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Letter to the Editor

When The Pharmacopoeia Fails: Cannabis for Pain

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Dear Editor,

To reiterate a previous *Pain Medicine* editorial [1], it is fallacious to conflate recreational/adult use of cannabis with its therapeutic application as the consumers' intents are disparate: altered state of consciousness vs symptom relief, and the corresponding dosing requirements reflect that difference. Comparison of the relative risks of cannabis and opioids is no contest, as the mechanisms of action, drug abuse liability and associated adverse event profiles of the two are not remotely comparable: Opioid overdoses caused a record of over 100K American deaths in 2021 in the United States, while secondary mortality attributable to herbal cannabis is extremely rare, usually associated with misadventures with law enforcement.

Addressing the most compelling cannabis concern, its abuse by young people, the best meta-analysis of the data [2] reveals that even the heaviest non-medical cannabis usage in teenagers and young adults reduces cognitive sequelae to non-statistical salience after abstinence of 72 hours with no evident permanent sequelae. No formal study has shown cognitive impairment in medical cannabis patients, and some have even documented improvement.

Recent data on efficacy of cannabis in pain management is compelling. A large prospective study in Canada (N = 1,145) employing approved cannabis preparations from one government-licensed manufacturer is illustrative [3], 68% of whom had chronic pain. A mean of less than one gram of cannabis flower was consumed daily, at a stable rate over time, without evidence of tolerance, tachyphylaxis or dose escalation. At baseline 28.1% were using opioids, declining to 11.3% over the course ($P < .001$), with mean morphine equivalent daily dose plummeting from 152 to 32.2 mg, a 78% reduction. Declines were noted in usage of other pain adjuncts. Patient quality of life measures increased in four domains with physical health up 36% and psychological 17%.

A recent retrospective observational study in Florida with disparate cannabis preparations (N = 2,183), claimed similar improvements [4]. Over 85% of patients reported cannabis was very or extremely important to their quality of life. Rand Short Form Survey (SF-36) demonstrated benefits on physical functions, role-physical limitation, bodily pain, social functioning, and role-emotional limitation (all $P < .0001$). The study also showed reduction in opioids and other analgesic adjuncts after cannabis treatment.

In terms of best practices with cannabis and pain management, increased future funding is needed for research, whether from government sources or from commercial cannabis stakeholders. This should favor clinical trials employing slow upwards titration of non-smoked products with application of quality control to regulatory standards utilizing preparations that are optimized for pain management. There are additional salutary components in cannabis beyond tetrahydrocannabinol and cannabidiol, exemplified by a recent survey of 127 patients utilizing cannabis preparations with at least 50% cannabigerol (CBG) content [5], of whom 40.9% had chronic pain as a primary complaint with reported improvement after treatment ($P < .001$), with marked benefits on comorbid anxiety and depression, few adverse events, and no withdrawal effects.

Formidable roadblocks to research remain that interfere with investigation in therapeutic applications of cannabis. This perpetuates both doubts as to its advisability of its use, as well as hindering availability of proven preparations. Given these facts, common sense demands that we at least listen to our patients who find it helpful in the here and now. "Reefer madness" continues to pollute the discussion. It is time to abandon the soapbox and educate ourselves on the potential and proper role of cannabis in the pharmacopoeia of today. Unless pain practitioners devote the time, interest, and expertise to discuss cannabis in context, it is high time to admit their failure and recruit help through referral a colleague who can.

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