

Medicinal cannabis

Approved November 2017

This position statement replaces the medical uses of cannabis portion (sections 26-31) of the NZMA's 2012 position statement on cannabis use.

Background

1. The desire for change regarding the legal status of cannabis, both for recreational and medicinal purposes, is gathering momentum around the world. However, the push for medicinal cannabis appears to be driven more by popular demand and pro-recreational cannabis law reform advocacy than by medical science. The lines between the recreational use and medicinal use of cannabis are blurred. This position statement focuses on the use of cannabis for *medicinal* purposes; *non-medicinal* recreational cannabis use remains, for now, covered by the NZMA's position statement on cannabis use overall.¹
2. There is biological plausibility for the use of cannabis as a medicine. The leaves and flowers of cannabis contain at least 100 different phytocannabinoids: the two major constituents being tetrahydrocannabinol (THC) and cannabidiol (CBD). THC is responsible for most of the psychoactive properties of cannabis, including effects sought by recreational users. CBD has anxiolytic properties and may moderate some of the psychoactive effects of THC. Cannabinoids interact with the endocannabinoid system, which is believed to be involved in a large range of bodily functions including analgesia, vomiting, immune system regulation, appetite, cognitive processes and motor control. It is postulated that much of the efficacy of cannabis-based medications relies upon synergy between the compounds.²
3. Research into the medical potential of cannabis has been limited, partly because of the prohibitionist approach to cannabis.³ Current available evidence for the effectiveness of cannabis as a medicine is modest⁴⁻⁹ (see Appendix for a summary). Despite limited evidence of effectiveness, people taking medicinal cannabis often claim to be using it for a broad range of conditions including chronic pain, depression, anxiety, headaches, ADHD, bowel problems, arthritis, PTSD and asthma. The effects of cannabis across a range of disorders may be a non-specific anxiolytic effect.
4. There is good evidence of the harms associated with cannabis. Its use in adolescence or early adulthood is associated with an increased risk of psychosis and reduced educational outcomes.^{10,11} Recent use of cannabis is associated with impairment of executive function including memory, and heavy use may be associated with deficits in decision making and concept formation that may not resolve with abstinence.¹² Regularly smoking cannabis is likely to be associated with bronchitis, while an association with respiratory cancer remains unclear.¹³ Cannabis use can lead to dependency and other use disorders; these risks may be higher than previously thought.¹⁴ The impact of cannabis use on motor vehicle accidents is also of concern.¹⁵
5. When it comes to medicinal cannabis, most people reported higher appreciation for herbal (also referred to as unprocessed or botanical) cannabis,¹⁶ with smoking being the most common mode of administration. Yet herbal cannabis, and particularly smoked cannabis, is problematic when intended to be used medicinally because of uncertainty over the active drug dose. To be considered as a pharmacotherapy, cannabis must conform with other regulated medicines. This requires, at a minimum, a consistent reproducible medication delivering the same dose of drug, evidence of

efficacy and safety, indications as to which disorder(s) the drug is licensed for and symptom targets.¹⁷ All this requires strong evidence provided in randomised controlled trials. Furthermore, medicines must reach much higher standard of positive therapeutic effects than recreational drugs.

6. While it is possible to access pharmaceutical grade and non-pharmaceutical grade cannabis-based products in New Zealand, the cost of the only pharmaceutical grade product licensed for use in New Zealand, Sativex[®], currently unfunded, is a considerable barrier to its use. There are also concerns that the process for seeking Ministerial approval* (now delegated to the Ministry of Health)¹⁸ is overly time-consuming and bureaucratic. The Government does not support the use of unprocessed cannabis leaf or flower preparations for medicinal use.

NZMA position and recommendations

1. The medical profession should be actively engaged in the debate about the use of cannabis for medicinal purposes.
2. The framework for the approach to medicinal cannabis should be consistent with that for medicines, and kept separate from debate about the legal status of cannabis for recreational use.
3. Doctors should not be enablers for the recreational use of cannabis.
4. The NZMA supports measures that facilitate research of medicinal cannabis, to widen and deepen the evidence base from which to make informed decisions.
5. Given the possible harms associated with smoking cannabis and the availability of other modes of administration, it is difficult to justify a place for smoked cannabis as a medicine.
6. Given the known harms of cannabis and weak evidence of efficacy as a medicine, caution is required before recommending cannabis for loosely identified medical reasons.
7. It is important to acknowledge the wide range of risks associated with cannabis, but these need to be considered in a similar light to the risks and side-effect profile of existing medications.
8. Doctors are well placed to educate people regarding the use of cannabis and to assist those with problems associated with cannabis. It is important that doctors engage in continuing education as the evidence regarding cannabis continues to evolve.

