

Cannabis Use and Baby Boomers: Attitudes and Patterns of Consumption

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ABSTRACT

Cannabis consumption, already legal in several American states and other jurisdictions around the world, became legal in Canada in October 2018. The present study examines the patterns of cannabis use in Canada among those born between 1946 and 1964, the so-called “Baby Boom” generation. This study was undertaken in order to better understand the motivations or inhibitions of Baby Boomer with respect to cannabis use decisions, as well as to explore their opinions about the effects of cannabis use on their health and cognitive and physical well-being. A voluntary, anonymous on-line survey was circulated using social media and flyers. The survey questions were on general health, cannabis use and effects, and other drug consumption. One hundred and forty-two responses were collected from June 2016 to May 2017. A majority (87.6%) had used cannabis although 42.5% had not consumed it for over a year. Most respondents first used cannabis in their teens (59%) or as young adults (38.4%). About 42% have continued to consume cannabis (daily (16.4%), weekly (20%), or monthly (5.5%). The majority of respondents (48.5%) were found to use cannabis for recreational purposes only, while 19.2% use it for both recreational and medicinal purposes, and 7.1% for assistance with their physical health. The most common conditions for which the respondents have used cannabis are pain (32.9%), sleeplessness (27.4%), and anxiety (24.7%). Baby Boomers report that they make conscious and informed decisions about their cannabis use, and for the majority, their use causes them no harms in their overall functioning, learning, or relationships. For some, cannabis provides a reduction in physical pain and sleeplessness, which improves their abilities to participate in activities that are important to them. More frequent users reported a higher rate of concerns with short-term memory, but overall, users reported their functioning was enhanced by their cannabis use.

Key words: cannabis, baby boomers, drug use, marijuana

Cannabis is the most commonly used illegal (note: legalization occurred October 2018 in Canada) drug in Canada and worldwide (Canadian Centre on Substance Abuse, 2017; Haines-Saah et al., 2014). Despite its historically prohibited status, large numbers of Canadians continue to consume it (Osborne & Fogel, 2008, p. 540). According to a 2005 Health Canada addiction survey, 45% of Canadian adults have

used cannabis at least once in their lifetime (Adlaf, Begin, & Sawka, 2005). In 2013, the latest year for which government statistics are available, 8% of Canadian adults aged 25+ reported using cannabis in the past year. British Columbia, on Canada’s west coast, has a past-year cannabis use prevalence (for ages 15 +) of 13.3%, significantly higher than the Canadian average of

11% (Canadian Centre on Substance Abuse, April 2016).

“Baby Boomers” - those born between 1946 and 1964 - are a unique demographic with respect to the evolution of cannabis consumption in Canada. People in this age group were children and teens during the 1960’s, a time in Canada when more than half the population was under the age of 25 and youth culture was strongly influenced by the hippie movement. Cannabis use was widespread, particularly on the West Coast and in urban areas. Social (if not legal) acceptance of cannabis consumption became a part of a culture that was permissive towards the drug (Black & Joseph, 2014). Challenges to drug policies, debates in the scientific community over harm, a gradual relaxation of police enforcement for minor drug crimes in some jurisdictions (Canadian Centre on Substance Abuse, 2016; Levasseur, Marcoux, & Kubinec, 2015) and, more recently, legislation to legalize cannabis use, have all happened as the Baby Boomer generation has proceeded through their adult lives. Baby Boomers are heading into their retirement years on the wave of cannabis legalization in Canada.

As attitudes towards cannabis use have become more tolerant, and access and availability to the drug increase, there has been a shift away from an association with deviant subcultures and a move towards normalization and acceptance of cannabis use as a lifestyle choice for many Canadians (Erickson, 1999; Duff et al., 2012; Osborne & Fogel, 2008; Parker, 2005). Many Baby Boomers have carried over the pro-cannabis norms and values they adopted in their youth into their adulthood (Black & Joseph, 2014; Salas-Wright et al., 2014). Han et al. (2016) point out that the Baby Boomer generation differs significantly from previous cohorts with respect to attitudes toward substance use as well as substance use behaviours. At the political level, the federal Liberal Party of Canada campaigned in 2015 on a platform that included the legalization of cannabis. Legislation was introduced in the spring of 2017, and legalization occurred in October 2018.

