welcomed news that synthetic cannabinoids were banned Australia-wide” recently. The Minister reported that “eight groups of synthetic cannabinoids and all synthetic cannabinomimetics became illegal from 12.01am Tuesday, May 1, 2012.” She went on to explain that the substances would be “banned after inclusion in the National Medical and Poisons Schedule by the Therapeutic Goods Administration.”

### **WADA to consider change of status for cannabis**

*Sydney Morning Herald: May 3, 2012*

Following a meeting between the World Anti Doping Authority (WADA) and “a coalition of Australian sporting bodies”, it has been suggested that cannabis be taken off the list of banned substances as many believe it is not a performance enhancing drug. John Fahey, WADA boss said, “Specifically to cannabis, I can only say to those – particularly in the football codes who have expressed concern that we’re focusing on an area that really isn’t about cheating in sport – I urge them to put a request up to WADA, which will be given to our list committee who will examine it.” Currently, athletes who “test positive to

cannabis on match days face bans of up to two years. In recent cases athletes have received three-month bans or have been warned.” NCPIC has developed a factsheet, ‘[Cannabis and sport](#)’ which discusses issues such as the impact of cannabis on sporting performance, cannabis use rates amongst athletes and testing for the drug amongst this population.

### **huge drug problem**

*Sydney Morning Herald: May 6, 2012*

Research published recently in *The Lancet* claims that “up to 250 million people use illicit drugs worldwide, with up to 38 million ‘problem’ users and up to 21 million people regularly injecting illegal substances.” Cannabis was the drug “most widely used” around the world, with “an estimated 191 million people globally using the drug in 2008.”

### **study shows how adolescent cannabis use can cause schizophrenia**

*The Medical News: May 9, 2012*

Research conducted by the Royal College of Surgeons in Ireland and published in journal, *Nature’s Neuropsychopharmacology* has “shown physical changes to exist in specific brain areas implicated in schizophrenia following the use of cannabis during adolescence.” Cannabis has been shown to interact with a particular gene named COMT and then “cause physical changes in the brain.” The COMT gene is said to “provide instructions for making enzymes which break down a specific chemical messenger called dopamine.” Dopamine is a “neurotransmitter that helps conduct signals from one nerve cell to another, particularly in the brain’s reward and pleasure centres.” It is thought that the interaction between cannabis and this gene may heighten the risk of developing schizophrenia.

### **the New Zealand adventure tourism operators face drug-testing**

*The Australian: May 10, 2012*

A post mortem on the pilot of the balloon which crashed in New Zealand in January found traces of cannabis in his system. This, coupled with another fatal crash where two tandem skydivers were found to be affected by the drug, has led the government to consider “compulsory drug testing in the tourism

adventure industry.” Despite cannabis not being proven to have been a “factor in the crashes” New Zealand Prime Minister, John Key, said “the revelations were a concern.”

### **early drug and alcohol use associated with lower levels of educational achievement**

*Medical News: May 17, 2012*

A study conducted by Washington University School of Medicine has found “evidence that early drug and alcohol use is associated with lower levels of educational attainment.” The study involved comparing male twins who “served in the military during the Vietnam era”. Those that “began drinking or using drugs as young teens or who became dependent on alcohol, nicotine or marijuana, were less likely to finish college than those who didn’t use alcohol or drugs until later life and never became dependent.” While early drug use was not found to ‘cause’ lower educational attainment, there was a strong ‘association’.

### **smokers come to a joint conclusion**

*Adelaide Now: May 21, 2012*

This article features extensive discussion about cannabis, how usage trends have changed over time and the impacts of the drug on mental health. Professor Copeland explains that 30 years ago, people tended to smoke the less potent parts of the cannabis plant, namely the leaves. These days however, the flowering heads, which contain higher concentrations of the psychoactive components of the plant, are more widely used. She goes on to say, “Police drug squads often find dumped bags of cannabis leaves that no one can be bothered with. They (dealers) throw it out. They can’t sell it. No one will buy leaf.” Other concerns voiced in the article include the impact cannabis can have on educational attainment and mental health. Use in Australia however has significantly reduced since the 1990s and Professor Robert Ali, head of Drug and Alcohol Services South Australia suggests this is due to the increase in awareness of risks associated with both cannabis and smoking in general.

