



Letter to the Editor

Korean J Anesthesiol 2020;73(2):171-172
<https://doi.org/10.4097/kja.19366>
pISSN 2005-6419 • eISSN 2005-7563

Received: August 26, 2019
Accepted: September 4, 2019

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In response to Na et al.'s long-term mortality of patients discharged from the hospital after successful critical care: do we need more comprehensive data?

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We have read the study on the long-term prognosis of patients after discharge from the intensive care unit (ICU) [1]. The article reaffirms the existence of factors that cannot be modified during the ICU stay; however, other aspects may improve survival after discharge, such as preventative measures.

The authors have discussed some of the limitations; however, there are additional aspects that we feel are worthy of discussing for better acceptance of the results. Firstly, although the 1-year mortality data reported in the study is congruous with international data, we believe that the reported mortality is probably lower. The exclusion of 827 patients who died in the hospital or had a terminal prognosis from the final analysis is a potential bias. Furthermore, 673 patients were also excluded because of ICU readmission, the number of patients readmitted within 1 year and the mortality data are unclear. Therefore, the data represent the long-term outcome of ICU survivals and not patients who required ICU care.

Secondly, in comparison with the 1-year mortality data from 2006 to 2011, the 5-year mortality data presented only a sample size as the study was performed on only 831 patients from 2006 to 2007.

Thirdly, the authors did not report the impact of ICU length of stay, treatment modalities such as the length of mechanical ventilation weaning modalities, tracheostomy, presence of specialized weaning units [2], and renal replacement on survival. No data on the quality of life of survivors were mentioned, including transfer to long-term care facilities or receiving in-home mechanical ventilation during the follow-up period [3]. It is recommended to consider this data since it is a critical factor that can affect the long-term outcome after discharge. Similarly, as the authors evaluated the long-term outcome, information and analysis of the parameters related to the quality of life at discharge that can be modified would provide essential information. We believe that it could be more informative if the authors considered the evaluation of predictive models of survival [4].

Lastly, the study is a single-center, university-based study and does not reflect mortality among ICU in Korea. The data cannot be generalized to entire Korea due to different standard of care and implementation/adherence of protocols. This data can be helpful to minimize institutional variation in discharge protocols [5]. We applaud the authors for their work with a relatively correct sample size and multivariate analysis of factors and

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would welcome the above information for better interpretation of their results.

Conflicts of Interest

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

Author Contributions

Antonio M Esquinas (Conceptualization; Data curation; Writing – original draft; Writing – review & editing)

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References

1. Na SH, Shin CS, Kim GH, Kim JH, Lee JS. Long-term outcomes of patients discharged from the hospital after successful critical care in the ICU in Korea: a retrospective observational study in a single tertiary care teaching hospital. *Korean J Anesthesiol* 2019. Advance access published on Jun 21, 2019. doi: 10.4097/kja.d.18.00275.
2. Ambrosino N, Vitacca M. The patient needing prolonged mechanical ventilation: a narrative review. *Multidiscip Respir Med* 2018; 13: 6.
3. Scheinhorn DJ, Hassenpflug MS, Votto JJ, Chao DC, Epstein SK, Doig GS, et al. Ventilator-dependent survivors of catastrophic illness transferred to 23 long-term care hospitals for weaning from prolonged mechanical ventilation. *Chest* 2007; 131: 76-84.
4. Damuth E, Mitchell JA, Bartock JL, Roberts BW, Trzeciak S. Long-term survival of critically ill patients treated with prolonged mechanical ventilation: a systematic review and meta-analysis. *Lancet Respir Med* 2015; 3: 544-53.
5. Kramer AA, Zimmerman JE. Institutional variations in frequency of discharge of elderly intensive care survivors to postacute care facilities. *Crit Care Med* 2010; 38: 2319-28.