



MIGRAINES

Clinical Summary



HARVEST
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Migraines & Headaches



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Migraine is a headache disorder, often presenting with nausea, vomiting, sensitivity to light, or sensitivity to sound.¹ With each episode lasting from a few hours to several days and its resulting impact on the activities of daily living,¹ finding an effective treatment is crucial to restoring quality of life. The current management of migraine involves a trial of different drugs matched to symptom severity.

Research has shown that disruptions in the endocannabinoid system, the body's innate cannabinoid system, may have a role in migraine occurrence (Figure 1). The cerebrospinal fluid of patients with migraine contains decreased levels of the endocannabinoid anandamide.³ Also, decreased expression of the cannabinoid receptor type 1 is associated with migraine.³ Therefore, medical cannabis (MC) may effectively relieve migraine attacks by complementing the endocannabinoid system.

There are a few studies demonstrating the benefit of MC in migraine treatment. One study examined the effects of MC on migraine by analyzing dataset that patients had entered on Strainprint, which is a mobile app that helps MC users to track changes in disease symptoms.⁴ Over a 16-month period, MC reduced migraine severity 88.1% of the time (table 1), and the mean migraine severity rating decreased by 50% (from 6.65 to 3.30).⁴ Even with repeated MC use, there was no significant

change in baseline migraine severity, which is encouraging given that about 15% of patients on conventional migraine drugs eventually develop medication-induced headaches (known as medication overuse headache).⁴ Additionally, a chart review of migraine patients at a US-based private medical practice showed that MC decreased migraine frequency in 85.1% of the patients, and the mean number of migraine headaches per month decreased from 10.4 at the initial visit to 4.6 at the follow-up appointment.⁵ These studies show that MC may effectively decrease migraine severity and frequency in migraine patients.

Analysis of self-reported outcomes of Israeli patients with MC license for migraine treatment revealed that more than 60% of the patients achieved a 50% or greater reduction in the monthly frequency of migraine attacks following MC treatment initiation.⁶ They also reported lower negative impact from migraine and lower use of conventional migraine medications, such as opioids and triptans.⁶ About 40% of the patients reported less than 50% reduction in the monthly migraine frequency following MC treatment initiation, which led the researchers to define them as "non-responders".⁶

Table 1 Changes in symptom severity

Symptom	% Sessions Symptom Reduction	% Sessions Symptom Exacerbation
Headache	89.9%	2.4%
Migraine	88.1%	3.1%

% Sessions No Symptom Change	Baseline Severity Rating	Post-cannabis Use Severity Rating
7.7%	M = 5.79 SD = 1.81	M = 2.74 SD = 1.88
8.8%	M = 6.65 SD = 2.08	M = 3.30 SD = 2.43

Abbreviation: M, mean; SD, standard deviation.

Table 1 Adapted from Short- and Long-Term Effects of Cannabis on Headache and Migraine by Cuttler, C., Spradlin, A., Cleveland, M. J., & Craft, R. M. The journal of pain : official journal of the American Pain Society, 21(5-6), 722-730. (2020).⁴



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However, if a patient is receiving little benefit or experiencing bothersome side effects from conventional migraine medications, navigating MC to find a product that works may still be a promising course of action.

Harvest Medicine patients self-reported outcomes shows that 84.77%, of 1044 patient respondents, have experienced a very positive or somewhat positive impact on their quality of life. While only 0.90% patients reported a negative or very

negative impact on their quality of life (figure 1).⁷

Despite these positive results, it is important to understand that not everyone will respond to MC. Users of Strainprint reported that MC actually led to worsening migraine symptoms 8.8% of the time.⁴ Also, although these studies did not directly report any side effects of MC, studies looking at MC used in other disease settings reveal that drowsiness, amnesia, cough, nausea, dizziness and euphoric mood are side effects most

likely or certainly related to MC use.⁸ Therefore, it is important for individuals seeking migraine symptom relief with cannabis, to consult a healthcare professional and find the most appropriate cannabinoid-based treatments for their migraines.

