CAPSULE COMMENTARIES

Capsule Commentary on Hayashi et al., Predictors associated with survival among elderly inpatients who receive cardiopulmonary resuscitation in Japan: an observational cohort study

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Developed nations are graying. Hospitals in these nations come to accommodate a growing number of elderly patients. The outcomes of elderly inpatients, however, are not always happy; there are unexpected in-hospital deaths.

This cohort study [1] examined survival at hospital discharge among elderly inpatients (aged ≥ 65) who received cardiopulmonary resuscitation (CPR), using an administrative data from 81 Japanese acute hospitals. Hayashi et al. found that 11% of 5365 patients survived to discharge, which is lower than the survival rate of previous studies.[2] The authors found that older age, multiple comorbidities (Charlson Comorbidity Index of ≥ 4), cancer, and hematological diseases reduced survival, which is clinically believable.

Institutional-level factors associated with reduced survival included CPR on weekends and small-sized hospitals. A recent US registry study also found that survival rates were lower after CRP during on-hours in comparison with off-hours.[3] Hayashi et al. hypothesized that the hospital staffing patterns and the subsequent availability of rapid response systems might be the underlying mechanism of reduced survival after in-hospital CPR. Although not examined in this study, other potential hypotheses for these findings included that large hospitals may afford to hire sufficient staff on off-hours thereby achieving a higher nursing staff ratio, provide better quality of care post CPR, conduct routine CPR simulations as training, or eventually nurture hospital culture and well-organized resuscitation teams.[4]

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This study also provides an opportunity to ponder on the importance of advanced care planning. This is a particularly sensitive topic among Japanese; the majority of Japanese avoid discussing advanced care planning or advanced directives[5] because it has long been taboo. In Japan, as in the rest of the world, there is a need for frank conversation between patients and clinicians regarding advanced directives, based on patient age and baseline comorbidities.

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