

Daily use of high-potency cannabis is associated with an increased risk of admission and more intervention after first-episode psychosis

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ABSTRACT FROM: Schoeler T, Petros N, Di Forti M, *et al.* Effects of continuation, frequency, and type of cannabis use on relapse in the first 2 years after onset of psychosis: an observational study. *Lancet Psychiatry* 2016;3:947–53.

WHAT IS ALREADY KNOWN ABOUT THIS TOPIC

Cannabis is a well-established environmental risk factor for psychosis.¹ More frequent users and those who start at a younger age are at greater risk² and the mean age of onset of psychosis among cannabis users is about 3 years younger than among non-users.³ In Europe and North America, about a third of patients with first-episode psychosis report regular cannabis use and about one-half of those quit after diagnosis and treatment.⁴ Former cannabis users with psychosis have fewer positive symptoms⁵ and lower rates of relapse⁶ than continued users. Schoeler *et al* aimed to examine the role of different patterns of cannabis use in the likelihood of relapse after the initial episode of psychosis, which is important because cannabis use is known to increase the risk of relapse, and relapse itself seems to be harmful. The study is novel because it examines whether there is a relationship between the dose of cannabis and the odds of relapse into psychosis, based on self-reports of the frequency of cannabis use and the assumptions about the potency of the reported cannabis preparation.

METHODS OF THE STUDY

The authors prospectively studied 256 patients aged between 18 and 65 drawn from south east London, who were treated for first episode of psychosis between 2002 and 2013. The independent variable was self-reported patterns of cannabis use, classified by continuity of use after the onset of psychosis, potency of the type of cannabis used and frequency of use after the onset of their illness. The dependent variable was relapse of psychosis within 2 years after onset of psychosis as defined by the need for admission or further treatment. The participants were interviewed at baseline and 2 years after presentation. Cannabis use was assessed with the Cannabis Experience Questionnaire while psychosis was defined clinically. Data about a range of potentially confounding factors (including age, gender, ethnicity, other substance use and treatment) were collected. Information about those who refused a follow-up interview was obtained from hospital records. Relapse was defined by a subsequent readmission for psychosis. The results were expressed in terms of survival time to readmission and the effect of possible confounding factors was assessed using logistic regression.

WHAT DOES THIS PAPER ADDS

- ▶ The paper adds to existing knowledge by demonstrating a possible dose–response relationship between the type and frequency of cannabis use and subsequent relapse.
- ▶ Former cannabis users had a lower rate of relapse (24%) than those who had never used cannabis (30%), intermittent users (40%), those with lower frequency and lower potency use (54%).
- ▶ Patients with continued higher frequency use of higher potency cannabis use had the highest rate of relapse (58%).
- ▶ Continued use of high-potency cannabis was strongly associated with relapse (adjusted OR (aOR) 3.28, 95% CI 1.22 to 9.18) after controlling for gender, ethnicity, other substance use and intensity of initial treatment. Cannabis use was associated with non-adherence to medication. A regression model that controlled for non-adherence suggested a

moderately strong independent association between continued use of high-potency cannabis and relapse (aOR 2.73, 1.02 to 5.56).

LIMITATIONS

The main limitation of the study is that the independent variable of cannabis use was not a direct measure of cannabis dosage or potency, and was inferred from self-reported the frequency of cannabis use and the assumed potency of the different forms of cannabis.

WHAT NEXT IN RESEARCH

Future studies might employ direct methods for assessing the extent of cannabis use, by corroboration of cannabis use with others and by assays of cannabinoid levels. It might also be possible to directly measure the potency of the consumed cannabis in jurisdictions where cannabis is no longer illegal, either by using manufacturer's data about cannabis potency or by the researchers obtaining and assaying cannabis samples. Knowledge of the association between cannabis use and psychosis relies heavily on observational data. Cannabis cessation among cannabis users with psychosis provides an opportunity for an experimental approach to study the effects of cannabis use on the course of psychotic illness. Those studies would also require the development of successful treatments for persistent cannabis use.

COULD THESE RESULTS CHANGE YOUR PRACTICE AND WHY

Yes. In an era of more liberal cannabis laws and widespread belief in the therapeutic value of cannabis, clinicians need to be able to communicate the risks of cannabis use in a confident way. These results will be of considerable assistance in providing advice about cannabis to psychosis patients and their families. The good news is that cessation of cannabis after the first episode of psychosis is common and results in a better prognosis. The bad news is that continued cannabis use is associated with less complete recovery and a higher rate of relapse.

Competing interests None declared.

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