

## Highlights of this issue

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### Risk factors and outcome in psychosis

The population prevalence of intellectual disability (also known as learning disability in UK health services) is approximately 1%, rather similar to the estimate of lifetime population risk for schizophrenia. The risk of psychiatric illness, particularly schizophrenia, is thought to be increased in people with intellectual disability. Morgan *et al* (pp. 364–372) linked two large population-based case registers in Australia to examine the overlap between intellectual disability and psychiatric illness. They found that a third of those with intellectual disability had psychiatric illness; the prevalence of schizophrenia was three times higher than the population estimates, with lower or equivalent rates of bipolar disorder and depression. The authors suggest that this overlap may reflect a common aetiology, acknowledging that other studies have shown that lower intellectual performance in adolescence is a risk factor for the later development of schizophrenia. Kelleher *et al* (pp. 378–382) examined an adolescent sample for the presence of psychotic symptoms, another putative risk factor for the development of subsequent psychotic illness. Six per cent of their sample reported experiencing at least one positive psychotic symptom, and these individuals were more likely to report having been abused during childhood and identified as both a bully and a victim of bullying. Kelleher *et al* propose that traumatic childhood events may contribute to the development of psychotic symptoms and eventual psychotic illness. Another acknowledged risk factor for psychotic illness is the use of cannabis in adolescence; however, whether it has an impact on the outcome of established psychotic illness is unclear, despite a widespread clinical belief that it contributes to a detrimental outcome. Zammit and colleagues (pp. 357–363) examined this question through a systematic review of the effects of cannabis on outcome in psychosis. They found that cannabis use was associated with increased relapse and decreased treatment adherence. However, links with increases in psychotic symptoms were more varied and their somewhat surprising conclusion was that there is insufficient evidence of cannabis use having a detrimental effect on outcomes in psychotic illness.

### Suicide, culture and special observations

Suicide rates in young women of South Asian origin have been suggested to be significantly higher than in the indigenous population in the UK, whereas the rates in older men have been thought to be lower; however, these conclusions have been based on ethnicity derived from place of birth, as ethnicity is not recorded on the death certificate – a limitation of this research. In an attempt to overcome this problem, specific name

recognition software, able to identify names with an Asian origin, was used to examine all suicides or open verdicts in the UK and Wales over a 10-year period ending in 2003. McKenzie *et al* (pp. 406–409) report that the suicide rates for South Asian men were lower than for other men in England and Wales, while the rates for young women were only marginally raised. However, unexpectedly, they found that older Asian women had significantly higher rates of suicide and the authors speculate on possible cultural reasons for this difference. In South Asia, similar questions are raised about the risk factors for suicide. A case-control study of suicides in Pakistan found that psychiatric illness, especially depression, was a significant predictor of suicide. Other risk factors were being married, unemployed, or having experienced negative and stressful life events. Khan *et al* (pp. 402–405) suggest that the under-recognition and subsequent under-treatment of depressive illness are largely due to insufficient primary healthcare cover in Pakistan. Returning to the UK, it is common practice to place in-patients considered at risk of self-harm on special or enhanced observations. This remains contentious, and Bowers *et al* (pp. 395–401) assessed the relationship between special observations and self-harm rates. They found no association between special observations and self-harm; however, intermittent observations were associated with decreased self-harm rates. Rather reassuringly, the availability of qualified nurses and ongoing ward-based activities were associated with reduced self-harm, whereas a high-volume throughput of patients had the reverse effect. The authors reflect on how the current policy of relatively reduced bed numbers but with higher patient throughput may actually act to increase the risks of self-harm.

### Auditory hallucinations and MRI in psychosis

Schizophrenia is characterised by the presence of auditory hallucinations, and one theory suggests that these arise as a consequence of misrecognition of one's inner speech. Hoffman *et al* (pp. 424–425) used functional MRI during auditory hallucinations to show that speech generation and perception areas, in the left anterior insula and the right middle temporal gyrus respectively, are active well before patients report experiencing the auditory hallucinations. They suggest that this could be due to the initiation of verbal content or prosody in these areas prior to propagation to auditory speech perception areas, as part of a 'top-down' process, leading to the perception of auditory hallucinations. Brans *et al* (pp. 422–423) examined longitudinal brain changes in patients with schizophrenia using structural MRI and report that patients show progressive decrements in grey matter volume with less prominent changes in white matter. The siblings of these patients did not show any such change and the authors conclude that these brain changes must be secondary to a disease-related process rather than a consequence of exposure to genetic risk, which would be expected to emerge in the relatives as well.