

Perceived support for medical cannabis use among approved medical cannabis users in Canada

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Abstract

Introduction and Aims. Very little is known about the social experience of medical cannabis use, including the experience of stigma among approved users. The current study examined perceptions of support from physicians, family and friends as well as the prevalence of ‘hiding’ medicinal cannabis use. **Design and Methods.** An online cross-sectional survey (N = 276) was conducted from 29 April to 8 June 2015. No public sampling frame was available from which to sample approved medical cannabis users (MCU). Eligible respondents were approved MCUs, aged 18 years or older, and reported cannabis use in the past 30 days for health reasons. Logistic regression analyses were used to assess aspects of stigma, including perceived support from their immediate social environment as well as behaviours reflecting a perceived social disapproval. **Results.** Approximately one-third of respondents (32.6%) reported that their physician had refused to provide a medical document, and the vast majority of respondents (79.3%) reported hiding their medical cannabis use, most commonly to avoid judgement. Fewer than half of approved users perceived that their doctor was ‘supportive’ (38%), whereas two-thirds perceived support from family (66.3%) and friends (66.3%). Perceptions of support were similar across most socio-demographic sub-groups. **Discussion and Conclusions.** Substantial proportions of approved MCUs in Canada report a lack of support and most have made some effort to conceal their medical cannabis use. Overall, the findings suggest that social norms around medical cannabis use remain unfavourable for many users, despite that fact that medical cannabis has been legal in Canada for more than a decade. [Leos-Toro C, Shiplo S, Hammond D. Perceived support for medical cannabis use among approved medical cannabis users in Canada. *Drug Alcohol Rev* 2018;37:627–636]

Key words: medical cannabis, social disqualification, societal approval, patient experience, stigma.

Introduction

Cannabis in Canada has had a history of prohibition and criminalisation since its inclusion in international drug control conventions in 1925 [1]. However, the last 20 years have seen major shifts in cannabis policy and medical cannabis is now recognised to have a range of therapeutic benefits (e.g. relief of chronic pain, chemotherapy-induced nausea) [2–7]. Canada introduced the Medical Marihuana Access Regulations in 2001, wherein Canadians with severe medical illnesses were granted legal access to medical cannabis. In September 2010, it was estimated that 400 000 to 1 000 000 Canadians were consuming cannabis for self-reported therapeutic benefit [8,9]; however, as of June 2013, only a fraction of those—approximately 30 000—had received approval from Health Canada to access and possess regulated forms of cannabis. The number of sanctioned users was predicted to grow to

50 000 by 2014 and by 2024 expected to reach approximately 400 000 [10]. Evidently, a majority of the medical cannabis users (MCU) in Canada seemed to access and possess cannabis through illegal channels. To date, medical cannabis dispensaries are not included as an authorised source of medical cannabis at the federal level; however, certain provinces such as British Columbia have licensed ‘compassion clubs’, also known as ‘dispensaries’, which was opposed by the federal government [11,12].

In 2014, the Medical Marihuana Access Regulations was revised and a new regulatory framework, Marihuana for Medical Purposes Regulations was introduced. Doctors and nurse practitioners became the gatekeepers of medical cannabis, and were able to determine the clinical conditions that would benefit from medical cannabis therapy [13]. The Marihuana for Medical Purposes Regulations was replaced by the Access to Cannabis for Medical Purposes Regulations

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in August 2016 to allow for registered cannabis users to produce a limited amount of the herb for their personal use [14].

In general, social norms in Canada are more accepting of cannabis use compared to many other countries [15,16]. However, this normalisation has been observed to be solely applicable to certain social contexts, stages in the life course, professions and enjoyed by socially acceptable sub-groups (i.e. university students perceived to be leading productive lives, artists, musicians); an alternative context or type of individual would be perceived as deviant and thus experience stigmatisation [14]. Medical anthropologists and sociologists describe stigma as ‘both a social process perpetuated by non-marginalised groups to achieve goals of exclusion and conformity, and a psychosocial process that marginalised groups must navigate and contend with’ [17]. Goffman’s 1963 work on stigma is often cited as the seminal work that lays the foundations for our understanding of health-related stigma. Goffman describes the concept as the rejection of an individual possessing an attribute that is deeply discredited by their society—conceiving the attribute as a spoiler of an individual’s identity, effectively making them undesirable and deviant [18]. Since Goffman, a greater consideration of the contextual aspects of an individual’s experience has expanded stigma as a concept to include considerations of how it may impact social life and relationships [19]. Social disqualification may have a profound impact on individuals and lead them toward increasingly negative states of health; an exacerbation to their already poor health if they are MCUs [20].

