

Title: Correlates of cannabis use disorder among prescribed and illicit medical cannabis users: Findings from the Cannabis As Medicine Survey 2022-23 (CAMS-22)

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Introduction: The factors associated with cannabis use disorder (CUD) among nonmedical 'recreational' users are relatively well known, yet little is known about CUD among medical users. Our aim was to explore the correlates of CUD among medical cannabis users, especially how these correlates differ between prescribed and illicit users.

Methods: Data came from CAMS-22, an 2022-23 online, anonymous, cross-sectional survey of adult Australians reporting using medical cannabis for medical reasons in the previous year. Participants were questioned about demographics, patterns of cannabis use, conditions for which medical cannabis was used, and DSM-5 criteria for CUD. Bayesian Horseshoe logistic regression models were used to identify covariates associated with meeting criteria for Any-CUD ($\geq 2/11$ criteria) and Moderate-Severe-CUD ($\geq 4/11$).

Results: 1796 participants were analysed, the majority of whom used mainly prescribed cannabis products (1426/1796, 79%). Criteria for Any-CUD criteria were met by 43% (778/1796; Prescribed 583/1426 [41%]; Illicit 195/370 [53%]) and Moderate-Severe-CUD criteria by 17% (306/1796; Prescribed 212/1426 [15%]; Illicit 94/370 [25%]) of respondents. When no other covariates were included the model, odds of prescribed users meeting criteria for Any-CUD were 61% less (OR=0.62, 95%CI: 0.49, 0.78) and Moderate-Severe-CUD 96% less (OR=0.51, CI: 0.39, 0.68) than for illicit users. However, when the other covariates were included in the model, Prescribed vs Illicit was no longer a notable predictor. The three most important correlates of both Any- and Moderate-Severe-CUD were number of times per day respondents used medical cannabis, proportion of cannabis for medical reasons, and global mental health.

Conclusions: When other factors are taken into account, prescribed medical cannabis users are no more likely to meet criteria for CUD than illicit users. The factors associated with CUD in medical cannabis users are similar to those in nonmedical users, with quantity/frequency of use and global mental health having strong associations with problematic use.

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patents to AU2017904438, AU2017904072, and AU2018901971 pending. Prof Arnold reports research grants from the NHMRC and from Lambert Initiative for Cannabinoid Therapeutics at the time of the conduct of this research. Prof Arnold has served as an expert witness in various medicolegal cases involving cannabis and has received consulting fees from the World Health Organization (WHO), Medical Cannabis Industry Australia (MCIA) and Haleon (consumer healthcare subsidiary of Glaxo Smith-Kline). He is an inventor on patents WO2019227167 and WO2019071302 issued, which relate to cannabinoid therapeutics.

Dr Mills reports no conflicts of interest.