EDITORIAL

Goals of Care for Patients with Severe Comorbid Illnesses Hospitalized for an Acute Deterioration

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End-of-life care has remained a challenging issue in the critical care. The improving longevity due to advances in medical science and systemic support systems has enhanced the quality of life in later years of human life. However, the aging process, at some point, makes the body functions to decline despite advanced medical care, especially in a patient having multiple comorbidities. Acute deterioration of any systemic dysfunction in such morbid cases leads to rapid decline of health and a possible death in short span. In the critical care setup, where all these patients finally lie, there is a persistent challenge to predict a death and futility of the treatment resource expenditure. Indian Society of Critical Care Medicine (ISCCM) brought in "End of Life Care Guidelines" initially in 2005 and its revised version in 2012. As per these guidelines, managing team of the doctors have the moral responsibility to decide the level of care for such morbidly ill patients. This decision will involve the choice of approach between "continuation of the aggressive system supports" and the "comfort care only."[1,2]

The implementation of "end-of-life care" has not been easy and has been facing a lot of ethical, legal, and practical problems.[3] To facilitate the decision-making, various objective and subjective methods have been used to predict a death, devise necessary action care plans based on available guidelines, and implement the advanced directive prepared by the patient. Advanced directive has recently been legally allowed in India by the Hon Supreme Court of India, although the procedure laid down to implement is rather difficult.[4]

One of the most difficult challenges has been to prepare a prediction model for the "remaining life span" and a "comfort care plan" in the cases who are suffering acute exacerbation and deterioration on top of multiple chronic morbidities. In this issue of IJCCM, Rishi Kumar Sarangi et al. have tried to survey the opinions of the relevant clinicians to decide action plans in such cases. But they concluded that there was a lot of discord in the approach to offer the care, difficulty in selecting a consensus plan of care, although there was no deficit of knowledge and awareness. They have suggested a pathway based on senior doctors' opinions, potential reversibility of the acute illness, harm benefit ratio of the interventions, and also patient and family's wishes. Besides treating doctors, the survey also included junior doctors, nurses, and palliative care staff.

The importance of nursing staff in terminal care and survival prediction has been highlighted and emphasized by Crawford et al. in the study of cancer patients.[5] This also had been endorsed earlier in two systematic reviews.[6,7]

Over years, nurses have proved their role in detecting early signs of deterioration and also handling the emotional burden of the family. Despite their major role in the management, the nurses do not seem to be the part of decision-making in comfort care plan or withholding the futile aggression. It needs to be established whether nurses can perceive the death prediction better than physicians. One Japanese study by Tokunaga-Nakawatase et al. did explore and found that nurses had a better predictive ability for death and necessary action plan, in terminally ill cardiac failure patients.[8]

The comfort care plan also involves clinical as well as nonclinical palliative care staff. Their role was also highlighted in survival prediction in terminally ill cancer patients.[6,7] But it was more evident in coronavirus disease-2019 (COVID-19) pandemic as a large number of patients were suffering a slow death despite initial aggressive management. In their review of 18 relevant studies, during COVID-19 pandemic, Connolly et al. tried to find out the role played by palliative care teams and concluded that their role in decision-making and comfort care in terminally ill is important and needs further evaluation.[9]

Involvement of all stakeholders is important in survival prediction as physicians are known to overestimate the survival span.[10] Such inaccuracies may have direct implications on unnecessary aggression of management in terminally ill patients. So there is a need for objective parameters besides subjective assessment, to decide the survival prediction and the care plan. Fernandez et al., in their study, tried to modify a Palliative Prognostic Index (PPI) by using only clinical features, like Palliative Performance Score (PPS), dyspnea at rest, oral intake, edema, and delirium. No laboratory parameters were used in this model. This PPI was found to be a reasonably good predictor of survival.[10]

Ball et al. also tried to develop a clinical prediction tool for critically ill patients by a multicenter prospective cohort study.[11] In this study, important predictors of hospital mortality at the time of

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intensive care unit (ICU) admission included age, serum creatinine, Glasgow Coma Scale, and serum pH. Based on these parameters, they developed a risk scale to decide the level of aggression and palliation in the patient care and concluded that the scale needs further validation.

In the critical care units, predictive scores like APACHE II and Predicted Risk Existing Disease and Intensive Care Therapy (PREDICT) are used to decide survival span and probability. All such models have their limitations and may not be able to translate in accurate prediction for any individual patient. Ros et al.,[12,13] in their single-center, prospective, observational cohort study, used a simplified tool in terms of surprise questions with "Yes" or "No" answers as follows: (1) "I expect that the patient is going to survive the ICU admission," (2) "I expect that the patient is going to survive the hospital stay," and (3) "I expect that the patient is going to survive one year after ICU admission".

The positive and negative predictive values of the surprise questions for ICU admission, hospital admission, and 1-year survival were, respectively, 64/94%, 59/92%, and 60/86%.

Thus, predicting survival, in patients with acute deterioration in the presence of multiple comorbidities, may appear simple, but is a complex issue, as can be seen above. Many simple and elaborate methods are in use for this purpose. Various subjective and objective methods will remain under evolution till ideal predictive model is designed. But that need not deter the caregivers to offer a survival prediction and level of care, based on existing tools.

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