ncpic e-zine
national cannabis prevention and information centre
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contents

what's new in cannabis?

2013 Aboriginal & Torres Strait Islander Music Competition Winner Announced!

The 2013 Aboriginal and Torres Strait Islander Music Competition received many creative and thoughtful entries from Aboriginal and Torres Strait Islander Australians.

Congratulations to Year 9 of Wadja Wadja High School from Woorabinda in Queensland, for winning our Aboriginal and Torres Strait Islander Music Competition with their song 'Yarndi or my Girlfriend'. The winners will receive $5000 and four will attend a workshop with Skinnyfish Music in Darwin.

Congratulations also to the runner-up entry by Carl Goodwin from Queensland. He will recieve a prize of $1000 for his fantastic song 'Ease the Pain'.

A CD with songs by the finalists will be available to order soon.

director's report

Professor Steve Allsop

A significant focus of NCPIC's work has been responding to cannabis related harm among Aboriginal and Torres Strait Islander communities. We have seen in these pages descriptions of important NCPIC activities and outputs in workforce development and resource dissemination, along with community engagement, that aim to address these communities' needs. This is important because, from the limited evidence we have about drug use among Aboriginal and Torres Strait Islander communities, it appears the prevalence of cannabis use, at least in some, has increased significantly and is estimated to be twice that of the non-Aboriginal population. This has been accompanied by a range of individual and community harms.

One NCPIC project has been coordinated by the National Drug Research Institute, as part of the NCPIC consortium. Consultations indicated that despite high levels of cannabis use and harm, many clinical services were simply unsure how to respond and sometimes, in the face of apparently competing concerns and limited resources, felt they could give little priority to the issue – as one clinician commented, the response is sometimes "it's only cannabis". The challenge for us was: how do we encourage those who work in Aboriginal health to recognise the important role that cannabis might play among presenting problems and, once it is recognised, what can they do?

Critically important to an effective approach was engagement with Aboriginal and Torres Strait Islander leaders and service providers. Our first step was to ensure the team leaders included Associate Professor Ted Wilkes, an NDRI colleague and Aboriginal leader with almost 20 years' experience as CEO of an Aboriginal community controlled health service. Dr Julia Butt, a clinical psychologist with experience working with Aboriginal communities, led the implementation of the project. We also engaged Aboriginal staff to work as part of the project team including the current Chair of NCPIC's National Aboriginal and Torres Strait Islander Reference Group, Mr Maurice Shipp. We worked closely with Aboriginal primary health care providers, both metropolitan and remote, and the National Aboriginal Community Controlled Health Organisation, to help ensure our approach was culturally secure and practical. Initial workshops held with primary health care providers helped us identify issues of concern to health services and the approach best suited to the diverse range of service settings. It was agreed, on the basis of a great idea from one of the team, that 'could it be the gunja?' was an important starting point for our program and the ensuing clinical approach. The process consisted of developing easy to apply (in a busy practice) screening and brief interventions, which included a focus on motivational enhancement, that a range of clinicians could employ in diverse settings. The project used staff consultation and whole-of-workplace strategies to ensure staff felt comfortable and motivated to try a new task in the context of management and administrative support. A key success was the inclusion of fields, assessing cannabis use, as part of routine health

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commentary on research

Nabiximols as an Agonist Replacement Therapy During Cannabis Withdrawal: A Randomized Clinical Trial – A Comment on Allsop and colleagues (2014)

Peter Gates

Cannabis withdrawal has very recently been recognised by the American Psychiatry Association in the fifth edition of the Diagnostic and Statistical Manual. This decision was based on research identifying that the majority of frequent cannabis users who abstain from use report a withdrawal syndrome; most typically characterised by irritability, anger, sleep-related difficulties and changes in mood. These symptoms are recognised to cause recent abstainers considerable distress and can lead to a relapse in use. As such, responding to cannabis withdrawal is among the primary concerns shared by cannabis treatment providers wishing to help their client prevent relapse.