*Approval is not needed to prescribe Sativex[®] for spasticity related to MS or cannabidiol-based products where the level of other naturally occurring cannabinoids is less than 2% of the cannabinoid content

References

1. NZMA. Cannabis use. Position Statement. July 2012. Available from http://www.nzma.org.nz/_data/assets/pdf_file/0014/1454/Cannabis-revised-July-2012.pdf
2. Russo E, Guy GW. A tale of two cannabinoids: the therapeutic rationale for combining tetrahydrocannabinol and cannabidiol. *Med Hypotheses*. 2006;66(2):234-46.

3. Nutt D1. Illegal drugs laws: clearing a 50-year-old obstacle to research. *PLoS Biol.* 2015 Jan 27;13(1):e1002047.
4. Whiting PF, et al. Cannabinoids for Medical Use: A Systematic Review and Meta-analysis. *JAMA.* 2015 Jun 23-30;313(24):2456-73.
5. PHARMAC. PTAC Minutes of Meeting held on 13 & 14 August 2015. Section 4. Available from <http://pharmac.cwp.govt.nz/assets/ptac-minutes-2015-08.pdf>
6. Gloss D, Vickrey B. Cannabinoids for epilepsy. *Cochrane Database Syst Rev.* 2014 Mar 5;(3):CD009270.
7. Devinsky O, et al. Trial of Cannabidiol for Drug-Resistant Seizures in the Dravet Syndrome. *N Engl J Med.* 2017 May 25;376(21):2011-2020.
8. French J, et al. Cannabidiol (CBD) significantly reduces drop seizure frequency in Lennox-Gastaut syndrome (LGS): results of a multi-center, randomized, double-blind, placebo controlled trial (GWPCARE4) (S21.001). *Neurology.* 2017 April 18;88:16 Supplement S21.001;1526-632X.
9. Friedman D, Devinsky O. Cannabinoids in the Treatment of Epilepsy. *N Engl J Med.* 2015 Sep 10;373(11):1048-58.
10. Fergusson DM, et al. Tests of causal linkages between cannabis use and psychotic symptoms. *Addiction.* 2005 Mar;100(3):354-66.
11. Fergusson DM, Boden JM. Cannabis use and later life outcomes. *Addiction.* 2008 Jun;103(6):969-76
12. Crean RD, et al. An evidence based review of acute and long-term effects of cannabis use on executive cognitive functions. *J Addict Med.* 2011 Mar;5(1):1-8.
13. Mehra R, et al. The association between marijuana smoking and lung cancer: a systematic review. *Arch Intern Med.* 2006 Jul 10;166(13):1359-67.
14. Hasin DS, et al. Prevalence of Marijuana Use Disorders in the United States Between 2001-2002 and 2012-2013. *JAMA Psychiatry.* 2015 Dec;72(12):1235-42.
15. Asbridge M, et al. Acute cannabis consumption and motor vehicle collision risk: systematic review of observational studies and meta-analysis. *BMJ.* 2012 Feb 9;344:e536.
16. Hazekamp A, et al. The medicinal use of cannabis and cannabinoids--an international cross-sectional survey on administration forms. *J Psychoactive Drugs.* 2013 Jul-Aug;45(3):199-210.
17. Newton-Howes G, McBride S. Medicinal cannabis: moving the debate forward. *N Z Med J.* 2016 Nov 18;129(1445):103-109. Available from <https://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2016/vol-129-no-1445-18-november-2016/7069>
18. Ministry of Health. Prescribing cannabis-based products. August 2017. Available from <http://www.health.govt.nz/our-work/regulation-health-and-disability-system/therapeutic-products-regulatory-regime/prescribing-cannabis-based-products>

Appendix: summary of evidence for effectiveness of cannabis as a medicine

A recent systematic review has reported moderate-quality evidence to support the use of cannabinoids for the treatment of chronic pain and spasticity, and low-quality evidence to support use of cannabinoids for nausea and vomiting due to chemotherapy, weight gain in HIV infection, sleep disorders, and Tourette syndrome.⁴ In 2015, PHARMAC's Pharmacology and Therapeutics Advisory Committee (PTAC) considered available evidence at the time for medicinal cannabis for the treatment of spasticity due to multiple sclerosis, pain (including pain associated with spasticity) and treatment-refractory epilepsy; PTAC concluded the strength and quality of evidence across these indications was poor.⁵ With epilepsies however, fresh evidence (since that of late 2013⁶ considered by PTAC) includes a recent RCT reporting cannabidiol to be significantly more effective than placebo in reducing seizure frequency in children with Dravet syndrome, when given in addition to standard antiepileptic treatment;⁷ and emerging evidence suggests that add-on cannabidiol may also significantly reduce seizure frequency in Lennox-Gastaut syndrome.^{8,9}