

Commentary on Prognostic Scoring Systems for Septic Patients in the Emergency Department

Acil Serviste Sepsisli Hastaların Prognozuna Yönelik Skorlama Sistemleri Üzerine Yorumlar



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Dear Editor,

We read with great interest the article titled “Comparison of MEWS, qSOFA, and MEDS Scores in Predicting the Prognosis of Septic Patients in the Emergency Department,” published in the November 2023 issue of your journal. The retrospective study by Ari et al. addresses a critical clinical question by comparing the prognostic value of various scoring systems in emergency department patients diagnosed with sepsis (1).

While we commend the authors for their meticulous work, we would like to offer several points that may contribute to the ongoing discussion:

Study Population Characteristics: The mean age of the included patients is relatively high (73.4 ± 14.6 years), which

accurately reflects a high-risk elderly population in the context of sepsis. However, this demographic profile may limit the generalizability of the findings to younger populations or different healthcare settings. As highlighted in a recent meta-analysis, current data remain insufficient for pediatric and young adult populations, indicating a need for further studies focused on these groups (2).

Primary Endpoint – 28-Day Mortality: The selection of 28-day mortality as the primary outcome is both methodologically sound and consistent with the existing literature. Nevertheless, clarification on whether late mortality or hospital readmissions beyond this time frame were evaluated would provide deeper clinical insight.

Clinical Utility of Scoring Systems: The high sensitivity and negative predictive value of the MEDS score in predicting mortality are noteworthy. However, its relatively complex structure may reduce its practical utility in fast-paced emergency settings where rapid decision-making is essential (3). It may be beneficial for the authors to address this limitation.

Proposal for Score Modification: One component of the MEDS score is the presence of a lower respiratory tract infection (LRTI). Despite advancements in treatment, LRTIs remain a significant global health burden, particularly among elderly and immunocompromised individuals, contributing substantially to morbidity and mortality (4). In this context, the authors’ suggestion to increase the weighting of LRTI within the MEDS score is notable. Prospective, multicenter studies are needed to assess the validity of such revisions, which could enhance the accuracy of risk stratification in septic patients and improve clinical decision-making.

Further Statistical Analysis: Although the AUC values derived from ROC analysis provide valuable information, conducting statistical comparisons of AUCs—such as using the DeLong test—would strengthen the methodological rigor and substantiate the superiority of the MEDS score over others.

In conclusion, this study offers a valuable comparative analysis for early risk stratification of septic patients in the emergency department. Future investigations supporting the proposed revisions to the MEDS score may further refine clinical decision-making processes.

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