

BULLETIN 7

How do women and men report medical cannabis use?

March 2023

In this bulletin we analyze data from Canadian respondents to Waves 2, 3 and 4 of the International Cannabis Policy Study (ICPS) collected between 2019 and 2021.

This bulletin is part of a larger research and knowledge translation project about sex, gender and cannabis use led by the Centre of Excellence for Women's Health and funded by Health Canada. Information about the overall project is available on the [Sex, Gender and Cannabis Hub](#). The bulletins report on sex and gender-based analyses of surveys and other data to sharpen our understanding of whether and how sex and gender affect cannabis use.

MEDICAL CANNABIS USE FOR WOMEN AND MEN

Since the legalization of cannabis in Canada, there has been increased interest in the use of cannabis to treat a range of diseases and symptoms. There are high expectations that cannabis can treat many symptoms and diseases [1] despite limited scientific evidence, research and few clinical trials. Questions about efficacy, different routes of administration, types of cannabis, and dosage of cannabinoids are common. Patterns of medical cannabis use reveal that women and men tend to use it for different reasons. For example, women are more likely than men to use cannabis for pain, anxiety, inflammation and nausea [2]. Among cannabis users who use cannabis for medical purposes, women are more likely than men to say that cannabis helped alleviate anxiety, nausea, anorexia, irritable bowel syndrome, and headaches [3]. However, more men than women report more relief from headache [3].

There is also increased interest in cannabis as a substitute for prescription drugs. In a US survey on the use of cannabis as a substitute for opioid-based pain medication, 97% of the sample decreased their use of opioids by using cannabis, and 81% felt that taking cannabis by itself was more effective for treating their condition than taking cannabis with opioids [4]. In a cross-sectional study, female users were more likely than males to substitute cannabis for prescription drugs, but the results were not statistically significant [5]. In addition, women who used cannabis for medical reasons were more likely to substitute cannabis for opioids than those who used cannabis for recreational purposes [5].

WHAT IS INCLUDED IN THIS BULLETIN?

In this bulletin we report our analysis of sex and gender differences of selected variables on cannabis use among Canadian respondents ($n = 47,988$) from Waves 2, 3 and 4 (2019–2021) of the International Cannabis Policy Study (ICPS), funded by the Canadian Institutes of Health Research. The sample of respondents who ever used cannabis to improve or manage symptoms for any mental health condition is 29,643. For medical conditions is 29,658, and for ever using cannabis for pain relief, instead of opioid or prescription medication is 9,580. For a full description of the survey and methods for the ICPS see: <http://cannabisproject.ca/methods>. For a description of our approach to analyzing sex and gender in Waves 1 to 4 of the ICPS data, see the [Methodology on the Sex, Gender, and Cannabis Hub](#).

In this bulletin we focus on medical cannabis use among those who had ever tried cannabis, in Waves 2, 3 and 4 of the ICPS, using data from the following questions in the survey:

- » Have you ever used cannabis for pain relief, instead of using opioids or prescription pain medication?
- » Have you ever used cannabis to improve or manage symptoms for any of the following... (mental health conditions)?
- » Have you ever used cannabis to improve or manage symptoms for any of the following... (medical conditions)?

Weighted chi-square analyses were used to conduct a sex and gender-based analysis for cannabis outcomes to compare results between men and women. Analyses were conducted using SAS Version 9.4 and SPSS Version 27. A threshold of $p \leq 0.05$ was used to denote statistical significance.

USING CANNABIS FOR PAIN RELIEF INSTEAD OF OPIOIDS OR PRESCRIPTION PAIN MEDICATION

Among those who had reported ever using cannabis to manage pain, a significantly higher proportion of women (77.9%) compared to men (74.4%) reported having used cannabis for headaches or pain relief, instead of using opioids or prescription pain medication.

