Research letter

Self-reported medical use of marijuana: a survey of the general population

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The issue of medical marijuana use has been on the forefront of public debate. There are indications that marijuana is sometimes used to alleviate pain from cancer, to reduce nausea from chemotherapy, to mitigate the wasting syndrome of AIDS, and for the treatment of glaucoma, epilepsy, multiple sclerosis and a variety of other disorders.[1,2] A few studies have suggested that the medical use of marijuana is common among people with HIV/AIDS[3,4] and those with certain psychiatric conditions.[5,6] However, there are no published surveys of such use among people with other conditions. We report results from the only general population survey known to have included questions about the medical use of marijuana. The survey involved telephone interviews with Ontario adults aged 18 years or more. Interviews were completed with 2508 people (67.4% of the 3723 households in which a household member answered the call). For this report we weighted the responses to account for differential selection related to regional stratification and household size.[7]

In the weighted sample 49 respondents (1.9%) reported using marijuana for a medical reason in the year preceding the survey (Table 1). A total of 173 other respondents (6.8%) reported using marijuana but not for medical reasons. (The corresponding numbers in the unweighted sample were 47 and 142.) The remaining 2305 respondents (91.2%) in the weighted sample reported no use of marijuana in the preceding year. The most frequently cited reason for using marijuana medically was for pain or nausea (41/49 [85%]). A variety of other uses were reported by a few respondents.

Table 1: Marijuana use in the previous year and other characteristics of Ontario adults aged 18 years or more surveyed in 1998*

	Marijuana use in previous year†		
Characteristic	None	Nonmedical only	Some self-reported medical use
No. (and %) of respondents (and 95% CI)	2305 (91.2) (89.8–92.5)	173 (6.8) (5.7–8.2)	49 (1.9) (1.3–2.8)
No. (and %) male (and 95% CI)	1051 (45.6) (43.3–47.9)	118 (68.2) (59.3–75.7)	31 (63.2) (48.1–78.2)
Mean age, yr (and 95% CI)	45.7 (44.8–46.5)	28.3 (26.7–29.9)	28.8 (26.1–31.5)
Mean score on Alcohol Use Disorders Test‡ (and 95% CI)	4.5 (4.3–4.7)	7.5 (6.6–8.4)	11.1 (8.2–13.9)
Mean no. of standard§ drinks/wk in previous yr (and 95% CI)	3.5 (2.3–3.9)	6.4 (4.5–8.3)	10.9 (6.3–15.7)
No. (and %) who used marijuana weekly (and 95% CI)	–	34 (19.7) (12.7–28.8)	17 (34.6) (21.3–53.7)
No. (and %) who smoked cigarettes (and 95% CI)	439 (19.0) (17.3–20.9)	76 (43.9) (34.8–53.3)	27 (55.1) (39.2–72.4)
No. (and %) who had ever used cocaine (and 95% CI)	63 (2.7) (2.1–3.6)	36 (20.8) (14.1–29.1)	18 (36.7) (23.0–54.7)
No. (and %) married or with partner (and 95% CI)	1540 (66.8) (64.6–68.9)	56 (32.4) (24.7–41.0)	16 (38.7) (20.0–51.4)

Note: CI = confidence interval.
*All the data are based on analyses of the weighted sample (n = 2526).
†All differences between nonusers and those who used marijuana for any reason were statistically significant ($p < 0.001$).
‡A 10-item screening instrument for alcohol problems.[8]
§Defined as one glass of wine, one shot of liquor or one 341-mL bottle of beer.

Compared with nonusers, those who used marijuana for any reason tended to be younger, more likely to have alcohol problems and more likely to have used cocaine in their lifetime (Table 1). Those who reported using marijuana for a medical reason were similar to the other users but were more likely to have used cocaine. A multinominal analysis showed that both groups of users differed from the nonusers in age, lifetime use of cocaine and scores on the 10 items of the Alcohol Use Disorders Test (AUDIT) for detecting harmful alcohol consumption.[8] However, a similar analysis showed that the only statistically significant difference between the 2 groups of marijuana users was in reported lifetime use of cocaine. Among the respondents who used marijuana for medical reasons, those with no history of cocaine use and an AUDIT score of less than 8 did not differ significantly from the other users with respect to age, sex, marital status or cigarette smoking (an AUDIT score of 8 or more indicates hazardous or harmful use of alcohol).

The finding that about 2% of the population could claim the right to use marijuana for medical reasons, based on self-identified needs, challenges the development of a system to ensure access to quality-controlled marijuana for medical use and could fuel arguments for decriminalization of marijuana for personal use. However, a more restricted definition of medical marijuana use based on clinical indicators rather than self-identified needs may not completely satisfy existing demands.

As in other population studies,[9] the use of marijuana for any reason was associated with male sex, relative youth, cigarette smoking, heavy drinking, alcohol problems and cocaine use. Those who used marijuana for medical reasons were generally similar to the other marijuana users but were more likely to have used cocaine. Further research is needed to determine whether experiences with alcohol and other drugs and other lifestyle factors influence motivations for marijuana use and beliefs in its medical benefits.

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The views expressed in the article are those of the authors and do not necessarily represent those of the Centre for Addiction and Mental Health.

This article has been peer reviewed.

Competing interests: None declared.

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