

“Frailty and Intensive Care”, Emerging Topic Amidst Economic Crisis in Sri Lanka

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Frailty is defined as a multidimensional; physical, psychological, cognitive, and social syndrome characterized by diminished physiological reserves and increased vulnerability to an adverse event. Frailty makes them more susceptible to disease and such events can change them from being independent to dependent, mobile to immobile, or mentally sound to dementia.

With the increase in the aging population, the ICU requirement for frail patients is increasing. These patients have a lesser ability to recover from a stressor and there's increased vulnerability for further complications such as delirium, hospital-acquired infections, delay in weaning, and early organ dysfunction. Hence, they will have a prolonged length of ICU stay, higher morbidity and mortality and also increased disability and poor quality of life even after discharge. Even though frailty demands more intensive care facility and resource utilization, the outcome is poorer compared to the non-frail population. Hence, it is of utmost importance to consider frailty in offering intensive care treatment. However, the ICU prognostic markers such as APACHE, and SOFA are based on medical and biochemical values rather than functional status. It is important to understand that the recovery from a critical illness not only depends on the severity of the acute disease but also on the

functional capacity of the patient and frailty is described in such terms.

However, the diagnosis of frailty is not straightforward. Clinical measurements such as walking speed and grip strength; simple questionnaires like Prisma 7 questionnaire; or different indices like the Frailty index, the Fried phenotype, or Clinical Frailty Scale (CFS) are a few examples of different frailty assessment tools. CFS which gives a global judgment based on fitness, comorbidities, vulnerabilities, disability, cognitive impairment, and life expectancy on a 9-point scale, has been utilized frequently in the ICU setting worldwide with good reliability.

In developed countries, frail patients are identified early, and their plan of medical care is well established at the primary health care level or in the wards. The ceiling of care, withdrawal of care, palliative care, and end-of-life care are well-established practices for frail patients when appropriate. These practices allow delivery of intensive care for the most appropriate and deserving patients while avoiding futile treatment for those who will not benefit from intensive care treatment. It also allows a pain-free and pleasant end-of-life experience surrounded by their loved ones. This gives better satisfaction to the relatives of the patients as well. On the other hand, unnecessary bed occupancy, resource utilization, and cost of hospital are minimized.

What are the challenges Sri Lanka faces?

With the rapid adaptation of advanced health care facilities in Sri Lanka, its elderly population is increasing. This is exaggerated by the high migration of the younger population. Sri Lanka

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has the highest proportion of the elderly population as well as the fastest rate of increase in the aging population in South Asia. In 2001, over 9% of Sri Lanka's population was 60 years or over and this is projected to increase to 24.8% by 2041. Even though frailty and aging are not synonymous, we can expect a proportionate increase in the frail population too.

The awareness of frailty, the importance, and methods of its assessment, and its value in predicting prognosis are poor in Sri Lanka. The health systems are mostly geared to provide maximum available care irrespective of frailty. The practice of palliative care and the ceiling of care are not well established in the current practice. The concept of advanced directives is virtually nonexistent. Withdrawal of care and do not attempt resuscitation orders are not legally accepted in Sri Lanka. These concepts are yet not even incorporated well either in undergraduate or postgraduate medical education in Sri Lanka.

There is no consensus on the most reliable and feasible frailty marker to determine ICU outcomes in Sri Lanka. The available outcome data originate mainly from developed countries where advanced intensive care facilities are available, and frailty is routinely considered in the process of decision-making. The reality in developing countries is mostly unknown. One cross-sectional study conducted by Siriwardhana et al among 746 older adults in Kegalle district of Sri Lanka found that 15.2% were frail and 48.5% were prefrail in this rural community.

As rational clinicians, the decision-making should be aimed at the provision of care for the best interest of the patient by thorough assessment, predicting prognosis, and weighing risks and benefits. Prognosis in terms of frailty will empower clinicians to take a more individualized and rational decision. This will be further facilitated by availability of Sri Lankan data in terms of frailty and outcome. It should be remembered that it is not that frail elderly people should not be offered intensive care, but frailty should be considered in providing care for the

best interest of the patient while avoiding futile treatment.

Sri Lanka is currently facing a significant economic crisis which has affected the uninterrupted delivery of good quality health care mainly due to limited medications and equipment supply. With the rising frail elderly population, the need for ICU is rising but without any possibility of expansion of ICU beds in the foreseeable future. In this current context, it is important to investigate the effectiveness and efficiency of healthcare for both the patients and the health system. Awareness of frailty and the importance of its assessment in the provision of intensive care should be increased and research on national data on outcome in frailty should be encouraged.

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