

Medical cannabis use among older adults in Canada: self-reported data on types and amount used, and perceived effects

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Contents: Supplementary Information (SI)

SI Methods.....	2
Questionnaires.....	3
SI Table 1: Demographic characteristics of older medical cannabis users at the intake visit who attended a follow-up visit.....	8
SI Table 2: Types of indications for pain, psychiatric disorders, and neurological disorders which were the primary indication for seeking medical cannabis among older adults.....	10
SI Table 3: Daily amount of herbal cannabis used by older medical cannabis users at follow-up.....	11

SI Methods:

Questions and options presented to patients attending a medical cannabis clinic and willing to answer questions about their demographic, social, and health status. Notes on presentation and data processing decisions for individual items are provided in square brackets.

Questionnaires

Q: version 1

Gender:

Male

Female

Q: [version 2 (Jan 1, 2019)]

Gender:

Male

Female

Other

Q:

Age [blank space for entry]

Q: "Are you currently self-medicating with cannabis (marijuana)?"

No

Yes

Q: "Do you smoke cigarettes"

No

Yes

Q: Version 1 “Do you drink alcohol”

No

Yes

Version 2 “Do you drink alcohol” [Aug 1, 2017]

No

Yes – rarely

Yes – occasionally

Yes – often

[Aggregated all Yes responses into Yes]

Q: “Please list ALL medications that you are currently on.” [Version 1]

“Please select all medications you are currently prescribed/taking for your referred condition(s).” [Version 2: Aug 1, 2017]

Antidepressants (e.g. amitriptyline, zoloft, cipralex, paxil, effexor, wellbutrin)

Over-the-counter analgesic (e.g. Tylenol, Voltaren gel)

Opioids/Narcotics (e.g. oxycodone, percocet, fentanyl, morphine, hydromorphone, methadone, Tylenol #1,#2 or #3)

NSAIDS (e.g. Anti-inflammatory medications i.e. ibuprofen/Advil, naproxen, celcoxib)

Cannabinoids (e.g. Nabilone/Sativex/Marijuana) [removed Jan 1, 2020]

Anti-epileptic (e.g. carbamazepine, valproic acid, phenytoin, lamotrigine)

Antispasmodics (eg. methocarbamol, cyclobenzaprine, baclofen, tizanidine),

Nerve Modulators (e.g. pregabalin, gabapentin)

Benzodiazepines (e.g. diazepam, temazepam, lorazepam, clonazepam)

Cymbalta [added Jan 1, 2019]

Sleeping pills (e.g. zopiclone, zolpidem, trazadone. seroquel, remeron) [added Jan 1, 2019]

Other

None of the above

Q: “What is the PRIMARY diagnosis (or medical condition) that you are coming to the Cannabinoid Medical Clinic for?”

“What is the primary diagnosis (or medical condition) that you are coming to the Cannabinoid Medical Clinic for?” [added Aug 1, 2017]

Neurological Disorders (e.g. MS, Spinal Injury, Seizures, Movement Disorders such as Dystonia, Huntington’s, Parkinson’s, Tourette’s)

Pain Disorders (e.g. Chronic Pain, Lower Back Pain, Fibromyalgia, Arthritis)

Psychiatric Disorders (e.g. PTSD, Anxiety, Depression, Dementia, Sleep disorders, Alcohol and Opioid Use Disorder)

Gastrointestinal (e.g. Bowel Disease) [removed Aug 1, 2017]

Gastrointestinal (e.g. Crohn's, Ulcerative Colitis, IBS) [added Aug 1, 2017]

Cancer/Oncology

AIDS (HIV)

Other

[Were only optionally seen by those selecting appropriate group above]

Q: Which Pain Disorder?

Chronic Pain

Lower Back Pain

Fibromyalgia

Arthritis

Neuropathic Pain [added Aug 1, 2017, removed Jan 1, 2019 – was only asked in a subset of clinics. Observations dropped.]

Other

Q: Which Neurological Disorder?

Multiple Sclerosis

Spinal Cord Injury

Seizures

Movement Disorders (e.g. Parkinson's, Tourette's, Huntington's, Dystonia)

Other

Q: Which Psychiatric Disorder?

Post Traumatic Stress Disorder (PTSD)

Anxiety

Depression

Sleep Disorders

Alcohol and Opioid Use Disorder

Other

Follow-up Questionnaire

Q: "Which of the following cannabinoids are you using?" [added Oct 1, 2016]

Nabilone

Sativex (Pharmaceutical Spray) [removed Jan 1, 2020]

Sprays [added Jan 1, 2020]

Herbal Cannabis

Cannabis Oil

Capsules [added Jan 1, 2020]

Q: "What is the average daily dosage of your primary cannabis oil?"