77.9% of women vs. 74.4% of men reported using cannabis for pain relief, instead of using opioids or prescription pain medication

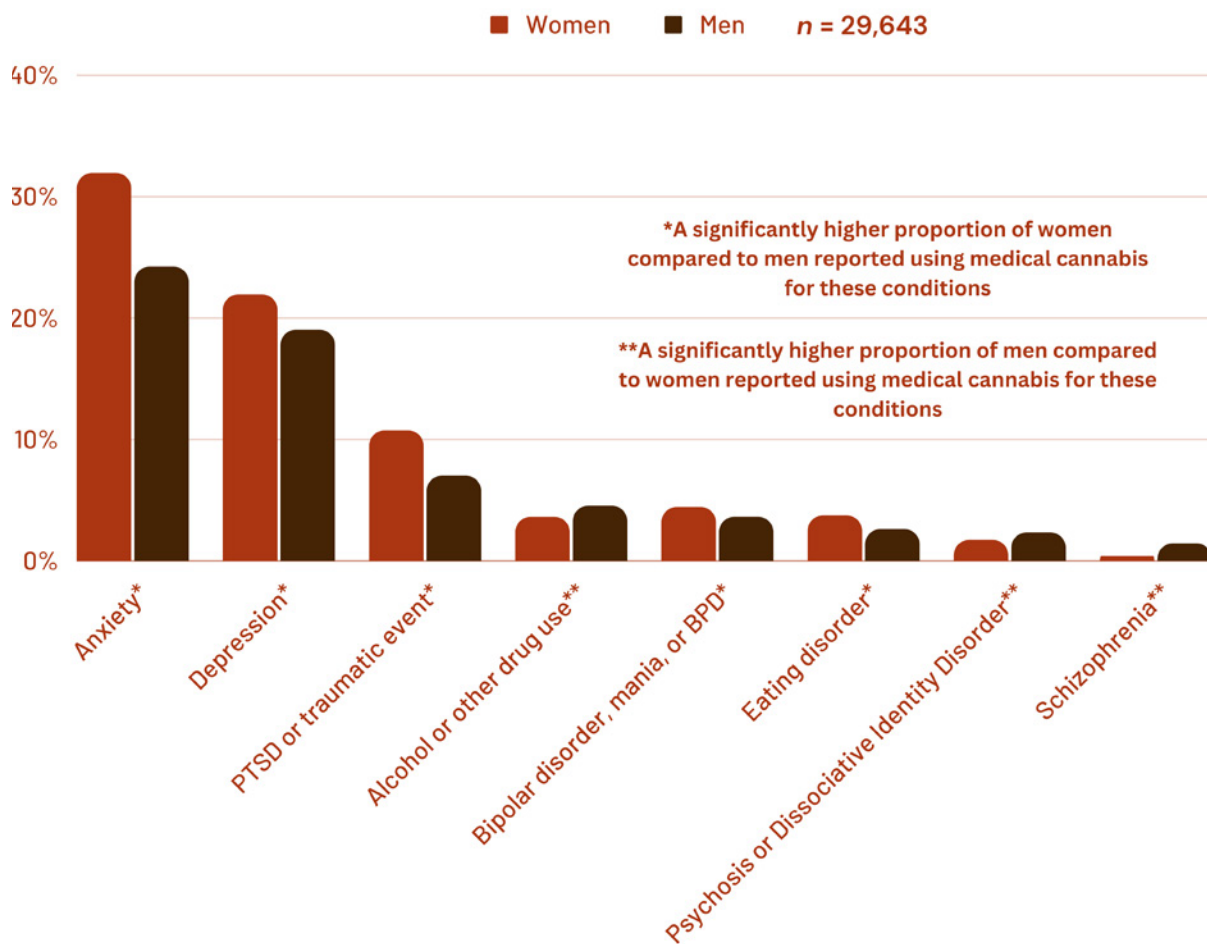


CANNABIS USE TO IMPROVE OR MANAGE MENTAL HEALTH SYMPTOMS AMONG THOSE WHO HAD EVER TRIED CANNABIS

23.2% of the women and 22.1% of the men who had ever tried cannabis reported using cannabis to improve mental health symptoms and these differences were statistically significant. There were also statistically significant differences in the proportion of women and men who used cannabis to improve or manage symptoms for anxiety (including phobia, obsessive compulsive disorder or a panic disorder, depression (including dysthymia), post-traumatic stress disorder (PTSD) or traumatic event (e.g., abuse or loss), bipolar disorder, mania, or borderline personality disorder, psychosis (e.g., paranoia, disorganized thinking, hearing voices that others can't hear) or Dissociative Identity Disorder, schizophrenia, alcohol or other drug use, and eating disorder. See Figure 1.

Figure 1

Cannabis use to improve or manage mental health symptoms among those who had ever tried cannabis between 2019–2021

