

DOI: 10.21767/2254-9137.100012

Where do we Stand on Using Cannabis for Medical Purposes in Australia and How Should Drugs be Regulated in the Community

Penington, DG

University of Melbourne, Australia

Corresponding author: David G Penington

✉ dgp@unimelb.edu.au

FRCP, FRACP, Emeritus Professor, University of Melbourne, Australia.

Received: September 24, 2015; **Accepted:** November 10, 2015; **Published:** November 13, 2015

Short Commentary

Processes are underway in two Australian States to introduce Medicinal Cannabis programs suitable for certain categories of people in real need. Because of the long held 'illegal' status and common emotionally based fears of illicit drugs, there has not been sufficient study in terms of formal clinical trials with cannabis in many areas, but these issues can be tackled if the necessary legal framework permits.

Commonwealth legislation based on the international Conventions is a potential obstacle, but the 1961 Convention, including the 1972 protocol, specifically provides that the drugs may be produced and used '*exclusively for medical and scientific purposes*' outside the restrictions of the Convention. The 1988 Convention against trafficking is also enshrined in Commonwealth legislation. Whilst growth of poppies and production of morphine, thebaine and codeine is permitted under Australian law in the light of INCB approvals and oversights, minor changes to the Commonwealth legislation, or granting of exemptions, may be required to permit progress bringing regulated cannabis preparations for medical purposes into line with medicinal opioid production and use.

Medicinal cannabis programs are now established in Netherlands, Italy, UK, Czech Republic, Israel, and Canada and in nearly 30 US States, some with restriction on the type of cannabis permitted. The 2015 World Drug Report of the UN Drugs and Crime Commission raises no problems, or even makes mention of these, but for a short section on Denver where the reality now is legalization and commercialization of cannabis, rather than 'medicinal cannabis'. Australia lags far behind many other signatories to the Convention in this regard, so that there must be no fundamental problem to proceeding to facilitate progress in an appropriately regulated manner covering controlled growth of plants, supervised manufacturing of products, regulated distribution for agreed purposes. It would be the first venture into government regulated supply of cannabis in Australia.

The National Cannabis Prevention and Information Centre (NCPIC) was established in Sydney in 2008 following a decision in 2006 near the end of the Howard Government's term with a budget of \$14m over 4 years. It was within Howard's framework

of being 'Tough on Drugs'. Wikipedia gives an account of its establishment and mission:

"The National Cannabis Prevention and Information Centre was established in response to growing community concerns about cannabis use, particularly amongst young people. ...The NCPIC mission is to reduce the use of cannabis in Australia by preventing uptake and providing the community with evidence-based information and interventions. But not necessarily factual evidence."

Now in 2015 we must question what has been achieved. The use of cannabis amongst young people has fluctuated somewhat year on year, but the figure for percentage of users in all age groups, has not changed since NCPIC was established as shown in the Australian Institute for Health and Welfare National Household Surveys.

In 2013, it was estimated that about 6.6 million (or 35%) people aged 14 or older had used cannabis in their lifetime and about 1.9 million (or 10.2%) had used cannabis in the previous 12 months. Around 1 in 5 (21%) people aged 14 or older had been offered or had the opportunity to use cannabis in the previous 12 months. 1 in 10 (10.2%) reported that they did use cannabis in that time. About 1 in 20 Australians (5.3%) had used in the month prior to the survey and 3.5% had used in the previous week [1]. These figures are almost identical with those of 2008! Government will inevitably question what is the return on investment comes from NCPIC! It is time to examine the factual evidence to which their 'Mission' is not necessarily bound.

The War on Drugs is Failing

NCPIC is not alone in failing to reduce consumption of illicit drugs. For years thoughtful people have asserted that the War on Drugs, which Richard Nixon crafted as a political re-election strategy in 1971, has consistently failed, despite huge financial investment in it by US governments ever since. As the Nobel Prize winning economist Milton Freedman repeatedly pointed out many years ago it cannot work. Market forces will always overcome legislative blocks where there is a clear demand and a ready supply [2]. Few recognize the huge penalties to society in corruption and crime associated with trafficking. George Schultz, former Secretary of State under Regan stated in 1990 “that the war on drugs is doomed to fail... that the conceptual base of the current program is flawed... that we need at least to consider and examine forms of controlled legalization of drugs” [3]. The death knell for the war on drugs was sounded over a quarter of a century ago and yet we are still struggling to adopt rational and evidence based drug policy.

We must look objectively at the evidence as to what is happening elsewhere in there world. In particular I draw your attention to the successful changes in Portugal - first brought to the attention of the international legal profession after a visit to assess it by the Chief Justice of Queensland Supreme Court, The Hon Paul de Jersey, addressing an international conference on Criminal Law in October 2010 [4]. He reviewed the Portugal situation and outcomes, urging all to consider moving in the same direction, rather than being bound by preoccupation that such policy will inevitably lead to increase use of drugs. The positive outcomes in Portugal are confirmed [5,6].

