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Page: 25

HEATHCARE DELIVERY

Critical care triaging in the shadow of COVID-19: Ethics considerations

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Since the World Health Organization declared coronavirus disease 2019 (COVID-19) a Public Health Emergency of International Concern, COVID-19 infection and the associated mortality have increased exponentially, globally. South Africa (SA) is no exception. Concerns abound over whether SA's healthcare system can withstand a demand for care that is disproportionate to current resources, both in the state and private health sectors. While healthcare professionals in SA have become resilient and adept at making difficult decisions in the face of resource limitations, a surge in COVID-19 cases could place a severe strain on the country's critical care services and necessitate unprecedented rationing decisions. This could occur at two critical points: access to ventilation, and withdrawal of intensive care in non-responsive or deteriorating cases. The ethical dimensions of decision-making at both junctures merit urgent consideration.

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Since the World Health Organization (WHO) designated the unfolding coronavirus disease 2019 (COVID-19) pandemic a Public Health Emergency of International Concern on 30 January 2020,[1] COVID-19 has significantly disrupted clinical care decision-making in affected countries. In March 2020, the WHO published interim clinical guidance on the care of COVID-19 patients aimed at health ministers, health system administrators, and other decision-makers.[2] In its guidance, the WHO highlighted the findings of a large cohort study of COVID-19 patients,[3] noting that ~40% of patients with COVID-19 may have mild disease, where treatment is mostly symptomatic and does not require inpatient care; ~40% of patients have moderate disease that may require inpatient care; ~15% of patients have severe disease that requires oxygen therapy or other inpatient interventions; and ~5% have critical disease that requires mechanical ventilation.[2] Where COVID-19 community transmission is established, the WHO has recommended that hospital authorities determine allocation of lifesaving resources for healthcare workers and patients. Despite an unprecedented national lockdown being declared in South Africa (SA) on 15 March 2020, COVID-19 cases in SA have continued to rise and community transmission is now established. This situation raises the prospect that a surge in cases may be imminent, which could overwhelm the country's health system. Accordingly, difficult critical care triaging decisions will have to be made, as a matter of urgency, in the country's private and state sectors. SA intensivists have considerable experience in rationing critical care resources in the country's resource-scarce environment. However, rationing in the context of a pandemic 'surge' is unprecedented in the country's history. Such decision-making raises profound governance and ethics issues.

Limited resources: The status quo in SA

The principle of distributive justice (the fair distribution of limited resources) has been central to healthcare decision-making in the public sector. Given an SA population of ~59 million, there are limited intensive care unit (ICU) beds, limited ventilators,[4,5] limited critical care clinicians,[6,7] and suboptimal personal protective equipment (PPE) for health workers.[8,9] It is evident from the experience of advanced economies, such as Italy, Spain and the USA,[10] that critical care resources in SA, which are already under-resourced, could experience unprecedented strain if COVID-19's presence in SA mirrors the exponential growth patterns seen elsewhere. The rationing of ICU beds and ventilators will be crucial to mitigating this scenario.

Ethical principles underlying rationing frameworks

In developing criteria for admission to an ICU during humanitarian emergencies, healthcare professionals are guided by broad ethics principles. As a first step, it is important to establish whether a patient wishes to have access to mechanical ventilation. Some patients may have documented their wishes in this regard in advance healthcare directives, such as 'living wills'.

For patients who have indicated that they wish to have access to mechanical ventilation, or for those who have not indicated their preference, several options exist regarding how to choose among them. Most frameworks, to date, suggest that all attempts be made to save as many lives as possible, specifically individuals with a reasonable chance of survival. This utilitarian approach is consistent with public health ethics and typically prioritises the young and healthy. However, some argue that the life of a 50-year-old with experience, skills and proven ability to make a contribution to society is more valuable than the life of a 20-year-old. Clearly, youth must be balanced with many other factors. The number of life-years post ventilation is also an important consideration.[11] Perhaps the most important consideration, however, is clinical suitability for critical care. Given that countries badly affected by COVID-19 have experienced a surge of patients who needed admission to an