

bulletin

Population trends in cannabis use and first results of a study on cannabis-related emergency department presentations

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Key points

- The 2007 National Drug Strategy Household Survey demonstrated that cannabis remains the most commonly used illicit drug in Australia
- Rates of recent cannabis use among 14 to 39-year-olds have continued to decline since 1998
- Despite these population-level declines, preliminary exploration of cannabis-related presentations to two Sydney emergency departments between 2004 and 2006 revealed the presence of physical and mental health problems and (sometimes violent) injuries
- There are gender issues worthy of further exploration, particularly the convergence in rates of cannabis use among the 14 to 19 years age group

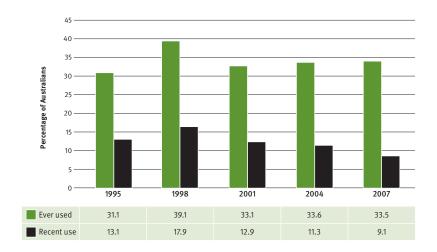
The Australian Institute of Health and Welfare (AIHW) has recently released the first results of the 2007 National Drug Strategy Household Survey (NDSHS). The findings report on patterns of cannabis consumption among Australians in 2007, compared with those at three year intervals between 1995 and 2004.

This Bulletin discusses these population trends and contains some preliminary findings of a soon-to-be-reported study of cannabis-related emergency department presentations.

The 2007 NDSHS revealed that cannabis remains the most commonly used illicit drug in Australia. As shown in Figure 1, lifetime prevalence of cannabis use has remained stable over the last three surveys, at just over one third of Australians aged at least 14 years. The rate of recent cannabis use (that is, use in the last 12 months), however, has continued to fall significantly since peaking in 1998, and currently stands at 1 in 11 (9.1%) Australians aged at least 14 years.

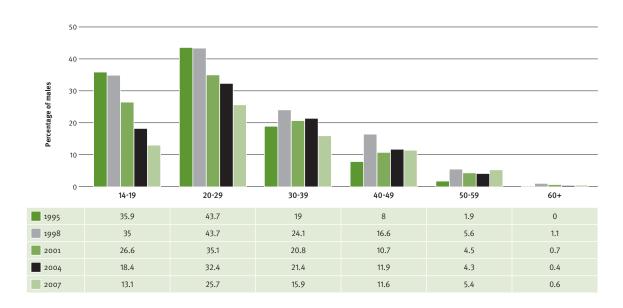
Figure 1

Percentage of Australians aged at least 14 years reporting lifetime and recent cannabis use, 1995 to 2007



More detailed trends relating to this decline in recent cannabis use among Australians are presented by age group and gender, in Figures 2 and 3. These figures show that for males and females, reductions in the rates of recent cannabis use are only notable in the younger age groups spanning 14 to 39 years. In addition, between males and females in the youngest age group (14 to 19 years), rates of recent cannabis use have converged over time and are no longer greater among males. This convergence of rates of use among males and females is similar to the pattern seen for tobacco smoking and alcohol consumption and requires further exploration.

Figure 2
Australian males' recent cannabis use by age group, 1995 to 2007



Percentage of females 30-39 14-19 20-29 40-49 50-59 20.1 0.5 1995 23.4 8.2 2.2 1.2 1998 34.2 29.3 16.3 6.3 7.6 1.2 2001 22.6 23.2 11.7 0.3 2004 17.4 19.5 5.7 2.1 0.2 10.6 2007

Figure 3
Australian females' recent cannabis use by age group, 1995 to 2007

Despite the reported declines in recent cannabis use among Australians since 1998, emergency departments continue to manage a variety of cannabis-related harms. A soon-to-be-published study by the authors of this Bulletin explored cannabis-related presentations to emergency departments in two inner-city Sydney hospitals between January 2004 and December 2006. This study used data from NSW Health's Public Health Real-time Emergency Department Surveillance System (PHREDSS) and involved a manual electronic search of its two nursing triage free-text fields for over 20 cannabis-related terms and coded for a range of issues.

A small subset of the data from this study is reported by gender in Table 1. This data reports on the primary diagnoses of the 702 cannabis-related emergency department presentations (which represents 0.3% of the total presentations), along with mental health problems and injuries recorded by the nursing triage staff.

Table 1
Characteristics of cannabis-related presentations to two Sydney Emergency Departments, 2004 to 2006

	Female % (n=193)	Male % (n=509)	Total % (n=702)
Primary diagnosis			
Cardiovascular	5.2	12.0	10.1
Respiratory	5.2	3.1	3.7
Seizures	6.2	4.3	4.8
Injury	12.4	15.1	14.4
Mental health	32.1	35.8	34.8
Loss consciousness/syncope	8.8	7.3	7.7
Nausea, vomiting, abdominal pain	21.8	15.1	17.0
Other	8.3	7.3	7.6
Mental health recorded by triage staff	43.0	45.8	45.0
Mental health (if recorded) n=316			
Schizophrenia	2.4	6.0	5.1
Depression/bipolar disorder	9.6	9.0	9.2
Psychosis	1.2	6.9	5.4
Anxiety	20.5	17.6	18.4
Suicide risk	14.5	10.3	11.4
Self-harm	7.2	3.0	4.1
Paranoid	4.8	3.9	4.1
Other specified	13.3	15.0	14.6
Multiple conditions	26.5	28.3	27.9
Injury recorded by triage staff	17.6	19.6	19.1
Injury (if recorded) n=134			
Violent	29.4	36.0	34.3
Non-violent	70.6	64.0	65.7

It appears that among the cannabis-related presentations, physical health problems (including gastrointestinal, neurological and cardio-respiratory problems) were the most common primary diagnoses, followed by mental health problems and injury. According to the notes of the triage nurses however, mental health problems were present in almost one half of all cannabis-related presentations. Among these mental health problems, anxiety was the most prevalent, followed by suicide risk, schizophrenia/psychosis and depression/bipolar disorder. In the triage notes, injury also emerged as having occurred in almost one quarter of cannabis-related presentations.

The number of presentations varies markedly by gender, with males representing 72.5% of such presentations. There also appear to be some gender differences in the types of mental health conditions, where psychosis-related disorders were more likely among males and suicide/self-harm related symptoms were more likely among females; this requires further examination.

Conclusion

Although recent cannabis use among Australians appears to have declined steadily since 1998, cannabis remains the most commonly used illicit drug in Australia. Furthermore, at least in the context of emergency departments in two inner-city Sydney hospitals, cannabis use appears to be associated with a number of harms, including physical and mental health problems and (sometimes violent) injury.

Reference

1 Australian Institute of Health and Welfare. (2008). *National Drug Strategy Household Survey: first results. Drug Statistics Series number 20. Cat. no. PHE 98.* Canberra: AlHW.