In 1984, Australia adopted a strategy on illicit drugs in which a new and very important plank was ‘harm reduction’ with respect to illicit drugs, yet the common belief in so many quarters, backed with almost religious fervor, is to expect police to solve the problem with more arrests and imprisonment - if necessary with building more and more jails. Drugs are seen as ‘evil’ as they are associated with crime, but of course that association is because they are ‘illegal’. Use of drugs in Australia has not diminished, indeed has steadily increased over 40yrs and our death rate from drug overdose, despite the policy of harm reduction is very concerning. Figures from a 2010 UN World Drug Report [7] (with similar figures, where provided, in the following years) show deaths for overdose per 100,000 population between the ages of 16 and 64 (Table 1).

Table 1 Deaths for overdose per 100,000 population between the ages of 16 and 64.

Country	Number of Deaths
USA	182.4
Canada	93.3
Australia	118.9
Germany	26.6
Netherlands	11.6
Spain	49.7
Sweden	69.2
Finland	68.9
Portugal	1

What has Portugal Achieved Since 2001 and What Can we Learn?

Whilst Portugal’s figures rise in some years, but well below 10. The striking feature of their system is decriminalization of possession of minor quantities for personal use. This has been associated with improved outcomes. The system entailed the establishment of a Commission to Dissuade Addiction (CDT, using the Portuguese words) to tackle problem use on a case by case basis, one in every single Department of the country. These have power to apply administrative sanctions and penalties outside the court system - including obligatory requirements for treatment and rehabilitation. Involvement of local communities is a key feature in dealing with it as a public health rather than a legal issue. This pattern with country-wide health-based programs outside the courts has been approved by INCB as a basis for removing criminal penalties for possession and personal use of illicit drugs, whilst drug trafficking remains with the police and the courts.

Lisbon is a major port for entry of drugs from the Americas and Africa to Europe. Portugal makes many seizures of drugs each year, but its own use of drugs is now well below that of comparable European countries. Figures from the European Modelling Commission on Drugs (EMCDDA) for 2015 show cannabis use in percentage terms as percentage of population aged 15-65 (Table 2).

The 2015 European Report shows further and significant reduction in life-time use of all illicit drugs as a percentage of population between 2007 and 2012 from 12 to 9.5 and of recent use down from 3.7 to 2.7%. Decriminalization of possession and use of all illicit drugs has been followed by reduction in use. Police and customs activities to try to reduce supply continue. The extent of what is termed ‘problem use’ with IV drug injection has reduced substantially since 1984, as has associated transmission of HIV. The key is local activity to control problem use with effective treatment and rehabilitation in a community setting, with expansion of treatment and rehabilitation facilities [8].

Hughes, as a staff member of the parent body of NCPIC, which opposes decriminalization, has asserted that these findings are not relevant for Australia, as the ‘diversion’ programs in Australia mean that “there is de facto decriminalization” [9]. This is not the case, however, as shown by Australian crime statistics. NSW figures for crime associated with Possession and Use of Cannabis for the 12 months to March 2015 are 24,994, up 14.5% on the previous period [10]. In Victoria there were 7,260 recorded offences for possession and use of cannabis in 2013/14 [11].

A careful epidemiological study of the effect of programs for medicinal cannabis on incidence of cannabis use in your people, comparing US States with and without medicinal cannabis legislation over 10 years has shown no effect of these programs on rate of use by young persons [12]. Medicinal cannabis relates to a very different age group.

Table 2 Cannabis use (as per European Modeling Commission on Drugs (EMCDDA) for 2015).

	Lifetime use	Last Month use
Portugal	9.4	5.1
Spain	30.4	17
Italy	21.7	8
Germany	23.1	11.1
Netherlands	25.7	13.7
Sweden	-	17
Great Britain	24.9	11.2

What is Emerging about the Link of Cannabis with Psychosis?

Important studies of high relevance to medicinal cannabis are those from the Maudsley/Kings College research group headed by Sir Robin Murray FRS. In 2009, they had shown a significant link between rising use of higher-potency cannabis in London and first episode of psychosis [13]. A study reported in 2015, however, found this was not true for all cannabis. When users of the sinsemilla type cannabis with high THC content (as universally used in Australia) were compared with the large number of users of 'hash' type cannabis with CBA content similar or greater than THC, and a large control group, there was no association with first onset psychosis in users of the 'hash' cannabis [14]. CBD has been shown to antagonize the cognitive impairment and psychotogenic effects associated with THC [15].

Clearly any medical cannabis used in Australia must be required to have adequate concentration of CBD, together with limited concentration of THC. The widespread fears of precipitation of psychosis will be no longer be relevant. Now that fears about association with schizophrenia can be put to one side, the legal arguments relating to the Commonwealth laws and the international Conventions are the next issue to be resolved.

As noted above, it is vitally important that all medicinal cannabis be assured to have a content of CBD at least equivalent to that of TCA. Cannabis rich in CBD has been reported to offer relief from juvenile epilepsy such as Dravet Syndrome and should be primarily CBD [16,17]. A formal trial of the CBD -rich preparation

Epidiolex is currently underway under oversight by the US FDA and European authorities [18].

