

MEDICINAL MARIJUANA: IS IT A SOLUTION FOR CHRONIC PAIN?

“To determine, in adults aged 18-65 years, diagnosed with chronic non-cancer related pain the pros and cons for cannabis therapy and is there evidence that it can provide effective pain relief?”

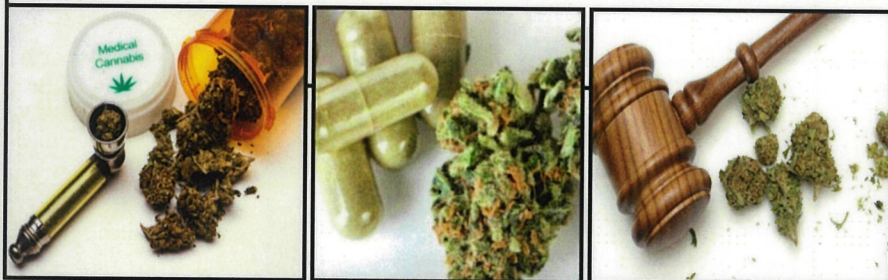
By Laura Wichman

INTRODUCTION

Medicinal cannabis remains an extremely controversial topic worldwide and the existence of safety concerns are apparent due to the illegal status of the drug in most jurisdictions. The scientific and clinical evidence to support the medical use of cannabis is still limited. Regardless, 1 in 20 New Zealanders are currently using cannabis for medicinal purposes; prescribed and illegally sourced (NORML New Zealand Inc., 2017). New Zealand legalised medicinal cannabis-based products in April 2016. However, as cannabis remains a class B controlled drug, before it can be prescribed, supplied and administered to a patient, an authorised health professional is required to process an application to the Ministry of Health for approval, in accordance to regulation 22 of the Misuse of Drugs Act 1977 (Ministry of Health, 2017).

PROS

Currently there is evidence that cannabis products show therapeutic promise in a few indications including neuropathic pain, HIV related chronic pain, spasticity in multiple sclerosis, cachexia, nausea and vomiting related to cancer, pain that cannot be relieved by conventional treatments, reduction in anxiety and aiding in sleeping difficulties and increasing appetite (New Zealand Drug Foundation, 2017; Wilkinson, Yarnell, Radhakrishnan & D'Souza, 2016). Although it is suggested that cannabis has a potential analgesic effect, there is limited evidence and thus there has been escalation in interest to develop a cannabis product to treat chronic pain, however it has proven difficult to determine as pain is a subjective feeling (Elikottil, Gupta & Gupta, 2009). The strongest argument in support of medicinal use of cannabis is one of the most fundamental goals of medical treatment; the intent to relieve suffering, physically and mentally, in a patient-specific context with thorough consideration of other options of medication and therapies available (Juurkin, 2014). It is important that this coincides with the determination of benefits exceeding the risks.



IMPLICATIONS

Health professionals need to be aware of the ever-changing legal status and availability of medicinal cannabis products. It is crucial when providing education to a patient about medicinal cannabis that it is correct and factual. The health professional must always make decisions in a patient focused context, after balancing the risks and benefits. Although there is evidence of therapeutic promise in regards to relieving chronic pain robust clinical evidence is still inadequate.

CONS

Potential short-term adverse side effects include tiredness, dizziness, dryness of the mouth, psychoactive effects of impaired judgement, impulse control, impaired planning, impaired cognition, disruption of short-term memory, impaired attention and concentration as well as reduction in psychomotor responses and it can also give way to dysphoria, hallucination, paranoia and anxiety (Wilkinson et al., 2016 Volkow, Baler, Compton & Weiss, 2014).

Potential long-term adverse side effects include adverse pulmonary effects, risk of addiction, risk of mental illness, increasing the risk of anxiety, depression, amotivational syndrome, psychosis-like effects and it is suggested to be related to negative effects on the brain development by signs of significant decline in individuals IQ, particularly when used as a child or adolescent (Volkow et al., 2014).

Additionally, in a longitudinal birth cohort, chronic long-term cannabis use was also linked to a decline in an individual's intelligence, which most importantly, after cessation of cannabis use, the declines did not reverse and remained permanent (Wilkinson et al., 2016).

CONCLUSION

With the ever-changing legal status of recreational and medicinal cannabis, the connection between prevalence and legalisation is unknown and causing concern for public health. Undoubtedly, the knowledge growth concerning the benefits and risks of medicinal use of cannabis will be an ongoing process. As a result of the controversial opinions and potential pros and cons, whether or not a health professional supports the use of medicinal cannabis, all clinicians will surely be confronted with a patient who elects to use it. Despite the limited guidance, it is essential health professionals are prepared to educate patients about what the use of medicinal cannabis entails and have the ability to provide evidence-based information to properly inform their patients. In conclusion, as a result of my research I believe that in the future, medicinal cannabis will have a place to treat specific conditions including chronic non-cancer related pain.

References

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Rationale for poster choice:

I have chosen to present my information gathered from performing a literature review on this issue in a poster format. Medicinal cannabis is an extremely controversial topic, which has been increasingly appearing on social media platforms and the news. I believe by presenting the information using a visual format, it can increase the number of potential viewers, thus educating a large group of people. By presenting the information in this format, it highlights the most vital information about the issue in a quick, easy to understand format (Miracle, 2008). As it has the potential to reach a greater number of individuals, in this case, it is the most effective medium for stimulating learning and awareness about the issue. A poster can be easily transported and displayed on the walls or notice boards in many settings; clinical academia or a professional conference (Miracle, 2008). They can attract a viewer who previously had no interest in the issue by disseminating key information in a capturing way to provide them with a general understanding in the hope to encourage further learning about the use of medicinal cannabis.

PECOT (Whitehead, 2013)

	Information relating to question	Explanation
Population	Individuals aged 18-65 years and diagnosed with chronic non-cancer related pain including neuropathic pain.	This tends to be the age where chronic pain is most debilitating and individuals are seeking safe and effective pain management.
Exposure/ Intervention	Interventions will include all cannabis preparations including synthetic and naturally occurring forms of the cannabis plant, as well as all administration routes.	I will be examining/ reviewing articles that involve any cannabis treatment for chronic pain to gain the greatest amount of information related to cannabis therapy.
Compassion/ Control	Same population but identifying the risks and benefits that can occur differently for each individual when receiving medicinal cannabis treatment for their chronic pain.	I am interested in the benefits of medicinal cannabis compared to the possible adverse effects and whether the benefits outweigh the risks.
Outcome	Safe and effective chronic pain management.	As I am investigating whether the benefits outweigh the adverse effects. I want to know if medicinal cannabis can be an effective treatment to manage chronic pain.
Time	Short-term and long-term risks and benefits.	Benefits can occur almost immediately but the risks can possibly occur short-term as well as long-term.

References

- Whitehead, D. (2013). *Searching and reviewing the research literature*. In Z. Schneider., D. Whitehead., G. L. Biondo-Wood., & J. Haber. (Eds.), *Nursing and midwifery research: Methods and appraisal for evidence-based practice* (4th ed., pp. 35-56). Chatswood, Australia. Elsevier Australia
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