Surprisingly, there are no pharmacotherapies that have been approved for use in assisting to temper cannabis withdrawal. A handful of medications have been evaluated to treat the symptoms of withdrawal and/or attenuating the perception of reward from using cannabis. These evaluations represent early investigations and typically involved recruitment of small sample sizes (less than 30 participants). In previous reviews of these pharmacotherapy trials, only synthetic analogues of THC (the main psychoactive cannabinoid) have been described to show promise. In addition, a very recent trial of cannabidiol (CBD; a cannabinoid with anxiolytic effects) has also shown promise in attenuating cannabis withdrawal (Crippa and colleagues, 2013). Following from the success of these trials of individual cannabinoids (and the success of similar agonist substitution treatments for other drugs such as using methadone to treat heroin dependence), Allsop and colleagues (2014) conducted a trial of nabiximols – an oral spray containing a roughly equal combination of THC and CBD – to treat cannabis withdrawal and increase treatment retention during an inpatient detoxification.

This was a two-site (Sydney and Sydney Eye Hospital and Belmont Hospital; NSW), randomized, double-blind, inpatient trial involving 6 days of nabiximols or placebo treatment (and 3 days washout). Participants were dependent cannabis users seeking inpatient detoxification treatment (aged a mean of 35 years, 76% male). A total of 24 participants received standard care along with a specially designed self-help book and placebo while 27 participants received the same and nabiximols (up to a maximum dose of 86.4mg of THC and 80mg CBD per day).

Following some rigorous assessment procedures conducted on each day of treatment and at 28 day follow-up, these authors found that nabiximols, relative to placebo, significantly reduced withdrawal severity (66% reduction from baseline compared to 52%) and improved the withdrawal timeline (withdrawal peaked at a mean of 2.3 days compared to 3.0 days and began to reduce below baseline at a mean of 3.1 days compared to 4.9 days). Upon close analysis it was found that nabiximol was particularly effective in treating feelings of craving, irritability/anger, and depression. In contrast, the nabiximols were not significantly more effective than placebo in retaining participants in the detoxification treatment beyond the period of medication use (day 9) or in reducing cannabis use frequency, dependence or related problems (assessed at follow-up).

Given that combined motivational enhancement therapy and cognitive behavioural therapies (with and without contingency management) have shown efficacy in assisting with cannabis use reductions, it follows that such treatments may be enhanced further when combined with pharmacotherapy. Given these reported successes of nabiximols in treating cannabis withdrawal, we are perhaps one step closer. Importantly, the authors identified that nabiximols should now be evaluated in a larger sample of individuals with varied cannabis use profiles (less frequent use as well as frequent use) as well as in a sample seeking outpatient treatment (the most frequently sought treatment for cannabis use).

Allsop, D.J., Copeland, J., Lintzeris, N., Dunlop, A.J., Montebello, M., Sadler, C., Rivas, G.R., Holland, R.M., Muhleisen, P., Norberg, M.M., Booth, J., & McGregor I.S. (2014). Nabiximols as an Agonist Replacement Therapy During Cannabis Withdrawal: A Randomized Clinical Trial. *JAMA Psychiatry*.

Crippa, J.A., Hallak, J.E., & Machado-de-Sousa, J.P. (2013). Cannabidiol for the treatment of cannabis withdrawal syndrome: a case report. *Journal of Clinical Pharmacy &Therapeutics 38*, 162-164.

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director's report

screening tools for patient reports. It was also considered important to develop health information resources about cannabis, for community members, to increase the expectation that assessment of cannabis use and related harm would be part of general clinical service provision. After trials in remote and metropolitan services, we are now finalising the accompanying resources (lesson plans; training DVDs; community information) for communities and service providers, along with a plan for broad dissemination – including website dissemination.

