

Rapid communication for effective medical resource allocation in the COVID-19 pandemic

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Since the first cases of Severe Acute Respiratory Syndrome Coronavirus 2, the outbreak of coronavirus disease 2019 (COVID-19) has been causing a serious public health crisis due to both limited antiviral treatment options and prognosis closely related to severity of disease [1]. Also, the need for medical resources, including staff, supplies and equipment, and space or structures (e.g., physical location) quickly outstrips the available supply; many supplies are essential to provide lifesaving care to critically ill patients.

In this issue of *Acute and Critical Care*, Wang et al. [2] reported a roadmap for hospitals and health systems to prepare for a surge in critical care capacity. In this study, they explained the efforts to prepare for the COVID-19 pandemic, for which their hospital expanded their hospital intensive care unit (ICU) for the management of critically ill patients. In conclusion, they suggested flexible bed management initiatives, teamwork across multiple disciplines, and development and implementation of guidelines to manage a surge of critically ill COVID-19 patients.

In our hospital, a regional center for the respiratory center has been placed into the dedicated center for COVID-19 including 17 ICU beds since December 30, 2020. Also, other tertiary hospitals within Busan Metropolitan City prepare ICU beds for critically ill COVID-19 patients. In order to provide immediate care for critically ill COVID-19 patients, the workers of the Busan Civil Facilitation Division assess total and available ICU beds of tertiary care hospitals within our city. In the event of an acute critically ill COVID-19 patient, these workers help the patient be admitted to a tertiary hospital using various messenger programs among hospitals.

In many countries, there are specialized wards within some tertiary hospitals or specialized hospitals for the management of COVID-19 patients. These institutions prepare separate ICUs and medical resources including mechanical ventilators and various equipment to manage patients requiring ICU admission. However, critical care resources, facilities of tertiary care hospitals, and shortage of critical care personnel are serious issues [3]. Moreover, available strategies to manage critically ill patients caused by non-COVID-19 origins are essential. Therefore, an understanding of the number of patients, capacity, and resource utilization is essential for public health policymakers to adequately address resource allocation. In addition, rapid communications among institutions within a province or city should be necessary to overcome shortage of ICU resources and to inform important decisions about allocation of scarce resources [3,4].

Editorial

Received: August 5, 2021
Revised: August 17, 2021
Accepted: August 17, 2021

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CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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REFERENCES

1. Zhou F, Yu T, Du R, Fan G, Liu Y, Liu Z, et al. Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. *Lancet* 2020;395:1054-62.
2. Wang J, Leibner E, Hyman JB, Ahmed S, Hamburger J, Hsieh J, et al. The Mount Sinai Hospital Institute for critical care medicine response to the COVID-19 pandemic. *Acute Crit Care* 2021;36:201-7.
3. Aziz S, Arabi YM, Alhazzani W, Evans L, Citerio G, Fischkoff K, et al. Managing ICU surge during the COVID-19 crisis: rapid guidelines. *Intensive Care Med* 2020;46:1303-25.
4. Hempel S, Burke R, Hochman M, Thompson G, Brothers A, Shin J, et al. Allocation of scarce resources in a pandemic: rapid systematic review update of strategies for policymakers. *J Clin Epidemiol* 2021 May 25 [Epub]. <https://doi.org/10.1016/j.jclinepi.2021.04.021>.