Dear Editor,

Time to Refocus: Rehabilitation Perspective on Meeting the Needs of the Indian Population

In recent years the Indian healthcare system has undergone rapid changes in the way services are delivered. There has been an increase in investment mostly in drugs and pharmaceuticals, machineries and equipment used in diagnosis and treatment of endemic and communicable diseases (Joseph & Ranganathan, 2016; Ganesan & Veena, 2018). The focus on communicable diseases has side-tracked the growing needs of the population living with chronic health conditions that, in the past, had high mortality rates such as stroke, road traffic accidents, and cancer. Furthermore, several researchers Sadikot et al, (2004); Ramachandran, (2007); Dandona et al, 2008; Kaul et al, (2009); Herman, (2017); Sharma & Ganguly, (2018) have shown that there is an increase in the proportion of older adults, people living with multi-comorbidities, chronic non- or slowly progressive conditions such as Type 2 diabetes, chronic obstructive pulmonary disease and arthritis, which keep them from leading productive lives. A study by Agarwal (2020) showed that in India, 6% of 1.36 billion people (around 81.6 million) are over the age of 65 years. Without robust health policies and direct investment to improve the health and quality of life of this growing section of the population, India will face premature deaths and have large numbers living with poor quality of health. Bloom et. al. (2014) estimated that by 2030 non-communicable conditions will cost the Indian economy over \$4.3 trillion in terms of loss in productivity and healthcare expenditure, which is twice the country's gross domestic product.

Rehabilitation is one main way to improve the health-related quality of life of this population and to meet Goal 3: Good Health and Well-being, of the Sustainable Development Goals adopted by the United Nations General Assembly (2015). In India, classified as a lower-middle-income country by the World Bank, rehabilitation services are scarce and are offered mostly in the urban areas (Fantom & Serajuddin, 2016). The healthcare services are barely able to handle the dual burden of controlling infection and coping with the growing population living with non-communicable conditions and comorbidities.

The recent COVID-19 pandemic has revealed the gaps in the current healthcare system provided by the State and the Central Governments. It has perhaps

presented an opportunity to develop a system on 'what could have always been attainable but was never implemented'. Global estimates of the need for rehabilitation, reports that, around 2.41 billion people (95% Uncertainty Interval 2.34, 2.50) in the world are in need of rehabilitation and highlights the burden of non-communicable diseases (Cieza et al, 2021). In view of the global estimates, this letter to the editor provides a broad perspective on the current state of rehabilitation within the Indian healthcare system and suggests possible avenues to better meet the demands of the Indian population.

- Redefining the role of rehabilitation: Rehabilitation services, specifically 1. the role of the physiotherapists, have to change from crisis intervention to community health so as to meet the needs of the population. Typically, physiotherapists are focused to support people to maximise their function (e.g., improve walking post-stroke) and/or return to pre-injury levels (e.g., post-fracture) wherever possible. However, this constitutes a small proportion of people to whom the services are available, as the services are concentrated in towns and cities. Consequently, the traditional physiotherapy approach needs to be recalibrated to meet the demands of those who often live in remote and rural areas. Rehabilitation professionals can, for instance, play a pivotal role in supporting, educating, and empowering people and communities to take charge of their own health. Professionals can engage with communities in local adaptation of evidence-based best practices, develop educational materials, and strengthen community-based rehabilitation programmes in the areas of prevention, health promotion, self-management, ergonomics, and quality of life, while also addressing barriers in society related to access to these services. Access to rehabilitation services has to move from being a 'privilege' to a basic health need.
- 2. Education of healthcare professionals:
- 2.1. Training: It is important that the next generation of rehabilitation professionals is sensitised and trained to meet the needs of people with non-communicable conditions such as obesity and Type 2 diabetes. It is also important to equip trainees with skills that are aligned with their career goals whilst meeting the population's needs. It is necessary that professionals already in the workforce are updated on current evidence-based practice guidelines and offered courses and/or training to bridge the existing gaps in skills and competencies. Continuous professional development training needs to be offered to meet the needs of the community, especially for those who do not have access to

rehabilitation services, and incentives should be offered to pursue advanced courses and develop skills in specialty areas. The COVID-19 pandemic has proven that distance and online learning options are feasible. This could be an option to support capacity-building of rehabilitation professionals.