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## media stories this issue

### majority relaxed about cannabis use

*Sydney Morning Herald: May 22, 2012*

This article discusses the disparate results of two surveys regarding the public's attitudes to legalisation and decriminalisation of certain drugs, including cannabis, in Australia. Professor Alison Ritter of the Drug Policy Monitoring Program at UNSW says the way poll questions are structured can affect how people answer them. The analysis undertaken by her centre of the 2010 National Drug Strategy Household Survey showed that "most Australians distinguish between legalising the use of illicit drugs and decriminalising their use, which would mean lower penalties for personal use." The questions analysed involved people's attitudes about what should happen to those found "in possession of small quantities of specified drugs." It was found that "nearly three quarters of Australians support lighter penalties, or effectively decriminalisation, regarding cannabis, but more than half oppose making personal use of such a drug legal."

### teens told smash bong and find alternatives

*ABC North West WA: May 23, 2012*

The State Government of Western Australia has launched a new campaign 'Swap for Pot', aimed at helping young people quit cannabis by "providing alternatives to cannabis users" such as exercise, cooking or woodwork. Professor of Health Policy at Curtin University, Mike Daube says "I don't think that suddenly kids are going to rush off and do something else instantly, I think this is part of a long term program."

### the trouble with cannabis

*Blayney Chronicle: May 24, 2012*

A Sydney Morning Herald-hosted debate at the University of Sydney saw a diversity of opinions voiced on the topic 'Should the government decriminalise drugs?' Dr Matthew Large, a psychiatrist at the University of New South Wales commented that "On most days, the majority of my inpatients have a history of long-term cannabis use." Issues such

as the relationship between cannabis use and mental health are discussed in this article, particularly the impact of the drug on the adolescent, developing brain. NCPIC's Professor Jan Copeland commented on the fraught nature of debate around cannabis issues, saying "the public discourse around cannabis has been politicised more than any other drug. People have no middle view about cannabis: typically it's the worst drug in the world or it's the most health-giving medication that should be encouraged." She goes on to say that young people using the drug face lower educational outcomes and issues with dependence.

### cannabis 'does not slow multiple sclerosis' progress

*BBC News: May 29, 2012*

A medical study conducted by the UK Peninsula Medical School in Plymouth, has found that 'cannabis does not halt the progression of multiple sclerosis (MS).' Patients in the study took tablets containing THC, the psychoactive component of cannabis, for three years and while they found that it eased MS symptoms, it did not slow the disease's "progression."

### survey sheds new light on bullying

*The West Australian: May 30, 2012*

A survey of almost 800 Victorian students has found that "72 per cent of Year 9 boys and 65 per cent of Year 9 girls had engaged in covert bullying" where behaviours such as "spreading rumours or excluding other children" were reported. Also found was the trend that "children who cyberbully are more likely to go on to use cannabis and engage in crime and violence."

### new dope plant doesn't get people stoned

*Sky News: May 31, 2012*

Israeli scientists have "cultivated a cannabis plant that doesn't get people stoned". The plant is also said not to increase appetite in users. The scientists "sought to neutralise the effect of the THC [the psychoactive component of the plant] and to increase the effect" of CBD or cannabidiol. Cannabis remains illegal under Israeli law however it is permitted when prescribed for medicinal purposes.

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## director's report

captured by the Commonwealth Poisons Standard, and to effectively outlaw the sale and possession under local state and territory legislation, of all products claiming to be "legal" alternatives to cannabis.

Hope you enjoy this issue of our E-Zine and many thanks to Clare, Peter, Morag and Paul who provide it, among their multiple demands, every month.

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## research publications

**Verrico, C.D., Liu, S., Bitler, E.J., Gu, H., Sampson, A.R., Bradberry, C.W., & Lewis, D.A.** (2012). Delay- and dose-dependent effects of  $\delta(9)$ -tetrahydrocannabinol administration on spatial and object working memory tasks in adolescent rhesus monkeys. *Neuropsychopharmacology* 37, 1357-1366.

