DEPARTMENT OF PUBLIC HEALTH SCIENCES

CANNABIS, SCHIZOPHRENIA AND OTHER PSYCHOSES
LONGITUDINAL STUDIES ON SWEDISH CONSCRIPTS

AKADEMISK AVHANDLING
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ABSTRACT

AIM

The overall aim of this thesis was to investigate the association between cannabis use and psychiatric disorders with emphasis on schizophrenia, other psychoses, depression and long term effects on mortality. Specific objectives were to: 1) investigate the long-term risk of schizophrenia, and other psychoses including brief psychoses among users and non-users of cannabis, (2) assess the risk of depression among users and non-users of cannabis, (3) determinate whether schizophrenia patients with a history of cannabis use have a different prognosis, with regards to readmission and hospital duration, compared with those without a history of cannabis use, (4) assess the overall risk of death among cannabis users compared with non-users; and assess mortality among persons with psychotic disorders and find out to what extent cannabis use affects the excess mortality

METHODS

A Swedish cohort of 50 087 military conscripts with data on cannabis use recorded in 1969 was followed up until 2007 (Study I, II, and III), and until 2011 (Study IV) in the Swedish National Patient Register and the Cause of Death Register as well as other socio-demographic databases. Information on a number of possible confounders were derived from the Swedish conscription cohort in 1969. Different statistical methods (cox proportional hazards models, negative binomial regression, logistic regression, multinomial logistic regression, and Fisher's exact test) were used in this thesis.

RESULTS

(1) Heavy cannabis users remain with a higher risk of schizophrenia throughout the follow-up period compared to non-users. (2) After control for confounding factors and especially markers of disturbed behavior during childhood, there was no increased risk of future depression among cannabis users. (3) Schizophrenia patients with a history of cannabis use had a significantly higher burden of in-patient care, with regard to hospital readmission and hospital duration, compared with those without a history of cannabis use. (4) Subjects with a history of heavy cannabis use are at higher risk of death compared with non-users. A history of cannabis use did not affect the increased mortality among persons with psychotic disorders.

CONCLUSIONS
It seems like the association between cannabis and schizophrenia may be stronger than that between cannabis and other psychiatric disorders such as brief psychosis and depression. Our findings indicate that the course and prognosis of schizophrenia may be more severe in cannabis users than schizophrenia cases in general. Subjects with a history of heavy cannabis use are at higher risk of long term psychotic effects as well as early death compared with non-users.