

Has there been a decline in the prevalence of cannabis use among British nightclubbers? Five-year survey data

JIM McCAMBRIDGE¹, NEIL HUNT²,
ADAM WINSTOCK³ & LUKE MITCHESON^{1,2}

¹*National Addiction Centre (The Maudsley/Institute of Psychiatry), Addiction Sciences Building, Denmark Hill, London, UK*

²*South London & Maudsley NHS Trust, KCA, UK*

³*South West Sydney Area Health Services & National Drug & Alcohol Research Centre, University of New South Wales, Australia*

Abstract

Reductions in the prevalence and extent of current cannabis use among British nightclubbers have been reported in an annual survey conducted over the five years 1999–2003 inclusive. The generalizability and potential significance of these data in relation to study of wider patterns of drug use and harm among young people are considered.

Introduction

Nightclubbers constitute a sentinel population of illicit drug users, among whom early evidence of trends among young people may be obtained (Measham, Aldridge & Parker, 2001; Winstock, Griffiths & Stewart, 2001). Cannabis is, by some margin, the most widely prevalent illegal drug used in Britain, both among young people and older adults (Ramsey, Baker, Goulden, Sharp & Sondhi, 2001; Condon & Smith, 2003). Following the governmental announcement of an intention to reform (Hansard, 2002), the legal status of cannabis was changed in January 2004. Considerable media attention has been directed towards cannabis over recent years.

Methods

Detailed epidemiological study involving probabilistic sampling of patterns of drug use in the general population is relatively rare, for reasons including cost and the illicit nature of the behaviour (Measham et al., 2001). Studies of drug use employing non-probability

Correspondence: Jim McCambridge, National Addiction Centre (The Maudsley/Institute of Psychiatry), Addiction Sciences Building, 4 Windsor Walk, Denmark Hill, London SE5 8AF, UK. E-mail: J.McCambridge@iop.kcl.ac.uk

sampling require careful attention to be given to the representativeness of data (McKeganey, 2001). Purposive sampling has recently been compared to randomly-drawn sampling and found to perform remarkably well (Topp, Barker & Degenhardt, 2004). There is a need, however, for further study to establish which particular purposive sampling methods best provide reliable data of known generalizability. Repeated measurements over time potentially allow inferences to be made on time trends where threats to the reliability and validity of data can be shown to be constant.

Since 1999, an annual survey of nightclub drug users has been conducted in conjunction with *Mixmag*, a specialist dance music magazine. Readers have been invited to return by freepost a questionnaire printed in the magazine itself. This option was supplemented by online access to the questionnaire in 2003. This innovation apart, data collection procedures have been identical across the years, permitting cross-sectional comparisons over time. Between 1999–2003, 1151, 795, 988, 491 and 1134 UK-based responses have been received, respectively (total $n=4559$). Of the responses for 2003, 736 (65%) were received online and 398 (35%) by post. Approximately 15% ($n=686$) in the combined dataset reported prior study participation. Mean age of respondents was 24 years and across the five years approximately 40% were women.

Results

The proportions reporting use of cannabis within the past month have declined slightly over time, leading to a pronounced reduction in 2003 (see Table I).

These data were modelled using logistic regression in STATA Version 8 to control for potential confounding by age, gender, data collection method (post/web), number of responses per year and excluding prior study participants. The time trend is confirmed to be robust to potential confounding (OR 0.87 [95% CI 0.81–0.93], $p < 0.001$).

The trend towards less-frequent use among current users (see Table I) is also apparent when one considers mean frequency of use. Modelling this variable with multiple regression, a mean reduction of approximately 0.5 days per month is evident each year ($B = -0.52$ [$-0.97 - -0.06$], $p = 0.025$).

Discussion

It appears possible that there has been a recent reduction in the reported prevalence of ongoing cannabis use among UK nightclubbers, both in the extent and frequency of use. Analyses have been specifically undertaken here to control for the effects of

Table I. Cannabis use prevalence over five years.

