

## From the Editor's Desk

### Depression and dementia in old age: improving effective care and prevention

Kamaldeep Bhui CBE, MD, FRCPSych

A growing aged population presents challenges for healthcare professionals in terms of ensuring the right capacity and skills are enshrined in training programmes, and that health services and social care be organised and delivered in an age-appropriate manner commensurate with need.<sup>1</sup> The coexistence of mental and physical illnesses, often with shared aetiologies or mutually reinforcing pathophysiology, recommends better models of care that integrate old age psychiatry, general medicine and neurology training schemes and services.<sup>2</sup>

Depression in older age is associated with a higher mortality, irrespective of country context.<sup>3</sup> Briggs *et al* (pp. 230–236) suggest that lower frontal lobe blood perfusion because of low blood pressure is associated with depression in community resident older people. Fancourt & Tymoszuk (pp. 225–229) approach the conundrum from quite a different perspective; they find that cultural engagement, visiting museums for example, appears to protect against depressive symptoms. Late-life depression shows high rates of non-response to treatment. Sahaj Samadhi meditation was expected to improve heart rate variability, a marker of cardiovascular health in late-life depression, in a trial run by Ionson *et al* (pp. 218–224). They found that it had no effect on heart rate variability, but there was a reduction in depressive symptoms over time. Depression is also a risk factor for self-harm and suicide, but this is less researched in older populations who also have other risk factors such as chronic pain and medical disabilities. Troya *et al* (pp. 186–200) plead that we make use of the frequent contact with health services to assess for self-harm, and that community-based models of research and prevention are also needed.

Population preventive models aim to stem the growing numbers of older people living with dementia. The relationship between early depressive and emotional symptoms and later dementia is the subject of exciting but as yet equivocal implications for prevention.<sup>4,5</sup> Could population-based opportunities to improve depressive symptoms also help reduce both depression and dementia risk? For dementia, scientists still need a target stage, a coherent model that can be applied at a population level, and appropriate

interventions that show promise.<sup>6,7</sup> However, risk factors found at the level of populations, for example, polygenic risk scores, do not easily perform as screening criteria.<sup>8</sup> Depressive symptoms may be a useful marker for a critical period of intervention before the onset of more significant cognitive impairment. The use of drug-based prevention for dementia is also not currently supported by evidence.<sup>6,9</sup>

Dementia care is put under the microscope by Dooley *et al* (pp. 213–217), who report that doctors, when offering diagnostic information to patients with cognitive impairment, most often make suggestions and assertions, and less often pronouncements and offers of intervention. Despite this range, 80% of patients did not clearly accept the advice, and were likely to resist suggestions. The level of cognitive impairment in patients did not influence the type of communication method chosen, and patient preferences did not influence recommendations for use of medication. Delirium is a common comorbidity found in dementia care, usually suggesting more severe illness and poor physical health and a higher mortality. Training staff to improve their knowledge of dementia and delirium does not improve patient outcomes, although staff knowledge appeared to improve a little (Abley *et al*, pp. 201–212).

## References

- Cheung G, Bailey A, Subau D, Martínez-Ruiz A. International perspectives on old age psychiatry training. *Am J Geriatr Psychiatry* 20 Dec 2018 (doi: 10.1016/j.jagp.2018.12.021).
- Fisher J, Teodorczuk A. Old age psychiatry and geriatric medicine: shared challenges, shared solutions? *Br J Psychiatry* 2017; **210**: 91–3.
- Brandao DJ, Fontenelle LF, da Silva SA, Menezes PR, Pastor-Valero M. Depression and excess mortality in the elderly living in low- and middle-income countries: systematic review and meta-analysis. *Int J Geriatr Psychiatry* 2019; **34**: 22–30.
- Rubin R. Exploring the relationship between depression and dementia. *JAMA* 2018; **320**: 961–2.
- Ismail Z, Gatchel J, Bateman DR, Barcelos-Ferreira R, Chantillon M, Jaeger J, et al. Affective and emotional dysregulation as pre-dementia risk markers: exploring the mild behavioral impairment symptoms of depression, anxiety, irritability, and euphoria. *Int Psychogeriatr* 2018; **30**: 185–96.
- Mar J, Soto-Gordoa M, Arrospide A, Moreno-Izco F, Martínez-Lage P, et al. Fitting the epidemiology and neuropathology of the early stages of Alzheimer's disease to prevent dementia. *Alzheimers Res Ther* 2015; **7**: 2.
- Ganguli M, Albanese E, Seshadri S, Bennett DA, Lyketsos C, Kukull WA, et al. Population neuroscience: dementia epidemiology serving precision medicine and population health. *Alzheimer Dis Assoc Disord* 2018; **32**: 1–9.
- Wald NJ, Old R. The illusion of polygenic disease risk prediction. *Genet Med* 12 Jan 2019 (doi: 10.1038/s41436-018-0418-5).
- Birdi R, Stephan BC, Robinson L, Davis D. Can we influence the epidemiology of dementia? Perspectives from population-based studies. *Postgrad Med J* 2015; **91**: 651–4.