Early-life origins of adult mental disorder

Four papers in the Journal this month address links between exposures or abnormalities in early life and the later onset of mental health problems in adulthood. Using data from the Dunedin Multidisciplinary Health and Development Study, Grisham et al (pp. 138–141) found that those with obsessive–compulsive disorder (OCD) at age 32 years differed significantly from controls on a number of neuropsychological tests conducted when they were aged 13 years. Although no differences were found in general intellectual functioning or verbal ability, impairments were specifically found on tests of visuospatial skills for those who would later develop OCD. In a Finnish study, Lahti et al (pp. 132–137) found evidence for a link between a number of early-life factors known to be important in the aetiology of schizophrenia, and the presence of adult schizotypal traits. For both men and women, the following factors were found to be predictive of adult schizotypy – higher gestational age, lower childhood socioeconomic status, undesirability of pregnancy, winter/autumn birth, higher birth order and maternal smoking, while small placental weight, low birth weight and small head circumference at 12 months were predictive of positive schizotypy traits for women only. Urbanicity of birth and/or upbringing has been repeatedly found to be associated with later development of mental disorders such as schizophrenia but the underlying aetiologic processes are unknown and most previous studies have been conducted in high-income countries. Lundberg et al (pp. 156–162) conducted a study in Uganda and found that urban birth was associated with an increased level of lifetime psychotic experiences and a history of more mental health symptoms in the week prior to assessment. The authors concluded that urbanicity may well be a universal factor in terms of its contribution to mental disorder. In an Australian study by McFarlane & Van Hooff (pp. 142–148), individuals who attended primary school in an area devastated by bushfire in 1983 were followed-up to determine rates of adult post-traumatic stress disorder (PTSD) and other psychiatric disorder. Compared with a control sample who attended school in a neighbouring region, those exposed to the bushfires in childhood had higher levels of ‘any DSM–IV disorder’ and ‘any anxiety’ but the differences were modest. No differences were found in levels of specific disorders such as PTSD, alcohol misuse or depression.

Treatment studies: measuring benefit, understanding duration of action, and considering alternatives to admission

The recommendation by the National Institute for Health and Clinical Excellence (NICE) for cost-effectiveness studies to make use of the EuroQoL cost-utility measure EQ–5D has had little impact on mental health intervention research. In order to assess the appropriateness of using the EQ–5D in the evaluation of a mental health intervention, Barton et al (pp. 170–177) measured the validity and responsiveness of the instrument in a study looking at the benefits of social recovery-oriented cognitive–behavioural therapy. They found that the EQ–5D was able to discriminate between individuals with different levels of ill health and that it was responsive to changes in such levels. In a special article by Harmer et al (pp.102–108), a cognitive neuropsychological model of antidepressant drug action is proposed. After an examination of key published findings relating to the effect of antidepressant drugs on behavioural and functional magnetic resonance imaging measures of emotional processing, the authors conclude that rather than acting as direct mood enhancers, antidepressants might act by changing the balance of positive to negative emotional processing. Following a systematic review of studies comparing residential alternatives to acute in-patient care, Lloyd-Evans et al (pp. 109–117) found some evidence to favour alternative service models – nine studies of moderate quality reported no contraindication to such alternatives, and there was also a suggestion that alternatives may be cheaper and lead to enhanced patient satisfaction.

Mental disorder and mortality

Mykletun et al (pp.118–125) linked data on anxiety and depression from a large population survey in Norway with a mortality database and found that the association between depression and mortality was at a level comparable with smoking. Comorbid anxiety and depression was associated with a lower risk of mortality than depression alone, whereas a U-shaped association was found between anxiety symptoms and mortality. In a prospective study of individuals with schizophrenia based in rural China, Ran et al (pp. 126–131) found elevated overall mortality rates for the sample compared with those reported for the general population but no significant difference in mortality between never-treated and treated individuals. The authors also report no link between suicide and treatment status.

Brain pathology in late-life depression and mental disorders linked to obesity

In a post-mortem study by Khundakar et al (pp.163–169), a reduction in the volume of pyramidal neurones in the dorsolateral prefrontal cortex was found among those with a history of late-life depression compared with an elderly control group, while no differences were found in volumes of non-pyramidal or glial cells. Kivimäki et al (pp.149–155) examined the association between common mental disorder and obesity over the life course and found that the strength of the association increases with age. No variation in the association by gender, ethnicity or socioeconomic position was found.