Equity for Indigenous Australians in intensive care

The similarity in mortality among Indigenous and non-Indigenous critically ill patients hides a complex story

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Aboriginal and Torres Strait Islander Australians are more likely to be admitted to acute care hospitals than non-Indigenous Australians.[1] While this is widely recognised, the over-representation of Indigenous patients in Australian intensive care units (ICUs) has been highlighted only recently.[2,3] The headline finding that Indigenous Australians have an ICU admission rate that is 1.2 times the expected rate considering population representation is concerning, although not surprising, given higher Indigenous hospitalisation rates.[1–3] It is reassuring that Indigenous patients appear to have similar in-ICU and in-hospital mortality.[2,3] Intensivists should be justifiably proud of this mortality equivalence, but deeper analysis conveys some inconvenient truths.

Intensive care unit admission characteristics

The median age of admission to the ICU for Indigenous patients is 15 years younger than for non-Indigenous Australians, and nearly 50% of Indigenous patients are aged less than 50 years (compared with 23% of non-Indigenous people).[3] Indigenous patients then are admitted at a time that would otherwise be one of peak workforce and family productivity, resulting in more productive years of life lost to critical illness and post-ICU morbidity.[3,4] Furthermore, Indigenous Australians are more likely to require an emergency hospital admission, are more likely to come from remote or very remote areas with more socio-economic disadvantage, and are more likely to have another ICU admission during subsequent hospitalisations.[3]

Analysis of the diagnostic categories for which patients are admitted to the ICU reveals further important differences between Indigenous and non-Indigenous critically ill patients. Sepsis is a relatively common presentation in Australian ICUs, comprising about one in ten admissions, but the proportion of Indigenous admissions due to sepsis is 1.7 times that of non-Indigenous patients (15% *v* 9%).[3] Perhaps this is not surprising given the comorbidity profile of Indigenous Australians, the poverty and poor housing, and the higher rates of blood stream infection.[5–7] Likewise, the population-standardised incidence rate of admissions to the ICU after severe trauma is 3.4 times as high for Indigenous as for non-Indigenous patients (847 per million *v* 251 per million population).[2] In order to reduce the burden of sepsis and trauma, attention needs to be focused on improvements in public health, including housing, education, health literacy and amelioration of poverty.

Although the data demonstrating over-representation are compelling, examination of the areas where Indigenous Australians are under-represented is also revealing. Very few Indigenous Australians are admitted to a private ICU, and the proportion of all ICU admissions after operative diagnostic codes for Indigenous Australians is about 60% of that for non-Indigenous Australians (31% *v* 54%).[3]

Finally, the observation that Indigenous Australians carry a higher burden of chronic disease that manifests at a younger age is well documented, yet this is incompletely reflected in critical care admission profiles.[7] While Indigenous patients have more ICU admissions associated with chronic kidney disease and cirrhosis, they have fewer ICU admissions associated with other chronic comorbid diseases, particularly those related most to subspecialty care, such as metastatic disease, immunosuppression and leukaemia.[3] While this may reflect the younger median age of Indigenous patients, there could be another explanation.

Critical care data: evidence of access barriers to primary and subspecialty care

A single unifying hypothesis that could explain the above differences is that access barriers exist for Indigenous patients in accessing culturally safe and clinically appropriate primary health and subspecialty care (Box).[8,9] Difficulty in accessing primary health care results in poorly managed chronic disease, which further exacerbates or complicates acute presentations, and may explain both the high rates of emergency acute admissions and the higher rate of ICU readmission during subsequent hospital episodes. Certainly, higher rates of emergency acute admissions have previously been associated with access barriers.[1,10]

We also postulate that the difficulties Indigenous patients face in accessing primary and subspecialty ambulatory care result in fewer referrals for subspecialty opinion and management, which leads to an under-representation of the chronic disease conditions associated with subspecialty care. Indigenous patients also face difficulties accessing hospital settings for elective and semi-elective procedures, resulting in fewer ICU admissions, particularly private ICU admissions in which elective procedures predominate. Given the difficulties in accessing specialist services in rural and remote areas, this observation is tautologous for many Indigenous patients.[1,11,12] However, for the greater number of Indigenous patients living in urban areas, the access barriers could be explained by cultural and language difficulties in navigating what is an

Fundamentals of culturally safe clinical practice[8,9]

