ISSN: 1607-8322, e-ISSN: 2220-5799 Anaesthesia, Pain & Intensive Care
Vol 29(6); September 2025 DOI: 10.35975/apic.v29i6.2885

EDITORIAL VIEW INTENSIVE CARE MEDICINE

Post-intensive care syndrome (PICS): A call for continuity beyond discharge

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ABSTRACT

Innovations in Intensive Care Units (ICU) have increased survival rates, but several patients experience Post-Intensive Care Syndrome (PICS), which encompasses persistent physical, cognitive, and psychological disability. The research emphasizes the need to identify and treat PICS, as 25-60% of ICU survivors experience it. Lack of standardized diagnostic criteria or a follow-up system has resulted in continued disability and diminished quality of life in patients. The objective of this study was to analyze existing literature on PICS, define its prevalence, identify associated risk factors, and outline strategies for providing post-ICU care. Findings indicated high levels of muscle weakness, cognitive dysfunction, depression, and post-traumatic stress disorder among survivors. The research concludes that post-discharge care gaps can be addressed through early rehabilitation, remote monitoring, mental health support, and patient-centered recovery plans, thereby improving long-term outcomes.

Keywords: Critical Illness; Intensive Care Units; Stress Disorders; Post-Traumatic; Cognitive Dysfunction; Rehabilitation

Citation: Khaliq H, Minhas M, Ahmed MAA. Post-intensive care syndrome (PICS): A call for continuity beyond discharge. Anaesth. pain intensive care 2025;29(6):441-43. **DOI:** 10.35975/apic.v29i6.2885

Received: May 14, 2025; **Revised:** July 11, 2025; **Accepted:** July 11, 2025

The advanced nature of modern medicine enables Intensive Care Units (ICUs) to save a larger number of critical patients due to their upgraded facilities. Improved survival rates in healthcare created an escalating requirement to address what follows treatment. Evidence-based reports show an emerging, yet frequently overlooked situation known as Post-Intensive Care Syndrome (PICS). This complex medical condition negatively impacts numerous ICU patients who survive a critical illness period. These patients often develop PICS, which contains multiple long-term physical, mental, and cognitive complications.[1] PICS occurs frequently because it affects approximately 25% to 60% of ICU survivors, with even higher prevalence among specific groups like elderly patients or those admitted to the ICU for prolonged periods. After discharging from the hospital, these individuals often experience protracted muscle weakness, limited mobility, memory difficulties, depression, anxiety, and post-traumatic stress disorder (PTSD) symptoms.[2]

As a result, these conditions negatively impact people's lives, making it difficult for them to reintegrate into society and creating numerous problems for families and caregivers. It is still difficult to notice post-intensive care syndrome (PICS) partly because treatment ends so abruptly when patients go home from the ICU. Most often, critical patients are quickly transferred to wards or sent back home with little organization since no follow-up system exists.[3] Physical problems associated with PICS include severe muscle wasting, joint stiffness, and body weakness, which often require prolonged rehabilitation periods of multiple weeks to months. Most patients who maintained active lifestyles before intensive care now need either walking assistance or

personal care from others.[4] Research by the Society of Critical Care Medicine shows that 65% of ICU survivors face substantial physical disabilities one-year post-discharge, which demonstrates the long-term impact of PICS.[5]

The mental aspect of PICS develops new difficulties for patients. Hospital patients describe experiencing memory problems, concentration issues, and problem-solving difficulties.[6] Patients who develop "ICU brain" show symptoms similar to dementia during the early stages, which result in major limitations in both professional and personal performance. Younger ICU survivors face difficulties in performing their expected workplace duties because of their ICU hospitalization.[7] Multiple factors produce these deficits during ICU care, which include hypoxia, delirium, sedative treatments, and inflammatory reactions that occur during ICU stays. Depression, together with anxiety disorders and PTSD, affects both ICU patients and their relatives, which healthcare professionals term PICS-Family (PICS-F).[8] After hospital discharge, patients experience persisting feelings of helplessness, anxiety, and disorientation, even though they have left the facility. There exists evidence from a 2021 research study that indicates ICU survivors developed PTSD symptoms that lasted for six months after hospital discharge.[9]

PICS is an exceptionally dangerous condition because it spreads throughout various ecosystems, starting with individual victims through their caregiving relationships to workplaces and broader communities.[10] The condition of PICS induces socioeconomic instability that stays for a long duration in families where disability affects their main source of income. However, there are no standardized diagnostic criteria for the problem, nor formal post-ICU assessment tools, which prevents us from measuring the entire scope of this problem.[11] Because post-intensive care syndrome (PICS) does not always begin immediately, treatment should begin before ICU discharge and continue after ICU discharge until full recovery is achieved, becoming an important link in the healthcare continuum. Letting patients use AI-powered remote monitoring and virtual rehab tools can improve their post-discharge wellness and lead them toward good health.[12]

With their real-time feedback systems, wearable devices can be used in remote physiotherapy programs to monitor patients remotely and help them assess patient physical development. Instead, applications that stimulate memory and attention development are needed for survivors of the Intensive Care Unit rather than a standard cognitive training solution.[13] Insurance financial backing is needed to fund present-day hospital post-ICU care programs since they not only provide deeper financial benefit, but the coverage also guarantees patient health outcomes. The foundation on which PICS can most effectively be fought is human characteristics. Ultimately, patient recovery depends on human compassionate acts (meaningful personal relationships with patient care and post-visit check-ins) and not on medical therapies and stabilization protocols.[1]

People who live through critical health events in the ICU often require support from networks and mental health professionals to regain their independence. Better outcomes for ICU patients do not rely only on follow-up phone calls or peer groups for support. Since ICUs treat patients until they recover, healthcare systems are responsible for steps that improve their well-being. ICU centers should ensure long-term rehabilitation, modern medical techniques, and patient-centered recovery to help heal more survivors effectively. Just as intensive care units set the standard in critical care during the last century, a developed post-ICU system can lead the way forward in critical care. It is important to realize that survival serves as the basis for the main purpose of care.

Conflict of interest

All authors declare that there was no conflict of interest.

Authors' contributions

All authors took part in the concept, literature search, and manuscript writing.

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