Development Over Time of the Population-Attributable Risk Fraction for Cannabis Use Disorder in Schizophrenia in Denmark

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Abstract

The population-attributable risk fraction for cannabis use disorder has increased 3- to 4-fold during the past 2 decades, which is expected with increasing use and potency of cannabis. If the association between cannabis use and schizophrenia is causal, this should be reflected in a corresponding increase in the proportion of schizophrenia attributed to cannabis use disorder over time. The results from these longitudinal analyses show the proportion of cases of schizophrenia attributable to cannabis use disorder in schizophrenia increased from approximately 2% in the period to 1995 to approximately 7% in the latest period.

Meaning

Changes in attributable fractions and causal inference for schizophrenia and other psychiatric outcomes should be considered to inform the ongoing public health debate on cannabis legalisation.

Original Investigation

Association of Cannabis Use During Adolescence With Neurodevelopment as a Function of Sex and Depression Status

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Purpose

To elucidate the specific associations of cannabis use during adolescence with neurodevelopment and the magnitude of these associations for boys and girls and for children with and without depression.

Methods

In a nationwide, register-based historical prospective cohort study, we assessed the association between cannabis use during adolescence and neurodevelopment as measured by standardized clinical assessments of neurodevelopmental outcome through the Danish National Research Resource for Neuropsychological Testing in Children and Adolescents.

Results

A total of 7,186 boys (49.0%) and 8,349 girls (50.0%) and 910 women (50.0%) and 834 individuals were included in the analysis, including 3,782 individuals with cannabis use disorder. The PARF of cannabis use disorder in schizophrenia increased from approximately 2% in the period to 1995 to approximately 7% in the latest period.

Conclusions and Relevance

Cannabis use and potency of cannabis have increased during the past 2 decades. If the association between cannabis use and schizophrenia is causal, this should be reflected in a corresponding increase in the proportion of schizophrenia attributable to cannabis use disorder over time. The results from these longitudinal analyses show the proportion of cases of schizophrenia attributable to cannabis use disorder in schizophrenia increased from approximately 2% in the period to 1995 to approximately 7% in the latest period.