

## S85. Scandanavian psychiatry: an epidemiologist's dream

Chairmen: P Jones, T Helgason

### DOES SCHIZOPHRENIA RESULT FROM PREGNANCY, DELIVERY AND PERINATAL COMPLICATIONS? A 28 YEAR STUDY IN THE 1966 NORTH FINLAND BIRTH COHORT

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Abnormalities of pregnancy, delivery and the neonatal period have been linked with adult onset schizophrenia. We tested this hypothesis in 11017 members of the 1966 North Finland birth cohort (n = 12058) who were alive and living in Finland at age 16. Standardized assessments beginning in mid-pregnancy were linked to national hospital registers in order to identify cases of schizophrenia.

There were 76 cases of DSM-III-R schizophrenia by age 28 years. Mothers' demographics were similar in cases and controls but conditions associated with chronic fetal hypoxia were more common in schizophrenia (OR 2.2; 1.3, 3.7), as were maternal fever above 38°C during pregnancy (OR 3.7; 0.7, 18.1), and placental ablations (OR 10.7; 1.8, 65). Delivery abnormalities were not more common in schizophrenia. Low birth weight (< 2.500 g), short gestation (< 37 weeks) and their combination (OR 3.4; 1.2, 9.5) were all more common in schizophrenia, but being small for gestational age (< 10th centile) was not; babies destined for schizophrenia tended to be born early but at an appropriate weight. 6 of 132 babies (4.6%) who survived perinatal brain damage developed schizophrenia (OR 7.5; 3.2, 17.6); 6.8% (5.4%, 7.4%) of the illness may be attributable to such damage.

The time window during which aberrations of brain development might contribute to the development of schizophrenia appears to be wider than previously proposed although, as in cerebral palsy, obstetric mishap does not appear important. We cannot rule out an interaction between pregnancy and perinatal events and a genetic diathesis.

### A COMPARATIVE NORWEGIAN PSYCHIATRIC EPIDEMIOLOGICAL STUDY

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This study aims at investigating the prevalence and incidence of mental disorder in two contrasting areas of Norway — Oslo, the capital, and a western rural district. Mental disorder as well as normal functioning will be related to individual development and social and cultural factors in order to throw light on causative aetiology.

The two regions are highly different with regard to medical and social indicators, Oslo having relatively high rates of coronary heart disease and social problems compared with the western part of the country.

A random sample of 2000 subjects in the age group 18–70 years from each of the regions will be studied by CIDI and instruments measuring personality variables and social network. Thus, this is the first largescale study of the epidemiology of personality disorder. Some preliminary findings from the investigation will be presented.

### PERSONALITY AND LOW IQ AS POSSIBLE RISK FACTORS FOR SCHIZOPHRENIA

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A cohort study of 50,000 male military conscripts based in Sweden will be described. The cohort was defined as those conscripts interviewed in 1969/70. 195 of the cohort were admitted to a psychiatric hospital in Sweden, with a diagnosis of schizophrenia, over the next 14 years.

Subjects with few friends at conscription, who preferred to socialise in small groups, who did not have a steady girlfriend and felt more sensitive than other people were thirty times more likely to develop schizophrenia than those without any of those characteristics. Subjects with low IQ were also at increased risk. These factors were all independently associated with schizophrenia.

The results will be discussed in terms of their relevance to aetiological hypotheses about schizophrenia and the appropriateness of multifactorial aetiological models in epidemiology. It is hypothesised that an underlying psychological deficit related to forming relationships, and developing in childhood and adolescence could be an important risk factor for schizophrenia.

### THE DANISH DATABASE FOR PSYCHIATRIC EPIDEMIOLOGICAL RESEARCH

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In Denmark a database for psychiatric epidemiological research has recently been established by linking the nationwide Danish Psychiatric Case Register to registers of general hospital admissions, causes of death, a medical birth register, a register of congenital malformations, a register of provoked abortions, and a register of cytogenetic examinations. The purpose of this database is to facilitate the use of linked case register data by both Danish researchers and researchers from other countries. This database includes approximately 320,000 individuals who have been admitted to Danish psychiatric hospitals or departments during the period 1969–1994. The database is based on cumulative nationwide registers and will be updated regularly, and it will also be attempted to include other registers. The database is currently being used for studies of perinatal risk factors and psychiatric disorders, as well as other studies. Examples of the uses of the database will be given as well as guidelines as to how to access the data.

## S86. Personality disorders: forensic aspects

Chairmen: H Sass, J Coid

### PERSONALITY DISORDERS AMONG CRIMINAL OFFENDERS FROM EAST LONDON: AN ANALYSIS OF CONSECUTIVE PSYCHIATRIC ASSESSMENTS 1987–95

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Forensic psychiatry services in the U.K. are located primarily in the