Currently, non-medical cannabis use remains illegal in jurisdictions that have legalised medical use of cannabis, which may help to sustain its stigmatised status even after it has received legal legitimacy. Illicit substance users are among the most stigmatised populations with variations in the degree of stigma depending on their drug of choice [17,21]. MCUs are not exempt from this stigma: recent studies demonstrate that MCUs perceive significant levels of stigma from their social context that includes family, friends, and their workplace peers [22]. Individuals that disclose their involvement in medical cannabis therapies are perceived to be less competent than those disclosing that they are on a pharmaceutical therapy when participating in job interviews; this leads to numerous associated health and social disadvantages [23]. There is a paucity of research regarding the kinds of social disqualifications MCUs experience. Compounding the problem are the different stigmatised conditions that medical cannabis therapies may benefit. For example, an end-stage AIDS patient may experience stigma associated not only to their cannabis use but to their medical condition as well. While interest and recognition of

medical cannabis’ therapeutic value exists, clinical practice suggests a continuing level of discomfort with prescribing medical cannabis [12,24]. Studies of physician attitudes indicate that the majority of family physicians, medical residents and medical students ‘did not have access to the quality of evidence to which they are accustomed and with which they felt comfortable’ with regard to cannabis for therapeutic purposes [25]. There exists a low uptake on the federal access program given the new regulations and significant discomfort from the medical community to suggest cannabis as a viable treatment option for patients [23].

Very little is known about stigma associated with Canadian MCUs or the ways in which stigma manifests itself in users in terms of health and social behaviours [10,21]. The stigma associated with cannabis may affect the quality of clinician-client relationships and care outcomes; a patient may be reluctant to ask about medical cannabis therapy and prolong the morbidity of a condition that may be relieved with its use. The current study characterised a group of approved medical cannabis patients along socio-demographic variables, resulting social behaviours, and quality measures of physician interaction to better understand the social component of stigma in terms of perceptions of acceptability of MCU among this understudied subgroup of individuals.

Methods

Study design

An online cross-sectional survey was conducted from 29 April until 8 June 2015. No public sampling frame was available from which to sample approved MCUs. Nor was there any reliable way of verifying approved status without disclosure of sensitive health-care records. Therefore, the current study recruited approved users through licensed producers—the only legal source of medical cannabis in Canada. At the time of the survey, a total of 16 licensed producers who were registering clients in Canada were identified and approached to assist with study recruitment. Nine licensed producers agreed and sent their registered customers an email invitation with information about how to contact the study investigators. Eligible respondents were approved MCUs, 18 years of age or older, and reported cannabis use in the past 30 days for health reasons. Eligible respondents were provided with a unique password via email to access the survey. Respondents who completed the survey were compensated with \$10 for completing the survey, provided via an electronic gift card or Interac email payment. In order to protect confidentiality and to minimise social desirability bias, email addresses were the only

personally identifying information collected from respondents. The study received approval from the Office of Research Ethics at the University of Waterloo.

Survey measures

The survey consisted of previously validated measures and adapted to the goal of the survey which was to characterise Canadian MCUs. Measures that were adapted from previously validated surveillance instruments underwent cognitive interviewing with approved medical cannabis patients fulfilling inclusion criteria.

Socio-demographics

Participants were classified into four regions of residence: Eastern (Prince Edward Island, Nova Scotia, New Brunswick, Newfoundland and Labrador, and Quebec), Ontario and Northern (Ontario, Northwest Territories, and Nunavut), Prairies (Alberta, Manitoba, and Saskatchewan), and British Columbia. Respondents were classified as White or Non-White. Non-White included respondents identifying as South Asian, Chinese, Black, Filipino, Latin American, Arab, Southeast Asian, West Asian, Korean, Japanese, Aboriginal or multi-racial. Their education was classified into three attainment categories, primary to secondary school, some post-secondary training or education and post-secondary school completion. Income level was assessed as low (\$0 to \$40 000), middle (\$40 001 to \$80 000), high (more than \$80 001) and undisclosed.

