

BULLETIN 2

How does sexual orientation affect patterns of use?

August 2021

In this bulletin we analyze data on Canadian respondents to Wave 1 of the International Cannabis Policy Study (ICPS) collected in 2018.

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.

SEXUAL ORIENTATION CATEGORIES IN THE ICPS

All participants were asked if they identified as heterosexual (or straight), homosexual (gay or lesbian) or 'other', which included bisexual. Respondents who refused to answer or answered 'don't know' were categorized as 'unstated' for analysis. Among the 10,057 Canadian participants, 90.0% reported being heterosexual, 3.1% as homosexual, 4.1% as 'other' and 2.8% 'unstated'.

SURVEY DATA ON SEXUAL ORIENTATION AND CANNABIS

Collecting survey data on sexual orientation and cannabis use in Canada began in 2003 in the Canadian Community Health Survey (CCHS). Analyses of the nonresponse rate showed that people were willing to disclose their sexual orientation [1]. In 2019, we recommended inclusion of sexual orientation in all Health Canada surveys on cannabis in our report: [Sex, Gender and Cannabis](#) [2]. Health Canada reviewed its approach and considered additional ways to integrate Sex and Gender Based Analysis Plus into the development of their data collection. In 2019, a new question on sexual orientation was added to the Canadian Cannabis Survey (CCS) [3] and in 2020, respondent profiles included sexual orientation in some public opinion research [4]. The International Cannabis Policy Study (ICPS) started collecting data on sexual orientation and cannabis use among Canadians in 2018. However, it is difficult to compare or utilize results from different surveys that ask about sexual orientation differently or inconsistently, use different categories or neglect to disaggregate results by sex and other intersecting variables.

SEXUAL ORIENTATION AND PATTERNS OF CANNABIS USE

Findings from the 2020 Canadian Cannabis Survey showed differences in cannabis use in the past 12 months by sexual orientation. Use was higher among those who reported being bisexual (55%), homosexual (gay or lesbian) (43%), or reporting an 'other' sexual orientation (45%), compared to heterosexual (25%) [5]. Within most sexual orientation categories, a higher percentage of men than women reported using cannabis in the past 12 months [5]. However, among bisexual respondents there was a higher percentage of women compared to men who reported using cannabis in the past 12 months [5].

WHAT IS INCLUDED IN THIS BULLETIN?

In this bulletin we report on sex and gender and sexual orientation variables on cannabis use among Canadian respondents ($n = 10,057$) from Wave 1 (2018) of the ICPS, funded by the Canadian Institutes of Health Research. Future bulletins will analyze subsequent waves of the ICPS. 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 the ICPS data, see the [Methodology on the Sex, Gender, and Cannabis Hub](#). In this bulletin we focus on several ICPS cannabis use variables:

- » Past 12-month use (including daily, weekly, monthly use) by sexual orientation category
- » Average number of days of cannabis use per year in each sexual orientation category

Weighted chi-square and Student's t-tests were used to conduct a sex and gender based analysis for cannabis outcomes and compare results between men and women. Analyses were conducted using SAS Version 9.4. A threshold of $p \leq 0.05$ was used to denote statistical significance. After chi-square tests for comparing cannabis consumption in the past 12-month (including daily, weekly, monthly use) between sexual orientation subgroups, a Benjamini-Hochberg procedure was applied to reduce the rate of false discovery. All significant differences remained the same after this adjustment.

Past 12-month use (including daily, weekly, monthly use) by sexual orientation

- » There were no significant differences in past 12-month use between respondents who reported being heterosexual and those who reported being homosexual (26.8% vs. 32.6%).
- » A significantly greater proportion of those who reported an 'other' sexual orientation (including bisexual) reported past 12-month cannabis use compared to those in the heterosexual category (46.2% vs. 26.8%).
- » A significantly greater proportion of respondents in the heterosexual category compared to those in the 'unstated' category reported cannabis use in the past 12 months (26.8% vs. 16.4%).
- » A significantly greater proportion of those who reported an 'other' sexual orientation compared to homosexual orientation reported cannabis use in the past 12 months (46.2% vs. 32.6%).
- » A significantly greater proportion of those who reported a homosexual orientation compared to those classified as 'unstated' reported cannabis use in the past 12 months (32.6% vs. 16.4%).
- » A significantly greater proportion of those who reported an 'other' sexual orientation compared to 'unstated' reported cannabis use in the past 12 months (46.2% vs. 16.4%).

