

Rehabilitation Across Borders: A Comparison of Physiotherapy and Occupational Therapy Services in India and South Korea

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Abstract— Rehabilitation is an essential component of healthcare for individuals living with disability, injury, neurological disorders, chronic diseases, developmental conditions and age-related functional limitations. Physiotherapy and occupational therapy are two important components within multidisciplinary rehabilitation. Although both professions contribute to improving functional independence and quality of life, their organization, regulation, accessibility and integration within healthcare systems differ across countries.

This comparative narrative review examines physiotherapy and occupational therapy services in India and South Korea, with particular attention to professional regulation, rehabilitation infrastructure, workforce information, public and private service delivery, community-based rehabilitation, home-based care and technology-assisted approaches. Government publications, national statistical sources, regulatory documents and peer-reviewed literature were examined to identify major characteristics of rehabilitation systems in the two countries.

India has developed a national regulatory framework for specified allied and healthcare professions and provides rehabilitation through government hospitals, disability rehabilitation programmes, district-level services and private healthcare facilities. South Korea has an established statutory framework for physical therapists and occupational therapists and a structured system of designated rehabilitation medical institutions. Both countries have significant rehabilitation capacity, but they face different challenges related to accessibility, workforce planning, population needs and service integration.

The comparison suggests that India and South Korea can benefit from reciprocal learning rather than one-way policy transfer. India can draw lessons from South Korea's structured rehabilitation institutions, workforce information, health-system organization and technology-assisted care, while South Korea can learn from India's experience with community-oriented, geographically distributed and resource-adapted healthcare approaches. Practical cooperation through joint research, professional exchange, tele-rehabilitation, assistive

technology and community-based pilot programmes could translate this mutual learning into measurable improvements in rehabilitation services.

Keywords: *rehabilitation; physiotherapy; occupational therapy; india; south korea; allied healthcare; disability; community rehabilitation; healthcare accessibility; technology-assisted rehabilitation*

I. INTRODUCTION

Rehabilitation is a fundamental component of healthcare that aims to optimize functioning and reduce disability among individuals experiencing health conditions or injuries. According to the World Health Organization, rehabilitation includes interventions designed to help individuals maintain, restore or improve functioning and independence. The demand for rehabilitation is increasing globally because of population ageing, the increasing prevalence of non-communicable diseases, improved survival from serious illnesses and injuries, and greater recognition of disability and participation limitations.

Physiotherapy focuses primarily on movement, physical function, mobility, strength and balance, while occupational therapy focuses on enabling individuals to participate in meaningful activities and occupations, including self-care, education, employment and social participation. India and South Korea provide contrasting settings for examining rehabilitation because of differences in population structure, healthcare organization, professional regulation and technological development.

II. OBJECTIVES

This review examines the regulatory frameworks governing physiotherapy and occupational therapy in India and South Korea; describes the organization of rehabilitation services; examines available information regarding professionals and facilities;

compares public, private, hospital-based and community-oriented rehabilitation; identifies major barriers affecting access; examines developments in home-based and technology-assisted rehabilitation; and identifies practical opportunities for reciprocal India–South Korea collaboration.

III. METHODOLOGY

This article is a comparative narrative review based on publicly available secondary information. Government publications, national statistical databases, professional and regulatory documents, and peer-reviewed scientific literature relating to rehabilitation, physiotherapy and occupational therapy in India and South Korea were examined.

For India, sources included the Ministry of Health and Family Welfare, National Commission for Allied and Healthcare Professions, Allied and Healthcare Professionals Enrolment Portal, Department of Empowerment of Persons with Disabilities and other relevant public sources. For South Korea, sources included the Korean Statistical Information Service, Ministry of Health and Welfare, Health Insurance Review & Assessment Service and Korean legal information systems.

Because the two countries use different administrative classifications and reporting systems, absolute numbers of facilities and professionals cannot always be directly compared. The review therefore emphasizes system organization, regulation, accessibility, workforce information, service delivery and emerging directions.

IV. PHYSIOTHERAPY AND OCCUPATIONAL THERAPY IN INDIA

The National Commission for Allied and Healthcare Professions Act, 2021 represents an important development in India's regulation of allied and healthcare professions. The framework addresses education, professional standards and regulation of specified allied and healthcare professions, including physiotherapy and occupational therapy.