Medical cannabis use

Participants were classified into three categories according to their patterns of medical cannabis use in the past 30 days: daily use, almost daily use, and less than daily use. The self-reported reason for medical cannabis use in terms of the 'main health reason' was classified into three categories: physical (i.e. glaucoma, nausea, relief from epileptic seizures), psychological (i.e. depression, anxiety) and undisclosed. Users' primary source of medical cannabis was also classified into either Health Canada Licensed Producer or Unlicensed producer.

Perceived support and societal approval

Measures of perceived support were assessed for three reference groups: physicians, family and friends, using

the following question: 'What is your [reference group's] general attitude toward your marijuana use for health reasons?' using a 5-point Likert scale. Response options were analysed as dichotomous outcome to model the presence of support ('very supportive' or 'supportive') versus absence of support ('very unsupportive', 'unsupportive' and 'neutral/mixed support').

A measure of societal support was also asked: 'Please select the option you agree with': (i) 'Society strongly disapproved of medical marijuana'; (ii) 'Society disapproves of medical marijuana'; (iii) 'Society neither disapproves or approves of medical marijuana'; (iv) 'Society approves of medical marijuana'; (v) 'Society strongly approves of medical marijuana'. Responses as the presence of support ('approves', 'strongly approves') or absence of support ('disapproves', 'strongly disapproves' or 'neither').

Hiding cannabis use

Hiding their use was assessed by asking: 'Do you hide your marijuana use for health reasons from...' with options: (i) 'None of your friends'; (ii) 'Some of your friends'; (iii) 'All of your friends' and (iv) 'Refuse to answer'. The same question was used for their family and co-workers with the same responses. Participants who reporting hiding were asked: 'What are your reasons for hiding your marijuana use? (select all that apply)', with the following response options: (i) 'Respect for the feelings of non-users'; (ii) 'Avoiding judgement'; (iii) 'Setting an example for children'; (iv) 'Fear of legal punishment'; (v) 'Privacy'; (vi) 'I don't hide my marijuana use'; (vii) 'Other (please specify)'; (viii) 'Do not know' and (ix) 'Refuse to answer'.

Physicians and medical approval

Participants were asked, 'Has a physician ever refused to give you a medical document to use marijuana for medical reasons?' ('Yes', 'No', 'Do not know', 'Refuse to answer'). Participants who reported physician approval were asked: 'What was the physician's reason for refusing to give you a medical document to use marijuana for health reasons?' ('Advised that you were not yet sick enough to need marijuana'; 'Feared repercussions from the medical association'; 'Other (please specify)'; 'Do not know'; and 'Refuse to answer' from which they were able to select all that applied. Finally, participants were asked, 'Have you ever had to pay any sort of fee for a medical document to use marijuana?': (i) 'Yes'; (ii) 'No'; (iii) 'Do not know'; (iv) 'Refuse to answer'.

Analysis

Analyses were conducted using SPSS, Version 22 (IBM, Illinois). Logistic regressions were conducted to examine the level of perceived societal approval of medical cannabis use (0 = Absence of approval, 1 = Presence of approval), perceived presence of physician support (0 = Absence of support, 1 = Presence of support), perceived presence of family support (0 = Absence of support, 1 = Presence of support), and perceived presence of support from friends (0 = Absence of support, 1 = Presence of support), physician refusal to provide prescription for medical cannabis (0 = Refusal of prescription, 1 = No refusal of prescription). The following set of covariates were entered into each model: age, gender, ethnicity, region of residence, educational attainment, income, main medical condition and source of medical cannabis. 'Adjusted' odds ratios are presented throughout, unless otherwise noted.

Results

Sample characteristics

A total of 364 respondents completed the survey after deleting cases with missing information for age ($n = 1$), gender ($n = 8$) and incorrect responses to a data integrity question ($n = 27$). The survey completion rate (COMR) was 79.4% (American Association for Public Opinion Research, 2015). The analytic sample was restricted to the 276 individuals who reported using cannabis exclusively for medical reasons and for whom complete information was available for all covariates used in the logistic regression models.

Sample characteristics are shown in Table 1. The sample had a greater proportion of males, approximately 80% were older than 30, predominantly white, and the sample heavily represented by residents of Ontarians and the Northern Territories. Almost half of respondents reported having some education beyond secondary school; however, a majority were classified as 'low' income. Daily users accounted for 60% of the sample. Almost two-thirds of individuals reported a physical problem as their reason for using medical cannabis. Approximately three in four individuals reported a Health Canada Licensed producer as their primary source of medical cannabis.

