Multimorbidity in Aboriginal and non-Aboriginal people

GA (Tony) Broe, Kylie Radford

A life course perspective is needed to improve Aboriginal health and close the lifespan gap

The findings by Randall and colleagues,[1] based on linked 10-year New South Wales hospital and mortality data, confirm that multimorbidity (the presence of two or more chronic conditions) is about two and a half times as frequent among age-, sex- and socio-economic status-matched Aboriginal than among non-Aboriginal people admitted to NSW hospitals; that one-year mortality is similarly two and a half times as high for the Aboriginal people in this linked dataset; and, importantly, that the higher number of morbidities for hospitalised Aboriginal people potentially explains a large proportion of the difference in Aboriginal and non-Aboriginal mortality.

These hospital data-based multimorbidity findings are important, but not unexpected. They are likely to reflect a similar pattern of multimorbidity in the Aboriginal population receiving primary care for chronic diseases, whether in Aboriginal Community Controlled Health Organisations (ACCHOs) or in local general practices. They are also likely to reflect patterns of and disparities in multimorbidity across Australia.

The authors' findings are important in the context of increasing recognition of the significance of chronic disease prevention and management for maintaining health, reducing morbidity, and increasing lifespan, which they contrast with "the single disease focus of current medical practice". As the authors state, "[c]hallenges for patients with multimorbidity include communication with health care professionals, their involvement in decision making, coordination of care, assistance with self-care, and focusing on holistic and continuing care".[1] In contrast to the primacy of episodic acute care in current medical practice, these challenges emphasise the importance of chronic disease management in community primary care services: particularly, for Aboriginal people, in ACCHOs with their emphasis on Aboriginal community participation and control. Nevertheless, hospital systems also need to adapt to meet the needs of growing numbers of patients with multimorbidity.[2]

The age pattern of multimorbidity indicated by these linked hospital and mortality data underscores the importance of social determinants and the primary prevention of chronic diseases across the lifespan, particularly in early to mid-life. Randall and her co-authors report that the relatively higher multimorbidity in Aboriginal people appears early in life and reaches its maximum by age 40, and is primarily attributable to concurrent mental health problems (eg, alcohol or drug use, depression, psychoses), with or without physical comorbidity. This is the age at which the disparity in mortality rates peaks nationally for Aboriginal and Torres Strait Islander people, at about four times the rate for non-Indigenous Australians.[3] Indeed, most deaths (65%) in the Aboriginal and Torres Strait Islander population occur before the age of 65,[3] after which the burden of multimorbidity (driven by cardiovascular, respiratory, and metabolic diseases) increases steeply among both Aboriginal and non-Aboriginal people, consistent with trends for ageing populations around the world.[2] However, older Aboriginal people face a substantially higher burden, and from younger ages, in the number of chronic conditions with an impact on quality of life,[4] even as the lifespan gap narrows for these older survivors relative to their non-Indigenous peers.[5]

Although not reflected in the hospital data of Randall and her colleagues, dementia is another emerging problem and area of health inequity in later life for Aboriginal Australians,[6,7] with higher rates probably linked to cumulative mental and physical multimorbidity. It is notable that the chronic conditions for which rates are most markedly higher among Aboriginal than among non-Aboriginal patients are those with common risk factors (eg, smoking, physical inactivity, stress). This demands a preventive approach focused on reducing the prevalence of common risk factors for physical and mental health rather than on specific diseases or medical specialities.

Randall and her co-authors appropriately note the need to consider the social determinants of health. Their data highlight the imperative to change early life trajectories in order to reduce physical and mental multimorbidity, and to improve health and longevity. In other populations, adverse childhood experiences have a clear association with multimorbidity,[8] physical and mental chronic conditions, and the risk of premature death,[9] and they should be addressed as a public health priority in Australia. As highlighted by the study by Randall and colleagues, regional socio-economic differences and disadvantage are certainly important factors in the greater burden of disease among Aboriginal Australians, probably reflecting the higher proportion of Aboriginal people in rural and remote areas, but the 2.5-fold gap in multimorbidity is evident even after accounting for these differences. As Aboriginal people are well aware,[10] high levels of stress across the life course (first and foremost in childhood) and intergenerational trauma and racism that ultimately stem from the impact of colonisation are also severely "weathering" and damaging for Australia's First Peoples.

Positive change will require genuine and sustained support from all sectors of society, for parenting, education, meaningful work opportunities, healing, cultural empowerment, and, above all, self-determination by Aboriginal and Torres Strait Islander peoples.[10,11]

Neuroscience Research Australia (NeuRA), Sydney, NSW. t.broe@neura.edu.au doi: 10.5694/mja18.00348 See Research, p. 19

Acknowledgements: Kylie Radford is supported by a National Health and Medical Research Council—Australian Research Council Dementia Research Development Fellowship (1103312).

Competing interests: No relevant disclosures.

Provenance: Commissioned; externally peer reviewed. ■

1 Randall DA, Lujic S, Havard A, et al. Multimorbidity among Aboriginal people in New South Wales contributes significantly to their higher mortality. *Med J Aust* 2018; 209: 19-23.

2 Banerjee S. Multimorbidity — older adults need health care that can count past one. *Lancet* 2015; 385: 587-589.

3 Australian Institute of Health and Welfare. The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples: 2015 (AIHW Cat. No. IHW 147). Canberra: AIHW, 2015.

4 Fortin M, Lapointe L, Hudon C, et al. Multimorbidity and quality of life in primary care: a systematic review. *Health Qual Life Outcomes* 2004; 2: 51.

5 Cotter PR, Condon JR, Barnes T, et al. Do Indigenous Australians age prematurely? The implications of life expectancy and health conditions of older Indigenous people for health and aged care policy. *Aust Health Rev* 2012; 36: 68-74.

6 Li SQ, Guthridge SL, Eswara Aratchige P, et al. Dementia prevalence and incidence among the Indigenous and non-Indigenous populations of the Northern Territory. *Med J Aust* 2014; 200: 465-469. https://www.mja.com.au/journal/2014/200/8/dementia-prevalence-and-incidence-among-indigenous-and-non-indigenous

7 Radford K, Mack HA, Draper B, et al. Prevalence of dementia in urban and regional Aboriginal Australians. *Alzheimers Dement* 2015; 11: 271-279.

8 Sinnott C, Mc Hugh S, Fitzgerald AP, et al. Psychosocial complexity in multimorbidity: the legacy of adverse childhood experiences. *Fam Pract* 2015; 32: 269-275.

9 Kelly-Irving M, Lepage B, Dedieu D, et al. Adverse childhood experiences and premature all-cause mortality. *Eur J Epidemiol* 2013; 28: 721-734.

10 Anderson I, Baum F, Bentley M, editors. Beyond bandaids: exploring the underlying social determinants of Aboriginal health. Darwin: Cooperative Research Centre for Aboriginal Health, 2007.

11 Marmot MG. Dignity, social investment and the Indigenous health gap. *Med J Aust* 2017; 207: 20-21. https://www.mja.com.au/journal/2017/207/1/dignity-social-investment-and-indigenous-health-gap ■