- Cultural safety is about community and individual empowerment to manage one's own health and wellbeing and social issues. It requires health systems to examine their own practices in order to break down the barriers to achieving cultural understanding and responsiveness. It empowers both the health care provider and the patient
- Core principles include self-determination, social and restorative justice, equity, partnership, reciprocity, accountability, sustainability and cultural context
- Cultural safety involves the effective care of a person from another culture delivered by a health care professional who has undertaken a process of reflection on their own cultural identity and recognises the impact their culture has on their own practice. It involves an acknowledgement by the health care provider that imposition of their own cultural beliefs may disadvantage the recipient
- The presence of a culturally safe experience can only be determined by the recipient of the health care episode, thereby acknowledging and reversing the inherent power imbalance that occurs in any health care interaction and particularly in interactions in which life-threatening illnesses are involved
- Since intensivists are interacting with critically ill patients and their families at a time of high stress, cultural safety is arguably of more importance, yet there has been little research in this area
- Cultural safety is central to breaking bad news and end of life discussions, both of which form important components of critical care management
- In providing care to Indigenous patients, the heterogeneity of Indigenous cultures across Australia must be appreciated, in particular between urban and remote populations; clinicians should be guided by local practices and the opinions of local Aboriginal Liaison Officers or Indigenous elders
- The ultimate goal is for all people to feel respected and safe when they interact with the health care system

increasingly complex and siloed medical system. These observations further highlight socio-economic disadvantage and marginalisation, and serve as a salient reminder of the gulf that exists between advantaged and disadvantaged people in Australia.

Understanding the problem and evaluating interventions

If we are to move towards closing the gap in health care equity, it is important to document and understand the baseline epidemiological data against which the impact of future interventions can be compared. This requires multijurisdictional, multidisciplinary cooperation. The Australian and New Zealand Intensive Care Society (ANZICS) Centre for Outcome and Resource Evaluation registries contain data describing about 90% of intensive care admissions within Australia. However, these data are limited to the hospital admission. Opportunity exists to leverage data linkage of de-identified data to not only improve data quality but, more importantly, to better understand patients' pre-ICU admission health through linkages to general practice databases, for example. In addition, long term outcomes could be described through linkages to other datasets, such as death registries or databases tracking chronic disease. Such undertakings are initially resource- and labour-intensive, but once established, they provide a richer dataset. To achieve this, appropriate resourcing and collaboration with dataset custodians, as well as dedicated government funding will be required.

The role of the intensive care community in improving Indigenous health

Strengthening relationships between hospitals and primary health care providers may reduce acute hospitalisations.[13] Perhaps it is time for intensivists, and our professional bodies, to emerge from the confines of our ICUs and engage with community and primary health organisations. This is particularly urgent for regional and rural ICUs where the rates of ICU readmission are higher than for tertiary units.[3] Other medical colleges have been outspoken in their calls for public health measures that improve the outcomes of their patients. Although the College of Intensive Care Medicine of Australia and New Zealand (CICM) was one of the first colleges to publicly endorse the Uluru Statement from the Heart, both critical care peak professional bodies, ANZICS and CICM, have otherwise been relatively silent on matters relating to public health. Moreover, the diagnostic categories in which Indigenous patients are over-represented (ie, sepsis, trauma, cardiovascular disease and respiratory illness) are amenable to public health interventions.[2,3] The critical care community has a potential role in reducing marginalisation and providing culturally appropriate health care through statements of standards, advocacy for those without a voice, and clinical practice. While some may argue that this is largely symbolic, inclusivity begins with symbolism, and until this is recognised, marginalisation and the provision of culturally appropriate health care will suffer.

Partnership with Indigenous communities includes ensuring appropriate representation within the health care team that collectively cares for the critically ill patient (ie, medical, nursing, and allied health). There are currently no Indigenous intensivists, and only 1% of current trainees identify as Indigenous. While data are not readily available for other health care professionals, these figures are clearly well below population parity, let alone representative of the critically ill population. There is evidence of early work to improve representation. The CICM is drafting a Reconciliation Action Plan, which includes examining ways in which Indigenous trainees can be supported through to fellowship, as well as including material relating to the culturally appropriate delivery of clinical care in the core training of intensivists. Similarly, ANZICS has recognised that it has a role in improving intensive care outcomes for disadvantaged and diverse populations, and has recently established an Indigenous Research Collaborative that includes

Indigenous representation to better understand and lead research that involves Indigenous critically ill patients. We need to increase the opportunities for Indigenous Australians to train and gain employment within critical care. When our teams include more Indigenous people, the delivery of culturally safe and appropriate care is more likely to follow and is a necessary starting point along the pathway to equity.

Conclusion

Analysis of ICU data comparing Indigenous and non-Indigenous critically ill patients is troubling, and it is not merely the disproportionately greater admission rate. The evidence of underutilisation of health care resources, and the higher rates of emergency admission suggest inequity of access to primary and subspecialty care. Neither health disparities nor the gap in life expectancy will close until access to basic health care for Indigenous Australians is improved. While it appears that Indigenous Australians have similar mortality to non-Indigenous Australians once admitted to the ICU, more needs to be done to address the causes of the misrepresentation of Indigenous Australians in our ICUs. This includes further elucidation of the factors contributing to over-representation in some diagnostic categories while investigating the reasons for under-representation in other categories, and teasing out the contributions from living in regional and remote areas of Australia, socio-economic disadvantage and Indigenous status. Although it may be difficult, since many of these areas overlap, this research is increasingly necessary.

Critical care has a role to play through increased advocacy for, and partnering with, Indigenous communities and health organisations. Ultimately, our goal is to reduce the misrepresentation of Indigenous Australians in the ICU, and ensure that culturally safe and appropriate care is offered to all critically ill patients.

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