Brief Report

Bongs and baby boomers: Trends in cannabis use among older Australians

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Objective: To examine the prevalence and predictors of cannabis use among older Australians and discuss implications for service provision.

Method: Secondary analyses were conducted on the 2004 and 2013 National Drug Strategy Household Survey, a large and nationally representative data set. Frequency analyses explored the distribution of demographic characteristics and cannabis use. Logistic regression explored the predictors of cannabis use.

Results: Cannabis use among Australians aged 50 years and over increased significantly (P < 0.01) from 1.5% to 3.6% between 2004 and 2013. Cannabis use was significantly (P < 0.01) more likely among those who were male, unmarried, risky drinkers, smokers and poly-drug users, and significantly less likely among those who were older.

Conclusion: This increase in cannabis use among older Australians has important implications for policy and practice. Healthcare services and professionals need the skills to be able to effectively support older cannabis users. Targeted, age-appropriate interventions are similarly required.

Key words: aged, cannabis, public health.

Introduction

Recent demographic shifts have resulted in unprecedented increases in the number of older Australians [1]. While Australia's changing age profile is well established, examination of concomitant changes in older Australians' psychoactive drug use has been largely overlooked. Traditionally, research and service delivery interest in drug use has focussed on younger age groups. In contrast, there are emerging indications that substance use among older Australians is increasing at an alarming rate [2,3].

Cannabis is often perceived to be a 'soft' and at times even beneficial drug [4]. However, due to ageing-related physiological changes, its use can place older people at considerable risk of harm [5,6]. This study therefore sought to explore the prevalence, patterns and predictors of cannabis

Correspondence to: Professor Ann Roche, National Centre for Education and Training on Addiction, Flinders University. Email: ann.roche@flinders.edu.au use among older Australians and discuss implications for policy and practice.

Method

Data source

Secondary analyses were conducted on data from the 2004 and 2013 National Drug Strategy Household Surveys (NDSHS). The NDSHS uses a multistage stratified sampling technique and weights data to be representative of the total Australian population. Full sampling and weighting procedure details are available elsewhere [7]. For the purposes of this study, only data from participants aged 50+ years were included, resulting in samples of 11 890 (2004) and 11 367 (2013).

Measures

Equivalent measures were extracted from both the 2004 and 2013 surveys, allowing for direct comparisons between years.

Demographic characteristics of interest were age; sex; self-reported health; retirement status; marital status; number of household residents (a proxy for social support); rurality (based on the Australian Standard Geographical Classification); and psychological distress (based on the Kessler 10 scale).

Recent cannabis use was defined as using cannabis at least once during the past 12 months. Of recent users, those who used at least monthly were defined as frequent users, while those who used at least yearly but less than monthly were defined as occasional users. Participants were additionally asked to report how old they were when they first used cannabis. This was recoded into a dichotomous variable: those who first used at <50 years and those who first used at ≥50 years.

Other substance use behaviours included were as follows: smoking status (smoker/non-smoker); monthly drinking status (low risk/risky, as defined by the Australian Alcohol Guidelines [8]); and any other illicit drug use (apart from cannabis) within the past year (yes/no).

Analyses

Data were analysed using SPSS version 22. Frequency analyses were conducted with weighted data using complex samples analysis to account for the sampling design and

explored the distribution of demographic characteristics and cannabis use in each survey year. Z scores assessed significant differences between proportions. Logistic regression explored predictors of cannabis use.

Results

Demographic characteristics are shown in Table 1. In both 2004 and 2013, approximately half the sample was female, three quarters were married, a third lived in regional/remote areas, and most lived in households with more than one person, were in good health and were not psychologically distressed. Retirement was slightly less common in 2013 than 2004. The vast majority of the sample drank alcohol at low-risk levels, did not smoke and did not use other illicit drugs. While sample characteristics were relatively consistent across both survey years, there were substantial differences between cannabis users and non-users.

Cannabis use patterns were found to vary by age and over time (Table 2). A significantly (P < 0.01) higher proportion of older Australians reported using cannabis in 2013 (3.6%) compared to 2004 (1.5%). Regular use was also more common in 2013, but the difference was not statistically significant. By contrast, significantly (P < 0.01) fewer participants in 2013 reported using cannabis for the first time aged 50 + years (2.0%), compared to 2004 (5.1%). In both 2004 and 2013, there was an inverse relationship between cannabis use and age, with more younger (i.e. <50 years) than older (>50 years) respondents reporting use.