Bergen-Cico and Cico (2012) point out that the likelihood of cannabis use in adults is associated with social norms surrounding cannabis use among particular birth cohorts. In turn, this is linked to higher prevalence of cannabis use by adults over the age of 50. While some Baby

Boomers abandoned cannabis consumption in their youth, others continued to use it, and some resumed cannabis use in later years. Similar patterns of lifetime use have been observed in the US, Europe, and Australia (Bergen-Cico & Cico, 2017; Kortaba, 2012). The percentage of older adults in the US who use cannabis has tripled in the period from 2003-2014, reflecting generational differences in experiences of and attitudes toward cannabis use (Salas-Wright et al., 2017). The degree to which cannabis consumption has become normalized in Canada is the subject of some discussion (Duff et al., 2012; Lau et al., 2015).

The acute effects of cannabis are well understood, while the mechanisms of effects through the endogenous cannabinoid system in humans have begun to be elucidated during the last decades. Longer term impacts on physical and mental functioning, and as a risk factor for chronic disease and mental function, are less well understood, with a wide variety of studies showing a range of possible effects including cognitive deficits, lack of motivation, and psychosis (Volkow, et al., 2016). The reversibility of these impacts is also controversial (Filbey et al., 2014; Jager, Kahn, Van Den Brink, Van Ree, & Ramsey, 2006; Szutorisz & Hurd, 2016). The extent to which these may be a problem for older adults in particular is poorly understood, although very few older adults report cannabis abuse or dependence (Bergen-Cico & Cico, 2017).

Research on cannabis and cognitive function has focused largely on youth and young adults (McKetin, Parasu, Cherbuin, Eramudugolla, & Anstey, 2016). In a meta-analysis of the neurocognitive effects of cannabis use on adults, researchers found no significant effect on cognition except for a small effect in the learning and forgetting domains in chronic users (Grant, Gonzalez, Carey, Natarajan & Wolfson, 2003). In a study of mid-life adults, there was no evidence that cannabis was related to early decline in verbal recall, however researchers questioned whether their sample was too young to exhibit any effects of cannabis on their cognitive abilities (McKetin, et al, 2016).

The reasons for cannabis use can be considered to fall into three categories: recreational (used without medical justification), medical (used to alleviate symptoms of certain conditions or diseases), or a combination of both. Access to

cannabis for medical purposes has been legal in Canada since 2001, although it is highly regulated. The number of medical marijuana dispensaries is increasing across the country, offering a variety of cannabis products and alternatives to traditional 'bud' for those who do not want to smoke (Murphy et al., 2015). Studies suggest that older cannabis-using adults who are dispensary customers are more likely to report that they are using cannabis for the treatment of chronic illnesses, including pain, nausea, glaucoma and cancer (Bergen-Cico & Cico, 2017; Haug et al., 2017). Although there is some evidence that cannabis is effective for the treatment of medical conditions including seizure disorders, chronic pain, and inflammatory conditions (McCall, 2015), cannabis has physiological effects which may be particularly salient for older adults. Han et al. (2016) discuss cardiovascular, pulmonary, and cerebrovascular effects for which age is also a risk factor, and point out that a better understanding of cognitive effects on the aging brain is required, given the significant increase in the percentage of older adults who are using cannabis.

The present study examined the role of cannabis in the lives of the 'Baby Boomer' generation. The specific purpose was to explore the prevalence, usage patterns, and attitudes toward cannabis among this age cohort, with a focus on associations between cannabis use and social, mental, and physical health. This was a small, non-representative sample, and this research was intended to identify attitudes about use and associations between cannabis use and health that could point the research team towards topics warranting additional exploration.

METHOD

Participants

There were 142 respondents to the survey. Slightly more females (55%) than males (44%) participated; one respondent identified their gender as 'other'. Almost three-quarters identified as Caucasian. The average age of respondents was 63 years ($SD = 4.6$).

