Sleep cycles, hallucinatory brain activity and thyroid dysfunction in psychosis

Sleep disturbance is commonly reported in schizophrenia and may have implications for understanding the aetiology of psychosis-associated cognitive impairment. In a directly observed study of 14 middle-aged individuals with schizophrenia, Bromundt et al. (pp. 269–276) found that participants demonstrated a wide range of circadian sleep–wake cycle patterns and that those with abnormal sleep patterns were more likely to perform poorly on frontal lobe testing. The authors also found that the best predictors of cognitive performance were the relative amplitude of day/night activity and age. Aiming to improve understanding of the chain of brain events underlying the experience of auditory hallucinations, Hoffman et al. (pp. 277–283) determined the sequential organisation of functional magnetic resonance imaging-derived regional blood oxygen level-dependent activity in a sample of 11 patients with psychosis and 10 similar patients who did not experience hallucinations. The findings suggested a key role for speech-processing regions in the left inferior frontal gyrus and right temporal regions in triggering hallucinations. The authors also found evidence of delayed left temporal activation, thought likely to relate to source misattribution processes. In a study of women with postpartum psychosis, Bergink et al. (pp. 264–268) found elevated levels of thyroperoxidase antibody at 4 weeks post-partum compared with non-psychotic controls (19% vs. 5%). Those women with postpartum psychosis and evidence of autoimmune thyroid disease (AITD) were also found to have a much higher risk of progression to clinical thyroid dysfunction than those with AITD only.

Reducing duration of untreated psychosis, and rates of repeat self-harm

Lloyd-Evans et al. (pp. 256–263) have undertaken a systematic review of studies investigating the effectiveness of early detection initiatives to shorten the duration of untreated psychosis (DUP). On the basis of findings from 11 studies of 8 initiatives the authors found that general practitioner education campaigns and dedicated early intervention services did not appear to reduce DUP or to increase the number of treated cases. The authors also conclude that current evidence is most promising for intensive public awareness campaigns. In a randomised controlled trial based in Tehran, Hassanian-Moghaddam et al. (pp. 309–316) tested the efficacy of a postcard intervention to reduce suicidal behaviour following presentation to hospital for self-poisoning. Compared with treatment as usual, those sent nine postcards over a 12-month period had a reduced risk of suicidal ideation and suicide attempt at 12 months. However, the intervention did not appear to have a significant impact on self-cutting.

Epilepsy in autism and eating disorders in childhood

Although autism and epilepsy are well known to be associated, the features and correlates of epilepsy in this group have not been established. Bolton et al. (pp. 289–294) undertook a longitudinal study of 150 individuals diagnosed with autism in childhood and found that over a fifth had developed epilepsy when assessed at age 21 years or over. Epilepsy in this group, most often characterised by generalised tonic-clonic seizures, was more common among females, those with intellectual disability and those with poorer verbal abilities. Interestingly, familial liability to autism was also found to be associated with risk of epilepsy in the proband. On the basis that eating disorders may be increasing in younger age groups, Nicholls et al. (pp. 295–301) undertook a national surveillance study over a 14-month period in both a paediatric and mental health setting. New cases of early-onset eating disorders (before age 13 years) were found to occur with an overall incidence of 3.01 per 100 000. For those with outcome data available, 73% were improved at 1 year, 6% worse and 10% unchanged, and most were still in treatment.

Emotion recognition in depression and social support among immigrants

Comparing a sample of individuals with current depression and remitted depression with controls, Anderson et al. (pp. 302–308) found that the former performed poorly with regard to face emotion recognition while the latter correctly identified more emotions than controls. The authors conclude that reduced discrimination by those with depression may reflect withdrawal from the emotions of others, whereas enhanced discrimination by those with remitted depression may reflect vulnerability to relapse. Those taking antidepressants performed similarly to controls in this study. Drogendijk et al. (pp. 317–322) followed up a sample of individuals resident in an area of The Netherlands that was exposed to a devastating explosion in a fireworks storage facility in May 2000. Four years after the disaster, affected immigrants were found to lack social support more than native Dutch victims but when affected immigrants were compared with a sample of unaffected immigrants resident in a similar but unaffected region, no difference in social support was found. The authors conclude that the differences in social support found post-disaster were likely to have been present before the disaster.

Genetics of the schizophrenia–bipolar disorder spectrum

Using a schizophrenia-derived polygenic score in a bipolar disorder sample, Hamshere et al. (pp. 284–288) found that the score discriminated between those with schizoaffective bipolar disorder and the remaining individuals in the bipolar sample. The score did not, however, discriminate between those with and without psychosis. The authors conclude that their findings support a classificatory move away from the Kraepelinan dichotomy and towards approaches that recognise the common co-occurrence of domains of variation among those on the schizophrenia–bipolar disorder clinical spectrum.