

Cover Story



Expanding horizons in physiotherapy and rehabilitation

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Cover photo - The cover of the Sri Lanka Journal of Physiotherapy and Rehabilitation Sciences visually represents the dynamic and essential role of physiotherapy in restoring mobility, function, and quality of life. The interconnected circular motifs symbolize the holistic and continuous journey of rehabilitation, emphasizing the multidisciplinary approach that bridges science, clinical expertise, and patient-centred care.

The images within the circles depict various aspects of physiotherapy practice, from musculoskeletal rehabilitation and neurorehabilitation to functional training and assisted recovery. These visual elements highlight the diverse therapeutic techniques that support patients in regaining independence, underscoring the profession's vital contribution to healthcare.

Designed by – Mr. Vimukthi Kalegana & Mr. Kalpa S Perera

Introduction

Physiotherapy is a diverse healthcare discipline that addresses a wide range of conditions affecting mobility, function, and overall well-being. It plays a vital role in rehabilitation, injury prevention, and improving the quality of life across different patient populations.

Musculoskeletal physiotherapy focuses on diagnosing, treating, and preventing conditions related to muscles, joints, bones, and soft tissues. It helps manage conditions such as arthritis, fractures, sports injuries, and post-surgical rehabilitation. Techniques like manual therapy, therapeutic exercises, dry needling, and electrotherapy are used to alleviate pain and restore movement. Additionally, physiotherapists provide injury prevention strategies and ergonomic advice to support long-term musculoskeletal health.

Neurological physiotherapy, or neurorehabilitation, is essential for individuals with neurological disorders affecting movement, coordination, and balance. Patients with stroke, spinal cord injuries, Parkinson's disease, multiple sclerosis, or traumatic brain injuries benefit from motor retraining, task-specific exercises, and assistive devices. Physiotherapists use neuroplasticity-based interventions to enhance motor control, strength, and postural stability, helping patients regain independence and prevent falls.

Geriatric physiotherapy focuses on improving mobility and independence in older adults. Age-related conditions such as osteoporosis, arthritis, postural instability, and frailty are common concerns. Physiotherapists employ strength training, balance exercises, and flexibility techniques to prevent falls and maintain daily function. Cardiovascular health and mental well-being are also emphasized to promote active aging.

Cardiothoracic physiotherapy plays a crucial role in managing and rehabilitating patients with cardiovascular and respiratory conditions. Individuals recovering from chronic obstructive pulmonary disease (COPD), asthma, pneumonia, or post-cardiac surgery benefit from airway clearance techniques, breathing exercises, and pulmonary rehabilitation programs. Post-operative chest physiotherapy is also essential in preventing respiratory complications and promoting recovery.

Paediatric physiotherapy focuses on early intervention and rehabilitation for children with movement disorders and developmental delays. Conditions such as cerebral palsy, muscular dystrophy, developmental coordination disorder, and congenital disabilities require specialized care. Physiotherapists use play-based therapy, motor learning techniques, and assistive technology to improve movement, coordination, and posture. Family-centred care and parental education are also key components in supporting a child's long-term progress.

Physiotherapy is an integral part of healthcare, catering to a broad spectrum of patient needs. Whether addressing musculoskeletal pain, rehabilitating neurological conditions, supporting elderly individuals, enhancing lung function, or improving motor development in children, physiotherapists play a crucial role in optimizing mobility and health. By integrating evidence-based techniques and patient-centred care, physiotherapy continues to contribute significantly to rehabilitation and overall well-being.

UCFM Tower: Advancing physiotherapy care and research

The Faculty of Medicine, University of Colombo, has taken a pioneering step in advancing physiotherapy services with the establishment of specialized physiotherapy clinics at the UCFM Tower. These clinics provide comprehensive, evidence-based rehabilitation services across

multiple disciplines while serving as centres of excellence for physiotherapy research and innovation.

- ***Musculoskeletal physiotherapy clinic:***

Dedicated to the prevention, diagnosis, and rehabilitation of musculoskeletal conditions, this clinic focuses on conditions such as osteoarthritis, sports injuries, and post-surgical rehabilitation. Planned research at this clinic explores biomechanical movement analysis, manual therapy effectiveness, and rehabilitation strategies for chronic pain management.

- ***Neurological physiotherapy clinic:***

A leading centre for neurorehabilitation, this clinic provides therapy for patients with stroke, spinal cord injuries, Parkinson's disease, and traumatic brain injuries. Ongoing and planned research investigates neuroplasticity-driven rehabilitation, robotic-assisted therapy, and virtual reality applications in motor recovery.

- ***Paediatric physiotherapy clinic:***

Focuses on enhancing motor function and independence in children with developmental disorders, cerebral palsy, and neuromuscular conditions. Research excellence in this domain includes studies on early intervention strategies, play-based therapy, and assistive technologies to improve functional outcomes.

- ***Elderly care physiotherapy clinic:***

A specialized centre for geriatric rehabilitation, this clinic addresses age-related conditions such as osteoporosis, arthritis, and fall prevention. Research initiatives include exercise interventions for frailty, balance training techniques, and the

role of physiotherapy in improving cognitive function in older adults.

The Sri Lanka Journal of Physiotherapy and Rehabilitation Sciences, as the official journal of the Department of the Allied Health Sciences, continues to serve as a vital platform for disseminating ground breaking research, fostering collaboration, and elevating the standards of physiotherapy education, practice, and patient care in Sri Lanka and beyond.

Through the integration of clinical expertise and innovative research, physiotherapy professionals are shaping the future of rehabilitation sciences, ensuring enhanced quality of life for patients across all ages and conditions.

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