0-0.5mL/day

0.5-1mL/day

1-1.5mL/day

1.5-2mL/day

>2mL/day

Q: "Please describe the cannabinoid (CBD) content of your primary cannabis oil"

Almost exclusively CBD

Mostly CBD, some THC

Equal parts CBD and THC

Mostly THC, some CBD

Almost exclusively CBD

Q: "How much better is your mood/sleep/pain?" [Version 1: removed Jan 1, 2019]

"Rate your mood/pain/sleep since starting your cannabis treatment" [Version 2: added Jan 1, 2019]

>75% better

50-75% better

25-50% better

0-25% better

'none/worse'.

Q: "Since starting medical cannabis has your daily dosage of <x> changed?"

Significantly decreased

Mildly decreased

No change

Mildly increased

Significantly increased

I'm not sure

I wasn't on this before [Note: observations dropped for present study, as selecting this option indicates inconsistent questionnaire answering. About 2% of patients chose this option across drug classes.]

Herbal cannabis dose

Q: "What dose of the primary strain are you using?"

0-0.5g/day

0.5-1g/day

1-1.5g/day

1.5-2g/day

>2g/day

SI Table 1: Demographic characteristics of older medical cannabis users at the intake visit who attended a follow-up visit.

	Older adults (n=4,673)	Male (n=1,804)	Female (n=2,869)	Men vs. women **
Age (mean±SD)	72.8±6.6	72.1±6.0	73.3±6.9	t= 6.47, p<0.0001
% Prior cannabis use	14.9% (n=3,311)	19.9% (n=1,227)	12.0% (n=2,084)	z= -6.20, p<0.0001
% Smoking	9.8% (n=3,386)	9.9% (n=1,253)	9.7% (n=2,133)	z= -0.23, p=0.82
% Alcohol Use	64.3% (n=4,673)	66.3% (n=1,804)	63.1% (n=2,869)	z= -2.27, p<0.023
Medications	n=4,599	n=1,775	n=2,824	
– OTC analgesics	46.4%	39.1%	50.1%	z= 7.87, p<0.0001
– Opioids	28.8%	29.6%	28.3%	z= -0.94, p=0.35
– NSAIDs	27.0%	25.9%	27.6%	z= 1.27, p=0.20
– Antidepressants	22.3%	18.3%	24.9%	z= 5.24, p<0.0001

– Nerve Modulators	15.3%	13.9%	16.2%	z= 2.05, p=0.041
– Benzodiazepines	13.1%	10.0%	15.0%	z= 4.91, p<0.0001
Primary diagnosis	n=4,599	n=1,775	n=2,844	
– Pain	70.3%	66.5%	72.6%	z= 4.37, p<0.0001
– Oncological	7.3%	9.7%	5.7%	z= -5.09, p<0.0001
– Psychiatric	8.3%	8.4%	8.2%	z= -0.26, p=0.80
– Neurological	7.1%	9.1%	5.9%	z= -4.17, p<<0.0001
– Others	7.1%	6.2%	7.7%	z= 1.82, p=0.07

** Statistics reported are t- or z-statistic and p-value. OTC = Over the counter, NSAID =

Nonsteroidal anti-inflammatory drugs. Nerve modulators include pregabalin and gabapentin for pain, antiepileptics include carbamazepine, valproic acid, phenytoin, and lamotrigine.

SI Table 2: Types of indications for pain, psychiatric disorders, and neurological disorders which were the primary indication for seeking medical cannabis among older adults.

Table shows medical diagnosis in older adults as a percentage of each diagnostic category listed at the top

Pain (n=6,512)		Psychiatric (n=763)		Neurological (n=672)	
Arthritis	34.0%	Sleep Disorders	47.6%	Movement Disorders	39.4%
Chronic	33.8%	Anxiety	26.3%	Spinal Cord Injury	12.5%
Lower Back	16.6%	Depression	14.5%	Multiple Sclerosis	8.6%
Fibromyalgia	5.4%	Post-Traumatic Stress Disorder	6.8%	Seizures	4.3%
Other	10.2%	Dementia/ Alzheimer's	1.6%	Other	35.1%
		Alcohol and Opioid Use	0.4%		
		Other	2.8%		

SI Table 3: Daily amount of herbal cannabis used by older medical cannabis users at follow-up

		<0.5g/day	0.5-1g/day	1-1.5g/day	1.5-2g/day	>2g/day
Herbal	Men	26.3%	32.1%	17.7%	10.6%	10.9%
	Women	35.0%	29.3%	11.8%	8.8%	6.1%