Perceived support among health professionals

More than eight in 10 respondents (86.2%) reported having a physician or general practitioner. Approximately half (54.0%, $n = 149$) of the sample reported

Table 1. Sample characteristics of approved Canadian medical cannabis users in June 2015 ($N = 276$)

Characteristic	<i>n</i>	% (<i>N</i>)
<i>Gender</i>		
Male	158	57.2
Female	118	42.8
<i>Age</i>		
Young adult (18–30 years)	58	21.0
Adult (31–45 years)	109	39.5
Older adult (46–71 years)	109	39.5
<i>Ethnicity</i>		
White	219	79.3
Other	57	20.7
<i>Region</i>		
Eastern	39	14.1
Ontario and Northern Territories	160	58.0
Prairies	35	12.7
British Columbia	42	15.2
<i>Education</i>		
Primary to secondary school	86	31.2
Vocational school/ some university	127	46.0
Completed post-secondary school	63	22.8
<i>Income</i>		
Low	165	59.8
Middle	55	19.9
High	35	12.7
Undisclosed	21	7.6
<i>Daily use</i>	164	59.4
<i>Main condition</i>		
Physical	179	64.9
Psychological	55	19.9
Undisclosed	42	15.2
<i>Primary source</i>		
Health Canada licensed producer	205	74.3
Unlicensed producer	71	25.7

that a physician or nurse practitioner had ever recommended use of medical cannabis. Nearly one in four respondents (23.9%, $n = 66$) reported that an alternative health practitioner (e.g. naturopath, chiropractor, homeopath) had 'ever' recommended use of medical cannabis. One-third of the sampled individuals (32.6%, $n = 90$) reported that they had to pay a fee for a medical document to use medical cannabis.

As shown in Figure 1, 10.1% ($n = 28$) of respondents of the whole sample reported that their physician was unsupportive or very unsupportive of their use of cannabis for health reasons. More than one-third (36.2%, $n = 100$) perceived that their physician was neutral on the matter, while the 38.1% ($n = 105$) reported that their physician was either 'supportive' or 'very supportive'. A logistic regression model was fitted to examine factors associated with the perceived absence of physician approval of cannabis use for medical purposes (see Table 2, Model 1a). Of the factors included in the analysis, only the nature of the primary source of cannabis was statistically significant. Respondents who reported

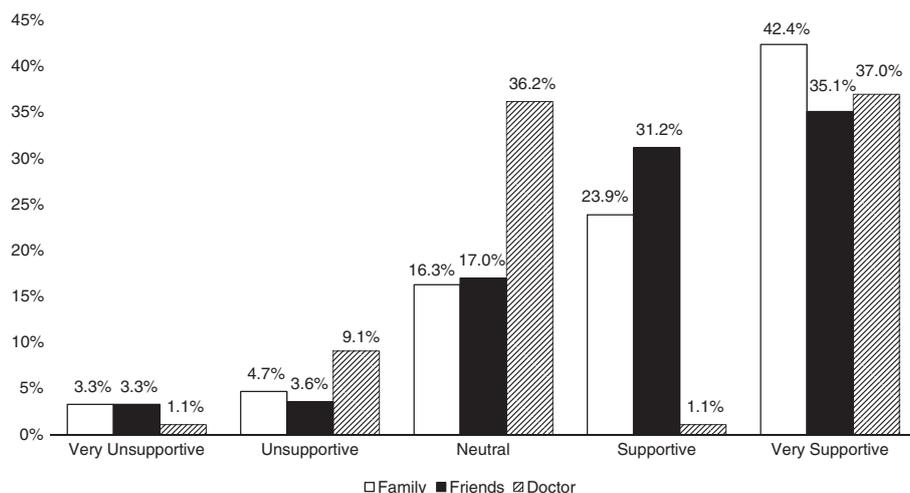


Figure 1. Perceived support from family, friends and doctor regarding cannabis use for medical purposes (N = 276).

'unlicensed producers' as their primary source for medical cannabis were more than twice as likely (odds ratio [OR] = 2.059, $P = 0.032$) to report perceiving an absence of physician support for their medical cannabis use.

