The role of palliative medicine in ICU bed allocation in COVID-19: a joint position statement of the Singapore Hospice Council and the Chapter of Palliative Medicine Physicians

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Abstract

Facing the possibility of a surge of COVID-19-infected patients requiring ventilatory support in Intensive Care Units (ICU), the Singapore Hospice Council and the Chapter of Palliative Medicine Physicians forward its position on the guiding principles that ought to drive the allocation of ICU beds and its role in care of these patients and their families.

Keywords COVID-19 · Intensive Care Unit (ICU) · Palliative medicine · Ventilatory support · Resource allocation · Triage

Facing concerns that local Intensive Care Units (ICU) will face a surge in COVID-19-infected cases requiring ventilatory support in an intensive care setting (Ministry of Health 2020; Young et al. 2020), the Singapore Hospice Council (SHC) and the Chapter of Palliative Medicine Physicians convened the SHC Ethics Advisory Committee to forward a position statement on the role of Palliative Medicine (PM) and the allocation of ventilated beds in the ICU.

With 5–15% of infected patients likely to require ICU support and Singapore facing nearly 20,000 active cases, it is possible that access to ICU beds may become limited. Care of patients whose condition is or is not deemed amenable to ICU support necessitates the involvement of PM physicians in triaging them and discerning how they and their families should be assisted. Both these issues need addressing.

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Involvement of PM physicians in triaging patients for ventilated ICU beds (British Medical Association 2020) should be led by clear ethical and practical considerations. We believe that this ought to take the form of the following considerations.

**Guiding Ethical Principles**

**Equity and Fairness**

Everyone matters and everyone matters equally. Individuals with an equal chance of benefiting from a resource should have an equal chance of receiving it. Individuals with a greater and more urgent need should be given greater and more urgent consideration. It is not unfair for individuals to wait if they could attain the same benefit later.

**Respect for Autonomy**

Individuals should be given the chance to express their views on matters that affect them and their personal choices about care and treatment should be respected as much as possible. They should be kept informed and educated on available care and treatment options.

**Balanced Distribution of Resources**

Decisions made should equitably consider and balance the needs of the society, rights of the individual and availability of resources.

**Transparent and Rational Decision-making**

Decisions should be as transparent, inclusive and reasonable as possible. They should be rational, evidence-based, practical in the circumstances and the result of a careful deliberation process.

**Minimize Harm Regardless of Age, Ethnicity, Creed**

Harm should be minimized through constant review and adoption of best practices. To the fullest ability, standard of care should be maintained for all individuals and disruptions should be curtailed.

**Shared Responsibility and Collaboration**

All stakeholders should stand united in supporting each other, taking responsibility for their own behavior, and sharing information readily and appropriately.

**Proportionality**

Information communicated to relevant stakeholders must be proportionate to risks involved; restrictions on rights must be proportionate to intended positive outcomes.
Flexibility

An open-minded approach should be adopted and strategies should constantly strive to reflect and address the unique needs of the situation.

Strategies

Early Formation of ICU Allocation Guidelines and Role of Palliative Care

Pre-emptive guidelines should be formulated by experts in infectious diseases, critical care, emergency medicine, clinical ethics and palliative care before the spike in demand for ICU beds (Hick et al. 2007; Biddison et al. 2018; White and Lo 2020).

This will facilitate clear communication with the public regarding the practical and ethical issues surrounding allocation of scarce ICU resources and attenuate concerns about discrimination against minority groups, boost trust in the public healthcare system, facilitate transparent, accountable and evidence-based decision making, and build solidarity within the community.

Early Exploration of Advance Care Planning (ACP), Advanced Medical Directive (AMD) and Extent of Care (EoC)

This will ensure respect of autonomy, patient preferences and respect for antecedent preferences contained within ACPs and AMDs.

Continued Transparency and Accountability

Wherever possible, triage teams or an independent interdisciplinary team of experts dedicated to deliberating complex triage decisions if the primary care team faces difficult ethical dilemmas should be established. The triage team should be available for consultation throughout the day and include at least one ethicist, two senior healthcare professionals (HCPs) and a PM physician who will offer support and experience in identifying, assessing and treating the physical and psychosocial issues of the critically ill and dying.

The triage team will help ensure accountability in care determinations and ensure these decisions are rational, transparent, inclusive, reasonable, evidence-based and practical.

