The Israeli Multi-Center Registry of Medical Cannabis (MC) for Chronic Pain: Current Findings

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THE ISRAELI MULTI-CENTER REGISTRY OF MEDICAL CANNABIS (MC) FOR CHRONIC PAIN: CURRENT FINDINGS

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BACKGROUND

Although the use of medical cannabis (MC) for chronic pain is rising, scientific evidence on its long-term effectiveness and safety is scarce.

AIMS

The aim of the study is to set up a patient registry on the treatment of MC for the relief of chronic pain in Israel. By prospectively collecting data on the effectiveness and safety of MC, we aim to identify predictors for success or failure of this treatment.

METHODS

The relevant ethics committees approved this multi-center study.
Patients are recruited by specialist physicians, following the completion of a new MC license application required by the Israeli Ministry of Health.
Patients that sign a written informed consent form are requested to complete a set of web-based questionnaires (Qualtrics) before (baseline) and 1, 3, 6, 9, and 12 months after initiation of MC treatment.
Data includes:
Physician reports on patients' diagnoses.

Patients' self-reported questionnaires: (1) Demographics; (2) Pain measures - mean, worst and least pain intensities during the previous week and McGill Pain Questionnaire sensory and affective pain; (3) Accompanied symptoms - Beck Depression Inventory, General Anxiety Disorder, Pain Catastrophizing Scale and Pittsburgh Sleep Quality Index; (4) Additional outcomes - Pain Disability Index, Quality of Life and Morphine equivalent dose (MO ED); and (5) Adverse effects (AEs).

RESULTS

This is an ongoing study and thus far, 1205 patients (674M and 516F) have enrolled and completed the baseline survey. Mean ± SD age is 49 ± 16 years (range 18-95). Following 1, 3, 6, 9 and 12 months of MC treatment, so far 676, 604, 428, 319 and 202 patients, respectively, have completed the follow-up surveys.
Pain diagnoses have included neuropathic pain (71%), musculoskeletal pain (52%), dysfunctional pain (16%), headache and visceral pain (13% each). Notably, some patients are diagnosed with concomitant pain etiologies.

Figure 1 shows the percentage of improvement from baseline of the tested parameters across the study time points. In general, all parameters improved after one month of treatment, continuing with gradual improvements at later time points. Notably, each time point includes a different number of patients since some patients have yet to complete the study. Hierarchical Linear Models show significant improvements for all tested parameters ($p<0.0001$). Bonferroni post hoc tests indicate that improvement is mainly between baseline and the one month follow-up.

Figure 2 exhibits the frequent (5% of the sample or more) adverse effects reported by patients at each time point. Some patients have reported various adverse effects. Fatigue and dizziness are the most frequent AEs followed by confusion, disrupted thinking, thirst and dry mouth. As can be seen during the one- year treatment, the percentage of patients reporting those AEs gradually decreases.

Figure 1: Percentage of improvement from baseline of the tested parameters for all patients across all the study time points

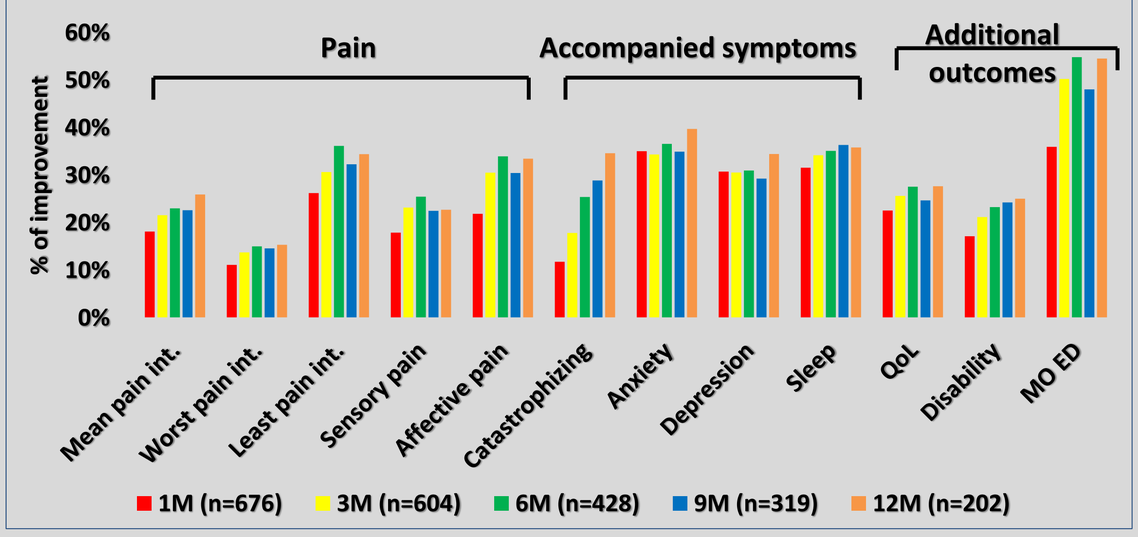
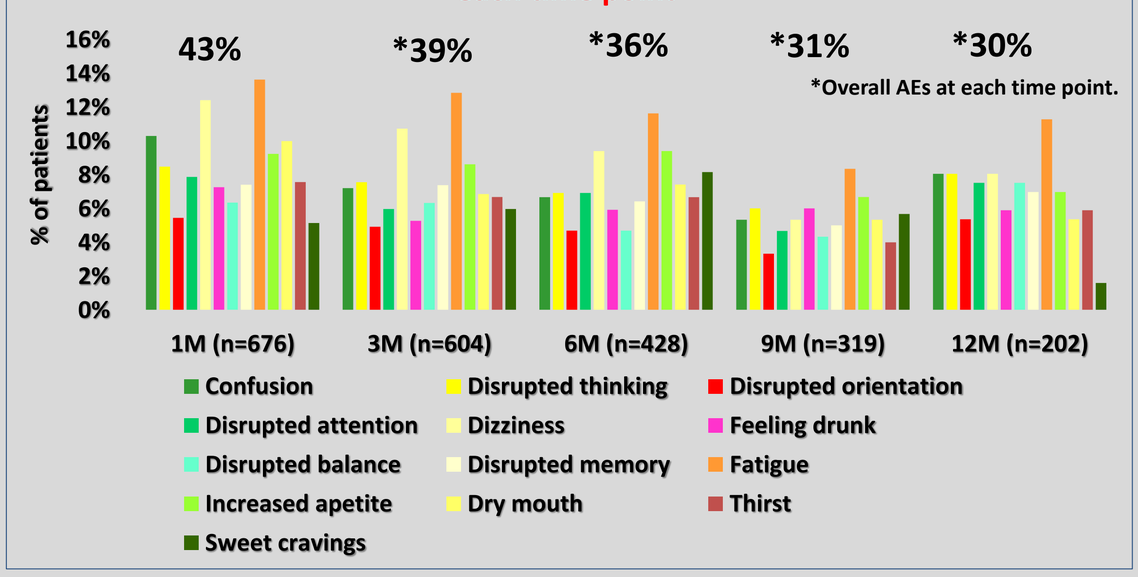


Figure 2: The proportion of patients with the most common adverse effects at each time point



CONCLUSIONS

The current findings suggest a moderate long-term improvement of chronic pain, associated symptoms and outcome measures with MC treatment.
In general, only a small amount of patients report AEs following MC treatment, which seem to gradually decrease over one year of treatment.
As the study sample is heterogeneous, continuation of the follow-up is needed in order to increase the number of patients completing the one-year treatment, understand reasons for withdrawal from treatment, identify predictors of treatment success or failure, and substantiate our current findings.

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