## In this issue

This issue contains one review of the prevalence of personality disorder in schizophrenia. Six papers examine risk factors for psychosis and psychotic-like experiences, three examine outcomes of psychosis and pre-psychotic signs, and five examine further aspects of schizophrenia and other psychoses.

### Personality disorder and schizophrenia

In the first paper, Newton-Howes *et al.* (pp. 1075–1082) report findings from a systematic review of the prevalence of personality disorder (PD) in those with schizophrenia and other psychoses. In 20 papers, with a total of 6345 subjects, the authors found considerable heterogeneity in reported prevalences, ranging from 4.5% to 100%. This variation was related to country of study, study type, instrument used to assess PD, and care setting. The authors note that the current literature does not allow firm conclusions to be drawn about levels of PD in those with schizophrenia and other psychoses.

# Risk factors for psychosis and psychotic-like experiences

Six papers examine risk factors for psychosis and psychotic-like experiences. In the first, Kirkbride *et al.* (pp. 1083–1094) investigated the relationship between neighbourhood level social capital and the incidence of schizophrenia using population-based data on two dimensions of social capital: social cohesion and trust (SC&T) and social disorganization (SocD). The authors found a U-shaped association between SC&T and the incidence of schizophrenia, such that rates were highest in areas low in SC&T and in areas high in SC&T, compared with those with median levels of SC&T. There was no evidence of an independent association between SocD and the incidence of schizophrenia.

Vanheusden *et al.* (pp. 1095–1102) examined associations between self-reported hallucinations and ethnicity in a population-based sample of 2258 subjects from the south-west Netherlands. The authors found that, compared with Dutch natives, self-reported hallucinations were higher in a number of ethnic groups, including Surinamese/Antilleans, Indonesians and other non-Western migrants, the odds ratios ranging from 2 to 13. When indicators of social adversity were controlled, these odds ratios reduced markedly. The authors conclude that this

supports the proposition that social adversity contributes to the high rates of psychosis found in migrant groups.

Laurens *et al.* (pp. 1103–1111) compared the prevalence of psychotic-like experiences (PLE) and other antecedents (e.g. developmental delay) of schizophrenia by ethnic group in a UK sample of 595 children aged 9–12 years. In line with studies of adult psychosis and psychotic-like experiences, the authors found that African-Caribbean children were 2–3 times more likely than White British children to have psychotic-like experiences and other antecedents. There was no evidence that such experiences were more common in other ethnic groups, notably Black Africans.

Weiser *et al.* (pp. 1113–1119) examined the relationship between the incidence of schizophrenia and migrant status in Israel, using data on 661792 adolescents for whom relevant data were available from the Israeli draft board and National Psychiatric Hospitalization Case Registry. The authors found that rates of schizophrenia were elevated for first- and second-generation migrants, with the highest rates being for migrants from Ethiopia (HR 2.95). The authors note that, compared with other significant migrant groups in Israel, Ethiopian migrants are a more visible group, with major cultural dissimilarities from the host country.

Freeman *et al.* (pp. 1121–1132) report findings from a study of 200 non-clinical subjects designed to identify factors that distinguish the occurrence of social anxiety and paranoid thoughts. The authors found that, when subjects were exposed to a neutral virtual reality situation, social anxiety and paranoia were associated with many similar factors, including depression, worry and interpersonal sensitivity. However, the presence of pre-existing perceptual abnormalities was strongly associated with paranoia but not social anxiety.

MacCabe *et al.* (pp. 1133–1140) investigated the association between school performance at age 16 and risk of schizophrenia and other psychoses in a sample of 907 011 subjects drawn from Swedish population registers. The authors found that poor school performance was associated with increased rates of schizophrenia (HR 3.9), schizoaffective disorder (HR 4.2) and other psychoses (HR 3.0). These associations held when a number of potential confounders were controlled, including migrant status, low birth weight, and socio-economic group.