Direct logistic regression was performed to assess the impact of demographic characteristics on the likelihood that participants would report that they had used cannabis within the past year. Ten variables were included in the model: age; sex; retirement status; marital status; rurality; self-reported health; psychological distress; social support; smoking status; and poly-drug use. In both 2004 and 2013, the model was statistically significant (P < 0.01, $\chi^2 = 492.1$ and 815.4, respectively).

Significant predictors of cannabis use were the same in 2004 and 2013. In both years, cannabis use was significantly (P < 0.01) less likely among those who were older (2004 OR: 0.86, 95% CI: 0.83–0.98; 2013 OR: 0.90, 95% CI: 0.88–0.92). By contrast, cannabis use was significantly (P < 0.01) more likely among those who were male (2004 OR: 1.58, 95% CI: 1.14–2.19; 2013 OR: 1.59, 95% CI: 1.26–2.00); unmarried (2004 OR: 2.90, 95% CI: 1.95–4.31; 2013 OR: 2.27, 95% CI: 1.70–3.03); risky drinkers (2004 OR: 2.80, 95% CI: 2.03–3.85; 2013 OR: 2.54, 95% CI: 2.01–3.20); smokers (2004 OR: 2.87, 95% CI: 2.12–3.90; 2013 OR: 4.41, 95% CI: 3.51–5.53); and poly-drug users (2004 OR: 4.72, 95% CI: 3.00–7.43; 2013 OR: 3.92, 95% CI: 2.87–5.36).

Discussion

This study examined changing patterns of cannabis use among older people. It identified that cannabis use among

Table 1: Sample characteristics for the total sample, cannabis users and non-cannabis users: 2004 and 2013

Demographic of	characteristics		2004			2013	
		Total sample $(n = 11700)$ †, %	Cannabis users (n = 207), %	Non-users (n = 11 493), %	Total sample $(n = 11 172)$, %	Cannabis users (n = 432), %	Non-users (n = 10 740), %
Age	50–59	42.2	88.9	41.5	39.8	80.7	38.3
	60–69	32.1	10.4	32.5	30.7	17.2	31.3
	70+	25.7	0.7	26.0	29.4	2.2	30.5
Sex	Male	47.9	67.2	47.6	48.2	65.7	47.5
	Female	52.1	32.8	52.4	51.8	34.3	52.5
Retirement status	Not retired	49.0	80.8	48.5	54.5	80.1	53.5
	Retired	51.0	19.2	51.5	45.5	19.9	46.5
Marital status	Not married	24.5	49.9	24.1	26.5	43.7	25.9
	Married	75.5	50.1	75.9	73.5	56.3	74.1
Rurality	Major city	64.9	56.4	65.0	67.8	58.5	68.2
•	Regional/remote	35.1	43.6	35.0	32.2	41.5	31.8
Number of people	1	14.9	25.7	14.8	14.3	15.6	14.3
in household	2+	85.1	74.3	85.2	85.7	84.4	85.7
Health status	Good/very good/excellent	79.3	79.0	79.3	80.6	79.5	80.7
	Fair/poor	20.7	21.0	20.7	19.4	20.5	19.3
Psychological	Low/moderate	92.7	83.9	92.8	92.2	86.6	92.4
distress	High/very high	7.3	16.1	7.2	7.8	13.4	7.6
Alcohol	Low risk	84.4	50.7	84.9	83.9	51.6	85.1
consumption	Risky	15.6	49.3	15.1	16.1	48.4	14.9
Smoking status	Non-smoker	87.1	56.4	87.6	87.4	50.6	88.7
. J	Smoker	12.9	43.6	12.4	12.6	49.4	11.3
Other illicit drug	No	96.6	86.8	96.7	94.9	81.4	95.4
use in past year	Yes	3.4	13.2	3.3	5.1	18.6	4.6

†All proportions were calculated using weighted data to account for the sampling design. However, all non-smokers reported here are unweighted.

