

Critical Care Rehabilitation: A Neglected Part of ICU Care

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Care for patients in the intensive care units (ICUs) has improved considerably over the years. Advances in medical therapy have led to better survival at discharge from ICU. However, survivors of critical illness are left with significant morbidities which require prolonged physical therapy and rehabilitation. Early rehabilitation is vital for improving quality of life and reducing secondary impairments seen in patients admitted to the ICU. This article highlights the need for a multidisciplinary approach to rehabilitating patients admitted to the ICU.

The role of a physical therapist in the ICU has been established with regard to airway clearance.¹ A survey in India found that only about 50% to 70% were ambulating patients in the ICU,² which shows that there is underutilization of the rehabilitation program for patients in the ICU. Physical therapy is recommended as one of the basic and essential requirements for ICUs.^{3,4} It has been reported that the critically ill patient's ability to ambulate was attributable to the ICU culture and utilization of physical therapy services to promote early mobilization.^{5,6}

The concept of rehabilitation for patients in ICU began with the definition for critical illness polyneuropathy in 1986. Over the last two decades, studies have looked at the effects of bed rest on the various systems of the body and how exercise helps in counteracting these effects. Following this increase in research, the European Society of Intensive Care Medicine highlighted the need for early institution of mobilization and exercise training through an active involvement of the physical therapist in harmony with the other ICU team members to coordinate and recommend mobilization plans, exercise prescription and its progression.³ Interventions used by physical therapists include mobilization, positioning, limb exercises, respiratory muscle training and electrical stimulation.⁴ The NICE guidelines published in 2010 also provided information on the assessment and treatment plans for patients requiring rehabilitation in the ICU.⁷ Recently, a clinical algorithm for mobilization of patients in the ICU was published.⁸

Concerns regarding safety and feasibility are issues to consider; however, in our center, mobilization of patients has been safe and feasible even among conscious, medically stable patients

on mechanical ventilation in the ICU. Mobilization in the form of sitting on the bed and sitting on a chair, and exercise to the limbs while being on mechanical ventilation appears to improve the psychological framework of the patient and also facilitates progression of rehabilitation once they are extubated. Similar findings were also reported by Burtin and colleagues in their randomized controlled trial on exercise training.⁹

To conclude, rehabilitation of patients is essential for patients who are admitted to the ICU. Available guidelines can be followed to develop an individualized exercise program for these patients. Utilization of physical therapy services beyond routine chest care is essential to improve the functional outcomes and quality of life among ICU survivors.¹⁰ A multidisciplinary approach involving nurses, occupational therapists, respiratory therapists and nutritionists are essential for holistic care and rehabilitation of patients in the ICU.¹¹

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