

# Rehabilitation: key for health in the 21<sup>st</sup> century

## Key messages

- Rehabilitation is essential, along with prevention, promotion, treatment and support, in addressing the full scope of health needs of a population and achieving Sustainable Development Goal 3: Ensure healthy lives and promote well-being for all at all ages.
- Rehabilitation plays an important role among older populations, reducing the risk of falls and hospital admissions, and keeping people independent for longer.
- More people than ever are living with noncommunicable diseases and other chronic conditions. Health systems need to be equipped to provide services that optimize functioning in light of impairments, injuries or health conditions, acute or chronic.
- The benefits of rehabilitation are realized beyond the health sector. Rehabilitation can reduce care costs and enable participation in education and gainful employment.
- Rehabilitation must be integrated into national health plans and budgets. Current epidemiological trends, demographic shifts and expanded access to health care make scaling up rehabilitation services imperative for health systems in the 21<sup>st</sup> century.
- Coordinated and concerted action is needed to scale up rehabilitation services and address the profound unmet needs that exist.

## Introduction

Dramatic shifts in the health and demographic profiles of populations are characterizing the 21<sup>st</sup> century.(1) People are living longer and with disabling chronic conditions that impact on their functioning and well-being.(2) Health systems are confronted with the responsibility of responding to these emerging challenges and health policies are placing increased emphasis on services targeted at increasing functioning, in addition to those that reduce mortality. Sustainable Development Goal 3 – Ensure healthy lives and promote well-being for all at all ages – articulates the importance of promoting healthy life expectancy, i.e. both living longer and living better. Rehabilitation is key to optimizing functioning and healthy life expectancy, and it is essential that health systems provide rehabilitation services to meet the changing needs of their populations and achieve Sustainable Development Goal 3.

## What is rehabilitation?

Rehabilitation is a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment. Health condition refers to disease (acute or chronic), disorder, injury or trauma. A health condition may also include other circumstances such as pregnancy, ageing, stress, congenital anomaly, or genetic predisposition. (4) Rehabilitation may be needed by anyone with a health condition who experiences some form of limitation in functioning, such as in mobility, vision or cognition. Rehabilitation is characterized by interventions that address impairments, activity limitations and participation restrictions, as well as personal and environmental factors (including assistive technology) that have an impact on functioning. Rehabilitation is a highly person-centred health strategy; treatment caters to the underlying health condition(s) as well as goals and preferences of the user.

## Why rehabilitation is key in the 21<sup>st</sup> century

In the 21st century the world faces a new set of challenges: rapid population ageing accompanied with a rise in chronic conditions and multi-morbidity.(5) The population aged over 60 is predicted to double by 2050 while the prevalence of noncommunicable diseases has already increased by 18% in the last 10 years. Chronic conditions are responsible for a significant proportion of premature deaths, but they also cause substantial disability,(1,2) and rehabilitation has a critical role to play in preventing and minimizing the limitations in functioning (e.g. in mobility, cognition, respiration, vision, communication) associated with ageing and chronic conditions. Addressing people's limitations in functioning helps to minimize the health, social and economic impact of health conditions, and improves well-being.(4)

However, rehabilitation is not only relevant for ageing populations and those with chronic conditions, but is also relevant for children, who form a significant portion of rehabilitation users and in many countries represent the largest group in need of rehabilitation services. For example, 48% of the population of Chad and 42% of the population of Timor-Leste is between 0–14 years of age.(6) Child mortality rates are declining, but not all children who survive are able to thrive.(7,8) Early interventions that optimize developmental outcomes for children with various health conditions, including neurological, congenital and intellectual impairments as well as injury, can impact participation in education, community activities and future capacity to work.

