Commentary on Clinical and Geriatric Predictors of In-Hospital Mortality in Older Adults Admitted to Internal Medicine Wards: A Retrospective Observational Study

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About the study

The rapid ageing of the hospitalized population has profoundly altered the clinical complexity of internal medicine wards. Older adults are frequently admitted with multimorbidity, polypharmacy, functional impairment, and geriatric syndromes, which significantly affect prognosis. Traditional disease centred models often fail to capture this complexity. In this context, the study by Siniscalchi et al. provides important real-world evidence on the prognostic role of geriatric factors in older inpatients. In a retrospective cohort of 556 consecutive patients aged ≥ 70 years, the authors identified prevalent delirium, severe frailty, comorbidity burden particularly liver disease and cancer as the strongest independent predictors of in-hospital mortality.

In contrast, chronological age and admission diagnosis alone showed limited prognostic value once geriatric variables were considered. These findings support the concept that biological vulnerability outweighs diagnostic categories in determining short-term outcomes among older hospitalized patients. Delirium emerged as the most powerful predictor of mortality. Patients with prevalent delirium experienced a four to ten-fold increase in the risk of death, depending on sex. Importantly, the study distinguishes between delirium subtypes, highlighting hypokinetic delirium as a particularly high-risk phenotype, especially in women. This distinction is clinically relevant, as hypoactive delirium is frequently under-recognized and associated with delayed intervention. Frailty, assessed using the Clinical Frailty Scale, independently doubled the risk of in-hospital mortality when severe (CFS ≥ 7). This reinforces frailty as a robust marker of reduced physiological reserve and impaired resilience to acute illness. A notable contribution of the study is the sex-stratified analysis, revealing different vulnerability profiles. In men, mortality was primarily driven by prevalent delirium and cancer, whereas in women hypokinetic delirium and liver disease severity were dominant predictors. Although exploratory, these findings suggest sex-specific pathways to adverse outcomes that merit further.