Approximately one-third of respondents (32.6%; $n = 90$) reported that their physician had 'ever' refused to provide a medical document to facilitate the procurement of medical cannabis. Of this sub-sample, 58.9% ($n = 53$) reported that their physician feared repercussions from the medical association and 53.3% of the sub-sample ($n = 48$) reported that their doctor told them they were uncertain of cannabis use for therapeutic reasons, unsure of the legal territory, or simply did not support its use among other reasons. In addition, 8.9% ($n = 8$) of respondents within the sub-sample reported that their physician advised that they were not sick enough to be provided with the necessary documentation, whereas two respondents reported not being provided with a reason for refusal. Table 3, Model 3 presents the results of the logistic regression model examining factors associated with respondents' physicians' refusal to prescribe medical cannabis. Individuals reporting physical conditions, (i.e. glaucoma, nausea, relief from epileptic seizures) were less likely (OR = 0.406, $P = 0.011$) to report a physician refusal to prescribe cannabis for medical purposes than those reporting psychological conditions (i.e. depression, anxiety) as their primary condition for treatment with medical cannabis.

Perceived social support

Less than half of the sample (44.2%, $n = 122$) reported perceiving societal approval of their use of medical

cannabis. Perceptions of physician, family and friends' level of support varied by a number of socio-demographic factors and sourcing behaviours. Table 3, Model 1, outlines the results of the logistic regression analysis examining factors associated with the absence of societal approval of cannabis use for medical purposes among approved users and Table 2, Models 1b and 1c, present the results of logistic regression analyses associated with perceived absence of support from family and friends including their respective odds ratios.

Individuals who reported sourcing their cannabis for medical purposes from unlicensed producers were 2.7 (OR = 2.691, $P = 0.003$) times more likely to report a perceived absence of societal approval for their use of medical cannabis than those sourcing from a Health Canada licensed producer. Men were approximately half as likely (OR = 0.566, $P = 0.039$) as women to report a perceived absence of support from their family. Two-thirds (66.3%, $n = 183$) of those reporting using medical cannabis perceived support from their family, similar to levels of perceived support among friends (see Figure 1).

There were regional differences between perceived absence of support from friends among approved MCUs surveyed. Respondents from Ontario and the Northern Territories surveyed as well as those from the Prairies were less likely to report a perceived absence of support from their friends than those from Eastern provinces (OR = 0.324, $P = 0.005$ and OR = 0.249, $P = 0.011$, respectively). Respondents that reported 'low' and 'middle' levels of income were less likely to report a perceived absence of support from friends than those that did not disclose their income level (OR = 0.283, $P = 0.017$ and OR = 0.237, $P = 0.015$, respectively). Furthermore, respondents that did not disclose their main condition for which

Table 2. Logistic regression analyses examining factors associated with perceived absence of support associated with use of cannabis for medical purposes among approved users (N = 276)

