

Highlights of this issue

By Derek K Tracy

Mother, mother/there's too many of you crying

There are greater rates of psychosis in minority ethnic and migrant groups. This is ever more so the fewer surrounding people there are from the same background – a so-called ‘ethnic density effect’ that operates in a dose-response fashion. What has been less clear is how this might differ between various populations. Baker et al (pp. 632–643) unpicked this in a review of 32 studies, ten of which were included in a multilevel meta-analysis. Consistent with previous work, reduced own-group density was associated with a rise in the rate of psychosis: overall, a 10% drop equated to a 20% increase in illness risk (though, intriguingly, there was a reverse relationship in South American migrants to Sweden). However, this was most notably seen in Black populations, where risks were considerably greater than average; the authors discuss how ‘visible minorities’, especially Black individuals, have been particularly vulnerable to overt discrimination and coercive healthcare practices. There was considerable heterogeneity in effect size, which might represent distinctive social experiences of specific subgroups, as many studies aggregated potentially quite different groups into broad categories, such as ‘Black’ or ‘Asian’.

Bhui et al (pp. 686–694) remind us of the construct of ‘syndemics’, wherein socioenvironmental issues can cluster and reinforce harms: here we might think of adversity, discrimination and racism, socio-economic conditions and so forth. Using logistic regression models applied to UK Biobank data, they identified three constructs linked with psychosis: lifetime adversity, current adversity and biomarkers. The first two were more strongly associated in individuals from ethnic minorities. Both pieces demonstrate that more work is needed on this important issue (and there are no standard approaches to testing syndemic models). I’m reminded of contemporary political and media ill-winds and discourse on ‘migrants’ that risk exacerbating disconnects between communities: we all have responsibilities and positive parts to play here.

It never fails to astonish me how much of a lag there can be in appropriately diagnosing bipolar affective disorder; this can be a delay of up to a decade, particularly if the first episode occurs early or is a depressive one. In a genome-wide association study and polygenic score analysis, Kalman et al (659–669) evaluated age and polarity at onset in samples covering several thousand individuals across multiple trial cohorts. Earlier age at onset was associated with worse educational attainment, more psychotic symptoms and suicidal thinking, and – interestingly – fewer subsequent illness episodes. Those whose first episode (the ‘polarity’) was manic were more likely to have subsequent delusions and manic symptoms. Caution is always required when transcribing population-level data to the individual patient in front of you, but these findings can help you consider stratifying risks.

Brother, brother, brother/there's far too many of you dying

I won’t be the only one grumbling about the new expanded (and expensive) ultra-low emission zone for cars in London, while equally recognising its necessity. Shockingly, air pollution is estimated to lead to almost half a million premature deaths across Europe – at a cost of over a *trillion* pounds – every year. It has also been linked with the development of both psychosis and depression, but it has been less clear how it might longitudinally affect illness severity and rate of relapse. Newbury et al (pp. 678–685) identified over 13 000 individuals

who first presented with one of these conditions between 2008 and 2012, and linked high-resolution local ambient levels of nitrogen dioxide, nitrogen oxides and particulate matter to their local address and healthcare follow-ups. In the following year, increased pollutants were associated with an approximately 10–20% greater risk of inpatient stays and a 10–30% rise in community mental health events, a finding which persisted to the 7 year second assessment point. Individual- and area-level covariates that might be important confounders – including gender, age, ethnicity, population density and deprivation – were controlled for, strengthening confidence in the association. Causality has yet to be proven, but there are viable putative mechanisms via neuroinflammatory and oxidative stress pathways. Overall, from a health and financial perspective, time to switch to an electric vehicle, I think.

Segev et al (pp. 644–651) tackle iatrogenic harm, specifically clozapine-induced myocarditis. This is a well-recognised potential side-effect, but it is not always adequately delineated, as clinical symptoms can mimic medication effects. Using a natural language algorithm, the authors retrospectively analysed almost a quarter of a million patient electronic records, with independent assessment by cardiologists where the findings were ambiguous. Of the 254 instances of suspected myocarditis, 80% did not actually have the condition. Troponin and C-reactive protein had very good diagnostic accuracy, with raised levels of the former having almost 90% specificity; conversely, tachycardia had almost no diagnostic value. All confirmed cases occurred within 42 days of medication initiation. These data suggest that clozapine is too often being inappropriately discontinued without accurate diagnosis.

You know we've got to find a way/to bring some lovin' here today

Hallucinatory experiences have a peak occurrence during childhood, when they are experienced by about one in six. However, it has been unclear which factors might predict their persistence into adolescence. Steenkamp et al (pp. 670–677) report on a large population-based cohort that followed up over three thousand young people at mean ages of 10 and 14 years. Of those who initially had hallucinations, they persisted in just over one-fifth, and this was associated with higher levels of baseline symptoms, emotional and behavioural problems, lower self-esteem and worse non-verbal IQ. Despite identifying such factors, a predictive model developed to test for persistence demonstrated poor accuracy. Neurodevelopmental and social vulnerabilities clearly affect outcomes, but these are complex and currently proving difficult to clinically utilise when planning future care. Yates et al (pp. 652–658) note that studies of hallucinations have inadequately sampled across the full lifespan, particularly the later years. They used the 1993, 2000, 2007 and 2014 cross-sectional Adult Psychiatric Morbidity Survey series to better elucidate this. Past-year hallucinations were most common in individuals aged 16–19 years, where they had occurred in about 7%, but this dropped to a low of 3% in those over 70 years old. Interestingly, hallucinations in this older age group were significantly less associated with mental illness and suicidal ideation than those in younger cohorts. The almost explosive growth of mindfulness, particularly among the general public, has raised some professional concerns about hype and the adequacy of the scientific literature in keeping up with this. Ellet and Chadwick’s editorial (pp. 629–631) is a thoughtful and timely piece on the potential harmful effects in relation to psychosis. The authors offer eight sensible recommendations to operationalise, monitor and report any harms, from study design through to drop-out rates and adverse events. Compared with pharmacotherapeutic research, harms are understudied and underreported in psychological research more generally; this editorial is a welcome addition. Finally, Kaleidoscope (pp. 697–698) invokes Lieutenant Frank Drebin in exploring ways to reduce vaccine hesitancy.