

## Legalising Cannabis – an Unhealthy Choice

Josephine H. Baxter, Dr Gregory Pike, Dr Stuart Reece, Drug Free Australia

May, 2013

---

Australia already has lenient cannabis laws, where decriminalisation and cautions have been in place since the 80's<sup>1</sup>. Australia also has one of the highest *per capita* cannabis usage rates in the world.<sup>2</sup> Any further relaxation would exacerbate the situation and burden future generations with increased harm to mental and physical health.

The harm caused by cannabis has been widely documented.

*'There is growing evidence to indicate that the risks are significant, particularly with respect to mental health, where the results may be psychosis, depression, anxiety, memory deficits, impaired learning and motivation. These harms are of particular relevance for the developing brain and so all that can be done to protect young people from the harm of smoking cannabis should be a priority. Other harms include risks associated with immediate effects, for example due to impact upon motor control and decision-making, changes in perception and anxiety and possibly blacking out. Long term harms may also include risk of certain cancers and other respiratory diseases.'*<sup>3</sup>

The reality is that cannabis is a complex substance that is increasingly being proven dangerous.

*'When smoked, there are over 1,500 toxic chemicals that have been identified, including carbon monoxide, carcinogens and irritants. These all greatly affect the body's respiratory and cardiovascular systems in a similar manner to the known effects of smoking tobacco. Moir et al's 2007 study of marijuana smoke found ammonia at levels up to 20-fold greater than that found in tobacco, hydrogen cyanide at concentrations 3-5 times those in tobacco smoke, and confirmed the presence of known carcinogens and other chemicals implicated in respiratory diseases.'*<sup>4</sup>

Reece *et al* point out that *'The following facts are not controversial in that they are settled in the epidemiological and scientific literature'*:

- *The long term smoking of cannabis is associated with numerous respiratory complaints and psychiatric disorders.*

---

<sup>1</sup> NCPIC Fact Sheet - <http://ncpic.org.au/ncpic/publications/factsheets/article/cannabis-and-the-law>

<sup>2</sup> W. Hall, L. Degenhardt *'Highest cannabis users are Australians'* <http://www.uq.edu.au/news/?article=19898>.

<sup>3</sup> Dr Gregory K Pike – Medical Marijuana – a Dopey idea? May 2013 - [www.drugfree.org.au](http://www.drugfree.org.au)

<sup>4</sup> Reece, Baxter & Baker, The Use of Cannabis for Medical Purposes, May 2013 - [www.globaldrugpolicy.org](http://www.globaldrugpolicy.org)

- *Since synaptic function and traffic intensity rates are coupled to synaptic structure and neuronal network architecture, cannabis use in key developmental periods is believed to alter brain microstructure and network function accounting for the various neuropsychiatric deficits, especially when cannabis exposure occurs in key developmental periods such as adolescence and also development in utero .*
- *Cannabis is associated with ‘driving under the influence of cannabis’ (DUI) and high rates of motor vehicle accidents and fatalities.*
- *Adolescent cannabis use has been shown repeatedly by long-term longitudinal human studies to be associated with a gateway effect, increasing the use of other hard drugs in later life; and of severely impairing the long-term life trajectory, reducing the attainment of normal life goals such as marriage, and long-term productive employment.*<sup>5</sup>

Recent research from Auckland University, New Zealand, indicates that cannabis use may also more than double the risk of stroke in young adults.<sup>6</sup>

The strong link between cannabis and mental health has been well documented and includes research into the onset of psychosis and schizophrenia, as well as other mood disorders including depression, bi-polar disorder and amotivational syndrome. Research has also explored the links with suicide, especially in young people. For instance, Professor Jenny Williams states that *‘the regular use of cannabis can trigger suicidal thoughts in some users, particularly young men, according to the results of a 30-year study that experts say strengthens the need for stronger warnings about the drug, particularly for adolescents and young adults’.*<sup>7</sup>

Legalising cannabis will further increase use. Even though rates of use in Australia are high compared to the rest of the world, they are still far lower than for legalised drugs. Use in the past 12 months was as follows:

- *Alcohol - 81 %*
- *Tobacco – 18%*
- *Cannabis – 10% (compared to worldwide average of 5%).*<sup>8</sup>

<sup>5</sup> AS Reece MD ‘*Chronic toxicology of cannabis*’ May 2009. <http://www.truecompassion.org/PDFS/Marijuana%20toxicity%20and%20potency/Chronic%20Toxicology%20of%20cannabis.pdf>

<sup>6</sup> *Cannabis now a stroke risk* Professor Alan Barber - American Stroke Association's International Stroke Conference 2013, Honolulu. <http://www.nzdoctor.co.nz/un-doctored/2013/february-2013/05/cannabis-linked-to-higher-stroke-risk-in-young-adults.aspx>

<sup>7</sup> Jenny Williams: “*Cannabis use can lead to suicidal thoughts*” 2<sup>nd</sup> National Cannabis Conference, held in Brisbane from 19-21 September 2012. <http://benews.unimelb.edu.au/2012/cannabis-use-can-lead-to-suicidal-thoughts>

<sup>8</sup> UN World Drug Report 2010

Daily use of cannabis is 1.5% compared with daily tobacco use of 15.1%, further highlighting the disparity between use of a legal drug and an illegal one.<sup>9</sup>