Characteristic	Reference category	Model 1a			Model 1b			Model 1c		
		OR	95% CI	P	OR	95% CI	P	OR	95% CI	P
<i>Gender</i>										
Male	Female	1.137	(0.673–1.920)	0.631	0.566	(0.330–0.972)	0.039	0.827	(0.472–1.448)	0.505
Age		0.990	(0.968–1.012)	0.356	0.983	(0.960–1.006)	0.148	1.020	(0.996–1.045)	0.106
<i>Ethnicity</i>										
Non-White	White	1.116	(0.552–2.258)	0.760	1.291	(0.648–2.576)	0.468	1.403	(0.676–2.911)	0.364
<i>Region</i>		(X ² = 1.802, P = 0.614)			(X ² = 5.012, P = 0.171)			(X ² = 10.738, P = 0.013)		
Eastern	British Columbia	1.732	(0.645–4.652)	0.276	1.112	(0.423–2.927)	0.829	1.492	(0.570–3.909)	0.415
Ontario & Northern Territory	British Columbia	1.221	(0.576–2.590)	0.602	0.999	(0.459–2.175)	0.999	0.484	(0.221–1.057)	0.069
Prairies	British Columbia	0.922	(0.342–2.487)	0.872	0.341	(0.107–1.089)	0.069	0.372	(0.127–1.088)	0.071
Ontario & Northern Territory.	Eastern	0.705	(0.316–1.575)	0.394	0.898	(0.417–1.937)	0.785	0.324	(0.147–0.718)	0.005
Prairies	Eastern	0.532	(0.191–1.485)	0.228	0.307	(0.097–0.966)	0.044	0.249	(0.085–0.731)	0.011
Ontario & Northern Territory.	Prairies	1.325	(0.604–2.906)	0.482	2.929	(1.095–7.834)	0.032	1.301	(0.534–3.171)	0.562
<i>Education</i>		(X ² = 2.297, P = 0.317)			(X ² = 0.706, P = 0.703)			(X ² = 2.411, P = 0.300)		
Primary to secondary	Completed post-secondary school	0.736	(0.351–1.541)	0.416	0.945	(0.440–2.029)	0.885	1.065	(0.476–2.382)	0.877
Vocational school/some university	Completed post-secondary school	1.177	(0.602–2.302)	0.633	1.215	(0.605–2.441)	0.584	1.622	(0.783–3.361)	0.193
Vocational school/ some university	Primary to secondary	1.600	(0.871–2.938)	0.130	1.286	(0.686–2.408)	0.433	1.522	(0.782–2.964)	0.216
<i>Income</i>		(X ² = 2.297, P = 0.317)			(X ² = 4.006, P = 0.261)			(X ² = 6.822, P = 0.076)		
Low	Undisclosed	1.242	(0.458–3.365)	0.671	0.535	(0.198–1.447)	0.218	0.283	(0.100–0.801)	0.017
Middle	Undisclosed	1.283	(0.425–3.875)	0.658	0.977	(0.325–2.941)	0.967	0.237	(0.074–0.755)	0.015
High	Undisclosed	0.868	(0.265–2.851)	0.816	0.570	(0.164–1.979)	0.376	0.403	(0.117–1.387)	0.150
Middle	Low	1.034	(0.521–2.049)	0.924	1.828	(0.913–3.658)	0.089	0.837	(0.399–1.755)	0.637
High	Low	0.699	(0.304–1.610)	0.401	1.065	(0.418–2.716)	0.894	1.426	(0.585–3.473)	0.435
Middle	High	1.478	(0.594–3.680)	0.401	1.715	(0.636–4.627)	0.286	0.587	(0.220–1.566)	0.287
<i>Main condition</i>		(X ² = 2.230, P = 0.328)			(X ² = 0.666, P = 0.717)			(X ² = 7.257, P = 0.027)		
Undisclosed	Psychological	1.958	(0.744–5.152)	0.173	1.414	(0.573–3.493)	0.452	3.235	(1.268–8.250)	0.014
Physical	Psychological	1.029	(0.530–2.000)	0.932	1.035	(0.516–2.080)	0.922	1.131	(0.543–2.358)	0.742
Physical	Undisclosed	0.526	(0.217–1.274)	0.154	0.732	(0.322–1.667)	0.457	0.350	(0.151–0.809)	0.014
<i>Primary source</i>										
Unlicensed producer	Health Canada licensed producer	2.059	(1.063–3.986)	0.032	1.443	(0.768–2.712)	0.254	1.512	(0.787–2.905)	0.215

CI, confidence interval; OR, odds ratio.

Table 3. Logistic analyses examining factors associated with perceived absence of societal approval of cannabis use for medical purposes among approved users and physician refusal to prescribe cannabis (N = 276)

