

Highlights of this issue

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Drinking water, dementia, suicide and psychopharmacology

Lithium has primarily been used in the treatment of affective disorders; this issue of the Journal describes its effects on regional suicide rates and its potential for modifying cognitive impairment. Two reports examine the association between lithium levels in drinking water and the regional variation in the rates of suicide. While the smaller study by Kabacs and colleagues (pp. 406-407) carried out in England did not identify any significant relationship, Kapusta et al (pp. 346-350), in a larger study from Austria, report that suicide rates were significantly inversely correlated with the mean lithium levels in drinking water in different regions, even after adjusting for significant socioeconomic confounders. They suggest that their data replicate results from other countries and warrant further studies of chronic low-level lithium intake on health. In a clinical study of lithium treatment for amnestic mild cognitive impairment, Forlenza and colleagues (pp. 351-356) demonstrate that 12 months of treatment resulted in significant decreases in cerebrospinal tau, a marker of pathological process in Alzheimer's dementia, and also positive effects on neuropsychological function. They conclude that lithium may exert a protective effect on the progression of cognitive impairment. In an accompanying editorial, Young (pp. 336-337) reviews the wider literature on lithium use in psychiatry as well as specific inhibitory effects of lithium on the glycogen synthetase kinase 3 gene and tau phosphorylation, as a putative mediating factor in these results. He also raises two further significant points. First, if these are true effects, then what is the relationship between regional lithium levels in water and the relative rates of dementia? Second, the more pragmatic question: how does one progress these preliminary results where the drug in question does not offer the opportunity to be patented, and thus the rewards for industry development are limited? In a variation on this theme, reflecting on the need for a new paradigm for developing novel drug therapies, a thoughtful editorial by Cowen (pp. 333-335) cautions against a simplistic antipathy towards the pharmaceutical industry. He advocates for a more balanced, synergistic and transparent approach, both in the association between psychiatry and industry, but also in the practical aspects of prescribing medication effectively.

Psychological treatments for bulimia and depression

Even when treatments have demonstrated efficacy in a specific disorder, the optimal manner in which to apply them can still remain unclear. Mitchell *et al* (pp. 391–397) studied a stepped care approach to treating bulimia – starting with a self-help technique, then going on to fluoxetine, and finally using cognitive–behavioural therapy (CBT), if patients are not

responding to the earlier treatment. They found that this stepped care was superior to standard CBT augmented with fluoxetine at 1 year follow-up. At the end of treatment, a brief supervised self-help version of CBT, delivered by less experienced therapists and augmented with fluoxetine treatment, was as effective as a longer period of traditional CBT by expert therapists, with added fluoxetine. The stepped care approach was also likely to be more cost-effective. The value of family intervention in depression is highlighted by Shimazu et al (pp. 385-390): they found that time to relapse was significantly reduced after four sessions of a family psychoeducation intervention. Interestingly, these effects did not appear to be mediated by changes in familial expressed emotion and were achieved without the patient attending the sessions. An accompanying editorial by Colom (pp. 338-340) reviews the benefits of psychoeducation and also refers to the important, but often neglected, necessary multiple components of effective psychoeducation. He is clear that psychoeducation is not the mere provision of educational material, general guidance on prevention, or advice on crisis management, but is a more interactive process of developing a shared understanding of the management of a patient's condition. Towards this end, he sets out some of the necessary environmental conditions for effective psychoeducation to flourish.

Vitamins, screening for suicide and the consequences of prenatal loss

Over the past decade, there has been an enormous growth in the market for vitamin supplements. Vitamin D supplementation has been advocated for the prevention of seasonal affective disorder, and depressed mood in older people. Sanders and colleagues (pp. 357-364) showed no benefit of vitamin D supplementation on the mental health of a large population of elderly individuals within a randomised control study design. They highlight that these results cannot be extrapolated to clinical populations where such studies are still required. There is enormous interest in reducing the rates of suicide in the general population. The observation that many people who died by suicide had visited their primary care physician prior to the event had raised awareness of the need for screening in primary care. However, there has been a concern that screening, by asking about suicidal tendencies, may itself precipitate suicidal thoughts in vulnerable individuals. Crawford et al (pp. 379-384) report that screening for risk of suicide does not increase the likelihood of a person having suicidal thoughts and that primary care workers should have confidence in screening for suicide risk among people with signs of depression. The loss of a child through miscarriage or stillbirth has been associated with depression and anxiety during subsequent pregnancy. Robertson Blackmore et al (pp. 373-378) demonstrate that symptoms of depression and anxiety persist after the birth of a healthy child and well into the postnatal period. They suggest that history of prenatal loss should be viewed as a risk factor for depression and that early recognition of such symptoms would help in preventive interventions to promote healthy adjustment for both mother and child.