Table 2: Cannabis use patterns by age group: 2004 and 2013

Cannabis use patterns	patterns		20	2004			2	2013		Z Score:
		50-59 years $(n = 4730)$ †, %	60–69 years $(n = 3613), \%$	70+ years $(n = 3357), %$	All 50+ $(n = 11700), \%$ ($(n = 11700), \%$	50-59 years $(n = 3831), %$	60–69 years $(n = 4013), \%$	70+ years $(n = 3328), %$	All 50+ $(n = 11 \ 172), \%$	
Cannabis use in	N 8	96.8	99.5	100.0	98.5	92.7	98.0	7.66	96.4	z = 10.1, P < 0.01
past year	Yes	3.2	0.5	0.0	1.5	7.3	2.0	0.3	3.6	
Frequency of use	Occasional	48.7	53.2	49.5	49.1	43.8	44.9	45.4	44.0	z = 1.2, P = 0.24
	Regular	51.3	46.8	50.5	50.9	56.2	55.1	54.6	56.0	
Age of first use	<50 years	97.4	89.2	69.2	94.9	266	95.4	84.6	98.0	Z = 8.3, P < 0.01
,	>50 years	2.6	10.8	30.8	5.1	0,3	4.6	15.4	2.0	

sample proportions in 2004 and 2013. However, all non-smokers reported here are unweighted. ‡Two-tailed, two proportion z-test assessing differences between total design. to account for the sampling data -All proportions were calculated using weighted older Australians has increased over the past decade. This is in direct contrast to younger age groups, where use has been declining for several years [3]. This trend mimics recent increases in other types of drug use among older adults [3,9]. It is likely that a combination of factors is contributing to these patterns, including the unique social and demographic characteristics of Baby Boomers (i.e. those born between 1946 and 1964) [10–13]. It may also be that contemporary discussions regarding the efficacy and legitimacy of medical cannabis [14] have influenced patterns of cannabis use among this population.

Findings additionally indicate that the particularly high levels of cannabis use observed among the 'young old' (i.e. those aged 50–59) reflect a cohort effect. The overwhelming majority of cannabis users in this age group began using at a younger age and continued this use into their older years. This suggests that educative approaches highlighting the increasing harms associated with drug use in older age may be beneficial.

As a result of these upward trends in levels of cannabis use among older people, treatment services are seeing a substantial increase in the number of older clients seeking treatment for cannabis use [15], and it is likely that this demand will increase in the future. However, older individuals have unique needs in terms of substance use treatment, and these are often not well understood and poorly met [16,17]. Furthermore, traditional aged care services may not be well placed to deal with the increasing numbers of clients with drug-related problems.

Thus, there is a need to better equip healthcare services and practitioners to support older drug-using clients. Ideally, this should involve development of more specifically designated services for older people; assistance with costs associated with treatment; and strategies to minimise stigma/discrimination [18]. In addition, health practitioners should receive ongoing upskilling and education to assist them in identifying and managing substance use problems among their older patients.

More age-appropriate intervention strategies are similarly required to prevent, treat and manage cannabis (and other drug) use among older people. Importantly, such interventions must take into account the substantial heterogeneity of older clients and differences in their needs [18]. It is also important to consider potential concomitant mental health problems [19].

The current study also highlighted that age, sex, marital status and other substance use are significant predictors of cannabis use among older Australians. Consequently, there is considerable scope for interventions to target particularly vulnerable populations of older people (i.e. unmarried men aged 50–59 who also use other substances). This may prove an effective strategy for early identification of

cannabis use and associated harms, and subsequent implementation of strategies to manage, reduce or cease use.

Limitations

This study utilised self-report data, and as such may be subject to desirability/recall bias. Furthermore, although the NDSHS is weighted to be representative of the total Australian population, it is possible that particularly vulnerable older respondents (e.g. those in very poor health; socially isolated; in aged care services) were less likely to respond.

Conclusions

Cannabis use among older Australians has increased significantly over the past decade. This has important implications for the full range of aged care support services as well as the drug and alcohol sector. It is vital that all healthcare services have the ability and capacity to appropriately serve older cannabis (and other drug) using clients. Targeted, age-appropriate intervention strategies should additionally be implemented to prevent and manage use among older individuals.

Acknowledgement

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Key Points

- Cannabis use among older Australians has increased significantly since 2004.
- Unmarried men aged 50–59 who also use other substances are at particular risk.
- Health services (including drug treatment services) must be equipped to effectively serve increasing numbers of older cannabis (and other drug) using clients.
- Age-appropriate interventions are additionally required to prevent, treat and manage cannabis (and other drug) use.

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