

## Highlights of this issue

By Kimberlie Dean

### Neurobiological developments in understanding schizophrenia and bipolar disorder

Two papers in the *Journal* this month examine specific genetic risk factors for schizophrenia – one focused on potential mechanisms for a single nucleotide polymorphism (SNP) identified as a common risk variant, and the second investigated copy number variations (CNVs) at a number of schizophrenia-associated loci. Rose *et al* (pp. 115–121) have taken an SNP (rs7914558), within the cyclin M2 gene, identified as a novel schizophrenia variant by the recent Psychiatric GWAS Consortium ‘mega-analysis’, and determined the effects of this variant on neurocognition, social cognition and brain structure in schizophrenia. No impact of genotype on neuropsychological testing was found but risk status was found to be associated with both an index of social cognition (attributional style) and brain volumes in regions proposed to support social cognition. Rees *et al* (pp. 108–114) utilised data from a large sample of individuals with schizophrenia and a publicly available data-set of controls to establish the contribution of CNVs at 15 previously identified loci. Of these previously implicated CNVs, 13 were found to be associated with schizophrenia, 6 significantly so, and 11 significantly associated with schizophrenia status once findings were combined with previous results. Overall, a minority of individuals with schizophrenia (2.5%) were found to be carrying at least one large CNV at one of these loci (compared with 0.9% of controls). The authors comment on the potential utility of routine CNV screening, particularly in light of the high rates of associated comorbidity with a range of neurodevelopmental and other serious physical pathology.

Like schizophrenia, bipolar disorder is also known to be a highly heritable neuropsychiatric condition but unlike schizophrenia, the developmental trajectory of those born to affected parents is not well established. Duffy *et al* (pp. 122–128) have analysed data from a longitudinal study of 229 offspring and 86 controls followed for up to 16 years. High-risk offspring were found to have an increased lifetime risk of a broad range of disorders while those born to lithium non-responsive parents were the only subgroup to develop psychotic disorders. The authors highlight the evidence identified to support a progressive transition through clinical stages among those developing disorder, beginning with non-specific psychopathology.

Lloyd *et al* (pp. 129–136) have also focused on the underlying aetiology of bipolar disorder by examining changes in the corpus callosum among those with euthymic disorder compared with healthy controls. The authors report differences between the two groups in overall and subregional callosal volumes, an absence of changes seen in normal ageing in the bipolar group, and evidence for a gender effect. The authors comment on the need for longitudinal studies of callosal structure and function to track the progression of changes during key periods in development and in the course of illness.

### Intervention trials – a trial in primary care and a meta-analysis of trials in older people

Menchetti *et al* (pp. 144–150) report on the results of a multicentre randomised controlled trial of interpersonal counselling compared with selective serotonin reuptake inhibitors (SSRIs) for treatment of depression in primary care. The proportion of patients achieving remission at 2 months was higher in the counselling group than in the SSRI group. Importantly, the authors also report on a number of patient characteristics that appeared to moderate treatment outcome differentially by treatment group including depression severity, functional impairment, comorbid anxiety, history of previous episodes and smoking status. For example, those in their first episode of depression were more likely to remit in response to counselling, whereas those experiencing a second episode were more likely to remit with SSRI treatment.

In a meta-analysis of trials of interventions aimed at reducing benzodiazepine use in older people, Gould *et al* (pp. 98–107) found that a number of interventions appeared to be effective, particularly supervised withdrawal augmented with psychotherapy. The authors suggest that pragmatic considerations, including lack of access to psychotherapy, may require that a stepped care approach be taken to addressing benzodiazepine use in older people. Such an approach should begin with a medication review followed by provision of a withdrawal schedule and education about benzodiazepine use.

### Mental health status in two specialised groups – deployed armed forces personnel and transsexual individuals

In a study of UK military personnel who took part in two mental health surveys 18 months apart (2010 and 2011) while deployed to Afghanistan, Jones *et al* (pp. 157–162) found that the prevalence of self-reported mental disorder was low (and lower than when estimated in military population samples), did not differ significantly between surveys and was dominated by common mental disorders rather than post-traumatic stress disorder (the latter 2.8% in 2010 and 1.8% in 2011). Perceptions of psychological support were associated with mental disorder such that, for example, recall of good predeployment psychoeducation, perceptions of good leadership and good family support were found to be associated with better mental health.

In a study of individuals with gender identity disorder in four European countries, Heylens *et al* (pp. 151–156) found that 38% had a current Axis I psychiatric diagnosis, with affective and anxiety disorders predominating. An Axis II diagnosis was found in 15%, a level comparable to that in the general population. In an editorial focused on disorders of gender identity, Barrett (pp. 96–97) highlights the evidence to support prompt assessment and treatment undertaken by experienced multidisciplinary clinics or networks, beginning with establishment of a clear diagnosis and based on the general principle that reversible treatment should precede irreversible intervention. Barrett also highlights the evidence that among those with transsexualism carefully selected for intervention, benefits to quality of life following appropriate treatment are well established.