

## Letter to the Editor

### AN EXPERIMENTAL METHOD FOR ASSESSING WHETHER MARIJUANA USE REDUCES OPIOID USE IN PATIENTS WITH CHRONIC PAIN

*Addiction's* editors called recently for the use of more rigorous designs to assess whether marijuana use can lessen opioid use [1] than the ecological and correlation studies that have been the norm to date. We write to suggest and illustrate one type of study where such designs are ethically and practically feasible: randomized trials of opioid tapering in patients with chronic pain.

In a just-reported trial [2], 68 community out-patients with chronic pain who were taking opioids long term participated in a 4-month physician-monitored, patient-centered, voluntary opioid taper program. Pain, opioid and functional outcomes are reported in detail elsewhere [1]. The study also revealed an opportunity to determine if cannabis use might relate inversely to moderate-, high- and very high-dose opioid tapering, particularly given that it was conducted in a Colorado clinic. Such pragmatic experimental data might directly inform behavioral response to opioid reduction and pain control, as well as overdose risks.

Fifty-one patient participants completed the study, and the majority were high-dose users (median morphine equivalent daily dose was 288; range = 60–1005) who had been taking opioids for 6 years (range = 1–38 years). Of those, 18 (35.3%) reported using marijuana at baseline. These data suggest that a pool of cannabis–opioid co-users are available for tapering studies. The results showed that self-reported marijuana use was statistically unchanged at 4-month study completion, although three of the marijuana users reported marijuana cessation at study end (15 reported continued use). However, because this was a secondary question, for which the study was not powered, the effect size would need to be very large to show itself here.

We are now conducting a large, four-state, pragmatic clinical trial on voluntary patient-centered opioid tapering and aim to investigate this issue more fully in almost 1300 patients with chronic pain who are taking long-term opioids [3]. We have the opportunity to deeply characterize patterns of cannabis use and alterations that may occur during opioid reduction. Additionally, we will elucidate type of use, mode of administration and rough frequency

of cannabis use. Finally, we may understand more clearly how evidence-based behavioral treatment for chronic pain may impact upon opioid and cannabis use alike. We encourage other investigators planning or conducting opioid tapering research studies to exploit their scientific platforms as opportunities to examine cannabis–opioid substitution or co-reduction effects within an experimental framework.

#### Declaration of interests

None.

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