Optimization and Dynamic Surveillance of Existing Resources

In Singapore, stable patients are decanted to private hospitals, community hospitals and community isolation facilities to optimize resources in public acute hospitals (Ministry of Health 2020; Channel News Asia 2020). Resources including availability of ICU beds, key medications such as sedatives and opioids, supportive treatments such as dialysis machines, and personal protective equipment within all hospitals should be closely monitored.
A clear grasp of the situation and available resources would allow for greater efficacy and quality of care across the continuum. This ensures balanced decision-making and distribution of resources, and boosts collaborations. Concurrently there should be flexibility in the deployment of manpower to Internal Medicine and ICU care to ensure resources are easily redistributed and portable across care settings.

**Equitable Allocation of Scarce Resources**

The Guiding Ethical Principles should be adhered to by the triage team and should be informed by evidence-based prognostic tools such as the Sequential Failure Assessment (SOFA) score, Simplified Acute Physiology Score (SAPS 3), or the Acute Physiology And Chronic Health Evaluation (APACHE) score. A multi-dimensional scale that includes measures of frailty and physical function such as age and Clinical Frailty Scale (CFS) may also be used in tandem (Poole et al. 2012; Zhou et al. 2020; Zhang et al. 2020; MDCalc 2020; Chen et al. 2020).

Understanding the potential benefits that the patient is likely to accrue from ventilatory support, their prognosis and their previously stated wishes will determine the proportionality and beneficence of an ICU admission.

**Reassessment of Responses and Continued Transparency with HCPs**

Strategies adopted should be rigorously reassessed and adapted as the pandemic situation evolves. The PM team must also be involved in the care of patients and their families who are allocated ICU beds, and those patients and their families who are not. In addition the PM team must be involved in supporting healthcare professionals in the ICU and those caring for patients not been allocated ICU beds. Prevailing models in Singapore have seen PM physicians integrated into the ICU care team and working together with dedicated medical social work (MSW) teams to meet the following roles.

**Provision of Support and Palliative Care in ICU**

PM physicians together with MSWs should be involved in the creation of early PM consultation protocols, be part of daily ward rounds with the ICU teams, participate in education sessions for the ICU multidisciplinary team and provide regular debriefs for the ICU teams.

**Provision of Support and Palliative Care Where Treatment Is Withheld**

For patients not allocated ICU beds, PM physicians and MSWs should be involved immediately to support the patient’s and their family’s needs. To ensure effective care of these patients and families, the PM team should formulate guidelines and decision-making algorithms for pragmatic pharmacological and non-pharmacological methods of alleviating symptoms commonly associated with COVID-19 pneumonia, such as dyspnoea, excessive respiratory secretions, delirium and pain. This will empower primary care teams to act swiftly and safely in delivering generalist palliative care in a manner that is consistent with the patient’s values, beliefs and wishes.
Specialist PM support should be available for the treatment of distressing symptoms such as dyspnoea, which may require rapid bedside titration of medications and the use of palliative sedation therapy if symptoms remain recalcitrant.

**Provision of Support and Palliative Care Where Treatment Is Withdrawn**

Similar care and consideration should be provided to patients whose ventilatory support is to be withdrawn as a result of progressive deterioration despite maximal ICU support. Early identification and PM involvement will help support these families and patients as well as the HCPs involved.

**Psychological Support for Patients**

HCPs should act as patient advocates and address their fears when deprived of traditional social networks and family support as a result of isolation protocols. Active screening for spiritual and existential distress should be carried out and provided in a timely, appropriate and personalized manner.

**Psychological Support for Patients’ Families**

Families suffer too and are often wrought with worry, guilt and helplessness. Concurrently as funeral rituals are shortened or disallowed in line with social distancing measures, some families may feel disenfranchised and have additional difficulty processing their grief. Flexibility in addressing these needs without compromising safety is required to support families. Here the combined PM, MSW and ICU teams should be proactive in addressing grief and bereavement needs. This may take the form of regular virtual ‘visits’, timely follow-ups and reassurances. Bereavement support should be provided in a timely, appropriate and personalized manner.

**Psychological Support for HCPs**

HCPs frequently experience moral distress and the decision to withhold or withdraw ventilatory support may be traumatizing especially if it results in death. It is imperative to holistically assess and support the team either individually or as a group and provide them with resources to support themselves. Here, having the triage team discuss these issues with them will certainly provide an added source of support.

**Availability of Data and Materials**

All data generated or analyzed are included in this published article.

**Authors’ Contributions**

All authors were involved in investigation, analysis, reflection, manuscript writing and review, and administrative work for journal submission. All authors have read and approved the manuscript.

**Compliance with Ethical Standards**

**Conflict of Interest**

The authors declare that there is no conflict of interest.
Ethics Approval and Consent to Participate  
NA

Consent for Publication  
NA

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