Rehabilitation becomes increasingly important as access to health care improves and greater numbers of people survive injury and illness. And because it constitutes an important aspect of care for those who experience short or long-term impairment and limitations in functioning following injury or illness,(9–11) access to rehabilitation needs to increase proportionately to emergency, trauma and medical care. Integrating rehabilitation into the health care system and ensuring early access to services can help ensure optimal outcomes from other health interventions, and mitigate the risks of ongoing complications that may diminish a person's health and well-being and burden the health system.(12)

While demand for rehabilitation is growing, the capacity to provide rehabilitation in many parts of the world fails to meet existing needs. Several studies from southern Africa show that as few as 26% of people receive the rehabilitation they need.(13–16) Anecdotal evidence suggests that this figure is reflective of the situation in many low- and middle-income countries, although there are few robust national studies of unmet rehabilitation needs in other countries.

## Dealing with misconceptions about rehabilitation

Several widely held misconceptions about rehabilitation undermine its potential impact on the health of populations.

- ✘ **Misconception:** Rehabilitation is only for persons with disabilities (as defined by the CRPD<sup>1</sup>)
- ✔ **Fact:** Rehabilitation is needed by anyone with a health condition, impairment or injury, acute or chronic, that limits functioning

People with severe, long-term physical, mental, intellectual or sensory impairments may benefit substantially from rehabilitation and participate more intensively and for longer duration than other rehabilitation users. However, rehabilitation is needed by anyone with a health condition that limits functioning; people may access rehabilitation after an acute illness or injury (such as a burn or musculoskeletal injury), if they have a chronic condition (such as diabetes, cardiac failure or lower back pain), or in order to facilitate recovery following surgery. Given its wide applicability, rehabilitation should be integrated into the health system and made available to those who need it.

While rehabilitation is for everyone, not only persons with disabilities, in order to be compliant with the Convention on the Rights of Persons with Disabilities (CRPD), Member States should ensure that rehabilitation services are accessible to persons with disabilities. This may involve modifying the physical environment where services are provided, or making rehabilitation information accessible in different formats.

- ✘ **Misconception:** Rehabilitation is only a highly specialized service for athletes or a post-injury return-to-work service
- ✔ **Fact:** Rehabilitation addresses the needs of a broad scope of people across the lifespan

Rehabilitation gains high visibility in the context of sports, where it is recognized as essential for returning professional athletes to their respective professional roles. Return-to-work rehabilitation is also recognized as having significant social and economic benefits. Yet, while rehabilitation in both these fields is undoubtedly valuable, it represents only a fraction of the true scope of rehabilitation and of rehabilitation users.

- ✘ **Misconception:** Rehabilitation is a luxury health service that can be ignored in the face of competing demands for investment and resources
- ✔ **Fact:** Rehabilitation is a core component of health care and is also often needed to achieve and maintain the best outcomes from other health interventions, such as surgery

The erroneous belief that rehabilitation is an expensive and luxurious addition to essential health services has meant that it has been undervalued in health system financing and development, and although it plays a critical role in optimizing health outcomes, advances in the field have lagged behind those in other areas of health. Rehabilitation has been recognized as a core component of Primary Health Care since the Alma Ata Declaration in 1978, yet its representation in primary care is relatively poor. Acknowledging the critical contribution rehabilitation makes to improving functioning and well-being, and its importance to the effectiveness of other health interventions, is fundamental to correcting this disparity.

<sup>1</sup> The Convention on the Rights of Persons with Disabilities defines Persons with Disabilities as those who have long-term physical, mental, intellectual or sensory impairments which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others.

## Integrating rehabilitation into different models of care

The WHO Framework on Integrated People-centred Care places people, rather than diseases, at the centre of health care delivery. By its very nature, rehabilitation responds to individuals' needs and priorities, and targets limitations in functioning across the continuum of care and throughout the lifespan. So, as countries move towards integrated person-centred care, it is imperative that quality rehabilitation is embedded in service delivery models.

A long-term model of care is of increasing importance as a population ages. While all health services (promotion, prevention, treatment, rehabilitation, palliation) play a role in long-term care, rehabilitation is arguably at the core, since by optimizing functioning people not only live longer but live better. Efforts to integrate rehabilitation into long-term care policy and delivery therefore need to be amplified.

