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From the Editor's desk

By Kamaldeep Bhui

Brexit, social division and discrimination: impacts on mortality and mental illness?

The British public's vote to leave the European Union has sent ripples and shock waves of worry among all people fearing social division, financial insecurity, and uncertainty about residential rights of nationals of non-UK countries. Scientific, security and social policy cooperation had fostered stability and innovation to improve the lives of the disempowered, including better collective interventions to tackle health inequalities, and there has been a period of careful scrutiny of the care systems and processes, and progress towards protecting the human rights of people living with mental illness. Greater trust and cooperation were at the heart of the European project, alongside greater trade and political connection.

Preceding the referendum, a culture of extremism and intolerance became visible in political debate including discussions about the future of the NHS and publicly funded services, specifically on the subject of recruiting professionals from around the world. Following the referendum, stigma, prejudice and discrimination seem to be on the rise, with some egregious examples of racism and assault against migrants and religious and ethnic minorities, as well as British citizens of non-UK heritage. These overt expressions of hostility appear to thrive off latent ideologies of national identity, superiority, destiny, self-protection and survival. A higher mortality in minorities is associated with experiences of discrimination in older adults[1] and area levels of racism,[2] although the same has not been shown in a younger cohort of Black women.[3] Low levels of segregation in the USA correlate with lower Black/White differences in mortality of infants and young adults.[4] Mortality, suicide, homicide/violence, and cardiovascular diseases are substantially elevated among sexual minorities in high-prejudice communities.[5] In the UK, discrimination is associated with common mental disorders.[6] Employment, social action and anti-stigma interventions including social contact rather than segregation help improve outcomes.[7–9] Better knowledge is needed on how social adversity (prejudice, discrimination, stigma, low income, socioeconomic position) influences cumulative risks of poor mental health[10–13] and biological mechanisms of disease, for example, by accelerated ageing,[14] epigenetics,[15,16] and explanations for higher rates of heart disease,[17] respiratory disease,[18] poorer outcomes of HIV treatment,[19] and experiences of pain.[20] Young people and children are also witnessing more violence and open prejudice, as well as being victims of it, and such experiences can become biologically embedded.[21] Encouragingly, early life experiences of adversity might be buffered by learning and education, reflecting neuronal plasticity.[16]

This month's *BJPsych* contributes several new studies of mortality and potential mechanisms by which adversity influences biology. As further evidence of biological embedding of adversity, Demakakos *et al* (pp. 135–141) found that poor parenting style was associated with a higher mortality at follow-up, and with cancer but not heart disease. Bipolar disorder is associated with a higher risk of dementia and increased mortality (Almeida *et al*, pp. 121–126), and increased risk of death related to suicide, accidents, pneumonia, influenza, and liver and digestive system disease. Anhedonia is associated with higher mortality among patients with type 2 diabetes (Nefs *et al*, pp. 142–149), and relevant to the notion of social connectedness being critical in all societies, loneliness is associated with higher mortality in older adults, the effect being mediated by physical activity (Holwerda *et al*, pp. 127–134).

The biosocial fabric in which mental illness emerges is further illustrated by several studies; for example, on the impact of childhood trauma on later mental illness (Petros *et al*, pp. 169–170). The mental health of Syrian refugees in Jordan is influenced by environmental (financial, housing, employment) and psychosocial outcomes such as loss of role and social support, and inactivity (Wells *et al*, pp. 99–106). Area deprivation may also explain higher rates of compulsory treatment in mental health services in urban areas (Keown *et al*, pp. 157–161, and see relevant editorials by Burns & Rugkåsa, pp. 97–98, and Lepping *et al*, pp. 95–96). Other groundbreaking studies improve our knowledge about classification and diagnosis (Böhnke & Croudace, pp. 162–168, and Reininghaus *et al*, pp. 107–113), and reflect on emerging new genetic markers of mental illness (Tesli *et al*, pp. 114–120, and Curtis, pp. 93–94). Despite more people receiving psychological and pharmacological treatments, levels of common mental disorders remain constant, and a substantial proportion of people are still not receiving treatments that we know reduce premature mortality in those with mental illness.[22]

Social and political divisions are powerful sources of discrimination, as are aggressive biological drives and instincts and motivational mechanisms related to limbic system and amygdala. But the reflective human mind can moderate the forces of instinct and perceptions of difference, reconciling apparent inconsistencies in our socially connected world, and potentially altering the biological imprint of social adversity. Much more research is needed on the way social adversity can be encoded in biology, and the role of social, psychological, psychiatric and neuroscience-based interventions in promoting human behaviour that improves population mental health while traducing extremist sentiments that are hazardous for health.

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