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SCHIZOPHRENIA IN THE OFFSPRING OF ANTENATALLY DEPRESSED MOTHERS AND WITH FAMILIAL RISK - THE NORTHERN FINLAND 1966 BIRTH COHORT

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Aims: Schizophrenia is considered to be a neurodevelopmental disorder arising as a result of interactions between genetic vulnerability and environmental risk factors. We studied the association between mothers' antenatal depressed mood and schizophrenia in their adult offspring with special consideration to Familial Risk for psychosis.

Method: In the Northern Finland 1966 Birth Cohort mothers of 12,058 children were asked at mid-gestation at the antenatal clinic if they felt depressed. This general population birth cohort of the children was followed up for over 30 years, being record-linked with the Finnish Hospital Discharge Register (FHDR) for detecting psychosis in the subjects. The FHDR was also used for identifying psychosis in the parents. Familial Risk for psychosis was considered as a genetic risk factor and mothers' depression as an environmental risk factor.

Results: Offspring with both Familial Risk of psychosis and depressed mother had the highest cumulative incidence of schizophrenia, 7.4% (adjusted OR 10.3; 4.6-23.0). Of the offspring with only psychotic parent without antenatal depression, 2.3% got schizophrenia (OR 2.6; 1.2-5.4). In the offspring without Familial Risk of psychosis and with maternal depression the risk of developing schizophrenia was not elevated.

Conclusion: Mothers' depressed mood during pregnancy per se is unlikely to increase the risk for schizophrenia in the offspring, but may effect in subjects at risk for psychosis. This finding is an example of a gene x environment interaction in the development of schizophrenia.