Environmental predictive factors of cognition in first episode psychotic patients

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BRACKGROUND

In recent years, evidence for the influence of environmental factors on the development of schizophrenia and other psychoses has become well-established. Indeed, schizophrenia patients have demonstrated greater sensitivity and increased manifestations of psychotic symptoms in response to mild stressors.

Certain environmental conditions have already been identified as risk factors for psychosis, including history of obstetric complications (OC) and low parental Socioeconomic status (SES). Despite the established role of these factors in the development of a first episode psychosis (FEP), their potential to predict specific phenotypes such as cognitive impairment remains to be studied.

In the present study we aim to investigate the role of OC, SES and their interaction in predicting cognitive functioning in FEP.

METHODS

Participants

FEP diagnosed of schizophrenia, schizophreniform and schizoaffective disorders and controls

Instruments used

• History of OC: Lewis-Murray Scale-around delivery events (Any vs no OC)
• Parental SES: Hollingshead–Redlich Scale (low versus high parental SES)
• Global cognitive (GC) index: mean of 7 cognitive domains (calculated by z scores of neuropsychological tests based on the performance of controls)

Statistical analysis

• Independent relationships between GC and CO or SES: were assessed by means of bivariate comparison (t-test)
• Interaction on GC: general linear model was run using GC as the dependent variable, CO, SES and their interaction as fixed factors * sex, age and GAF as covariables

RESULTS

228 FEP (156 males [68.4%], mean age 23.24, SD=5.85) and 194 controls (126 males [64.9%], mean age 23.66, SD=5.90) were included. FEP patients had significantly higher proportion of subjects with a history of OC (Chi²=11.12, p=0.001) and lower SES (Chi²=12.99, p<0.001) compared to controls.

CONCLUSION

• Environmental risk factors (history of OC and low SES) are more prevalent in the FEP group than the control group.
• Results from this study suggest that cognitive phenotypes are sensitive to SES in both control and FEP cohorts and to OC in the subgroup with schizophrenia. In schizophrenia, the presence of OC seems to nuance the risk associated with low SES.

REFERENCES:

3. Rodriguez-Toscano, E MScab; Fraguas, D MD, PhDab; Bioque MD, PhD; González-Pinto, A MD, PhD; Corripio, MD, PhD; Lobo, A MD, PhDc; Bernardo, M MD, PhDd; Cuesta, MD, PhDab; Parellada M MD, PhDab and PEPs group.

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