Characteristic	Reference category	Model 2			Model 3		
		OR	95% CI	P	OR	95% CI	P
<i>Gender</i>							
Male	v. Female	0.654	(0.387–1.106)	0.113	1.375	(0.790–2.394)	0.260
<i>Age</i>		0.989	(0.967–1.011)	0.322	1.003	(0.980–1.026)	0.819
<i>Ethnicity</i>							
Non-White	v. White	1.424	(0.702–2.889)	0.327	0.748	(0.363–1.542)	0.432
<i>Region</i>			(X ² = 2.338, P = 0.505)			(X ² = 1.240, P = 0.743)	
Eastern	v. British Columbia	1.828	(0.679–4.924)	0.233	0.826	(0.295–2.316)	0.717
Ontario & Northern Terr.	v. British Columbia	0.991	(0.462–2.116)	0.982	1.147	(0.528–2.490)	0.729
Prairies	v. British Columbia	1.142	(0.414–3.148)	0.798	1.485	(0.536–4.117)	0.447
Ontario & Northern Terr.	v. Eastern	0.542	(0.243–1.207)	0.134	1.388	(0.589–3.270)	0.454
Prairies	v. Eastern	0.624	(0.222–1.760)	0.373	1.797	(0.614–5.262)	0.285
Ontario & Northern	v. Prairies	0.868	(0.389–1.936)	0.730	0.772	(0.345–1.728)	0.529
<i>Education</i>			(X ² = 0.278, P = 0.870)			(X ² = 0.959, P = 0.619)	
Primary to secondary	v. Completed post-secondary school	0.842	(0.398–1.780)	0.652	0.840	(0.386–1.825)	0.659
Vocational school/some university	v. Completed post-secondary school	0.843	(0.430–1.652)	0.619	0.709	(0.351–1.434)	0.339
Vocational school/some university	v. Primary to secondary	1.001	(0.545–1.841)	0.996	0.845	(0.447–1.598)	0.604
<i>Income</i>			(X ² = 2.298, P = 0.513)			(X ² = 1.903, P = 0.593)	
Low	v. Undisclosed	0.814	(0.287–2.313)	0.700	2.197	(0.671–7.195)	0.194
Middle	v. Undisclosed	0.640	(0.205–2.001)	0.443	2.137	(0.602–7.583)	0.240
High	v. Undisclosed	0.458	(0.133–1.576)	0.215	1.693	(0.432–6.639)	0.450
Middle	v. Low	0.786	(0.400–1.545)	0.485	0.973	(0.485–1.950)	0.938
High	v. Low	0.562	(0.239–1.321)	0.186	0.771	(0.318–1.870)	0.565
Middle	v. High	1.398	(0.554–3.533)	0.478	1.262	(0.486–3.273)	0.633
<i>Main condition</i>			(X ² = 0.939, P = 0.625)			(X ² = 6.433, P = 0.040)	
Undisclosed	v. Psychological	1.504	(0.580–3.903)	0.401	0.618	(0.245–1.562)	0.309
Physical	v. Psychological	0.994	(0.509–1.940)	0.986	0.406	(0.202–0.817)	0.011
Physical	v. Undisclosed	0.661	(0.280–1.561)	0.341	0.657	(0.279–1.545)	0.336
<i>Primary source</i>							
Unlicensed producer	v. Health Canada licensed producer	2.691	(1.394–5.196)	0.003	1.098	(0.572–2.106)	0.779

their use of cannabis was medically necessary were more than three times as likely (OR = 3.235, $P = 0.014$) to report an absence of support from friends than those that reported a psychological issue as their main medical condition for requiring medical cannabis. Individuals that reported a physical condition were less likely (OR = 0.350, $P = 0.014$) than those reporting psychological conditions to report a perceived absence of support from their friends.

Overall, 80.1% ($n = 221$) reported hiding their use of cannabis at least once—see Figure 2. Nearly 6 in 10 (57.2%, $n = 158$) of respondents reported hiding their use of cannabis from their friends. Almost one-third (30.8%) of the sampled respondents reported fear of legal punishment due to their use of medical cannabis.

Discussion

Our findings add to current knowledge regarding approved MCUs in Canada and their perceptions of stigma within their social contexts. This study indicates that cannabis users experienced aspects of stigma within their immediate social relationships including family and friends. Even though use of non-medical cannabis is common in Canada—34% of Canadians over 14 report using cannabis in their lifetime—approved medical users perceive a lack of social support for their therapies [26].

Stigmatisation can take the form of moral regulation and social control [27]. Although medical cannabis has been legal in Canada since 2001, consumers have had to overcome substantial bureaucratic and practical