	1999	2000	2001	2002	2003
<i>Of total sample</i> ¹ :	($n=1151$)	($n=795$)	($n=787$)	($n=335$)	($n=805$)
Last month use	73.1% ($n=841$)	72.1% ($n=573$)	70.0% ($n=551$)	70.5% ($n=236$)	63.7% ($n=513$)
<i>Of last month users:</i>					
Less than weekly	17.8% ($n=150$)	19.6% ($n=112$)	20.9% ($n=115$)	18.6% ($n=44$)	25.2% ($n=129$)
1–4 days weekly	27.4% ($n=230$)	28.3% ($n=162$)	28.5% ($n=157$)	34.8% ($n=82$)	33.7% ($n=173$)
5–7 days weekly	54.8% ($n=461$)	52.2% ($n=299$)	50.6% ($n=279$)	46.6% ($n=110$)	41.1% ($n=211$)

¹New study participants only. Similar proportions are obtained when considering the whole sample, regardless of past study participation.

potential confounders, which are both known and measured. The effects of unknown and unmeasured confounders are impossible to ascertain without further study. In light of the nature of the population under study, these findings also suggest the possibility of a subsequent wider decline in cannabis use prevalence among young people, in the period leading up to the legislative change. Since January 2004, cannabis possession has been partially decriminalized, with drug confiscation rather than arrest becoming more likely. Not only is it unclear why such a reduction in cannabis use may have occurred but it is also uncertain what impact the change in policing of cannabis will have on prevalence.

The public health and policy implications of changing prevalence levels of cannabis use and related harms have become more prominent recently (MacLeod et al., 2004a). However, compelling evidence of harm associated with cannabis use, and other drugs commonly used by young people, is lacking (MacLeod et al., 2004b). Given that there is a degree of interchangeability between drugs, changing patterns of cannabis use are likely also to be implicated in changing patterns of other drugs, including alcohol. There is an urgent need for public investment in formal epidemiological study of cannabis and other drug use and related harms, particularly among young people.

Acknowledgements

We are grateful to Selina Lovell for data entry and other support, and to the staff and readers of *Mixmag*. The first author is supported by a Wellcome Trust Health Services Research Fellowship.

References

- Condon, J., & Smith, N. (2003). *Prevalence of drug use: Key findings from the 2002/03 British Crime Survey*. Home Office Research Study, 229. London: Home Office.
- Hansard (2002, 10 July). Vol. 388, Col. 887. London: HMSO.
- MacLeod, J., Oakes, R., Copello, A., Crome, I., Egger, M., Hickman, M., Oppenkowski, T., Stokes-Lampard, H., & Davey Smith, G. (2004b). Psychological and social sequelae of cannabis and other illicit drug use by young people: A systematic review of longitudinal, general population studies. *Lancet*, 363, 1579–1588.
- MacLeod, J., Oakes, R., Oppenkowski, T., Stokes-Lampard, H., Copello, A., Crome, I., Smith, G. D., Egger, M., Hickman, M., & Judd, A. (2004a). How strong is the evidence that illicit drug use by young people is an important cause of psychological or social harm? Methodological and policy implications of a systematic review of longitudinal, general population studies. *Drugs: Education Prevention & Policy*, 11, 281–297.
- McKeganey, N. (2001). In dance scene drug surveys the sampling matters. *Addiction*, 96, 1212–1214.
- Measham, F., Aldridge, J., & Parker, H. (2001). *Dancing on drugs: Risk, health and hedonism in the British club scene*. London: Free Association.
- Ramsey, M., Baker, P., Goulden, C., Sharp, C., & Sondhi, A. (2001). *Drug misuse declared in 2000: Results from the British Crime Survey: Home Office Research Study, 224*. London: Home Office.
- Topp, L., Barker, B., & Degenhardt, L. (2004). The external validity of results derived from ecstasy users recruited using purposive sampling strategies. *Drug and Alcohol Dependence*, 73, 33–40.
- Winstock, A. R., Griffiths, P., & Stewart, D. (2001). Drugs and the dance music scene: A survey of current drug use patterns among a sample of dance music enthusiasts in the UK. *Drug and Alcohol Dependence*, 64, 9–17.