Short communication

Association between cannabis use and non-traffic injuries

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ABSTRACT

Background: This study aimed to assess the association between cannabis use and unintended non-fatal injuries other than those caused by road crashes.

Methods: Cross-sectional data were collected from a nationwide sample of 27,934 subjects surveyed in 2005 in Spain: 14,699 persons aged 15–34 years and 13,235 aged 35–64 years. Logistic regression was used to obtain odds ratios (OR) between patterns of cannabis use and frequency of non-traffic injuries, adjusted for sociodemographic factors and for the use of alcohol, tobacco and other drugs.

Results: Cannabis use in the last 12 months was associated with a higher frequency of injuries (OR = 1.4; 95% CI: 1.2–1.7). The OR in older adults (35–64 year age group) was 1.8 and 1.3 in younger people (15–34 year age group). The strongest associations found were between weekly use of cannabis and injuries from knocks and bumps (OR = 5.1; 95% CI 2.9–8.9) and those occurring outside work (OR = 3.0; 95% CI 1.8–4.9) in the older adult population.

Conclusion: Although our analysis did not control for behavioural factors, cannabis use is independently associated with an increased frequency of non-traffic injuries, especially in the older adult population. These associations emphasise the need to carry out longitudinal studies addressing the causal links between cannabis use and unintended injuries.

1. Introduction

Cannabis is the most widely consumed illegal drug in Western countries (European Monitoring Center for Drugs and Drug Addiction, 2010). In 2008, 23 million Europeans aged 15–64 years (6.8%) had used cannabis in the last year, with the highest prevalence reported among young people (16% in the 15–24 age group) (European Monitoring Center for Drugs and Drug Addiction, 2010). The same as occurs for alcohol consumption, impairment related with cannabis use could be expected to be related to a higher risk of injuries (Macdonald et al., 2006; Wells and Macdonald, 1999). In experimental studies, cannabis produces dose-related impairment in reaction time, information processing, perceptual-motor coordination, motor performance, attention, and tracking behaviour (European Monitoring Center for Drugs and Drug Addiction, 2008; Hall and Degenhardt, 2009; Ramaekers et al., 2004, 2006). However,

these effects vary with dose, mode of administration, the user's previous experience, vulnerability to psychoactive effects, and use setting (Hall and Degenhardt, 2009).

Most previous studies have explored the association between cannabis use and all types of injuries, including traffic-related ones (Cherpitel, 1999; Gmel et al., 2009; Macdonald et al., 1999; Polen et al., 1993; Regidor et al., 1996; Vinson, 2006; Wadsworth et al., 2006). However, to our knowledge, the association between cannabis use and the frequency of unintended non-fatal injuries other than those caused by road crashes (i.e. non-traffic injuries, NTIs), has not been addressed in previous studies and to date remains unclear. The first approach in assessing this association should undoubtedly be the use of a cross-sectional study. Although this design has been widely used in previous studies to explore the relationship between alcohol and injuries, this has not been the case with illicit drugs. In these studies subjects self-report exposure (drug use) and effect (accident); thus, they provide clear advantages because they allow the control group to be selected using the same criteria as the cases, and especially because many confounders can be considered simultaneously.

Accordingly, the present study aimed to assess the association between patterns of cannabis use and the frequency of NTIs

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