

Cover story

Breath of life: Integrating innovation and continuity in cardiorespiratory physiotherapy

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In the evolving landscape of healthcare, cardiorespiratory physiotherapy stands as a critical pillar in restoring respiratory and cardiac function, particularly among vulnerable patients. This discipline, rooted in science and refined through clinical experience, now spans a spectrum of care settings ranging from the high-acuity environment of intensive care units (ICUs) to community-based pulmonary rehabilitation and personalised breathing retraining. The cover image, portraying a physiotherapist delivering lung expansion therapy in an ICU, showcases this visual narrative. It not only reflects the discipline's role in acute and emergency care but also symbolises the broader, patient-centred journey of recovery that physiotherapists expertly guide across settings.

The cover image was generated using ChatGPT 3.0 (OpenAI, 2025) with the prompt "Delivering physiotherapy in the ICU". Generated June 07, 2025

Lung expansion therapy in acute and emergency care: Laying the foundation for recovery

In emergency and intensive care settings, where survival hinges on timely and multidisciplinary intervention, physiotherapists play a crucial role in preserving respiratory function. The cover image captures this contribution precisely, a physiotherapist delivering lung expansion therapy to a critically ill patient using techniques such as incentive spirometry and positioning. These interventions are pivotal in preventing complications such as atelectasis and ventilator-associated pneumonia. Beyond technical execution, the image reflects a deeper shift: the emergency and intensive care units are no longer just a domain of life support machines, but a space for early mobilisation and rehabilitative care.

Physiotherapists play a vital role in this transformation, bridging acute care and functional recovery from the very onset of critical illness.

From acute care to community: The role of pulmonary and cardiac rehabilitation

The journey of cardiorespiratory recovery rarely ends at hospital discharge. Many patients, particularly those living with chronic cardiorespiratory diseases, structured rehabilitation is essential to restore physical capacity, independence and quality of life. This is where cardiac and pulmonary rehabilitation emerges as a gold-standard approach, seamlessly continuing the foundation laid in the acute care setting.

These programmes integrate tailored exercise prescriptions, patient education, and psychosocial

support to reduce dyspnoea, enhance endurance, and promote long-term adherence. Group-based treatment programmes foster community connection and motivation, reinforcing functional gains. Physiotherapists act as clinical leads and programme coordinators, using outcome measures and progressive training to personalise care, ensuring the programmes are tailor-made to patients' physio-psycho-social potential.

Personalised retraining: The ultimate goal of the cardiorespiratory care

While high-tech interventions in acute settings and structured group rehabilitation programmes represent essential pillars of cardiorespiratory physiotherapy, personalised retraining stands as its ultimate expression. This phase symbolises the transition from therapist-led care to patient-driven management, where precision meets empowerment.

Individually tailored interventions such as inspiratory muscle training, thoracic expansion exercises, diaphragmatic breathing, aerobic reconditioning, and functional strength training are designed to enhance pulmonary ventilation and cardiovascular endurance, optimise oxygen delivery, reduce symptom burden, and restore confidence in daily activity. These interventions are specifically valuable for individuals recovering from conditions such as chronic obstructive pulmonary disease (COPD), heart failure, post-cardiac surgery, or long acute care stays.

Personalised care also accounts for comorbidities, psychosocial factors, and health literacy, enabling physiotherapists to guide patients toward sustainable

behavioural change and improve quality of life. By fostering self-monitoring, energy conservation strategies, pacing techniques, and safe exercise progression, this stage ensures that patients remain active partners in their recovery journey.

Ultimately, personalised cardiorespiratory retraining is not merely the final step; it is the integrative force that completes the circle of care, bridging science, compassion, and long-term resilience and independence.

A unified vision: building the future of cardiorespiratory physiotherapy

As Sri Lanka's healthcare system continues to evolve, the role of physiotherapists in cardiorespiratory care is expanding both in scope and influence. From integrating into acute care and leading rehabilitation programmes to adopting digital tools for tele-rehabilitation, physiotherapists are redefining care across all levels. However, growth must be matched with preparedness. Advancing the field requires investment in workforce training, equitable distribution of resources, and a strong commitment to ongoing professional development.

The visual focus on acute care physiotherapy serves as a compelling reminder of where this journey often begins. Yet, it also reflects the potential for integrated practice models that unify early intervention, long-term recovery, and patient empowerment while emphasising that physiotherapists are no longer peripheral providers, they are central figures in promoting resilience, recovery, and reintegration into daily life.