Sampling

Several different sampling strategies were used: the survey link was posted on Facebook and emailed to researchers' contact lists, and invitations to participate were placed in faculty workplace mailboxes. A snowball sampling technique was also used, as respondents were encouraged to forward the survey to their own contacts. Both cannabis users and non-users were recruited.

Data Collection

This research involved the collection of data through the use of an electronic survey developed specifically for this study. The study variables were based on a review of existing literature on cannabis, adults, learning, and mental health.

Variables were organized to gather responses in the following areas: demographics; cannabis use habits; attitudes towards cannabis use in society; perceived effects of cannabis on personal, physical, mental, and social functioning; perceived effects on learning.

Measures

In order to achieve the most comprehensive findings possible, both fixed and open-ended questions were used in the survey. Respondents were given opportunities to provide qualitative information in addition to answering the fixed response survey questions. Measures included multiple choice (single and multiple response), matrix/ranking, and likert scale (6 pt).

Data Analysis

Frequencies were calculated on all variables to provide a descriptive representation of the adults included in the study. Cross tabulations were utilized to examine the relationship between key variables as identified by the literature. The qualitative data was analyzed for themes and recoded where possible. As the sample is non-random and non-representative, more extensive analysis was not warranted. All data management and analysis were conducted using Fluid Survey, Excel and SPSS.

RESULTS

Of the 142 respondents to the survey, 85% lived in British Columbia and 72% lived in Vancouver and/or the lower mainland of BC. The majority of respondents (87.6%) had used cannabis at some point in their lives, although 42.5% had not used for over one year and 27.2% indicated they no longer use marijuana. Consistent with the literature (Centre for Addiction and Mental Health, 2013), most respondents first used cannabis in their teens (59%) or as young adults (38.4%). Baby Boomers report that they used daily (16.4%), weekly (20%), or monthly (5.5%), with the remainder stating they no longer used, or used rarely. Most users felt they used just the right amount of cannabis (87.9%), some felt they used too much (4.4%), and others reported they felt they did not use enough (7.7%).

Dried bud was the most frequently used form of cannabis (77.9%). Cannabis oil (4.2%) and edible baked good containing cannabis (3.2%) were both used at a much lower rate. Smoking cannabis was the most popular method of consumption reported, whether in a traditional 'joint' (52.3%), smoking a pipe (11.6%), a 'bong' or water pipe (8.1%), or using a vaporizer (14%).

The majority of respondents (48.5%) were found to use cannabis for recreational purposes only while 19.2% used it for both recreational and medicinal purposes, and 7.1% for assistance with their physical health. The most common conditions for which the respondents have used cannabis were pain (32.9%), sleeplessness (27.4%), and anxiety (24.7%). Other reasons cited by single (1) respondents included menopause,

depression, stress, inflammation, stomach upset, migraine, and sexual stimulation.

Daily cannabis users used equally for recreational reasons or a combination of recreational and medicinal reasons (33.3%). They used less for solely recreational purposes than the total sample (48.5%), and used at a higher rate for pain, sleeplessness and anxiety. Over half of the daily cannabis users (52.9%) reported that their use has improved their physical well-being by allowing them to cope with their pain and sleep and relax better. The larger sample had a much lower physical well-being improvement rating of 21.9%.

Early Onset of Use (Age 13-15)

For the subset of 33 respondents who started using cannabis between ages 13 and 15, they were more likely than the full sample to report that they were "more motivated to learn" than their peers and that they are better at learning new things than same-age peers (see Table 1). This same group of early users also reported more frequent use of cannabis. There were also differences between the two groups with respect to the conditions they reported using cannabis to address.

