



Cannabis use and non-cancer chronic pain

I read with interest the Article by Gabrielle Campbell and colleagues.¹ The authors should be commended on completion of this long prospective study exploring the effect of cannabis on pain outcome measures in patients who used prescribed opioids for the treatment of non-cancer pain. Although the study is thought-provoking, I have noticed a number of potential inconsistencies that require further explanation by the authors.

The study results are based on phone interviews of cannabis users (78 occasional and 48 nearly daily cannabis users at baseline, out of a total sample of 1514 participants). The majority of participants used illicitly obtained cannabis without knowing its content. On the basis of this sample, the authors report that the patients using cannabis had increased pain and generalised anxiety disorder severity scores, compared with those not using cannabis. The use of cannabis did not reduce prescribed opioid requirements.

At the same time, the authors found that the participants who used cannabis also reported that cannabis had been effective with regard to pain reduction (mean score of 7.3 at 2-year, 7.0 at 3-year, and 7.2 at 4-year follow-up, with 10 being a complete relief). In fact, 60% of the participants at the 4-year follow-up would have used cannabis if they had access to it, versus 33% at baseline. Moreover, the cannabis users claimed that they used cannabis for the following reasons: to alleviate pain (83% at 3-year follow-up and 83% at 4-year follow-up), to reduce pain-related distress (68% and 73%, respectively), to improve sleep (67% and 64%), and to reduce generalised anxiety (72% and 65%). Only 22% of participants at 3 years and 12% at 4 years reported that they had discontinued using cannabis because of the ineffectiveness of the substance in relieving pain.

Finally, 22% of participants at 3 years and 30% at 4 years reported reduced opioid requirements when using cannabis. The authors do not provide the characteristics of these participants.

Numerous studies, including systematic reviews and meta-analyses, have documented the salutary effects of cannabis and cannabinoids in the treatment of chronic pain of non-cancer origin.^{2,3} Two well-conducted studies corroborate these conclusions (ie, a reduction in opioid prescribing).^{4,5} Therefore, the authors should discuss the discordant results and possible reasons for the contradictions.

Some studies have suggested that cannabis might preferentially target the affective aspects of pain and that cannabinoids induce anti-anxiety effects.^{6,7} One of the beneficial mechanisms of cannabis use for pain disorders could be related to its ability to alter the reactive thoughts regarding negative feelings associated with pain. Thus, cannabinoids might positively affect a patient's perception of pain and improve coping mechanisms. The disassociation of objectively measured pain outcomes from the perception of pain by the participants might explain the contradictory results.

I declare no competing interests.

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