

## The excess burden of severe sepsis in Indigenous Australian children: can anything be done?

**IN REPLY:** We thank Schultz for her stimulating correspondence in response to our article<sup>1</sup> and the accompanying editorial<sup>2</sup> on invasive infections in critically ill Indigenous children. Schultz highlights that the assessment of life-threatening infections as defined and analysed in the article may not adequately reflect the wider social, emotional and cultural aspects of wellbeing.

Marmot recently advocated for shifting discussions on a global scale from economic growth alone towards an increased focus on human development<sup>3</sup> as a prerequisite to fundamentally address inequities in health care. We agree that while our study attempts to assess the direct burden of invasive infections in critically ill children, the data do not permit us to draw conclusions on the wider impact of severe infections. Nonetheless, the study highlighted the increased risk for Indigenous children to suffer from life-threatening infections, which is one of several factors contributing to excess childhood mortality in this vulnerable patient group. This finding will hopefully prompt further research into effective interventions. For example, the severity of paediatric sepsis, such as the degree of organ failures, is closely related to the time to initiation of antimicrobial treatment and fluid resuscitation. While sepsis bundles commonly focus on the recognition of deteriorating patients within health care settings,<sup>4</sup> education to increase community awareness of the disease in high income countries to facilitate early medical treatment has received less attention.

Importantly, the impact of socio-economic status on morbidity and premature mortality has been demonstrated to be comparable with that of other major health risk factors such as smoking, insufficient physical activity, hypertension and alcohol consumption.<sup>5</sup> Rather than considering socio-economic circumstances as a non-modifiable risk factor, they may provide opportunities for improved strategies to address disease burden and improve the wellbeing and health of the population. Indeed, one of the strongest determinants of mortality among children aged under 5 years in communities is maternal education.<sup>6</sup> In addition to the wider components of a holistic perspective on human health proposed by Schultz, maternal education may therefore

represent one of several key strategies to close the gap on paediatric sepsis.

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