

EDITORIAL

The Role of Rehabilitation in Promoting Healthy Ageing

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INTRODUCTION

Rehabilitation is defined as “a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment”¹. These interventions address not only physical impairments but also psychological, cognitive, and social needs, taking into account each person’s goals, family circumstances, work environment, and wider community context. In the 21st century, the rapid increase in human longevity represents a major public health achievement, supported by advances in medical science, public health measures such as improved sanitation, vaccination, maternal and child health, and wider socioeconomic development². Global life expectancy at birth increased to 73.3 years in 2024, representing an increase of 8.4 years since 1995³. Between 2015 and 2050, the proportion of the world’s population over 60 years will nearly double from 12% to 22%⁴.

As populations age, maintaining health, function, and independence in later life becomes increasingly important. Healthy ageing is defined as “the process of developing and maintaining

the functional ability that enables well-being in older age”. Functional ability reflects the dynamic interaction between an individual’s intrinsic capacity, including physical and mental capacities, and the environment in which they live. These environmental characteristics span the immediate home setting, communities, social relationships, the built environment, attitudes and values, health and social policies, and the systems and services that support healthy ageing^{5,6}.

Longer life expectancy is frequently associated with multimorbidity, defined as the presence of multiple chronic conditions. Maintaining good health enables older people to remain independent and actively participate in family and community life. This demographic change also shifts healthcare needs towards complex, high-cost management and long-term support, highlighting the urgent need for strategies to reduce the individual and societal burden of ageing^{2,3}. This article discusses rehabilitation as an essential component of healthy ageing, with particular emphasis on functional independence, quality of life, prevention of disability, and access to rehabilitation services.

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Rehabilitation and functional independence

As people grow older, they may experience chronic health conditions such as cardiovascular disease, cancer, diabetes, chronic respiratory illness, arthritis, stroke, spinal cord injury, fractures, including a wider range of non-communicable diseases (NCDs). These conditions can make everyday activities more difficult and may reduce independence, mobility, and quality of life^{1,7,8,9}.

Rehabilitation is therefore a cornerstone of healthy ageing because it helps older adults overcome functional limitations and continue participating in family and community life. Rather than accepting decline as inevitable, rehabilitation offers a pathway to maintaining function and well-being. It shifts the focus from merely treating illness to optimizing function, preventing avoidable disability, and supporting meaningful daily activity. Rehabilitation is an important health strategy because it slows the disabling effects of chronic conditions such as cardiovascular disease, arthritis, and diabetes; promotes independence; and helps prevent further injury. By optimizing functional ability, rehabilitation enables older adults to remain engaged in activities that are important to their daily lives¹.

Clinical benefits of rehabilitation in older adults

Rehabilitation enables older adults to maintain independence, mobility, and dignity. In stroke recovery, multidisciplinary interventions such as physiotherapy, occupational therapy, and speech and language therapy can help rebuild motor, cognitive, and communication function. These interventions may improve strength, balance, functional capacity, and confidence in daily activities¹⁰. One study showed that intensive rehabilitation had better effectiveness and efficiency in stroke patients¹¹.

Rehabilitation also has an important role in the management of long-term musculoskeletal conditions. In osteoarthritis, tailored exercise plans, weight management, and assistive technologies can help maintain joint mobility and slow functional decline¹². These interventions are important because osteoarthritis can affect mobility, independence, and participation in everyday life.

Falls prevention is another important area where rehabilitation can support healthy ageing. Falls, fractures, and long-term disability among older

adults place a heavy burden on individuals, families, and healthcare systems. Preventive rehabilitation interventions, including balance and strength training, can reduce these risks. A systematic review showed that physical exercises are effective in improving balance, lower extremity strength, and mobility, while also reducing falls and fall-related complications¹³.

Economic and public health value of rehabilitation

Rehabilitation is also a critical and cost-effective health strategy that reduces the impact of illness, injury, and chronic conditions. It is an essential part of universal health coverage, alongside health promotion, disease prevention, treatment, and palliative care. Rehabilitation has wider economic and societal value by preventing long-term disability and dependence, reducing avoidable healthcare use, and helping individuals regain or maintain their ability to work and participate in society. Globally, an estimated 2.4 billion people may require rehabilitation to maximize their independence, avoid costly hospitalizations, and regain their ability to work¹.

Beyond individual benefits, rehabilitation is also a valuable public health investment. Investing in rehabilitation services can help reduce hospital admissions, long-term care needs, and the wider costs associated with disability and dependence¹. This makes rehabilitation both a compassionate and cost-effective approach to supporting ageing populations^{1,14}. For example, one study showed that for every Australian dollar spent on inpatient rehabilitation following acquired brain injury, an estimated \$A91 was saved in ongoing care costs¹⁵.

Barriers to rehabilitation access

Despite its benefits, access to rehabilitation remains uneven. In many regions, services are limited, expensive, or concentrated in urban centres. Older adults in rural or low-income communities are often left without the support they need to recover, adapt, and maintain independence. This gap reflects a broader issue in which healthcare systems often prioritize acute treatment over long-term recovery and functional support.

Without stronger policy and funding support, rehabilitation may continue to be undervalued despite its proven benefits. In some low- and middle-income countries, more than 50% of people do not receive the rehabilitation services they require. Emergencies, including conflicts,

disasters, and outbreaks, can also create large increases in rehabilitation needs while simultaneously disrupting rehabilitation services¹. Addressing these barriers requires rehabilitation to be recognized as a core part of health systems rather than an optional service after acute treatment.

CONCLUSION

Healthy ageing is not merely about extending lifespan, but about improving quality of life, preserving functional independence, and enabling older adults to remain active within their families and communities. Rehabilitation plays a central role in achieving these goals by helping older adults recover from illness and injury, manage chronic conditions, prevent avoidable disability,

and maintain dignity in later life.

As populations continue to age, rehabilitation should be recognized as an essential component of health systems worldwide. Strengthening rehabilitation services can support healthier ageing, reduce long-term dependence, and improve both individual and societal outcomes.

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Conflict of Interest

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Authors' Contribution

All authors contributed to the conception, drafting, critical revision, and approval of the final manuscript.

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