The project is important because it addresses significant health and social challenges and demonstrates NDRI and NCPIC are responding by working in close partnership with Aboriginal people and communities – essential elements of an effective approach to reduce cannabis-related harm among Aboriginal and Torres Strait Islander communities.

media stories this issue

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 Matt Tooth at m.tooth@unsw.edu.au

quitting cannabis improves psychosis treatment adherence

Medical News: December 13, 2013

New research coming out of Spain's Hospital Santiago has found that quitting cannabis helps psychosis patients adhere to medication in the long-term. This is of particular significance to patients who are admitted to hospital involuntarily. According to Ana González-Pinto, the "results suggest that cannabis use and its withdrawal could be a mediator of adherence in FEP patients."

synthetic drug use down among US teens

Echo Net Daily: December 23, 2013

Use of synthetic cannabis has declined among American teenagers according to the US Government's survey on drug use. There has been a 3 per cent reduction in reported use among high school students, from 11 to 8 per cent who have experimented with synthetic cannabis over the past year.

NSW drivers turning to drugs: five times more people being caught than those under influence of alcohol, new police statistics show

Daily Telegraph: January 6, 2014

NSW Police have responded to new figures showing drivers are five-times more likely to test positive for drugs thanalcohol. Police are increasing roadside testing, and for illicit drug use including cannabis and methamphetamine. "There is a perception, particularly among young people, that you can't drink and drive but you can take illegal substances and get away with it – well they are wrong,'' said Assistant Commissioner John Hartley of highway patrol.

cannabis during pregnancy results in defective development of fetal nerve cells

News Medical: January 28, 2014

The number of children suffering from maternal drug exposure is increasing according to a recent European study published in *EMBO Journal*. Cannabis is one of the most frequently used illicit drugs by pregnant women.

The study found consuming cannabis during pregnancy resulted in "defective development of nerve cells of the cerebral cortex, the part of the brain that orchestrates higher cognitive functions and drives memory formation". Though not all children who have been exposed to cannabis will suffer immediate and obvious deficits, leader of the study, Professor Tibor Harkany warned that relatively subtle damage can significantly increase the risk of delayed neuropsychiatric diseases.

research publications

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

Lagerberg, T.V., Kvitland, L.R., Aminoff, S.R., Aas, M., Ringen, P.A., Andreassen, O.A., & Melle, I. (2014). Indications of a dose-response relationship between cannabis use and age at onset in bipolar disorder. *Psychiatry Research 215,* 101-4.

Allsop, D.J., Copeland, J., Lintzeris, N., Dunlop, A.J., Montebello, M., Sadler, C., Rivas, G.R., Holland, R.M., Muhleisen, P., Norberg, M.M., Booth, J., & McGregor, I.S. (2014). Nabiximols as an Agonist Replacement Therapy During Cannabis Withdrawal: A Randomized Clinical Trial. *JAMA Psychiatry.*

Vallée, M., Vitiello, S., Bellocchio, L., Hébert-Chatelain, E., Monlezun, S., Martin-Garcia, E., Kasanetz, F., Baillie, G.L., Panin, F., Cathala, A., Roullot-Lacarrière, V., Fabre, S., Hurst, D.P., Lynch, D.L., Shore, D.M., Deroche-Gamonet, V., Spampinato, U., Revest, J.M., Maldonado, R., Reggio, P.H., Ross, R.A., Marsicano, G., & Piazza, P.V. (2014). Pregnenolone can protect the brain from cannabis intoxication. *Science 343, 94-8.*

Weinstein, A.M., Miller, H., Bluvstein, I., Rapoport, E., Schreiber, S., Bar-Hamburger, R., & Bloch, M. (2014). Treatment of cannabis dependence using escitalopram in combination with cognitive-behavior therapy: a double-blind placebo-controlled study. *American Journal of Drug and Alcohol Abuse 1*, 16-22.

