

Highlights of this issue

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Neurodevelopmental disorders, schizophrenia and neuroimaging

There is an argument that the neurodevelopmental hypothesis of schizophrenia should be extended to incorporate the overlap with more classical neurodevelopmental disorders such as autism-spectrum disorders, attention-deficit hyperactivity disorder (ADHD) and intellectual disability. This proposal is put forward in an intriguing reappraisal piece by Owen and colleagues (pp. 173–175), who highlight the considerable overlap in genetic risk between all these disorders, and their common features as evidenced by recent genetic findings and the expression of different degrees of impairment in cognitive function. They propose that this more dimensional approach may be of greater utility than focusing on discrete disease entities when looking for cortical mechanisms mediating these symptoms. Patients with schizophrenia undergoing functional magnetic resonance imaging (fMRI) demonstrated decreased activation in frontal and striatal cortical areas while undertaking a decision-making task. Koch *et al* (pp. 223–229) also found that decreased white matter integrity was associated with the degree of functional hypoactivation seen in their patients. They suggest that these structural white matter alterations may be closely related to the observed activation decrements, and may be a consequence of deficits in anatomical connectivity in schizophrenia – and could be secondary to a deficiency of cortical association fibres. An fMRI study from India examined verbal fluency in patients with schizophrenia, demonstrating that in addition to the core fronto-temporal regions showing activation in healthy controls, other regions of cortex were also activated in patients. John and colleagues (pp. 213–222) suggest that this additional cortical activation may reflect more inefficient processing in patients. They also observed lower levels of cortical activation during the resting state in patients with schizophrenia, compared with healthy participants, which they speculate may be indicative of a more general tendency towards less efficient cortical inhibition.

Childhood bipolar disorder, ADHD, abortion and depression

The considerable variation in the diagnosis of schizophrenia between the USA and Europe led to the International Pilot Study of Schizophrenia in the early 1970s, and a drive towards standardisation of practice. A paper by Hassan *et al* (pp. 195–198) examines the rates of bipolar disorder symptoms in patients with ADHD in the UK – the literature from the USA suggests considerable variation ranging from 2% up to 23%. They found

only one child with bipolar disorder in their assessment of 200 patients with ADHD, and no increase in rates of family history of bipolar disorder. Although they could not exclude sampling-related factors, the authors also highlighted possible transatlantic differences in diagnostic evaluations: they report a study demonstrating that the rate of childhood-onset bipolar disorder in the USA was double that in the UK. In an accompanying editorial, Carlson (pp. 171–172) discusses the possible reasons for the variation in diagnostic rates and makes the case for a cross-national diagnostic study in the manner of the original International Pilot Study of Schizophrenia. She reviews a study examining vignettes of children and the differences in their interpretation: in evaluating a case illustrating hyperactivity and mania, three-quarters of US psychiatrists rated the patient as having mania, while only a third of UK psychiatrists did so. Abortion and mental health is a controversial subject, with the prevailing view being that women having a legal abortion after an unintended pregnancy do not have higher rates of mental health problems than women with unplanned pregnancy carried to term. However, Ludermitz and colleagues (pp. 237–238) report that this is not the case with unsuccessful abortion attempts in Brazil, where abortion is illegal. They found significantly higher rates of postnatal depression in women unsuccessfully attempting an abortion and make a case for improving family planning in these regions.

Depression, physical health and health anxiety

There is greater awareness that the presence of depressive illness in patients with chronic physical health problems has a significant impact on health and functional disability. A review and meta-analysis of pharmacological treatments concludes that antidepressants are efficacious and safe in this population. Taylor *et al* (pp. 179–188) suggest that selective serotonin reuptake inhibitors are probably more likely to be selected as first choice because of lower levels of adverse effects and fewer pharmacodynamic interactions; they also suggest that certain antidepressants – sertraline, citalopram and mirtazapine – are safe post-myocardial infarction and may confer some benefit on cardiac mortality. Hypochondriasis – severe health anxiety – is a relatively common problem in medical settings and is often chronic, with considerable levels of disability. Hedman and colleagues (pp. 230–236) report the results of an internet-based cognitive-behavioural therapy (CBT) approach for health anxiety that demonstrated large positive effects on anxiety, with two-thirds of the treated sample no longer fulfilling criteria for hypochondriasis after treatment. They propose that internet-based CBT offers not only a cost-effective way to treat health anxiety, as seen previously with depression and general anxiety, but also the additional benefit of flexibility and the opportunity of dramatically increasing the availability of CBT for these conditions.