

Abstract

Background

Multiple aetiological factors have been implied in schizophrenia and its outcome. Results from recent works are suggestive of a paternal age effect on the risk of schizophrenia. How this may affect schizophrenia outcome was not previously studied. We hypothesis advanced paternal age to have an effect on the outcome of schizophrenia.

Method

191 patients with first episode schizophrenia and their relatives were interviewed for parental ages, socio-demographic factors at birth, birth rank, family history of psychotic disorders and obstetric complications. Outcome measures at the end of the first year of treatment included negative symptoms, number of relapses, and occupational functioning.

Results

We performed correlation for paternal age and the key outcomes. A significant association was detected for relapse and paternal age. No correlations between paternal age and occupational functioning or negative symptoms were found. Further exploration with hierarchical regression analysis supported contribution from paternal age but not for other factors. Analysis between different paternal age groups found a significantly higher relapse rate with paternal age over forty. Results did not support a maternal age effect.

Conclusion

Advanced paternal age is associated with a higher tendency for relapse within the first year. Such effect is strongest at a threshold of paternal age at forty or above. It is unlikely to be mediated through less effective parental supervision or non-compliance. No effect is found for negative symptoms or occupational functioning. Lack of association with negative symptoms may be due to the relatively short duration of study period.