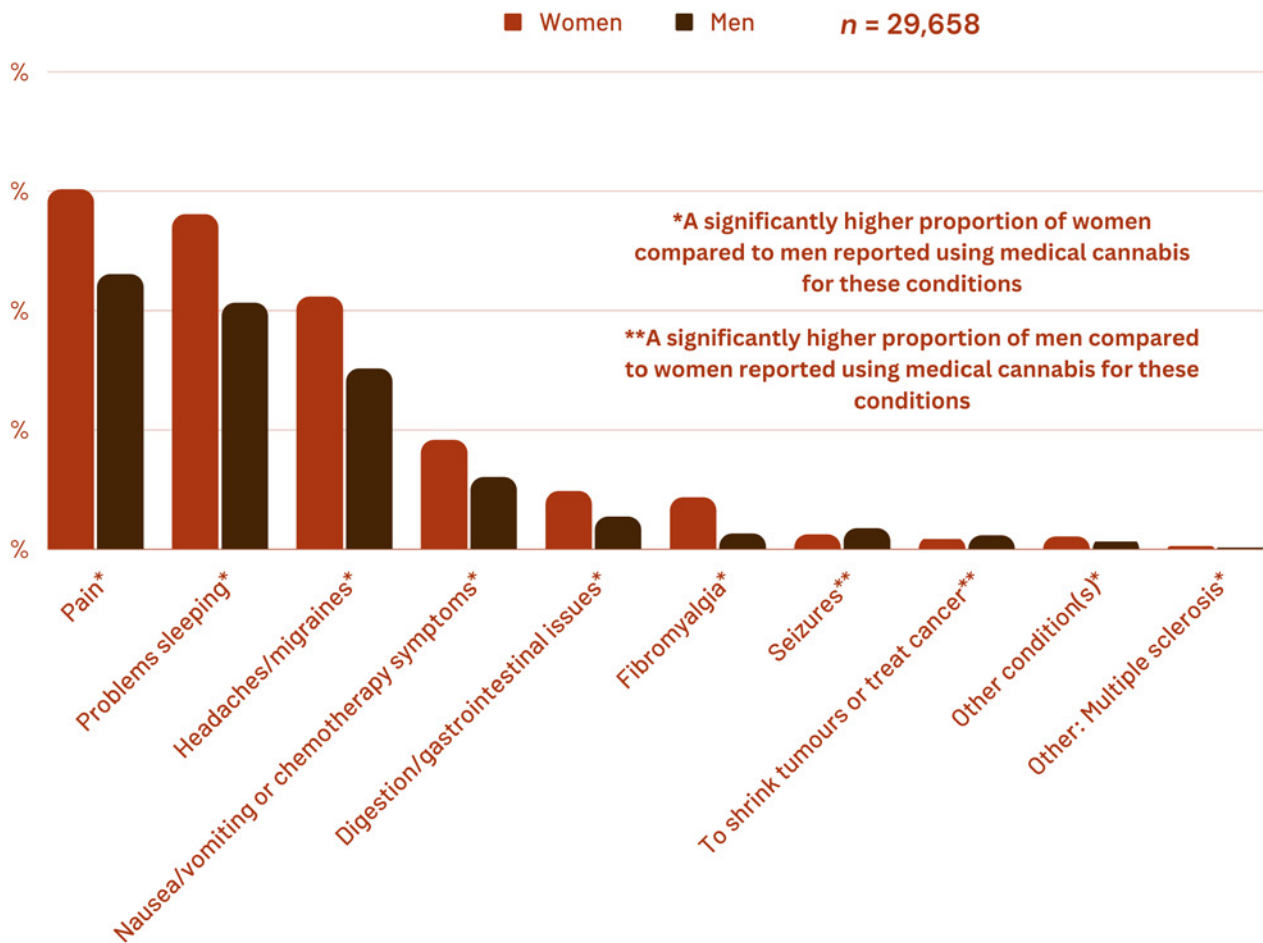


CANNABIS USE TO IMPROVE OR MANAGE MEDICAL HEALTH SYMPTOMS AMONG THOSE WHO HAD EVER TRIED CANNABIS

30.1% of the women and 27.1% of the men who had ever tried cannabis reported using cannabis use to improve or manage symptoms for any medical condition and this difference was statistically significant. There were also statistically significant differences in the proportion of women and men who used cannabis to improve or manage symptoms for headaches/migraines, pain (including arthritis, neuropathy or premenstrual syndrome), nausea/vomiting or chemotherapy symptoms, seizures, to shrink tumours or treat cancer, problems sleeping, digestion/gastrointestinal issues (Crohn’s Disease, colitis, irritable bowel syndrome, inflammatory bowel disease, etc.), fibromyalgia, other condition(s), and other-multiple sclerosis. See Figure 2. A significantly higher proportion of men (51.3%) vs. women (47.2%) have never used cannabis to treat or improve symptoms.

Figure 2

Cannabis use to improve or manage medical health symptoms among those who had ever tried cannabis between 2019–2021



CONCLUSION

Data from the ICPS show that more women than men report using cannabis for therapeutic purposes. Women and men exhibit different patterns of cannabis use to treat or improve different types of mental and medical (physical) health conditions. For example, while women are more likely to report cannabis use for mental health conditions such as anxiety, depression, PTSD or traumatic event, bipolar disorder, mania, or borderline personality disorder or eating disorder, men are more likely to report cannabis use for psychosis or dissociative identity disorder, schizophrenia or alcohol or other drug use. For medical conditions, significantly more women reported cannabis use for headaches/migraines, pain, nausea/vomiting or chemotherapy symptoms, problems sleeping, digestion/gastrointestinal issues, fibromyalgia, or multiple sclerosis. And more men reported using cannabis for seizures or to shrink tumours.