V. REHABILITATION INFRASTRUCTURE IN INDIA

Rehabilitation services in India are delivered through government hospitals, medical colleges, rehabilitation institutes, disability rehabilitation

services, charitable organizations, private hospitals, private clinics and community-based programmes. The Department of Empowerment of Persons with Disabilities operates the District Disability Rehabilitation Centre programme. However, rehabilitation infrastructure is not represented by one unified national database, limiting the ability to produce a comprehensive public count of all physiotherapy and occupational therapy facilities.

VI. REHABILITATION WORKFORCE IN INDIA

The availability and geographical distribution of rehabilitation professionals are important determinants of accessibility. India's NCAHP framework provides a basis for establishing national standards for allied and healthcare professions. A standardized national database containing the number, professional category, location and practice status of physiotherapists and occupational therapists would assist healthcare authorities in identifying workforce shortages and planning future education and employment requirements.

VII. PHYSIOTHERAPY IN INDIA

Physiotherapy contributes to rehabilitation across numerous clinical areas, including musculoskeletal conditions, neurological disorders, cardiopulmonary disease, sports injuries, paediatric conditions, postoperative recovery and age-related functional decline. Accessibility remains an important consideration, particularly for individuals living in rural and economically underserved communities.

VIII. OCCUPATIONAL THERAPY IN INDIA

Occupational therapy focuses on functional independence and participation in daily life. Occupational therapists may assist individuals with self-care, upper-limb function, cognition, sensory processing, education, work and social participation. A systematic review published in 2021 examined occupational therapy interventions for people with disabilities in India and identified seven randomized controlled trials involving 305 participants.

IX. COMMUNITY-BASED REHABILITATION IN INDIA

Community-based rehabilitation can improve continuity of care by bringing rehabilitation closer to individuals and families. District-level rehabilitation

programmes can support people who may otherwise have difficulty travelling to specialized centres. Community rehabilitation can include functional assessment, therapeutic intervention, assistive devices, education, family training and referral.

X. PRIVATE REHABILITATION SERVICES IN INDIA

Private healthcare represents an important component of rehabilitation delivery in India. Physiotherapy and occupational therapy services may be provided through private hospitals, specialized rehabilitation centres, outpatient clinics and individual practices. A complete publicly accessible national count of physiotherapy and occupational therapy clinics could not be established from available national data.

XI. REHABILITATION IN SOUTH KOREA

South Korea has an established statutory framework governing physical therapists and occupational therapists. The Korean Medical Service Technologists Act recognizes physical therapists and occupational therapists as medical technologists and provides statutory definitions of their professional activities.

XII. REHABILITATION MEDICAL INSTITUTIONS IN SOUTH KOREA

South Korea has developed a designated rehabilitation medical institution system. The Health Insurance Review & Assessment Service establishes criteria concerning designated rehabilitation medical institutions, including facilities, staffing and rehabilitation services. Requirements include dedicated physical therapy, exercise therapy and occupational therapy areas.

XIII. REHABILITATION WORKFORCE IN SOUTH KOREA

Rehabilitation Service Continuum

Assessment	Intervention	Transition	Community	Follow-up
Functional assessment and goal setting	Physiotherapy / Occupational therapy	Hospital → outpatient / home	Participation, education, work and daily activities	Outcome monitoring and long-term support

Figure 1. Rehabilitation can extend from initial assessment and clinical intervention to home-based support, community participation and long-term follow-up.

The Korean Statistical Information Service provides national statistical information concerning healthcare personnel, including physical therapists and occupational therapists. Structured workforce statistics can support healthcare planning and identification of geographical differences in rehabilitation workforce availability.

XIV. PHYSIOTHERAPY IN SOUTH KOREA

Physiotherapy is established across Korean healthcare and rehabilitation institutions. Korean physical therapy practice encompasses neurological, musculoskeletal, paediatric, cardiopulmonary, sports and other clinical areas. Research has also examined standardized outcome measures among Korean physical therapists.

XV. OCCUPATIONAL THERAPY IN SOUTH KOREA

Occupational therapy is an established component of multidisciplinary rehabilitation in South Korea. Occupational therapists contribute to activities-of-daily-living training, functional rehabilitation, self-management, upper-limb rehabilitation, cognitive rehabilitation and participation-focused interventions.

XVI. HOME-BASED REHABILITATION

Home-based rehabilitation can benefit individuals who experience difficulties travelling to healthcare facilities because of mobility limitations, age, disability or geographical distance. South Korean research has investigated home-based rehabilitation following stroke and other neurological conditions. India also has substantial potential for home-based rehabilitation because of its large geographical area and uneven distribution of specialized healthcare services.

