

Patterns of cannabis and tobacco use in Australia: Latent class analysis and health-rated correlates

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Introduction and Aims: The co-use of tobacco and cannabis is high in Australia. Co-use can occur simultaneously or asynchronously and could be more harmful than the use of each substance alone. This study examined the patterns of tobacco, cannabis and co-use and their associations with socio-demographic correlates, health factors and poly-substance use.

Method: The nationally representative Australian 2019 National Drug Strategy and Household Survey was used in this study (n =22,015). Latent class analysis was used to identify subgroups of respondents based on a set of tobacco and cannabis use indicators. The socio-demographic correlates, health indicators and recent substance use of each class was examined using multinomial logistic regression.

Results: A four-class solution was identified: 'Tobacco-only' (7.4%), 'Cannabis-only' (5.6%), 'Co-use tobacco and cannabis' (2.3%), and 'Non-user' (84.7%). Compared to non-users, respondents in all other classes were more likely to be male, younger (<60 years), single, living in rural regions, experiencing high level of psychological distress, and had used other illicit substances in the last year. Within the co-use class, 79% had simultaneously mixed tobacco and cannabis. In the co-use class, the simultaneous use of other illicit substances (e.g., alcohol, ecstasy, cocaine) with cannabis was high.

Discussions and Conclusions: A substantial proportion of respondents have used either or both tobacco and cannabis where simultaneous use both tobacco, cannabis and other illicit substances in the co-use class was high. Interventions and policies need to target users of both substances.

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