Prohibitive laws provide effective deterrence, making people think twice before using such a harmful substance. A Department of Criminology study in 2001 found that the illegal status of cannabis deters 29% of young people from trying it.<sup>10</sup>

The following are examples of increases in use as drug policies become more lenient:

- **Australia:** SA (1987) and ACT (1993) decriminalised cannabis – use went from negligible to almost double that for NSW and Victoria.<sup>11</sup> ‘The adjusted prevalence rate in SA for ever having tried cannabis rose from 26% to 38% between 1988 and 1993. However, the adjusted rate of weekly cannabis use more than doubled from 3% in 1988 to 7% in 1991’.<sup>12</sup>
- **United States:** Alaska legalised cannabis in 1975. By 1988, 72% in year 12 had tried it and it was recriminalized in 1992; California decriminalised cannabis in 1975 and in just 10 months use increased 15% amongst 18-29 year olds. Oregon decriminalised cannabis in 1973 – use was up 12 % after 12 months amongst 18-29 year olds.<sup>13</sup>
- **United Kingdom:** depenalising the possession of small quantities of cannabis in the London borough of Lambeth led to significant longer term impacts on hospital admissions related to the use of hard drugs. Admission rates for men increased by between 40% and 100% of their pre-policy baseline levels.<sup>14</sup>
- **Portugal:** decriminalised cannabis in 2001. The latest ESPAD statistics show an increase in use amongst youth<sup>15</sup>

Legalising cannabis for medical purposes is associated with the potential for increased abuse. For example, among youths aged 12-17, marijuana usage rates were higher in US states with medical marijuana laws (8.6%) compared with those without such laws (6.9%).<sup>16</sup>

A similar study of people age 18 and older, published in the journal ‘*Drug and Alcohol Dependence*’, found the odds of marijuana abuse or dependence were almost twice as high

---

<sup>9</sup> Australian Government, Australian Institute of Health and Welfare 2010 National Drug Strategy Household Survey Report, Drug Statistics Series Number 25, July 2011, Table 12.2, p157

<sup>10</sup> NSW Dept of Criminology Report, 2001

<sup>11</sup> National Drug Strategy, Monograph Series No 31, Marijuana in Australia: Patterns and Attitudes (1997) p 53 <http://www.health.gov.au/internet/main/publishing.nsf/Content/phd-drugs-mono31>

<sup>12</sup> Donnelly *et al.*, The effects of partial decriminalisation on cannabis use in South Australia, 1985 to 1993, *Aust. J. Public Health* 19(3): 281-287, 1995

<sup>13</sup> G Christian: The Case Against Drug Legalisation, July 2012

[http://www.drugfree.org.au/fileadmin/library/Policies\\_Legislation\\_and\\_law/TheCaseAgainstDrugLegalisaion-DFA-2012.pdf](http://www.drugfree.org.au/fileadmin/library/Policies_Legislation_and_law/TheCaseAgainstDrugLegalisaion-DFA-2012.pdf)

<sup>14</sup> Policing Cannabis and Drug Related Hospital Admissions: Elaine Kelly and Imran Rasul, October 2012

<sup>15</sup> ESPAD report 2012 pages 134 and 138

[http://www.espad.org/Uploads/ESPAD\\_reports/2011/The\\_2011\\_ESPAD\\_Report\\_FULL\\_2012\\_10\\_29.pdf](http://www.espad.org/Uploads/ESPAD_reports/2011/The_2011_ESPAD_Report_FULL_2012_10_29.pdf)

<sup>16</sup> Annals of epidemiology sept 2011 – need full reference

in states with medical marijuana laws, compared with those without the laws.<sup>17</sup> Such laws may create the perception that marijuana for any purpose is safe.

Colorado psychiatrist Christian Thurstone describes the mess created by medical marijuana as follows:

*In the absence of credible data, this debate is being dominated by bad science and misinformation from people interested in using medical marijuana as a step to legalization for recreational use. Bypassing the FDA's well-established approval process has created a mess that especially affects children and adolescents. Young people, who are clearly being targeted with medical marijuana advertising and diversion, are most vulnerable to developing marijuana addiction and suffering from its lasting effects.*<sup>18</sup>

Drug Free Australia supports a balanced and humane illicit drug policy that aims at primary prevention and recovery-based treatment. This can never be achieved if harmful drugs such as cannabis are condoned through legalisation. This is particularly concerning if cannabis were to be made legal for 'recreational' purposes. We already have escalating health issues with the legal drugs tobacco and alcohol. Legalising cannabis will add to this and open a Pandora's box of additional mental and physical health problems.

The maxim that 'availability and acceptability increase consumption' holds true here. Legalisation (including decriminalisation) will prove the maxim true. Young people in particular will perceive cannabis as harmless, use will increase, and with it increased damage to the physical and mental health of the whole community.

---

<sup>17</sup> Drug and Alcohol Dependence ? Need Full reference – is this the right one? - Thurstone C, Lieberman SA & Schmiege SJ, Medical marijuana diversion and associated problems in adolescent substance treatment. *Drug Alcohol Dependence* 118(2-3):489-492, 2011

<sup>18</sup> [http://nrfocus.org/latest\\_topics/is-marijuana-medicine/](http://nrfocus.org/latest_topics/is-marijuana-medicine/)