Learning

Baby Boomers were asked to reflect on how cannabis use affects their ability to learn. As can be seen in Table 2, the majority of respondents indicated that cannabis use had no effect on their learning. For those who did report an impact, it

Table 1. *Comparisons between Early Onset Cannabis Users and the Total Sample*

	Early onset of use (age 13-15)	Total sample
I learn new things better than people my age	60.6%	46.1%
I am more motivated to learn than people my age	63.6%	56.3%
I use cannabis daily	21.9%	17.1%
I use cannabis weekly	15.6%	9.9%
I use cannabis monthly	9.4%	5.4%
Conditions:		
Pain	33.3%	33.9%
Sleeplessness	37%	27.4%
Anxiety	37%	24.7%

Table 2. *Perceptions of the Effects of Cannabis Use on Learning among Baby Boomers Who Use Cannabis and among Baby Boomers Who Use Cannabis Daily*

All Baby Boomers Who Use Cannabis						
	Positive effect	Somewhat positive effect	No effect	Somewhat negative effect	Negative effect	Total Responses
Short term memory	2 (2.2%)	2 (2.2%)	66 (72.5%)	7 (7.7%)	14 (15.4%)	91
Reading comprehension	2 (2.2%)	4 (4.4%)	66 (73.3%)	6 (6.7%)	12 (13.3%)	90
Learning new things	5 (5.6%)	13 (14.4%)	61 (67.8%)	3 (3.3%)	8 (8.9%)	90
Concentration	5 (5.6%)	13 (14.4%)	51 (56.7%)	4 (4.4%)	17 (18.9%)	90
Motivation to learn	4 (4.5%)	13 (14.6%)	58 (65.2%)	2 (2.2%)	12 (13.5%)	89
Baby Boomers Who Use Cannabis Daily						
	Positive effect	Somewhat positive effect	No effect	Somewhat negative effect	Negative effect	Total Responses
Short term memory	1 (5.9%)	0 (0%)	11 (64.7%)	1 (5.9%)	4 (23.5%)	17
Reading comprehension	1 (6.3%)	2 (12.5%)	12 (75%)	1 (6.3%)	0 (0%)	16
Learning new things	2 (12.5%)	4 (25%)	10 (62.5%)	0 (0%)	0 (0%)	16
Concentration	2 (12.5%)	3 (18.8%)	8 (50%)	2 (12.5%)	1 (6.3%)	16
Motivation to learn	2 (12.5%)	13 (18.8%)	11 (68.8%)	0 (0%)	0 (0%)	16

was more negative than positive for short-term memory, reading comprehension, and concentration, and slightly more positive for learning new things and motivation to learn.

Daily cannabis users reported a slightly different impact on their learning ability than all users surveyed. Although the sample was smaller, they reported higher ratings of positive effects on their learning in all five areas, but also higher negative effects on their short-term memory (23.5% v 15.4%). With the exception of short-term memory, the ratings for no effect were similar between the two groups.

Consistent with the reported effects on learning (McInnis & Porath-Waller, 2016), the majority of Baby Boomers (60.5%) stated that their mental state remained unchanged the day after consuming cannabis. Among those who reported differences in mental state the day after consuming cannabis, similar numbers reported difficulty focusing the next day (20.9%) or reported increased ability to focus (18.6%).

Baby Boomers were asked about their reactions to using cannabis. Relaxed and happy (74.7%),

lively and talkative (37.9%), and a reduction in aches and pains (37.9%) were the most frequently reported reactions, however 12.6% reported feeling paranoid and 2.3% reported they had experienced hallucinations.

While the majority of respondents (63.6%) reported that their cannabis use had no impact on their physical well-being, 21.6% indicated their physical well-being had improved. This included an increased ability to cope with or a reduction in pain (54.3%), and improvement in sleep and relaxation (45.7%). A smaller number of respondents, all of whom started using cannabis when they were aged 13-15, indicated their cannabis use had harmed their physical well-being (3.4%), including coughing or lung problems and overall feelings of being tired and/or unmotivated.

Most Baby Boomers reported that their cannabis use has no impact on their ability to manage tasks (73%), no impact on their friends or social life (79.8%), no impact on their financial situation (94.3%), and no impact on their home life (82%). For those who indicated a positive impact,

they reported being calm and focused, connected to their friends, and in a better mood as they experience less pain. Negative outcomes include problems focusing, being reclusive, and experiencing the disapproval of family.

While the majority of Baby Boomers (68.1%) stated that their cannabis use did not impact their relationship with an intimate partner, positive impacts included improved sex (47.8%) and increased sensitivity and empathy. Harms centred on their partner disapproving of their cannabis use.