Data from the ICPS show that approximately 75% of respondents use cannabis for pain relief instead of opioids or prescribed pain medications, with women being more likely to do so, compared to men. This has direct implications for treatment or harm reduction in the context of the opioid crisis in Canada.

KEY MESSAGES

1. Overall, more women than men who had ever used cannabis reported having used cannabis for both medical conditions and mental health conditions.
2. More women than men who had ever used cannabis reported having used cannabis for pain relief, instead of opioids or prescription pain medication.
3. More women than men reported using cannabis for mental health conditions such as anxiety, depression, PTSD or traumatic event, bipolar disorder, mania, or borderline personality disorder or eating disorder.
4. More women than men reported using cannabis for medical conditions such as for headaches/migraines, pain, nausea/vomiting or chemotherapy symptoms, problems sleeping, digestion/gastrointestinal issues, fibromyalgia, or multiple sclerosis.
5. More men than women reported using cannabis for mental health conditions such as psychosis or dissociative identity disorder, schizophrenia or alcohol or other drug use.
6. More men than women reported using cannabis for medical conditions such as seizures or to shrink tumours.

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The Centre of Excellence for Women's Health respectfully acknowledges the First Nations, Inuit, and Métis peoples as the first inhabitants of the traditional custodians of the lands where we live, learn, and work.

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