XVII. TECHNOLOGY-ASSISTED REHABILITATION

Technology is increasingly influencing rehabilitation practice. Emerging approaches include tele-rehabilitation, virtual reality, wearable sensors, robotic rehabilitation, remote monitoring and digital exercise programmes. Technology-assisted rehabilitation may be particularly useful when geographical or transportation barriers prevent frequent attendance at conventional facilities.

XVIII.COMPARATIVE ANALYSIS OF INDIA AND SOUTH KOREA

India and South Korea have both developed significant rehabilitation systems, but their structures

and challenges differ. India has established an important national regulatory foundation through the NCAHP Act, 2021 and provides rehabilitation through government programmes, hospitals, disability centres and private services. South Korea has an established statutory framework and a structured system of designated rehabilitation medical institutions.

Rather than interpreting these differences as a simple ranking, the comparison provides a basis for identifying complementary strengths. India has significant potential in community-oriented and resource-adapted service delivery, while South Korea provides useful examples of structured institutional rehabilitation, workforce information, health-system organization and technology integration.

Comparative Overview

Feature	India	South Korea
Professional regulation	National framework through the NCAHP Act, 2021.	Established statutory framework for physical therapists and occupational therapists.
Workforce information	National framework exists; more comprehensive location and practice data would strengthen workforce planning.	Structured national statistical information is available for healthcare personnel.
Institutional rehabilitation	Services are delivered through government, private, disability and community settings.	Designated rehabilitation medical institution system provides structured institutional rehabilitation.
Community & home rehabilitation	Strong opportunity to expand access, especially across rural and underserved areas.	Increasing relevance with population ageing, chronic disease and the need for continuity of care.
Technology-assisted rehabilitation	High potential for scalable and affordable digital and remote rehabilitation models.	Strong opportunity for technology, research and innovation partnerships.

Table 1. Qualitative comparison of selected rehabilitation-system features. The comparison is descriptive and does not represent healthcare quality, effectiveness or a direct ranking of the two countries.

XIX. ACCESSIBILITY AND EQUITY

Accessibility is a central issue in rehabilitation. In India, geographical distance and differences in healthcare infrastructure can make rehabilitation difficult to access for rural populations. In South Korea, comparatively structured rehabilitation services that extend beyond specialized hospitals can connect clinical care with home and community settings. Both countries require rehabilitation services that extend beyond specialized hospitals and

connect clinical care with home and community settings.

XX. FUTURE DIRECTIONS

The future development of rehabilitation in India and South Korea should move beyond the expansion of individual services toward integrated, accessible and evidence-informed rehabilitation systems. Both countries have different healthcare structures, population needs and available resources, but these differences create opportunities for mutual learning.

For India, future priorities include strengthening rehabilitation within primary and community healthcare, improving the availability and distribution of rehabilitation professionals, developing standardized workforce information, expanding home- and community-based services, and increasing access to technology-assisted rehabilitation. Tele-rehabilitation, mobile health applications and remote monitoring may be particularly valuable in geographically dispersed and underserved populations.

South Korea can continue to strengthen community and home-based rehabilitation, particularly in response to population ageing and the increasing burden of chronic disease and long-term functional limitations. Greater emphasis on continuity between institutional rehabilitation, home care and community participation may help extend rehabilitation beyond specialized facilities.

Both countries can also strengthen rehabilitation research through standardized outcome measurement, longitudinal data collection and multidisciplinary research involving physiotherapists, occupational therapists, physicians, engineers, public-health professionals and rehabilitation users.

XXI. OPPORTUNITIES FOR INDIA–SOUTH KOREA COLLABORATION

India and South Korea can contribute complementary strengths to the development of rehabilitation services. Rather than viewing one country's system as a model that should simply be transferred to the other, bilateral cooperation can focus on adapting successful approaches to each country's healthcare, economic and demographic context.

21.1 What India Can Learn from South Korea

India can learn from South Korea's structured approach to rehabilitation institutions, health-system organization, rehabilitation workforce information and technology-supported care. South Korea's experience with designated rehabilitation medical institutions and health-insurance mechanisms provides useful examples for examining how rehabilitation services can be organized, monitored and integrated within a broader healthcare system. India could adapt these principles by developing stronger rehabilitation referral pathways,

standardized service indicators and better national information on rehabilitation professionals and services. However, such approaches should be adapted to India's geographical diversity and resource variation rather than directly replicated.

21.2 What South Korea Can Learn from India

South Korea can also benefit from India's experience with delivering healthcare across highly diverse geographical and socioeconomic settings. India's emphasis on community-based, district-level disability services, family participation and resource-conscious healthcare approaches offers useful perspectives for extending rehabilitation beyond specialized institutions.