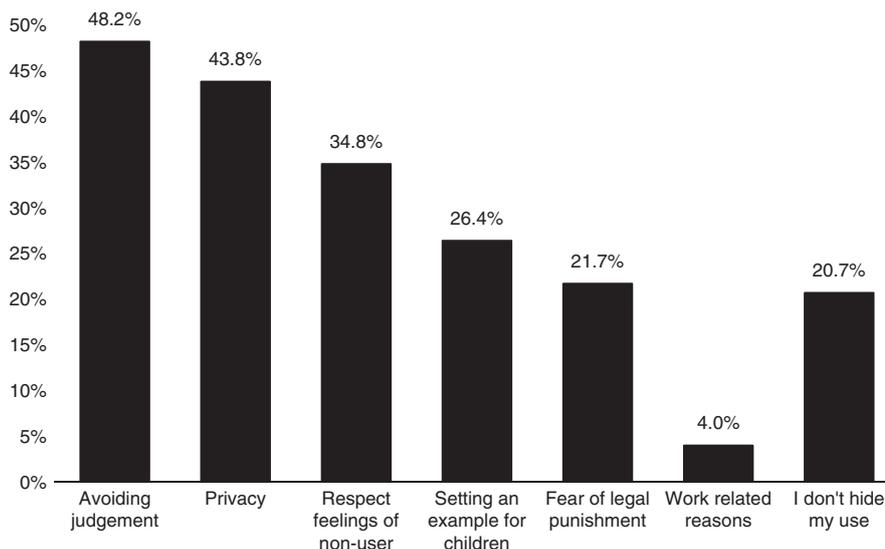


Figure 2. Reasons approved medical cannabis users provide for hiding their use (N = 276).

barriers to receive approval as an authorised medical user and to access medical cannabis [28]. These barriers have likely contributed to stigma around medical cannabis use and lower levels of perceived support. For example, individuals reported experiencing lapses in authorisation of documentation that allowed them access to their prescribed therapies forcing them to either forgo treatment or access the substance illegally [29].

Overall, the few significant findings in the logistic regressions that were conducted reveal that even though our sample population may be heterogeneous along socio-demographic characteristics and clinical conditions, their experience with stigma in their social context was relatively homogeneous in terms of their perceptions of societal approval of their use of medical cannabis and the support they perceive from their doctors, families, and friends.

The current study's findings suggest that clinicians may be uncomfortable with prescribing medical cannabis and that there may be a lack of clarity around clinicians' roles under the revised Marijuana for Medical Purposes Regulations, as well as changing medical cannabis policies (See *R v. Smith*) [30]. Many approved users reported being refused medical cannabis by their physician, and this experience was more common among those who reported a 'psychological' rather than 'physical' health condition which may be due to a number of factors including unclear boundaries between non-medical and medical cannabis use and a general lack of information regarding therapeutic benefits that could be derived from cannabis therapies among Canadian physicians [13,31]. This is consistent with the well-established finding that mental health conditions are associated with far greater stigma and discrimination

and evidence from jurisdictions with established medical cannabis markets such as California, USA [32–34].

Perceived support from family and friends was considerably higher than physicians, although women were more likely to report an absence of support than men. It may be that the general population 'genders' cannabis use and relaxes social controls among men while chronic cannabis use among women continues to represent a greater taboo in society [35]. In addition, approximately 80% of approved users reported hiding their cannabis use at some point, for a range of reasons. Notably, one fifth reported hiding their use out of fear of legal consequences. This may reflect the shifting legal status of medical cannabis in Canada, as well as the fact that many approved users were sourcing their cannabis from sources other than 'licensed producers'. Future research might examine to what extent hiding medical cannabis use is due to stigmatisation of the underlying health condition or with the use of cannabis as a medical therapy.

Limitations

The cross-sectional nature of the study does not allow for causal inferences. Random sampling was not conducted due to a lack of public sampling frame for approved MCUs; thus, a convenience sample was used. Verification of individuals that reported being approved MCUs was not feasible given the sensitive nature of accessing patient medical records. However, respondents were sampled via the customer lists of established licensed products, which provides a measure of verification. Despite the fact that respondents

were reassured about the confidentiality of the survey, medical cannabis use remains a ‘sensitive’ topic and the survey is subject to social desirability bias, which may have resulted in under-reporting of some outcomes, such as the frequency with which users source their medical cannabis from ‘illicit’ sources. The study also has a number of strengths. This survey made use of a large sample of approved cannabis users across Canada and is among the first to include approved cannabis users exclusively. This is a population that is largely understudied and the need to build the evidence base for evolving cannabis policy makes it quite timely. The current study also took place during a regulatory shift from the Medical Marihuana Access Regulations to Marihuana for Medical Purposes Regulations which has not been examined before.

Conclusions

The current study suggests that significant stigmatisation of medical cannabis persists, even 15 years after some forms of medical cannabis were legalised in Canada. The findings indicate that there are a number of issues associated with stigmatisation they may encounter when they make use of health services, issues in their social environment that include intrinsic and extrinsic perceptions of socially constructed ideas of conformity and deviance, as well as legal and health ramifications related to medical cannabis. In particular, the findings suggest barriers with respect to clinician support for medical cannabis use. Future research should examine how perceptions of medical cannabis use evolve following legalisation of non-medical cannabis use in Canada.

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Conflict of Interest

The authors have no conflicts of interest.

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