**Verweij, K.J., Zietsch, B.P., Liu, J.Z., Medland, S.E., Lynskey, M.T., Madden, P.A., Agrawal, A., Montgomery, G.W., Heath, A.C., & Martin, N.G.** (2012). No association of candidate genes with cannabis use in a large sample of Australian twin families. *Addiction Biology* 17, 687-690.

## 2<sup>nd</sup> National Cannabis Conference



From Genetics to Practice

Brisbane Convention and Exhibition Centre  
Grey St, Brisbane, QLD, Australia

Wednesday 19 – Friday 21 September 2012

| Key Dates                      |                   |
|--------------------------------|-------------------|
| Call for abstracts opens       | 1 November 2011   |
| Call for abstracts closes      | 2 March 2012      |
| Registrations open             | 2 March 2012      |
| Notification of presentations  | 23–29 April 2012  |
| Early bird closes              | 17 August 2012    |
| Conference registrations close | 14 September 2012 |
| Workshops start                | 19 September 2012 |
| Conference starts              | 20 September 2012 |

[Click here to register online](#)

# Reduce Your Use: A self-guided online cannabis treatment program

Dr Sally Rooke

NCPIC has recently launched an Australian-first, fully self-guided online cannabis treatment, *Reduce Your Use: How to Break the Cannabis Habit*. The program is largely based on a face-to-face brief treatment previously found to be effective for problematic cannabis use. This adaptation incorporates interactive components from other existing online therapies, and is informed by the principles and techniques of cognitive behavioural therapy and motivational enhancement therapy. The website contains six core modules: (1) Feedback and Building Motivation; (2) Managing Smoking Urges and Withdrawal; (3) Changing Your Thinking; (4) Coping Strategies and Skill Enhancement; (5) Activities and Interpersonal Skills; and (6) Relapse Prevention and Lifestyle Changes.

Rather than being an impersonal mode of treatment, the therapy is highly personalised, containing several additional treatment options, individualised documentation for people using the website, and extensive personalised feedback. The program can be used in text or video mode.

Research findings supporting the effectiveness of *Reduce Your Use* were recently obtained in a randomised controlled trial. The study included 225 participants from Australia, New Zealand, the UK, and the US. Participants were randomly assigned to the intervention website or to a control condition involving online educational information on cannabis. Quantity and frequency of cannabis use, cannabis abuse symptoms, and cannabis dependence symptoms

were assessed prior to receiving treatment, and at six-week and three-month follow-up assessments. While significant improvement was evident in both groups, outcomes at the three-month follow-up assessment showed significantly fewer days of past-month cannabis use, as well as significantly lower levels of cannabis abuse and dependence, among the intervention group compared with the control group. Rates of past month abstinence and past month quantity of use also trended in favour of lower levels among the intervention group relative to controls. Participant feedback demonstrated generally high levels of satisfaction with *Reduce Your Use*.

The availability of an online treatment for cannabis use could serve to remove some of the barriers that frequently prevent people from receiving treatment. Currently, most evidence-based cannabis treatment services

require clients to have face-to-face interaction with a health professional, which can act as a deterrent from treatment-seeking, a problem that NPCIC aims to address through flexible online delivery via the *Reduce Your Use* intervention. These barriers to more traditional forms of treatment include stigma, difficulty in taking time off work or sourcing child-care in order to attend counselling sessions, as well as geographical isolation or transport issues for potential clients.

The website is freely accessible to anyone seeking assistance to cease or reduce their cannabis use. Those providing treatment to individuals who are experiencing problems with cannabis use also might find it helpful to refer their clients to the online program as an adjunct to treatment. The program can be accessed at [www.reduceyouruse.org.au](http://www.reduceyouruse.org.au)

## Reduce your use: How to break the cannabis habit



If you think your cannabis use is a problem for you, then this free online program may help you to cut back and even stop your use altogether.

We provide you with advice and support throughout the course of the program as it progresses over six weeks.

Take the first step to reducing your use today. Sign up now and get started immediately.



## ncpic contact details

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 NPCIC, its work and activities please contact Clare Chenoweth on (02) 9385 0218

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