Beyond the intensive care unit: ensuring the long term health of critically ill Indigenous people

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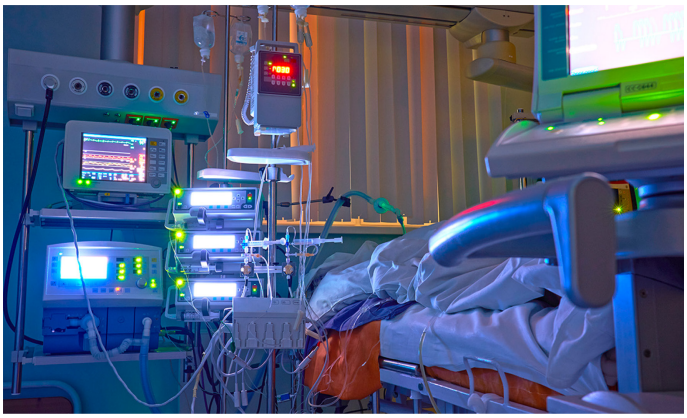
An important aim after critically ill Indigenous people return home is to avoid the need for re-admission to hospital

Evidence is growing that an episode of critical illness which requires admission to an intensive care unit (ICU) affects longer term health outcomes. More advanced age, chronic disease, and severity of the critical illness all influence long term outcomes, and the challenge is to identify modifiable factors and to design interventions that improve these outcomes.[1] Identifying who is at risk of poorer long term outcomes would facilitate better targeting of surveillance and intervention after discharge from the ICU. Indigenous Australians have generally poorer health outcomes than non-Indigenous Australians, their median age at presentation with critical illness is lower, and have a greater burden of chronic disease, but their ICU and hospital outcomes are similar to those of non-Indigenous Australians.[2,3] However, longer term outcomes after ICU care have not previously been investigated in detail.

The study reported by Secombe and colleagues in this issue of the *MJA* examined 330 712 admissions to Australian ICUs during 2017–2019 and compared 12-month mortality outcomes for Indigenous and non-Indigenous Australians.[4] The authors found that the median age of Indigenous patients (51.2 years; interquartile range [IQR], 36.7–63.6 years) was lower than for non-Indigenous patients (66.5 years; IQR, 52.7–76.1 years). Unadjusted mortality risk was nevertheless similar for the two groups. After adjusting for age, admission diagnosis, illness severity, hospital type, jurisdiction, remoteness, and socio-economic status, mortality risk (hazard ratio, 1.20; 95% confidence interval [CI], 1.14–1.27) and 12-month mortality (adjusted odds ratio, 1.24; 95% CI, 1.16–1.33) were each higher for Indigenous than non-Indigenous patients.[4]

It is important that we understand the factors that contribute to poorer long term outcomes for Indigenous people after ICU admissions. Secombe and colleagues found that ICU, in-hospital, 30-day, and 90-day mortality were each similar for Indigenous and non-Indigenous critical care patients.[4] The most important reasons for the higher 12-month mortality are likely to be found outside the walls of the ICU, and include differences in pre- and post-admission health care. Chronic disease burden is greater for Indigenous than non-Indigenous ICU patients;[2] the proportions of Indigenous ICU patients with diabetes, chronic kidney disease, and liver disease are larger than for non-Indigenous ICU patients.[2,3,5]

Intensive care treatment has been described as an "ambulance at the bottom of a cliff".[3] The cultural and socio-economic determinants of the health of Indigenous people cause disadvantage that is carried through the ICU, and they are the principal determinants of long term health outcomes.[3,6]



A larger proportion of Indigenous ICU patients are from outer regional, remote, and very remote locations, and areas of greater socio-economic disadvantage.[7] Emergency ICU admissions are more frequent for Indigenous people than non-Indigenous Australians, and this has been attributed to health disparities reinforced by cultural and social determinants that delay early access to health care that could avert the development of critical illness requiring ICU care.[2,3,6]

The study by Secombe and colleagues is limited by its data sources, which do not capture pre-admission factors.[4] Poorer long term outcomes for Indigenous Australians after ICU care may indicate health disparities and suboptimal performance of the Australian health system in providing care that meets their particular needs.[3,4] It is important to note that all people (Indigenous and non-Indigenous) admitted to ICU care who survive to discharge have poorer 12-month survival than the general population.[8] Most of the increase in long term mortality may be attributable to pre-admission factors and the overall health trajectory of the patient, the ICU admission being just one of many factors that determine long term health status.[9]

Hospital and ICU admissions are opportunities for alleviating the chronic disease burden and disadvantage that affects long term outcomes for Indigenous people by connecting the patient and their family with community care systems that provide a multidisciplinary approach to long term health care.[10,11] Meaningful communication is the key to empowering the patient and their family to influence their health trajectory and wellbeing. An important aim after critically ill Indigenous people return home is to avoid the need for re-admission to hospital.[11] Targeted research to identify modifiable factors and interventions that improve long term outcomes for Indigenous Australians after ICU admissions is the next step.

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