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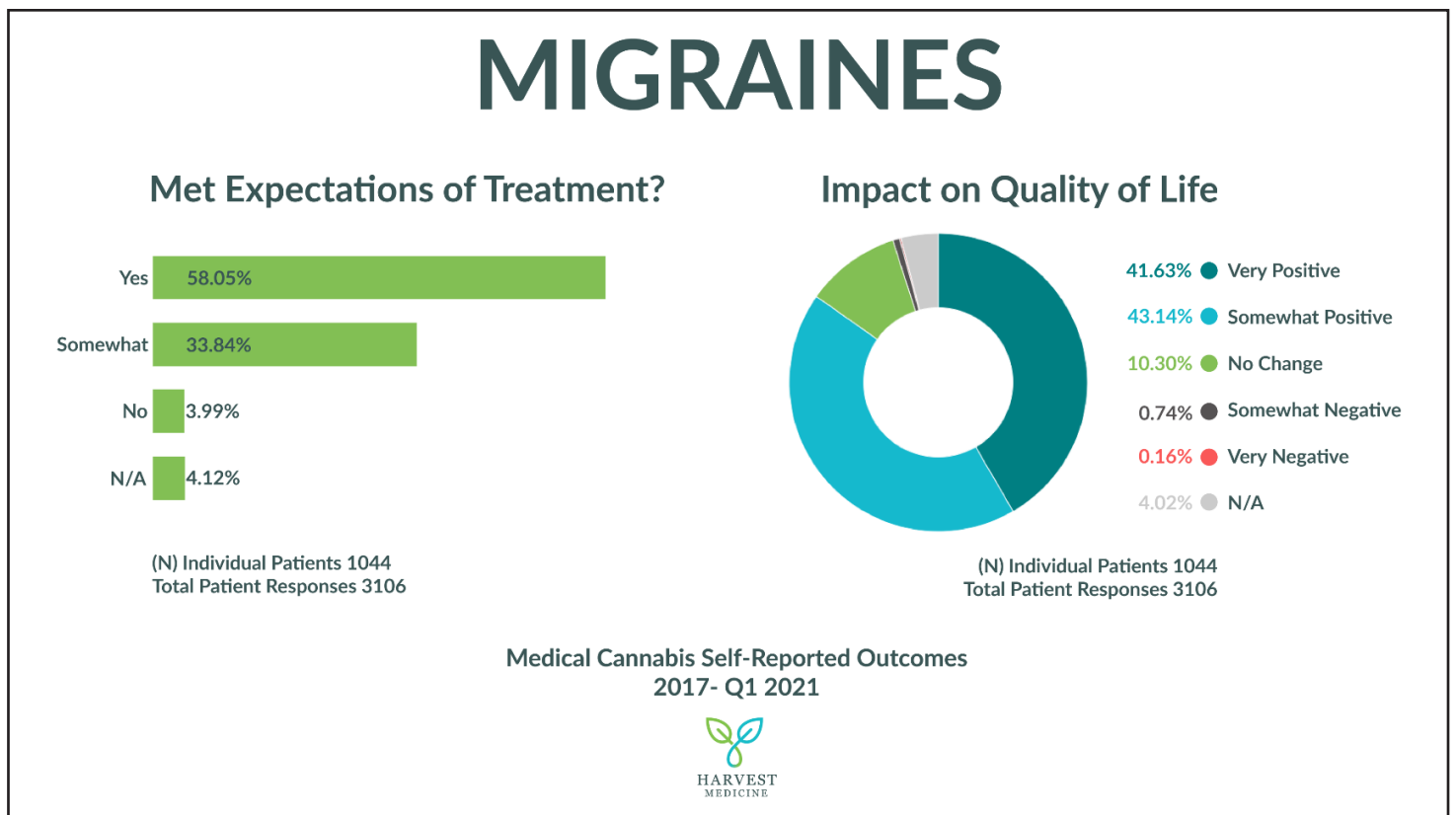


Figure 1 Harvest Medicine. (2021). Migraine patient self-reported outcomes⁷



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