

## Prevalence and correlates of cannabis use disorder among Australian medical cannabis users

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**Introduction:** The prevalence and correlates of cannabis use disorder (CUD) in medical cannabis users are poorly described. It is unclear whether predictors of CUD in this population are similar to populations using cannabis for recreational reasons.

**Methods:** We analysed data from an online anonymous cross-sectional survey of Australians using cannabis medicinally within the preceding year. Questions included demographics, patterns of cannabis use, conditions for which cannabis was used, general health, and criteria for CUD and cannabis withdrawal syndrome (CWS). Bayesian horseshoe logistic regression models were used to identify participant and health conditions associated with meeting DSM-5 CUD conditions for Any-CUD ( $\geq 2/11$  criteria) and Moderate-Severe-CUD ( $\geq 4/11$ ).

**Results:** 905 participants' data were analysed. Any-CUD was endorsed by 290 (32.0%), and 117 (12.9%) met the Moderate-Severe-CUD threshold, with tolerance (21%) and CWS (35%) the most commonly-endorsed criteria. The correlates with the strongest association with Moderate-Severe-CUD were inhaled route of administration (OR=2.96, 95%CI 1.11-7.06), frequency of cannabis use (OR=1.24, 1.11-1.35) and proportion of cannabis for medical rather than recreational reasons (OR=0.83, 0.74-0.94). Strongest correlates of Any-CUD were frequency of cannabis use (OR=1.19, 1.10-1.28), inhaled route (OR=2.26, 1.38-3.70), times used per day (OR=1.09, 1.04-1.15), frequency of tobacco use (OR=1.10, 1.03-1.17), age (OR=0.75, 0.64-0.90), pain as main indication (OR=0.58, 0.36-1.00) and proportion of cannabis for medical reasons (OR=0.89, 0.81, 1.00).

**Conclusions:** Correlates of CUD in medical cannabis users and recreational users appear broadly similar. CUD was associated with using cannabis to treat mental health rather than pain conditions and inhaled over other routes of administration.

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