Peters, E.N., Schwartz, R.P., Wang, S., O'Grady, K.E., & Blanco, C. (2014). Psychiatric, psychosocial, and physical health correlates of co-occurring cannabis use disorders and nicotine dependence. *Drug and Alcohol Dependence 134*, 228-34.

Sánchez-Blázquez, P., Rodríguez-Muñoz, M., & Garzón, J. (2014). The cannabinoid receptor 1 associates with NMDA receptors to produce glutamatergic hypofunction: implications in psychosis and schizophrenia. *Frontiers in Pharmacology 4,* 169-179.

Ecker, A.H. & Buckner, J.D. (2014). Cannabis use behaviors and social anxiety: the roles of perceived descriptive and injunctive social norms. *Journal of Studies on Alcohol and Drugs 75*, 74-82.

Proal, A.C., Fleming, J., Galvez-Buccollini, J.A., & Delisi, L.E. (2014). A controlled family study of cannabis users with and without psychosis. *Schizophrenia Research 152,* 283-8.

Kuepper, R., Oorschot, M., Myin-Germeys, I., Smits, M., van Os, J., & Henquet, C. (2013). Is psychotic disorder associated with increased levels of craving for cannabis? An Experience Sampling study. *Acta Psychiatrica Scandinavica 128,* 448-56.

Cousijn, J., Watson, P., Koenders, L., Vingerhoets, W.A., Goudriaan, A.E., & Wiers, R.W. (2013). Cannabis dependence, cognitive control and attentional bias for cannabis words. *Addictive Behaviours 38*, 2825-2832.

Hemphill, S.A. (2013). Commentary on Heron et al. (2013): Findings on associations between conduct problem

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we want your feedback

NCPIC is currently reviewing the way we put together our e-Zine, and we want to hear from you! What do you like or dislike? What would you like to see more of? How would you prefer to access our e-Zine? Click through to our online survey here and tell us what you think!

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research publications

trajectories, early risk factors and adolescent cannabis use – how do they fit with existing theories? *Addiction 108,* 2139-2140.

Heron, J., Barker, E.D., Joinson, C., Lewis, G., Hickman, M., Munafò, M., & Macleod, J. (2013). Childhood conduct disorder trajectories, prior risk factors and cannabis use at age 16: birth cohort study. *Addiction 108,* 2129-2138.

Fabritius, M., Chtioui, H., Battistella, G., Annoni, J.M., Dao, K., Favrat, B., Fornari, E., Lauer, E., Maeder, P., & Giroud, C. (2013). Comparison of cannabinoid concentrations in oral fluid and whole blood between occasional and regular cannabis smokers prior to and after smoking a cannabis joint. *Analytical and Bioanalytical Chemistry 405,* 9791-9803.

van Wel, J.H., Kuypers, K.P., Theunissen, E.L., Toennes, S.W., Spronk, D.B., Verkes, R.J., & Ramaekers, J.G. (2013). Single doses of THC and cocaine decrease proficiency of impulse control in heavy cannabis users. *British Journal of Pharmacology 170,* 1410-1420.

Porter, B.E. & Jacobson, C. (2013). Report of a parent survey of cannabidiol-enriched cannabis use in pediatric treatment-resistant epilepsy. *Epilepsy & Behaviour 29*, 574-577.

Davis, G.P., Compton, M.T., Wang, S., Levin, F.R., & Blanco, C. (2013). Association between cannabis use, psychosis, and schizotypal personality disorder: findings from the National Epidemiologic Survey on Alcohol and Related Conditions. *Schizophrenia Research 151*, 197-202.

Hjorthøj, C.R., Orlovska, S., Fohlmann, A., & Nordentoft, M. (2013). Psychiatric treatment following participation in the CapOpus randomized trial for patients with comorbid cannabis use disorder and psychosis. *Schizophrenia Research 151*, 191-196.

ncpic contact details

NCPIC is a consortium led by the National Drug and Alcohol Research Centre and is an Australian Government Department of Health initiative

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