Clinical Interventions in Aging

Dovepress

open access to scientific and medical research

Open Access Full Text Article

LETTER

The Clinical Frailty Scale is the Significant Predictor for in-Hospital Mortality of Older Patients in the Emergency Department [Letter]

Ji Wu, Xiping Shen

Department of General Surgery, Suzhou Ninth Hospital Affiliated to Soochow University, Suzhou, Jiangsu Province, People's Republic of China

Correspondence: Xiping Shen, Department of General Surgery, Suzhou Ninth Hospital Affiliated to Soochow University, Ludang Road, Wujiang District, Suzhou, Jiangsu Province, 2666, People's Republic of China, Tel +86 0512-82881248, Email shenxiping2022@163.com

Dear editor

We have read a recent article titled "The Association Between Frailty Evaluated by Clinical Frailty Scale and Mortality of Older Patients in the Emergency Department: A Prospective Cohort Study", with great interest.[1] This study is significant, as it provides insights into the factors that predict adverse outcomes in older patients in the emergency department (ED). This article highlights the importance of the Clinical Frailty Scale (CFS) score. These findings have important implications for early prediction of unfavorable outcomes in the older ED population. While recognizing the value of this study, we would like to make the following comments.

Firstly, although the logistic regression model is widely acknowledged for its utility, it may inadvertently lead to risk overestimation in scenarios beset with potential competing risks. Consequently, for the mortality risk assessment explored in this paper, especially when systemic diseases (such as heart failure and pulmonary edema) are potentially interrelated, employing a competing risks model appears more fitting. Traditional survival analysis techniques might not adequately account for the influence of secondary events on the primary study outcome, whereas the competing risks model affords a more holistic analytical viewpoint.[2]

Secondly, the authors' inclusion of important information such as demographic information and laboratory tests to adjust for potential covariates is commendable. However, we suggest a further expansion of the scope of covariates such as Charlson Comorbidity Index.[3] Additionally, factors such as organ failure assessment and physical activity should also be considered for a more comprehensive assessment of the stability and reliability of the results.[4]

Last but not least, this article primarily explores the relationship between the CFS score and clinical outcome. Considering previous studies on the delays to admission from ED and in-hospital mortality, conducting subgroup analyses might enhance the applicability and universality of these findings.[5] Furthermore, recommending stratified analyses for patients with complications could deepen the understanding and evaluate the impact of these factors on research outcomes.

Disclosure

The authors declare no potential conflicts of interest in this communication.

References

1. Lin JW, Lin PY, Wang TY, et al. The association between frailty evaluated by clinical frailty scale and mortality of older patients in the emergency department: a prospective cohort study. *Clin Interv Aging*. 2024;19:1383–1392.
2. Damen JA, Hooft L, Schuit E, et al. Prediction models for cardiovascular disease risk in the general population: systematic review. *BMJ*. 2016;353:i2416.
3. Charlson ME, Carrozzino D, Guidi J, et al. Charlson comorbidity index: a critical review of clinimetric properties. *Psychoth Psychosom*. 2022;91(1):8–35. doi:10.1159/000521288

Received: 10 August 2024
Accepted: 2 September 2024
Published: 4 September 2024

4. Moreno R, Rhodes A, Piquilloud L, et al. The Sequential Organ Failure Assessment (SOFA) Score: has the time come for an update? *Critical Care*. 2023;27(1):15. doi:10.1186/s13054-022-04290-9
5. Jones S, Moulton C, Swift S, et al. Association between delays to patient admission from the emergency department and all-cause 30-day mortality. *Emerg Med J*. 2022;39(3):168–173. doi:10.1136/emermed-2021-211572

https://doi.org/10.2147/CIA.S490961