The development of psychosis. Upthegrove et al

There is a reported association between childhood adversity and childhood adversity and psychosis, with a focus on hallucinations with childhood sexual abuse, death of loved one and being victimised. These were not associated with the development of delusions. The authors suggest that, given the phenomenological specificity of their findings, future studies need to examine these subtypes in more detail if we are to identify and improve outcomes in those at increased risk. On a related topic, Barker and colleagues (pp. 177–180) review putative biological mechanisms that could underpin the association between childhood adversity and psychosis, with a focus on alterations within the hypothalamic–pituitary–adrenal axis mediated by expression of brain-derived neurotrophic factor in the hippocampus and the neuropeptide oxytocin. In their editorial, they propose epigenetic mechanisms as the key feature by which environmental effects can influence longer-lasting phenotypic change, and use attachment theory as a psychological construct to frame these changes at the cognitive level. They caution against a simplistic translation into therapy, highlighting the caveats that much of this work is in animal models, with weaker data in humans. The use of technology to improve assessment of hallucinatory symptoms is the focus of an editorial by Demeulmeester et al (pp. 181–183). They review the increasing use of health apps in assessing symptoms in mental health; and then describe the development of the Multisensory Hallucination Scale for Children (MHASC), designed to be used on tablets, and the advantages of using an approach that is set as part game and part standardised test.

Reducing the incidence of repeated self-harm

There is an enormous personal, economic and societal cost associated with suicide and self-harm. Given the difficulty in predicting and preventing self-harm de novo, it is essential to optimise our response to people presenting with self-harm, in order to reduce the frequency of any subsequent attempts. In a review of brief contact interventions after self-harm Milner and colleagues (pp. 184–190) found that overall these methods did not confer a significant benefit on repetition rates or suicide. The authors suggest that larger-scale studies are necessary to examine some of the more promising individual approaches, such as postcard interventions. A study of a package of measures, including postcards and problem-solving therapy, in people presenting to hospital after self-harm supported the findings of the review; there were no significant differences in outcomes at a 1 year follow-up post-intervention. Hatcher et al (pp. 229–236) suggest that despite the lack of consistent positive differences, low-cost interventions such as postcards may still be worth implementing as they may be helpful for some people.

Neural change in psychiatric disorder

It is unusual to compare neural signatures across many different diagnostic groups; Fonzo and colleagues (pp. 206–215) demonstrate that amygdala activation was related to greater negative affect or anxiety, whereas patients with panic disorder were more likely to show activation in the posterior insula. The authors suggest that this multidiagnostic approach has utility in clarifying dimensional characterisation of mental illness. A similar approach was used by Regenbogen et al (pp. 198–205), who compared brain activation using functional magnetic resonance imaging during a dynamic social cognition task in patients with schizophrenia and patients with depressive illness. They suggest that patients with schizophrenia were characterised by disturbance of neural networks associated with processing semantic context, whereas patients with depression showed greater change in mentalising networks. They suggest that dynamic social stimuli may offer useful probes for differentiating between different psychiatric diagnoses.