Trends and interactions of risk factors in psychotic disorder - Northern Finland Birth Cohorts (NFBC)

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BACKGROUND

Schizophrenia is a complex mental health disorder. Incidence rates of schizophrenia range from 8 to 43/1000 PY worldwide. In Finland, the prevalence of any psychotic disorder is 4.5%, that is higher than worldwide. There are some identified risk factors for psychotic disorders, however there is a need to explore more. It has been shown that e.g. advanced paternal age, obstetric complications, cannabis consumption, motor dysfunction, urban residence and low IQ are risk factors for psychotic disorders. The are some changes in prevalence of different risk factors over the time. Study by Ashton et al. (2001) showed for example, that a cannabis use have increased in recent decades. Previous studies on the interactions before risk factors and time trends studies on incidence of psychotic disorders are rare. NFBC 1966 and 1986 are unique prospective cohorts: 12058 and 9432 children followed since mother's pregnancy. Data collected since pregnancy of the mother and from national registers. The NFBC 1966 has 312 individuals with psychosis and 10623 controls, whereas the NFBC 1986 has 123 individuals with psychosis and 9182 controls. There are numerous variety of studies in the NFBC in different subfields of medicine and more than 350 NFBC articles published.

RELEVANCE OF THE PROJECT

In previous studies on the NFBC and psychoses these two birth cohorts were not combined and studies on interactions of the risk factors were not performed. Studying the risk factors contributing to schizophrenia aetiology, its interaction and time trends of psychotic disorders occurrence can provide with better understanding of disease triggers and strategies to prevent severe state disease development at the early stages. Exploring the interactions of risk factors can contribute to designing of effective interventions aimed at identified risk groups co-exposed to multiply risk factors.

RESEARCH PLAN

Overall aim: To study trends and interactions of risk factors in the Northern Finland Birth Cohorts (NFBC) 1966 and 1986

Specific aims:
• To indentify and compare prevalence and incidence of psychotic disorders in NFBC 1966 and NFBC 1986
• To identify and compare risk factors of psychotic disorder in cohorts
• To determine risk factors interactions in cohorts

Analyze data on the exposures and psychosis outcome as a routine cohort study methods (e.g. Cox regression analysis)

EXPECTED RESULTS

There are differences between two cohorts in occurrence of different types of psychoses, risk factors and risk factors interactions.

REFERENCES

Zammit S et al. Examining interactions between risk factors for psychosis, Br J Psychiatry, 2010, 197, 207-211