A painful lesson: are we repeating previous mistakes in pain management?

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The idea that cannabis could be an alternative to opioids in the treatment of pain is attractive and gaining attention. The USA has witnessed a substantial rise in opioid-related deaths over the past decade, during which restricting the use of prescribed opioids has resulted in many people sourcing these opioids elsewhere, including from the illicit market.[1] For many patients, their journey to opioid dependency started when they were introduced to these drugs after surgery or as a way of managing acute and chronic pain.[2]

There is clearly an incentive to find an alternative drug that has a lower risk of overdose or development of a dependency. But could cannabis or cannabinoids be a safer and more effective alternative?

The answer according to Gabrielle Campbell and colleagues[3] seems straightforward—cannabis use did not reduce pain compared with no cannabis use for the patients with chronic non-cancer pain included in their prospective cohort study at 4-year follow-up. Compared with those who had not used cannabis, patients who used cannabis had greater pain severity score (relative risk ratio 1·14, 95% CI 1·01–1·29 *vs* 1·17, 1·03–1·32), greater pain interference score (1·21, 1·09–1·35 *vs* 1·14, 1·03–1·26), lower pain self-efficacy scores (0·97, 0·96–1·00 *vs* 0·98, 0·96–1·00), and greater generalised anxiety disorder severity scores (1·07, 1·03–1·12 *vs* 1·10, 1·06–1·15). Cannabis use also did not reduce their use of opioid medication. However, there are limitations to these observational findings. Although participants were asked about how many days they used cannabis for, we do not know if some people used once in a day or more than once. Any proof of concept, pharmaceutical trial, or licencing approval for a drug would need this detail to establish how often a drug should be taken. Likewise, we do not know what type of cannabis the participants used in this study. This fact matters, as cannabis varies in strength[4] and, as with any analgesia, the dose needs to be matched to the severity of pain experienced. Insufficient information about the type and strength of cannabis is a common problem across all cannabis research,[5] which could be improved by a standard assessment instrument based on an agreed measure of cannabis strength, in the same way that alcohol by volume is used to measure and describe the strength of alcohol.

WHO recently reviewed the therapeutic potential of one particular cannabinoid—cannabidiol.[6] Although this review focuses on the potential benefits in relation to epilepsy, there is a brief mention of analgesia; however, the report suggests that the evidence for benefit is considerably less advanced for analgesia than for epilepsy.[6] In part, the WHO review is in response to the increasing number of countries permitting access to cannabis for medicinal use. This regulatory change can raise the expectations and hope for patients that cannabis will be an effective treatment for their health problems, including pain. We should not repeat the problems we now face with opioid prescribing, which originated from weak evidence that these drugs are effective in the management of chronic pain.[7] One way forward would be to conduct a randomised controlled trial to investigate cannabis and its ability to control pain. Controlling and measuring the dose and type of cannabis used in such an experiment would be crucial for any comparison study and for applying the findings in practice. Unless we learn from the history of opioids and their use, we run the risk of replicating a non-evidence based approach to pain management, which will ultimately let down patients in need.

Ian Hamilton, Suzanne H Gage
University of York, York YO10 5DD, UK (IH); and University of Liverpool, Liverpool, UK (SHG)
ian.hamilton@york.ac.uk

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