Editorial

Intensive care and the gaps in health outcomes for Indigenous Australians

Geoffrey J Dobb[1,2], Kwok M Ho[1,2,3]

Narrowly targeting single risk factors will not reduce gaps in injury burden and other health outcomes

The differences between the health outcomes and life expectancy of Aboriginal and Torres Strait Islander (Indigenous) people and those of other Australians are well documented. Trauma is the second most frequent cause of death and a major cause of morbidity and disability among Indigenous Australians.[1] Their increased exposure to injury starts in childhood[2] and persists throughout life.[3] An earlier study in Western Australia confirmed that a greater proportion of Indigenous than non-Indigenous Australians sustain injuries requiring their admission to intensive care units (ICUs), although their risk-adjusted mortality was similar to that of non-Indigenous patients.[4]

In this issue of the *MJA*, Magee and colleagues[5] describe the admission characteristics and hospital outcomes for adult Indigenous and non-Indigenous Australians treated in public hospital ICUs after major trauma. The headline finding of the authors — that the population-standardised frequency of trauma-related ICU admissions was more than three times as high for Indigenous as for non-Indigenous Australians — is shocking: or it would be, had we not become inured to such findings. While the risks of injury for Māori or Pacific Islanders in New Zealand[6] or First Nations people in Canada[7] are greater for than for other people in these countries, the differences are smaller. In Australia, the unadjusted and risk-adjusted in-hospital mortality of Indigenous people after severe trauma are similar to those of non-Indigenous Australians,[5] but this should be no cause for complacency. The fact remains that the frequency of trauma-related ICU admissions of Indigenous Australians increased between 2010 and 2015, and is unacceptably high.

Magee and colleagues[5] do not include information on the causes of trauma leading to ICU admission, making it difficult to formulate actionable plans for reducing the burden of injury without collating information from other sources. Numerous reports have indicated that risk factors for injury — including excessive alcohol consumption, domestic violence, and self-harm — are highly prevalent in Indigenous Australian communities.[8–10] Important root causes underlie many of these individual risk factors, so that projects narrowly targeted at single problems will not reduce the injury burden or improve other health outcomes.

Indigenous Australians have experienced substantial intergenerational disadvantages and psychological and emotional trauma, resulting in persistent systemic barriers to closing the gaps in health, education, and social outcomes between Aboriginal and Torres Strait Islander people and other Australians. In addition, unemployment, poverty, and limited access to primary health care and education services are all important underlying causes of injury. Alcohol control[11] and injury prevention programs[12] may help, but it will be difficult to significantly improve health equity without recognising the social and historical context in which many Indigenous Australians still live.[13]

The needs of Indigenous Australians extend beyond direct access to health services, which are often limited in remote communities or are restricted by a lack of culturally safe facilities. Their further needs include reconciliation, housing, employment, targeted welfare, education, and land rights, all of which are ultimately, directly or indirectly, linked to health.

The complexity of the interactions between these pivotal sociocultural aspects can be compared with that of the health and medical problems of a critically ill patient. Australia has led the world in many areas of intensive care medicine; it was the first country to develop intensive care as a medical specialty, with designated, fully trained, full-time specialists caring for critically ill patients in a holistic manner delivering essential multiple organ support and, when necessary, coordinating the care and support provided by other specialties. This approach achieves better outcomes for the critically ill than would an uncoordinated piecemeal approach with intermittent visits by different medical specialists.

The needs of Indigenous Australians are complex and the effectiveness of support in one domain is dependent on that of other services. It is perhaps time for an intensive care approach, with an independent Department of Indigenous Services at the federal level encompassing and coordinating, in close partnership with relevant state and territory departments, all major services for Indigenous Australians, including housing, education, health, and welfare.

The leadership of Indigenous Australians in setting the priorities, emphases, and formats of these services, and their

---

[1] Royal Perth Hospital, Perth, WA. [2] University of Western Australia, Perth, WA. [3] Murdoch University, Perth, WA. ✉ geoffrey.dobb@health.wa.gov.au ▪ doi:10.5694/mja2.50005 ▪
See Research (Magee).
[Correction added on 13 May 2019, after first online publication: minor changes have been made after analysis errors in the cited Magee article were corrected.]

involvement in their delivery by a single coordinating government agency or department has the potential to deliver more accessible, culturally appropriate, holistic, and comprehensive services to Indigenous Australians. We know that the medical problems of critically ill patients require urgent and comprehensive action if optimal outcomes are to be realised. Similarly, unless we tackle the social determinants of health for Indigenous Australians in a coordinated and efficient manner, substantial improvements in Indigenous health will remain elusive.

Canada has shown it is possible to reduce the health gap between indigenous and non-indigenous populations. It is high time that Australia did the same for our Indigenous peoples.

Competing interests: No relevant disclosures.

Provenance: Commissioned; externally peer reviewed. ■

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

2 Moller H, Falster K, Ivers R, et al. Inequalities in hospitalised unintentional injury between Aboriginal and non-Aboriginal children in New South Wales, Australia. *Am J Public Health* 2016; 106: 899–905.

3 Stevens D. Critical illness and its impact on the Aboriginal people of the top end of the Northern Territory, Australia. *Anaesth Intensive Care* 2003; 31: 294–299.

4 Ho KM, Finn J, Dobb GJ, Webb SA. The outcome of critically ill Indigenous patients. *Med J Aust* 2006; 184: 496–499. https://www.mja.com.au/journal/2006/184/10/outcome-critically-ill-indigenous-patients

5 Magee F, Wilson A, Bailey MJ, et al. Trauma-related admissions to intensive care units in Australia: the influence of Indigenous status on outcomes. *Med J Aust* 2019; 210: 493–499.

6 Creamer G, Civil I, Ng A, et al. Ethnicity of severe trauma patients: results of a population-based study, Auckland, New Zealand 2004. *N Z Med J* 2010; 123: 26–32.

7 George MA, Brussoni M, Jin A, et al. Ecological analyses of the associations between injury risk and socioeconomic status, geography and Aboriginal ethnicity in British Columbia, Canada. *SpringerPlus* 2016; 5: 567.

8 Wilson M, Stearne A, Gray D, Saggers S. The harmful use of alcohol amongst Indigenous Australians. *Australian Indigenous HealthBulletin* 2010; 10(3). http://healthbulletin.org.au/wp-content/uploads/2010/06/alcohol_review_june_2010.pdf (viewed Oct 2018).

9 Australian Institute of Health and Welfare. Family, domestic and sexual violence in Australia 2018 (Cat. No. FDV 2). Canberra: AIHW, 2018.

10 Australian Bureau of Statistics. 3303.0. Causes of death, Australia, 2016. Sept 2017. http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/3303.0~2016~Main%20Features~Intentional%20self-harm%20in%20Aboriginal%20and%20Torres%20Strait%20Islander%20people~8 (viewed Oct 2018).

11 Clough AR, Fitts MS, Muller R, et al. A longitudinal observation study assessing changes in indicators of serious injury and violence with alcohol controls in four remote indigenous Australian communities in far north Queensland (2000–2015). *BMC Public Health* 2018; 18: 1126.

12 Ho KM, Litton E, Geelhoed E, et al. Effect of an injury awareness education program on risk-taking behaviours and injuries in juvenile justice offenders: a retrospective cohort study. *PLoS One* 2012; 7: e31776.

13 Greenwood ML, de Leeuw SN. Social determinants of health and the future well-being of Aboriginal children in Canada. *Paediatr Child Health* 2012; 17: 381–384. ■