Social Attitudes Concerning Cannabis

Legalizing recreational cannabis would have an impact on the usage of 26.1% of the respondents, who reported they would be more relaxed about their use if it were legal, and feel there would be more choice and better quality control. The current lack of legal status of the drug is not a determinant of use for 14.3% of respondents. Of the Baby Boomers surveyed, 60.9% feel it should be legalized, 23.6% prefer decriminalization, 10% support medical cannabis, and 5.5% believe the laws should stay the way they are. The majority (58.6%) believe it should be regulated, taxed and sold like alcohol; 13.5% feel it should be treated the same as tobacco, while the minority would like it to be treated as a medicinal product: herbal medicine 3.6%; over the counter 7.2%, and available by prescription 8.1%.

Despite the above data that shows little or no reported impact on a number of different areas of functioning, one-third of the Baby Boomers surveyed indicated that cannabis is dangerous or somewhat dangerous. One-fifth believe it is beneficial, while 22.5% feel it is harmless or somewhat harmless. Baby Boomers indicated that the message they give young people is that cannabis is dangerous or somewhat dangerous (50.2%), although 18.2% stated they do not give them any messages about cannabis.

Baby Boomers were asked their opinion of cannabis use by different age groups. As might be anticipated based on our society's views of drug use, the younger the age group being considered, the higher the disapproval was for their drug use. For children aged 12-15 years, 92.7% disapproved ('somewhat disapprove' to 'strongly disapprove') of their cannabis use. For older teens (16-18 years), the disapproval rating dropped to 80.9%, with

more respondents indicating only 'somewhat disapprove' compared to the younger teen group (27.3% vs. 8.2%). For adults, the approval/disapproval ratings were reversed: only 22.7% disapproved of adult cannabis use. There was no significant difference between the results in these categories from the entire sample and those from the early onset users (age 13-15). The data in this study are consistent with research on "normalization" of cannabis use among older Canadians which shows that although adults acknowledge potential harms, and differentiate between moderate and problematic patterns of use, cannabis use is more likely to be viewed as "a normal and largely harmless practice" (Duff et al., 2012).

Use of Other Drugs

Baby Boomers were asked about their use and frequency of use of other drugs. Over half of the respondents had used tobacco (58.2%), however only 34.4% of them had used in the past year and only 5.8% were daily smokers. The numbers for alcohol use were much higher: 95.4% had used alcohol in their lifetime, and 96.2% of those who had ever used alcohol had used in the past year. They described their patterns of alcohol use as: daily drinkers (19%), weekly drinkers (23%), a few times per week (31%), monthly drinkers (8%) and drinking less than once per month (19%). Stimulant use (i.e. cocaine, speed, ice, crank, crystal, methamphetamine, uppers) was reported by 31.8% of respondents, but only 8.6% of those persons had used in the past year. A small number of respondents (15.5%) had used opioids that were not prescribed for them (i.e. hydrocodone, Oxycontin, Oxycodone, hydromorph, Percocet, heroin, opium, morphine). Most of those people (80%) had not done so for more than one year; one person used other people's opioids daily. Hallucinogens (i.e. LSD, mushrooms, psilocybin, mescaline, PCP, MEDA, MDMA, Ecstasy) had been used by over half the respondents (56.4%), but most of those people had not used in over one year (95.2%). Over-the-counter or prescribed medications were used for non-medicinal purposes by 15.5% of respondents, with 35.3% having done so within the past year. Lifetime inhalant use was low (12.7%), with only 15.4% of those who had ever used inhalants reporting use within the past year.

Early onset cannabis users were more likely to have used tobacco in their lifetime (80.6% compared to 58.2% for total sample), and had higher lifetime use of stimulants (54.8% v. 31.8%), opioids (29% v. 15.4%), hallucinogens (90.3% v. 56.4%), over-the-counter medications or prescribed medications for nonmedical uses (25.8% v. 15.5%), and twice as likely to have ever used inhalants (22.6% v. 12.7%).