## The health, social, and economic benefits of rehabilitation

Rehabilitation has benefits both for the user and his/her family, and for the health and other sectors (such as social, education and labour). Within the health sector, rehabilitation has been found beneficial in reducing length-of-stay in hospital, decreasing re-admissions, and preventing costly and potentially fatal complications,<sup>(12)</sup> thus helping to mitigate the negative social and health risks associated with prolonged hospital stay and health complications.

Especially in the context of complex conditions which require intensive and highly specialized rehabilitation, cost savings to the health and other sectors may be realized in the long term, rather than in the short term. When rehabilitation improves a person's independence and ability to resume work or other roles, the costs related to ongoing care and support incurred by social services, the person or the family, can be reduced.<sup>(17)</sup> A longer term impact of rehabilitation may be seen in the ability of a person to return to gainful employment or education, or in the degree of independence that rehabilitation has provided.<sup>(18)</sup> For older populations, rehabilitation has been shown to increase safety and independence, reduce the risk of falling, and decrease hospital and nursing home admissions.<sup>(19)</sup>

Assistive products can have a profound impact on safety, level of functioning and independence. To realize the full benefits of recent growth in the development and availability of such products,<sup>(18)</sup> access to providers who are proficient in assessing, prescribing and training in the use of the products is necessary.

## Preparing health systems to strengthen rehabilitation

To effectively meet the rehabilitation needs of their populations, countries need to undertake a systematic process of situation assessment, planning, implementation and evaluation. Rehabilitation needs to be integrated into national health plans and budgets, moving towards the goal of universal health coverage. Implementation of an effective rehabilitation system requires:

- strong leadership and governance at the ministry of health and effective coordination mechanisms with other relevant sectors
- adequate allocated funding for rehabilitation services
- efficient service delivery models, including referral systems across the different levels of the health system and between community and hospital-based services

- the availability of a multi-disciplinary rehabilitation workforce
- the integration of rehabilitation data into health information systems, and
- the availability of affordable assistive products.

Political will is fundamental to the successful development and implementation of a rehabilitation plan, and is fuelled by effective advocacy and access to reliable evidence, especially that related to cost-effectiveness. Enabling access to the knowledge, tools and resources (both human and fiscal) required to scale up rehabilitation is the shared responsibility of all stakeholders.

## Research priorities

The critical gaps in the evidence base for rehabilitation require significantly increased support for research. There is a notable paucity of systems-level rehabilitation research and of research from low-income countries. Among the research priorities included in the WHO (2017) *Rehabilitation in health systems*, particularly pertinent for rehabilitation policy and planning is research to:

- make known the cost-benefits of rehabilitation
- identify facilitators and barriers to accessing rehabilitation
- enable a standardized measure of rehabilitation impact.

In addition to increased investment, efforts need to focus on building the capacity for rehabilitation research in low- and middle-income countries and strengthening international collaborations.

## Advocating for rehabilitation

Despite the growing need for rehabilitation, there is lack of awareness about its role and the magnitude of unmet needs. This poses a substantial challenge to development of the rehabilitation sector, and there is an urgent need to advocate for rehabilitation services as being fundamental to addressing the needs of the population in the 21<sup>st</sup> century.<sup>(5)</sup> Rehabilitation users, providers and civil society have a particularly important role to play in strengthening rehabilitation advocacy.

## A way forward

The ageing population and growing contribution of chronic conditions and injuries to the burden of disease<sup>(1)</sup> mean that health systems are facing unique challenges in the 21<sup>st</sup> century. Rehabilitation, by targeting functioning,<sup>(21)</sup> is a key part of the response to this health crisis. As access to health care expands and people benefit from more advanced emergency, trauma and medical care, rehabilitation becomes proportionally important. It constitutes an essential aspect of care for people who experience short or long-term impairments and limitations in functioning following injury or illness, or who are at risk of developing other limitations. In many parts of the world, however, health systems do not have the capacity to provide the rehabilitation services that people need.<sup>(18)</sup> Scaling up rehabilitation calls for coordinated multi-stakeholder engagement to increase advocacy, develop and integrate rehabilitation plans and policies, and to implement these effectively so they reach all who are in need.

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