Qua pote quisque, in ea conterat arte diem: COVID-19 and Australian and New Zealand intensive care

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The current global severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic has thrust intensive care medicine to the forefront of health care practice in Australia and New Zealand. Indeed, reports from other countries and jurisdictions convey highly confronting statistics about the scale of this public health emergency,[1,2] particularly in terms of the demand on intensive care unit (ICU) services.[3,4] Whether this occurs here remains to be seen, although if such a scenario does eventuate, it will represent an unprecedented challenge to our community. In parallel, these events offer the opportunity for greater coordination, improved communication, and innovation in clinical care, which are principles that in many ways define our specialty.

In this edition of *Critical Care and Resuscitation*, Zangrillo and colleagues[5] offer insights into the rapid reshaping of ICU services in Milan, in response to an exponential increase in coronavirus disease 2019 (COVID-19) cases. They provide useful information for how our community might organise a similar coordinated and sustained response. Specifically, key endeavours that appear to have been useful include: coordinating care at a jurisdictional or regional level, rapidly repurposing clinical areas to accommodate critically ill patients, identifying and training additional staff, and protocolising clinical care for patients with COVID-19. Recognising that high quality clinical care for non-COVID-19 cases must continue, which may be best served by consolidating expertise at specific institutions, is also a critical observation. Indeed, the overwhelming focus on COVID-19 threatens to destabilise many existing services, beyond simply utilising all available bed stock. This reinforces the importance of a system-wide approach that continues to cater for our usual "clientele".

The report from Zangrillo et al[5] also highlights the workforce issues inherent in rapidly creating ICU capacity. In contrast to the narrative often reported in the lay media, ICU involves more than simply a bed and ventilator. Delivery of invasive organ support requires a dedicated, highly skilled workforce (of medical, nursing and allied health professionals) that cannot simply be mass reproduced. However, the COVID-19 pandemic does offer the opportunity to work with highly aligned specialties (such as emergency medicine, respiratory medicine and anaesthesia), while also exploring scalable, intensive education for staff members with limited ICU experience. Protocolising care, including the flow of information, is clearly a key part of successfully utilising such a makeshift workforce. What is crucial is to reinforce that people provide intensive care, rather than pieces of equipment.

The severity of presentations, and clinical outcomes from COVID-19 appear to vary substantially between regions[2,6-9] for reasons that are not entirely clear. In this issue of the Journal, Ling and colleagues[10] provide a description of the first eight patients requiring ICU in Hong Kong. Here, the majority of patients required invasive mechanical ventilation and vasopressor support, albeit none required prone positioning, inhaled nitric oxide, or extracorporeal support. Although only a very small case series, outcomes were generally very good. As the authors discuss, their experience is different in comparison with other regions, which may reflect the impact of public health measures, ICU resourcing and staffing, diagnostic testing, utilisation of early mechanical ventilation, antiviral treatment, and underlying biological heterogeneity. What this reinforces is the importance of detailed systematic research into COVID-19 epidemiology, risk factors, treatment, and clinical outcomes so as to inform current and future practice. Critically, this should also include health services research that specifically focuses on ICU capacity. It is reassuring that the Australian and New Zealand intensive care community is well placed to undertake this work,[11] which must remain a high priority.

Where existing intensive care resources are overwhelmed, it has to be acknowledged that there is no ideal solution. Dramatically increasing bed stock may require a dilution of human resources, such that at scale it will not be possible to use traditional models of care. Similarly, accessing adequate consumables (such as personal protective equipment) may also become problematic, leading to greater occupational risk. This may not only have an impact on the quality of care provided, but may also potentially affect staff morale, wellbeing and retention. Alternatively, restricting access

to ICU remains a highly emotive issue, which may lead to substantial levels of moral distress. What does appear clear, however, is that the lay community expects a coordinated, transparent and holistic approach, in which expert intensive care practitioners play a central role.[12] While decision making in respect to ICU access is an inherent aspect of our professional practice, and an activity we should embrace, this should be a shared responsibility among colleagues and other relevant health care professionals.

The current health care emergency helps to remind us of some of the key qualities that make intensive care in Australia and New Zealand truly remarkable. This includes a team-oriented approach to clinical care, which emphasises patient dignity, good communication and staff engagement and wellbeing. We are a respectful, inclusive and thoughtful community who listens to patients, families and each other. Above all, it is these qualities that will ensure the Australian and New Zealand ICU community can meet this challenge: *Qua pote quisque, in ea conterat arte diem* — Let people do what they are good at.

Competing interests

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