Past 12-month use (including daily, weekly, monthly use) by sexual orientation and sex/gender

- » Among men and women who reported a heterosexual orientation, a significantly greater proportion of men than women reported using cannabis in the past 12 months (29.6% vs. 24.0%).
- » Among men and women who reported a homosexual (gay or lesbian) orientation, a significantly greater proportion of men compared to women reported using cannabis in the past 12 months (36.9% vs. 16.8%).
- » While not statistically significant, a higher proportion of women than men in the 'other' sexual orientation category reported using cannabis in the past 12 months (48.1% vs. 41.4%).
- » Among those who did not state their sexual orientation, a significantly greater proportion of men than women reported using cannabis in the past 12 months (22.5% vs. 11.1%).

Among men and women who reported a gay or lesbian sexual orientation, a significantly greater proportion of men compared to women reported using cannabis in the past 12 months (36.9% vs. 16.8%)

Average # of days of cannabis use per year by sexual orientation for cannabis users

- » There were no statistically significant differences in the average # of days of cannabis use per year by sexual orientation subgroups.
- » The average # of days of cannabis use per year among heterosexual respondents was 151.1.
- » Homosexual (gay or lesbian) respondents used cannabis an average of 125.5 days per year.

Average # of days of cannabis use per year by sexual orientation and sex/gender for cannabis users

- » Among those who reported a heterosexual orientation there were no significant differences between women and men (150.8 vs. 151.5 days per year, respectively).
- » Among respondents who reported a homosexual orientation there were no significant differences between women and men (187.8 vs. 117.9 days per year, respectively).
- » Among those who reported an 'other' sexual orientation, there were no significant differences between women and men (130.1 vs. 175.2 days per year among men).
- » Among those who did not report their sexual orientation, there were no significant differences between women and men (109.6 days per year for women and 128.4 days per year for men).

KEY MESSAGES

1. Among heterosexual (straight), homosexual (gay or lesbian) or unstated (refuse or don't know) categories, a greater proportion of men than women reported using cannabis in the past 12 months.
2. There were no statistically significant differences in past 12 month use between respondents with a heterosexual vs. homosexual orientation.
3. There were significant differences in past 12 month use between heterosexual and 'other' (includes bisexual) and unstated sexual orientation categories.
4. Among those in the 'other' sexual orientation category, a higher but not statistically significant proportion of women than men reported cannabis use in the past 12 months.
5. There were no significant differences in the average # of days of cannabis use per year across sexual orientation categories.
6. Among cannabis users, there were no sex differences in the average # of days of cannabis use per year across sexual orientation categories.

CONCLUSION

Including sexual orientation is an essential part of integrating SGBA+ into the development of surveys and analysis plans. The inclusion of sexual orientation in the Canadian Cannabis Survey began in 2019. The ICPS included questions on sexual orientation in Wave 1 in 2018. Comparisons by sexual orientation subgroups can illustrate key differences among various groups with respect to sex, gender and patterns of cannabis use. There are sex/gender differences in patterns of cannabis use among respondents who reported a heterosexual or homosexual orientation, or were categorized as 'unstated'. As in most substance use patterns, a greater proportion of men than women reported cannabis use in the past 12 months. There is a possible exception. Within the 'other' ICPS sexual orientation subgroup that includes bisexual, a higher proportion of women than men reported cannabis use in the past 12 months although the results were not statistically significant. Similar results were reported in the Canadian Cannabis Survey for bisexual women [5].

Further research on sexual orientation will lead to a deeper understanding of such differences among non-heterosexual cannabis users, and will help tailor interventions and strengthen health promotion initiatives by sex, gender and sexual orientation.

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