There is, of course, the remaining matter of the possibility a different approach to recreational use of cannabis in the longer term, given that the current prohibition has failed to curb the use of cannabis in Australia. Use by young people undoubtedly has serious consequences for educational progress and more seriously, has long term consequences to development of the fore-brain [19,20] with likely life-long sequelae [21]. Perhaps cannabis of the type now envisaged for medicinal use would not have these consequences.

Where to with Regulated Supply of a Drug as Envisaged by George Schultz?

The Global Commission on Drug Policy, which includes many former and several current heads of State and the former Secretary General of the UN has urged that '...Regulation of drugs should be pursued... different models of regulation can be applied for different drugs. In this way, regulation can reduce social and health harms and disempower organized crime' [22]. Cannabis is the world's most widely used illicit drug, and the only one which does not directly cause death by overdose. It is also less addictive than alcohol, barbiturates and benzodiazepines [23]. The Commissions against Addiction (CDTs), in every Department of Portugal, see large numbers of cannabis users with few recurring problems following counselling. Regulated supply of a 'safe' form of cannabis with balanced CBD and THC for recreational use might also need to be considered in due course as a public health issue, as there is no way we can control illicit drugs to ensure they are 'safe'.

We might explore a model somewhat similar to that of Portugal, to tackle 'problem use' of any illicit drugs, with local community based bodies, linked with community policing using the Police Diversion Powers and local medical and health expertise, and supporting families in a community based effort. We might achieve much more in reducing the damage caused by drugs, as Portugal has achieved.

References

- 1 National Drug Strategy Household Survey detailed report (2013).
- 2 Friedman M (1991) 'The war we are losing'. In: Krauss MB, Lazear EP (eds) *Searching for Alternatives: Drug-Control Policy in the United States*, Hoover Institutional Press, Stanford, CA. pp. 52-73.
- 3 Cited by Knightley P (1999) War on drugs lost to market forces. *The Australian March* 6-7, pp.1 and 6.
- 4 The Hon Paul de Jersey (2010) Address to 12th International Criminal Law Congress available from Queensland Supreme Court Library.
- 5 Hughes C, Stevens A (2010) What can we learn from the Portuguese decriminalization of illicit drugs? *Brit J Criminol* 50: 999-1022.
- 6 Stevens A (2012) Drug decriminalisation in Portugal: setting the record straight 'Portuguese drug policy shows that decriminalisation can work, but only alongside improvements in health and social policies', *LSE European Politics and Policy Blog*, 10/12/12.
- 7 World Drug Report (2010).
- 8 ECDDA Report Portugal (2015).
- 9 Hughes C (2015) Presentation to NSW Bar Association 29 May.
- 10 www.bocsar.nsw.gov.au/Documents/RCS-Quarterly/NSW_Recorded_Crime_March_2015.pdf.
- 11 www.crimestatistics.vic.gov.au/home/crime+statistics/year+ending+31+march+2015/recorded+offences.
- 12 Hasin D S, Wall M, Keyes K M (2015) Medical marijuana laws and adolescent marijuana use in the USA from 1991 to 2014: results from annual, repeated cross-sectional surveys. *Lancet Psychiatry* 2: 601-608.
- 13 Di Forti M, Morgan C, Dazzan P (2009) High potency cannabis and the risk of psychosis *Brit J Psychiatry* 195: 488-91.
- 14 Di Forti M, Marconi A, Carra E (2015) Proportion of patients in South London with first episode psychosis attributable to use of high potency cannabis: a case controlled study *Lancet Psychiatry* 2: 233-8.
- 15 Murray MR, Morrison PD, Henquet C (2008) Cannabis, the mind and society: the 'hash' realities *Nat. Rev. Neurosci.* 8: 885-895.
- 16 Porter BE, Jacobson C (2013) Report of parent survey of cannabidiol-enriched cannabis use in pediatric treatment-resistant epilepsy. *Epilepsy & Behaviour* 29: 574-577.
- 17 Hussein SA, Zhou R, Jacobson C (2015) Perceived efficacy of cannabidiol-enriched extracts for treatment of pediatric epilepsy: a potential role for infantile spasms and Lennox-Gastaut syndrome *J Epilepsy Behav*, 47: 138-41.
- 18 www.gwpharma.co.uk/epidiolex.
- 19 Yucel M, Solowij N, Repondek C (2008) Regional brain abnormalities associated with long-term heavy cannabis use *Arch. Gen. Psychiatry* 65: 694-701.
- 20 Lorenzetti V, Solowij N, Fornito A, Lubman D I, Yucel M et al. (2014) The association between regular cannabis exposure and alterations of human brain morphology: an updated review of the literature *Current Pharmaceutical Design* 20: 2138-2167.
- 21 Silins E, Horwood LJ, Patton G (2014) Young adult sequelae of adolescent cannabis use: an integrative analysis *Lancet Psychiatry* 1: 286-293.
- 22 www.gcdpsummary2014.com and secretariat@globalcommission-ondrugs.org.
- 23 Nutt D, King LA, Saulsbury W (2007) *Lancet* 369: 1047-1053.