- 2.2. Strengthen healthcare systems at all levels (sub-, primary-, and communityhealth centres) to offer rehabilitation services that cater to the needs of local communities. As rehabilitation services are concentrated in urban areas, there is a need to build the capacity of the other professionals to offer basic rehabilitation services at various levels of the healthcare system.
- 2.3. Curriculum development: Developing a uniform physiotherapy training curriculum of similar duration across all educational institutions. There should be a core programme while allowing flexibility to incorporate the context-specific needs of the local population which the trainees will serve in the future.
- 2.4. Job descriptions: Clear job differentiation and salary scales should be in place among rehabilitation professionals with Bachelor's, Master's, and Doctoral degrees. Some specialised activities could be reserved or legally controlled. In other words, to be able to perform some interventions, physiotherapists must seek additional certification or obtain higher qualifications.
- 3. Research capacity and training: Research activities in rehabilitation are still underrated and limited to work done at academic institutions. Several factors that could impact the quality of research are the limited or lack of dedicated funding to support rehabilitation research, non- acknowledgment from peers in the medical community, and limited access to published materials due to expensive paywalls. This however is changing, thanks to open access policies and open science frameworks adopted by some institutions in higher-income countries. The Lancet journal, for instance, has shown a commitment to starting region-specific open access to scientific publications. There is a need to develop research capacity and collaborate with the international faculties in knowledge sharing and writing publications. Citations and cross-references are increasing from journals in Asian countries.
- 4. Population outlook towards rehabilitation: Increase awareness and health literacy among the public towards seeking rehabilitation services, not only for return to function following acute injuries but also for health promotion, physical activity, self-management, and to meet their goals in living a

healthier life. This will require information sharing among various healthcare professionals, and referrals to and from rehabilitation services. Rehabilitation professionals have to be called upon for their role as 'advocates and leaders' for accessible and sustainable services across and beyond the continuum of care.

- 5. Community programmes: One way to meet the needs of the community is to develop and support sustainable implementation of evidence-based community programmes. This will require the engagement of stakeholders such as community leaders, rehabilitation professionals, and local government. Programmes such as these need funds allocated by the Central and/or State Governments and, where possible, charities and philanthropies could supplement their efforts.
- Developing and supporting innovations and entrepreneurship in 6. rehabilitation: According to the World Confederation for Physical Therapy (WCPT), there are totally 48,396 physiotherapists in India, which is the equivalent of 4 physiotherapists for every 100,000 people. This is in contrast to the numbers seen in other countries for every 100,000 people, 68 physiotherapists in Canada, 76 in Australia, 74 in the United Kingdom, and 20 in the USA. The small number of physiotherapists in India will not be able to meet the rehabilitation needs of the large socio-culturally diverse and geographically dispersed population. Approximately, 29.2% of men and 32.6% of women over the age of 65 years reside in rural India (Mishra, 2020) with little or no access to rehabilitation services. Technology will increasingly play a key role in meeting demands and in reaching inaccessible populations in remote regions. Now that internet and the mobile phone have reached every corner of India, the next step would be to support innovation and technology to bring rehabilitation services to people. Several free health apps and online programmes are already on the market. For instance, RehApp is a free mobile app developed to support fieldworkers in low- and middle-income countries while engaging with people with disabilities (https://enablement.eu). Due to the COVID-19 pandemic, some of the innovations were employed in remote monitoring, telehealth, and online consultation to track and monitor people with coronavirus infection. These measures could be harnessed by the rehabilitation community to provide services to hard-to-reach populations in rural areas.
- 7. System-related issues: Currently, unlike most rehabilitation professionals, physiotherapists are not covered by the Rehabilitation Council of India. There

is a national regulatory body, the Indian Association of Physiotherapists (IAP), that maintains some information on membership and training institutions, and several States have created their own regulatory boards to maintain membership records. However, the lack of a central regulatory authority impedes participation in international initiatives such as the WCPT. The IAP was allowed to rejoin the WCPT in 2020, after a long wait. There is an urgent need to establish a national regulatory authority that has the power to monitor, inspect, certify, and maintain acceptable quality of memberships through mandatory formal and informal training, and standardise practices across different specialties.

Bridging the gap between the population needs and the existing rehabilitation services is the first step towards developing a comprehensive plan to overcome existing challenges. While some of these challenges can be addressed immediately, others would require a long-term commitment from different stakeholders.

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