

MS

Clinical Summary



Multiple Sclerosis

Multiple sclerosis (MS) is a neurodegenerative disease, in which local inflammation in the central nervous system leads to the loss of myelin, the protective layer around nerve fibres.¹ This disrupts communication to and from the brain, leading to symptoms such as vision impairment, extreme fatigue, muscle spasms, and mood changes.²

The prevalence of MS in Canada is one of the highest, with long-term care residents and women more frequently affected.² Although several categories of drugs are used to manage MS, they can be broadly categorized into 2 groups: (1) disease modifying therapies to delay disease progression and (2) symptom management drugs to target the different symptoms associated with MS.3 Medical cannabis (MC) may be an effective symptom management strategy for patients with MS.

A survey among patients at a MS center in Copenhagen revealed that pain (61%), spasticity (52%), and sleep disturbances (46%) were the three most commonly reported symptoms for which MC was used.4 MC users at a US-based MS clinic also cited these three symptoms as the most common reasons for using cannabis despite having been prescribed medications to manage symptoms (for example, Baclofen and Gabapentin for pain and muscle spasticity).⁵ In another study, MS patients reported improved pain management and fewer side effects as the main reasons for preferring MC over prescription drugs.6

These findings suggest that MC may effectively provide relief from pain, muscle spasms, and sleep disturbances in MS patients that are experiencing suboptimal benefit or undesirable side effects related to prescription medications.

Although MC is generally well tolerated, it is important to consult an experienced healthcare professional prior to use. This is particularly true since MC carries a risk of side effects, such as drowsiness, feeling subdued, and dizziness.4 At Harvest Medicine, MS is one of the top 10 medical conditions that patients seek care for,7 and experienced HCPs provide thorough assessment and follow up with patients on a regular basis. Patient outcomes have been remarkable, with 84.79% of MS patients reporting that MC has somewhat positively or very positively affected their quality of life (figure 1).7

To help more MS patients benefit from MC products, the role of specialized clinics such as Harvest Medicine will become increasingly important.

> -Harvest Medicine 2021 & Kang, A., University of Toronto Pharmacy Intern 2021

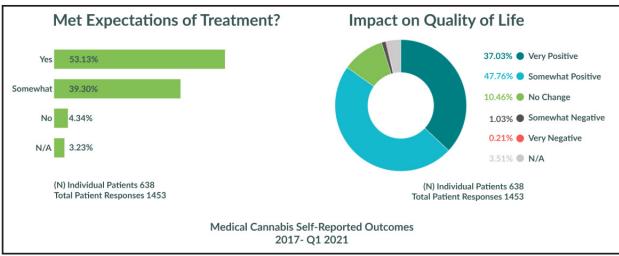


Figure 1 Harvest Medicine. (2021). Multiple Sclerosis patient self-reported outcomes⁷



References

- 1. Huang, W. J., Chen, W. W., & Zhang, X. (2017). Multiple sclerosis: pathology, diagnosis and treatments. Experimental and therapeutic medicine, 13(6), 3163-3166.
- 2. Gilmour, H., Ramage-Morin, P. L., & Wong, S. L. (2018, January 17). Multiple sclerosis: Prevalence and impact. Retrieved January 3, 2021, from https://www150.statcan.gc.ca/n1/pub/82-003-x/2018001/article/54902-eng.htm
- 3. Dargahi, N., Katsara, M., Tselios, T., Androutsou, M. E., De Courten, M., Matsoukas, J., & Apostolopoulos, V. (2017). Multiple sclerosis: immunopathology and treatment update. Brain sciences, 7(7), 78.
- Gustavsen, S., Søndergaard, H. B., Andresen, S. R., Magyari, M., Sørensen, P. S., Sellebjerg, F.,
 & Oturai, A. B. (2019). Illegal cannabis use is common among Danes with multiple sclerosis.
 Multiple sclerosis and related disorders, 33, 5–12. https://doi.org/10.1016/j.msard.2019.05.008
- 5. Weinkle, L., Domen, C. H., Shelton, I., Sillau, S., Nair, K., & Alvarez, E. (2019). Exploring cannabis use by patients with multiple sclerosis in a state where cannabis is legal. Multiple sclerosis and related disorders, 27, 383–390. https://doi.org/10.1016/j.msard.2018.11.022
- 6. Bruce, D., Brady, J. P., Foster, E., & Shattell, M. (2018). Preferences for medical marijuana over prescription medications among persons living with chronic conditions: Alternative, complementary, and tapering uses. The Journal of Alternative and Complementary Medicine, 24(2), 146-153.
- 7. Harvest Medicine. (2021). Multiple sclerosis patient self-reported outcomes. Update retrieved, May 2021, from.https://hmed.ca/patient-outcomes/

