

A Longitudinal Analysis of Cannabis Use and Mental Health Symptoms among Gay, Bisexual and Other Men who have Sex with Men (gbMSM) in Vancouver, Canada

Is cannabis use related to mental health symptoms among gbMSM diagnosed with anxiety or depression?

What is the importance of this study?

- Cannabis use among sexual minorities, such as gay and bisexual and other men who have sex with men (gbMSM), has been reported to be significantly higher than heterosexuals.
- While some may engage in substance use for pleasure, others may use it to cope with stigma, prejudice, discrimination and other sources of minority stress.
- Prior research has shown a positive relationship between cannabis use and symptoms of anxiety and/or depression; however, the directionality of this relationship is not clear.
- This study was conducted to examine factors related to regular cannabis use and associations with symptoms of anxiety and/or depression.

FACT BOX

In Canada, lifetime cannabis use is estimated at 42.5% among individuals 15 and older. This may increase given the legalization of recreational cannabis in October 2018.

How was this study conducted?

- From February 2012 to February 2017 at six-month intervals, participants in the Momentum Health Study completed a survey about socio-demographic, psychosocial and behavioural factors, such as mental health and substance use.
- The survey also included the Hospital Anxiety and Depression Scale (HADS), which was used to ascertain the severity of current symptoms of anxiety and depression.
- Factors related to recent associated symptoms were explored for participants with doctor-diagnosed anxiety or depression.
- Researchers were particularly interested in whether these symptom scores were different in those who reported regular cannabis use, defined as “at least weekly use in the previous three months”, compared to those who did not report regular cannabis use.

What are the key study findings?

- 55% (426/774) of the participants reported any cannabis use in the past three months at their enrolment visit, while 32% (250/774) reported weekly use.
- At baseline, 200 men reported having ever been diagnosed with an anxiety disorder, while 299 reported the same for depression or bipolar disorder.



- Those with a previous diagnosis of a mental health disorder were more likely to report regular cannabis use.
- Other factors that were positively associated with regular cannabis use in the past three months included being HIV-positive and using hallucinogens and stimulants (except cocaine and methamphetamines) in the past six months.
- Among gbMSM previously diagnosed with a mental health disorder, frequency of cannabis use was not associated with severity of anxious or depressive symptoms.

What do these findings mean?

- Our findings suggest that regular cannabis use did not appear to affect anxiety/depression symptoms among participants who reported having been diagnosed with anxiety or depression.
- This suggest that gbMSM who self-medicate with cannabis may not experience improvements in or worsening of mental health symptoms
- However, as this an observational study, it is also possible that the symptoms of those with anxiety or depression could have been worse, if they were not using cannabis.
- There is a need for further research in the form of well-designed randomized trials to evaluate the impact of cannabis on symptoms of anxiety and depression.

What is the BC-CfE Momentum Health Study?

Evidence from British Columbia and elsewhere has demonstrated the expansion of access to antiretroviral HIV treatment (ART) can result in population-level reductions in HIV incidence. This is the concept behind the made-in-BC Treatment as Prevention® strategy, or TasP®, which aims to expand early HIV testing and treatment to improve patients' health and curb the spread of HIV. Gay, bisexual and other men who have sex with men (gbMSM) represent the most affected HIV risk group, both in BC and Canada. The BC-CfE Momentum Health Study is designed to measure changes in HIV risk behaviour, attitudes toward TasP® and the proportion of HIV-positive gbMSM with unsuppressed viral load over time in the Vancouver region. The study uses respondent-driven sampling (RDS) to obtain a more representative sample reflecting the diversity of the gbMSM population in Vancouver.

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