

# Long-term acute care hospitals in Pakistan: an unmet need

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## Dear Editor,

Long-term acute care hospitals (LTACHs) are health care facilities designed to address a wide variety of complex patient needs, particularly for individuals requiring mechanical ventilation for prolonged periods, weaning from ventilators, specialized wound care, management of multiorgan failure, and postsurgical or organ transplant complications.<sup>[1]</sup> Patients admitted to such settings are transferred from intensive care units (ICUs) and require a multidisciplinary approach to care, including rehabilitation services, access to subspecialists, and in-depth laboratory services. This environment offers the opportunity to meet specific health care needs, either to recover from severe illness or for comprehensive palliative management when prognosis is limited.<sup>[2]</sup> LTACHs provide care that is too advanced for home or nursing care facilities but too prolonged for ICUs. However, in lower-middle-income countries such as Pakistan, LTACHs are unavailable, resulting in an inappropriate burden of care on ICU, which already have a significant patient population owing to inequalities in resource distribution.<sup>[3]</sup>

Critical care services in Pakistan are overburdened, with an estimated 1.5 ICU beds per 100,000 population, making Pakistan the third lowest in Asia, just ahead of Bangladesh and Myanmar, but less than India at 2.3 per 100,000.<sup>[4]</sup> Additionally, there is a lack of trained intensivists; a recent cross-sectional survey of ICUs recognized for postgraduate training revealed that of 151 hospitals, only 19 had critical care physicians managing their facility, and only 6 institutes have a recognized critical care medicine training program.<sup>[3]</sup> Furthermore, significant disparities exist between public versus private hospitals, and urban versus rural settings, with ICUs in rural public hospitals particularly lacking in infrastructure, systems, and staffing. Owing to a significant surge in noncommunicable diseases due to urbanization and advances in medical technology, the need for a robust critical care system is evident. Unfortunately, the existing gaps in critical care services

in Pakistan are exacerbated by the absence of LTACHs, leading to prolonged stays for patients in ICU settings and placing strain on an already weak system.<sup>[5]</sup>

According to the Centers for Medicare & Medicaid Services, LTACHs are defined as hospitals that provide care lasting  $\geq 25$  days. Patients admitted to LTACHs are classified as chronic critical patients, who are beyond the first stage of their critical illness but still require acute intensive care. In Pakistan, such patients are admitted to ICUs, which leads to decreased access to beds for those who require immediate critical care.<sup>[6]</sup> Owing to geographical disparities in ICU availability, ensuring that space is made for acute patients by discharging chronic critical patients is imperative; however, the lack of LTACHs complicates this situation.<sup>[3]</sup> Furthermore, approximately 25% of the population in Pakistan lives below the poverty line, relying heavily on the public sector for health care. With ICU beds occupied by chronic critical patients, many do not receive care promptly. The establishment of LTACHs can diminish the burden on existing ICUs and offer patients with appropriate recovery environments.<sup>[7]</sup>

Several challenges must be considered in any discussion regarding critical care capacity, especially LTACHs, in low-income countries such as Pakistan. First, a dedicated effort to train critical care staff is crucial for the development of respectable training programs for both doctors and nurses. Second, a decisive push for high-quality research at both local and national levels, facilitated by infrastructure, networks, and registries, is important. This will allow the generation of protocols that facilitate the practice of personalized critical care medicine tailored to the diverse population and epidemiology needs in Pakistan. Finally, a clear mandate from the government to develop critical care services, along with financial, policy, and infrastructural support, is crucial.<sup>[4]</sup>

## Conflict of interest statement

The authors declare no conflict of interest.

## Author contributions

Khan MR contributed to conceptualization, project administration, resources, original draft writing, review, and editing. Nusrat K contributed to validation, visualization, and original draft writing. Butt MN contributed to supervision, review, and editing.

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