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PERSONAL VIEWPOINT

Don't forget shared decision-making in the COVID-19 crisisNicholas Simpson ¹, Sharyn Milnes² and Daniel Steinfurt^{3,4}

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Key words

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As countries around the world prioritise the accumulation of ventilators and make plans to ration their use, it seems important not to neglect simpler measures which may have greater impact on the ability of our healthcare systems to deliver the best standard of care to the most patients. We believe two important considerations regarding shared decision-making should continue to guide institutional planning and clinical decision-making during this period.

Abstract

Mechanical ventilation as a resource is limited and may lead to poor outcomes in at-risk populations. Critical care supports may not be preferred by those at risk of deterioration in the COVID-19 setting. Patient-centred communication and shared decision-making should continue to remain central to clinical practice.

Engaging in shared decision-making may result in less frequent requests for critical care supports

A high proportion of patients referred to Australian Intensive Care Units may have a life limiting illness (LLI).¹ Many people would prefer to avoid invasive treatments, particularly if near or at the end of life.² While clinicians tend to default to treatment modalities, patients more frequently value functional outcomes, rarely favouring longevity alone.³ Research analysing patient outcomes after critical illness in the elderly suggest a high mortality and lower levels of function.⁴ Multiple studies in populations with LLI have shown improved quality of life outcomes following goals of care and end-of-life discussions with benefits including better

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quality of life, less aggressive medical interventions near death and even increased survival.^{5,6}

Many patients want to discuss realistic information with clinicians in order to make personalised decisions.⁵ Patient-centred goals of care discussion programmes have been shown to decrease critical care level intervention as a goal of choice, particularly in groups with LLI.⁶ While the aim of such programmes is not to decrease access to intensive care beds, increased critical care resource may be a side-effect of providing goal concordant care. In this context patient-centred shared decision-making may be one of the most important pandemic tools of all.

Shared decision-making regarding mechanical ventilation involves individual consideration of benefits and risks

It is important that patients are offered current realistic information about the risks and benefits of advanced respiratory supports for COVID-19 in order to participate in their own healthcare decisions. Emerging data suggest that advanced respiratory support is, at the least, not a universal panacea, with mechanical ventilation (MV) in some series associated with a mortality exceeding 50%.^{7,8,11} Acute respiratory distress syndrome (ARDS) in COVID-19 is strongly associated with MV and death¹² and a failure of conservative oxygenation strategies appears to be a predictor of poor outcome⁷ with disproportionate mortality in the elderly.⁹

The risks of MV should be considered during the explanation and planning phase of shared decision-making, particularly in vulnerable groups such as those

with LLI or the elderly.^{10,13,14} These risks include the potential loss of the ability to communicate with family and friends or make further decisions at the end of life or the burdens of prolonged critical care. Information about likely outcomes is also relevant, given our knowledge of the cognitive and functional burdens of ARDS survivors.^{15,16} A single organ support (MV) should be considered in the context of a whole person outcome.¹⁷

Many, in this context, may choose alternatives to advanced respiratory support. It is important to explore what other pathways may look like, including palliative care, or a defined trial of therapies, with a clear shared understanding as to what an acceptable outcome might be.

Conclusions

MV as a resource is limited and may lead to poor outcomes in at-risk populations. Critical care supports may not be preferred by those at risk of deterioration in the COVID-19 setting. Patient-centred communication and shared decision-making should continue to remain central to clinical practice, particularly as, for some groups, alternative treatments may offer a better chance of a good functional outcome or a less invasive death.

In the current pandemic, we would suggest the ongoing participation of clinicians in values-based shared decision-making, armed with current information specific to each patient, in order to guide informed choice. This will assist the provision of goal-concordant care and avoidance of individual harms. As an important side-effect this approach may preserve critical care resources and better inform choices around allocation.

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Retrieval medicine and pre-hospital care in remote Australia

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Key words

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Australia, the world's largest island and smallest continent, occupies a vast 8 million km². Its aeromedical retrieval and flying clinic services aim to provide high-quality healthcare to isolated communities¹ disadvantaged by the tyranny of distance. This persisting disadvantage is writ large over barren arid terrain, even nowadays requiring hours of air transfer to access a major hospital. The 'mantle of safety' conferred by Australia's fabled and world's first Royal Flying Doctor's Service (RFDS) confers some assurance for people who live and work in the outback. The transfer times to

Abstract

Retrieval medicine and pre-hospital care in remote Australia are challenging, requiring competencies in major trauma, high-risk obstetrics, critical care in adults and children, severe mental health-related agitation and envenomation. They keep a city-based retrieval and pre-hospital care doctor on their toes. Cultural fluencies to enhance care for Aboriginal and remote communities are critical during the long hours taken for the patient journey from the accident scene or clinic to definitive care.

definitive care for critically ill or injured patients ranges from the blink of the eye 30 min on a helicopter in the East of England, to long hours on a medically-configured plane Brisbane or Alice Springs-bound. Such long-haul retrieval is regularly requested from towns west of Roma in Queensland, and the many clinics and homesteads scattered over several million square miles served by the Central Australian Retrieval Service (Fig. 1).

As a retrieval and pre-hospital physician that has worked on rotary and fixed wing aircraft in Queensland, Alice Springs and the United Kingdom, I know that delays to definitive care due to inaccessibility or isolation of an accident scene or clinic imposes higher deterioration and death risk. This is more of an issue for major trauma,^{2,3} critical illness such as sepsis,⁴ as well as ischaemic stroke⁵ and ST elevation myocardial infarctions⁶ suited for time critical reperfusion procedures.

J. Ting has worked as a retrieval and pre-hospital physician in Australia, the UK and the Northern Territory. He continues in this role as a locum consultant with the Central Australian Retrieval Service.

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