#### Outcomes of psychosis and pre-psychotic signs

Three further papers examine outcomes of psychosis and pre-psychotic signs. In the first, Whitty *et al.* (pp. 1141–1146) investigated predictors of outcome at 4 years in a sample of 97 subjects with schizophrenia initially assessed during the first-episode. The authors found significant improvements in positive and negative symptoms, and in functioning, between baseline and follow-up. Better outcomes at follow-up were associated with fewer negative symptoms at baseline, more years in education and a shorter duration of untreated psychosis (DUP).

Iver *et al.* (pp. 1147–1156) examined the factor structure and correlates of signs and symptoms occurring in the pre-psychotic phase in a sample of 128 subjects with a first episode of psychosis. From a total of 27 early signs and symptoms, five factors were identified: depression, disorganization/mania, positive symptoms, negative symptoms, and social withdrawal. A long DUP was associated with depression and social withdrawal. Drug abuse was associated with depression and negative symptoms. The occurrence of mood-related signs pre-onset predicted a subsequent diagnosis of an affective psychosis.

Jeppesen *et al.* (pp. 1157–1166) investigated associations between pre-morbid adjustment, DUP and outcome of first-episode psychosis in a sample of 423 subjects assessed at baseline, 1-year and 2-year followup. The authors found that DUP was associated with more psychotic symptoms at each assessment. Poor pre-morbid social adjustment was associated with more negative symptoms, smaller social networks and poor vocational outcome at both follow-up points. The authors conclude that, while DUP is associated with poorer 2-year outcomes, impaired pre-morbid development is independently associated with more negative symptoms and poorer social outcomes.

### Other topics

The final five papers examine further aspects of psychosis. Hoffman *et al.* (pp. 1167–1176) investigated the characteristics of auditory verbal hallucinations (AVH) and their distinctiveness from everyday thoughts in a sample of 50 subjects with a diagnosis of schizophrenia and schizoaffective disorder who reported active AVHs. The authors found that most subjects (around 80%) were able to clearly distinguish AVHs from everyday thoughts. Verbal content and sense of control, rather than the acoustic qualities of voices, such as loudness, were most salient in distinguishing voices from everyday thoughts.

Vercammen *et al.* (pp. 1177–1184) examined potential mechanisms of hallucination genesis by applying signal detection theory (SDT) to a speech discrimination task in a sample of 15 subjects with schizophrenia who were hallucinating, 15 subjects with schizophrenia not hallucinating, and 17 healthy controls. The authors found that, compared with controls, perceptual thresholds were higher and perceptual sensitivity lower in both patient groups. Hallucinating patients showed increased sensitivity to speech stimuli compared with non-hallucinating patients. There was some evidence of a positive response bias in hallucinating patients, indicating a tendency to more readily accept that certain stimuli had been presented.

Pomarol-Clotet *et al.* (pp. 1185–1193), using fMRI, investigated prefrontal cortex activation during a working-memory task in a sample of 32 subjects with long-standing schizophrenia and 32 matched controls. The authors found that, compared with controls, cases showed reduced activation in the right dorsolateral prefrontal cortex (DLPFC) and other frontal areas. Greater activation in cases was evident in the anterior cingulated/ventromedial PFC, representing a failure of deactivation. The authors conclude that cases with schizophrenia showed both failure to activate and failure to deactivate during performance of a workingmemory task.

Bergemann *et al.* (pp. 1195–1201) examined the association between bone turnover, bone mineral density (BMD) and schizophrenia in a sample of 72 pre-menopausal, regularly menstruating women with schizophrenia and 71 matched controls. The authors found that markers of bone formation and resorption were increased in cases compared with controls. In contrast, in a subsample of 59 cases for whom data were available, BMD was in the normal range. The authors conclude that, despite increased bone turnover, pre-menopausal, regularly menstruating women with schizophrenia have normal BMD.

Suvisaari *et al.* (pp. 1203–1210) investigated predictors of mortality between late adolescence and middle age in 337 subjects whose mothers had been treated for schizophrenia. The authors found that mortality in the study subjects was more than double that in the general population. Within the group of study subjects, women had lower mortality from natural causes and lower overall mortality than men. The authors conclude that offspring of mothers with schizophrenia are at increased risk of premature death.

> CRAIG MORGAN Institute of Psychiatry, London, UK