

Highlights of this issue

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This month's Highlights has a strong focus on depression, from the perspectives of prevention, treatment and self-harm, with the ever-present richness of the biopsychosocial spectrum. The range of high-quality research in this area is aptly shown in the content of the papers highlighted this month.

Where's the harm?

The identification and management of risk is central to our everyday clinical practice in psychiatry, but the management of risk associated with mental disorders is not a straightforward algorithm such as those more commonly seen in the treatment of asthma or diabetes mellitus. Its permutations and combinations are limitless. Which is why the editorial by Sediqzadah and colleagues (pp. 575–577) helps us to disentangle the web of decision-making around what they refer to as involuntary isolation for people living with severe mental illness during the COVID-19 pandemic. It is a topic all too familiar to psychiatrists who grapple with this scenario on a daily basis. Mental health legislation varies across the globe, but the authors seek to explore the balance between civil rights and public protection when the harm is not that of risk to life through immediate physical harm to self or others but the longer-term harm from infection to both patients and the public.

Opposite poles

There is probably no greater debate both within and outside psychiatry than that on the safety and clinical effectiveness of electroconvulsive therapy (ECT). But for a treatment that has been in existence for over 80 years, there is a need to set the record straight.

Kirov and colleagues (pp. 594–597) have done exactly that through an evidence-based analysis in which they explore different aspects of ECT, including electrical pulse amplitude, duration and site of electrode placement. The authors detail how optimisation of these parameters to maximise clinical outcomes needs to be balanced against side-effects such as memory impairment, although this should be seen against the backdrop of how depression also affects memory. The use of more recent methods of administration that target the right prefrontal cortex may hold promise for a treatment that is likely to stay in our treatment repertoire for some years to come.

The paper by Watts and colleagues (pp. 588–593) then seeks to quell concerns about the longer-term outcomes of ECT on physical health. In an analysis of the Veterans Affairs healthcare system database, they compared data on 123 479 individual ECT treatments

provided to 8720 patients, including 5157 initial index courses of ECT. Through an elegant design protocol that used three different time frames of 7 days, 30 days and 1 year after ECT, not only did they find no difference in the relative risk of mortality from ECT at 30 days and 1 year in patients receiving ECT compared with controls, but there was also a 20% reduction in the relative risk of death from all causes – excluding suicide – in patients who received ECT. Perhaps the most striking feature of the study design was a 'propensity matching' of physical health risk in controls. Both these papers on the benefits and risks of ECT should fan the embers of good cheer for a treatment that continues to carry a high degree of stigma, when it rightly should not.

Walking away from depression

By 2030, depression is estimated to become the main cause of disease burden in high-income countries. The prevention of depressive disorder has been studied most closely where exercise has been the intervention. The problem has been that a large proportion of studies have been non-randomised or with multiple components. With this in mind, Bellón and colleagues (pp. 578–587) undertook a systematic review and meta-analysis of how exercise affects depressive symptoms in people without depressive disorder. The authors found a small effect on the standardised mean difference between intervention and control groups. Most of the interventions were aerobic, of moderate intensity, with two to four sessions a week of 60 min or less, supervised and objectively verified. Despite the small effect sizes at a study level, the cumulative effect at a population level holds promise for an intervention that can be incorporated into everyday activities.

Brain trauma – of a different kind

Brain development during childhood is a complex interplay between biochemical, physiological and pharmacological processes that affect nerve growth. Brain-derived neurotrophic factor (BDNF) is responsible for this brain integrity, with known associations with suicidal behaviour and childhood abuse. Kim and colleagues (pp. 598–605) examined this relationship more closely in 1094 adults aged 16 and over with depressive disorder as part of the MAKE Biomarker Discovery for Enhancing Antidepressant Treatment Effect and Response study, of whom 884 were followed up during a 1 year period of stepwise pharmacotherapy. Suicidal behaviours evaluated at baseline were previous suicide attempts and baseline suicide severity, and those at follow-up were increased suicide severity and fatal or non-fatal suicide attempt. The prevalence of baseline and incidence of follow-up suicidal behaviours were all highest in the presence of both childhood abuse and lower serum BDNF levels. There may now be a strong argument for more widespread use of BDNF in the prediction of suicide risk in people who have experienced childhood trauma.