Sex, Gender and Cannabis

The cannabis policy landscape is rapidly changing. In Canada, cannabis was legalized on October 17, 2018, and medical cannabis has been available since 2001. In the USA, thirty-three states have legalized medical cannabis use, and eleven states have legalized recreational cannabis use. In 2019, reports of vaping related lung injuries and deaths emerged, mostly among young people, with many of these cases linked to vaping cannabis products.[1]

Sex and gender based analyses of cannabis use patterns indicate the importance of sex and gender related factors to routes of administration, treatment for Cannabis Use Disorder (CUD) and assessing impairment.[2-4]

Key Sex-Related Factors
- In animal research, female rats metabolized THC more rapidly[5] although this may be reversed when CBD is also present.[6]
- In a study measuring cognitive effects of cannabis use among young adults, males had a more pronounced negative effect with regard to psychomotor speed/sequencing ability.[7]
- Females transition from initiation to regular use faster than males (similar to other substances), also referred to as “telescoping”. [8,9]
- There is some evidence of higher sensitivity to the subjective effects of cannabis in females compared to males, particularly at low doses.[10-12]

Key Gender-Related Factors
- Men and boys are more likely to report current[13-15] and past cannabis use,[16, 17] use cannabis more frequently[17, 18] and in greater quantities[17, 19] compared to women and girls. However, patterns may be changing; there is evidence from the USA that the gender gap in cannabis use is narrowing among adolescents.[19]
- Boys and men report experimenting with more routes of administration (ROAs) and higher rates of use of inhalation ROAs including smoking and vaping.[20-22]
- There is evidence from qualitative studies that girls and young women may use cannabis as a way of resisting dominant feminine ideals. For example, women may engage in patterns of use such as: using cannabis habitually, rolling joints, buying cannabis, and being able to ‘handle the high’. [23, 24]
• Simultaneous use of alcohol and cannabis appears to be higher in young men compared to young women\(^\text{[25, 26]}\) and is associated with substantial risks such as: greater impairment; heavier alcohol use; driving while impaired; and greater likelihood of comorbid substance use and mental health issues.

• Driving after cannabis use is more frequent among men.\(^\text{[27-29]}\) Evidence on being a passenger with someone who has used cannabis is mixed, with one study reporting greater rates of riding with someone who has used cannabis among men\(^\text{[27]}\) and another reporting no gender differences.\(^\text{[29]}\)

• In a study conducted with lesbian, gay, bisexual and transgender (LGBT) individuals, the highest rates of cannabis use were reported by transgender men (12.5%) and sexual minority females (12.1%).\(^\text{[30]}\) Gender minority stress has been associated with cannabis use.\(^\text{[31]}\)

For information about cannabis and its effects while pregnant, breastfeeding, and parenting, visit: bccewh.bc.ca

While research on sex, gender and cannabis is expanding, large gaps in the evidence remain. Most current evidence describes prevalence and patterns of use, with relatively few studies examining the influence of sex and gender on the health effects of cannabis use.

Further research on sex, gender and the patterns and effects of cannabis use is needed to better understand the benefits and risks for all genders, and inform more precise policy and practice responses.
REFERENCES