Tobacco users were more likely to have tried stimulants (43.8% v. 31.8%) or hallucinogens (71.9% v. 56.4%) during their life, however there was no significant difference in past year use (<9%). For other drugs (non-prescribed opioids, misuse of over-the-counter drugs, inhalants) there was no difference in lifetime use between tobacco users and non-users.

One respondent noted they turned to cannabis instead of prescription drugs to get through the pain of emotional trauma, in part because cannabis is less costly than prescription drugs for which they have no extended health care coverage.

DISCUSSION

This study presented a broad range of characteristics, attitudes and patterns of cannabis use by adults born between 1946 and 1964. Many of the findings are consistent with previous studies. In a 2015 study by Lau et al., it was noted that older cannabis users made informed decisions on the types of cannabis products they used, as well as the circumstances under which they used (why, when, where, and with whom). In research funded by the National Institute of Drug Abuse, Murphy et al. (2015) determined that although Baby Boomers are using alternative cannabis products rather than smoking to relieve physical ailments and improve their mental health, many still use for solely recreational purposes.

There are a range of medical conditions for which cannabis users seek relief. Chronic pain, insomnia, anxiety, and depression are most-often reported as the primary reasons for cannabis use among medical cannabis users (Bonn-Miller, Boden, Bucossi & Babson, 2014). Concerns have been raised that an increase in cannabis use by Baby Boomers may result in adverse health consequences for this population as they opt for a familiar drug to meet their recreational and

medicinal needs (Colliver, Compton, Gfroerer & Condon, 2006).

While this study did not specifically ask respondents to comment on the role cannabis plays in their sexual experiences, many noted that it has a positive impact. Cannabis users have long maintained that the drug has a significant role in enhancing their sexual experiences (Goode, 1970; Tart, 1971), with some claiming it raises sex to an 'art form' (Ford, 2003). In a more recent study, one third of participants reported that sex was a very important or important reason to use cannabis (Hathaway, 2003).

In Osborne & Fogel's study (2008), participants reported that cannabis enhanced their ability to concentrate, reduced their inhibitions and insecurities, and contributed to their 'creativity and capacity for original thought' (p. 558). They found daily chores more tolerable, and their relaxed state allowed them to focus on nature and physical sensations (associated with sexual activity) (p. 563).

A recent report by the Canadian Centre on Substance Abuse on the effects of cannabis use on cognitive functioning noted that 'continued chronic cannabis use does not produce severe or grossly debilitating impairment of memory, attention, psychomotor and other cognitive functioning; the effects on these cognitive abilities are generally more subtle' (McInnis, & Porath-Waller, 2016, p. 2).

There were very few statistically significant differences between the male and female responses in this study. Due to the small number of responses to some of the choices in each question, we were not able to draw any meaningful conclusions based on gender.

Limitations

The data set consists of only those who voluntarily participated in the study. There is no data available on the attitudes and use of cannabis of those who did not participate, therefore the present findings cannot be generalized to the general population.

This study did not ask respondents about their lifetime patterns of cannabis use. In hindsight, it would have been beneficial to gather data on respondents' reasons for continuing cannabis use, stopping use, and/or resuming use. Those results

may have assisted with the analysis of the existing data.

Conclusion

Baby Boomers report that they make conscious and informed decisions about their cannabis use, and for the majority, their use causes them no harms in their overall functioning, learning, or relationships. For some, cannabis provides a reduction in physical pain and sleeplessness, which improves their abilities to participate in activities that are important to them. More frequent users reported a higher rate of concerns with short-term memory, but overall, users reported their functioning was enhanced by their cannabis use.

Baby Boomers perceive cannabis as a low-risk and familiar drug that can assist with some of the mental and physical problems that emerge as they age (Black & Joseph, 2014). They are at a different stage of life where the benefits of using cannabis to deal with their 'stress and strains' outweigh the risks, especially in light of medicalization and legalization (Black & Joseph, 2014).

The self-perceptions of participants provide useful information about the harms and benefits they experience and should be a key consideration in the development of health and social policies that impact the choices available to rational adults with respect to their cannabis use.

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