India's experience with low-cost and digitally enabled healthcare approaches may also provide opportunities for South Korean researchers and institutions to explore rehabilitation models that are scalable, home-oriented and responsive to the needs of people living outside major medical centres.

21.3 From Knowledge Exchange to Practical Implementation

Bilateral cooperation should move beyond academic discussion and be translated into measurable pilot programmes. One practical approach would be to establish India–South Korea rehabilitation research partnerships involving universities, rehabilitation hospitals, professional organizations and public-health institutions.

- Joint rehabilitation research: Researchers from both countries could conduct comparative studies on neurological, paediatric, geriatric and musculoskeletal rehabilitation.
- Tele-rehabilitation projects: Korean technological expertise could be combined with India's experience in delivering healthcare across geographically diverse populations to develop affordable remote rehabilitation models.
- Assistive-technology development: Engineers, physiotherapists and occupational therapists from both countries could collaborate on affordable and context-specific assistive technologies.
- Professional and student exchange: Short-term academic exchanges, workshops and clinical-observation programmes could allow rehabilitation students and professionals to learn from different healthcare environments.
- Community rehabilitation pilots: Selected Indian districts and Korean communities could develop pilot programmes integrating rehabilitation with primary

healthcare, home-based care and community participation.

- Shared outcome measurement: Both countries could develop common rehabilitation outcome indicators to evaluate functional improvement, participation, quality of life, accessibility and continuity of care.
- Technology transfer with adaptation: Technology developed in South Korea could be evaluated in Indian settings for affordability and scalability, while India's experience with resource-adapted service delivery could inform more community-oriented Korean rehabilitation models.

Implementation should follow a pilot–evaluation–adaptation model. A programme should first be tested in a defined population, evaluated using measurable outcomes, modified according to local requirements and then considered for wider implementation. This approach reduces the risk of transferring healthcare models without considering differences in population, infrastructure, financing and workforce.

21.4 A Shared Vision for Rehabilitation

The long-term objective of India–South Korea cooperation should not be the duplication of either country's healthcare system. Instead, it should be the development of a shared rehabilitation framework based on accessibility, innovation, affordability, professional collaboration and patient-centred care.

India can contribute experience in community-oriented and resource-adapted healthcare delivery, while South Korea can contribute experience in structured rehabilitation institutions, health-system organization, technology and research infrastructure. Combining these strengths could support rehabilitation models that are both technologically progressive and socially accessible.

Such collaboration would also contribute to the broader international objective of strengthening rehabilitation as an essential component of health systems.

XXII. SCOPE AND METHODOLOGICAL CONSIDERATIONS

This review was designed as a comparative narrative analysis using publicly available secondary information from governmental, institutional, professional and scientific sources. Because India and South Korea use different administrative classifications and reporting systems, direct

numerical comparison of all rehabilitation facilities and professionals is not always possible.

Accordingly, the comparison focuses primarily on organization, regulation, accessibility, workforce information, service delivery and emerging directions rather than attempting to rank the two healthcare systems.

Future research can build upon this review through primary data collection, interviews with rehabilitation professionals, patient perspectives, facility-level surveys and comparative health-system datasets. Such research would allow more detailed evaluation of rehabilitation outcomes, costs, workforce distribution and service accessibility in both countries.

XXIII. CONCLUSION

Rehabilitation is increasingly important as populations age, chronic diseases increase and more individuals live with long-term functional limitations. India and South Korea have developed significant rehabilitation capacities, but their systems have evolved under different demographic, economic and healthcare environments.

The comparison presented in this review suggests that the relationship between the two countries should not be viewed simply in terms of one country learning from the other. Instead, India and South Korea have complementary experiences that can support mutual learning.

India can draw lessons from South Korea's structured rehabilitation institutions, workforce systems, health-insurance mechanisms, research capacity and technology-assisted approaches. South Korea, meanwhile, can gain insights from India's experience with community-oriented rehabilitation, family participation, geographically distributed healthcare and resource-conscious approaches.

The most valuable form of cooperation would therefore be practical and reciprocal. Joint research, professional exchange, tele-rehabilitation, assistive-technology development, community-based pilot programmes and shared outcome measurement could transform bilateral knowledge exchange into tangible improvements in rehabilitation services.

Ultimately, rehabilitation should extend beyond specialized hospitals and become a continuous component of healthcare that connects clinical

intervention with home, community participation and long-term follow-up. India–South Korea collaboration can contribute to this vision by combining technological innovation with accessibility, community engagement and patient-centred care.

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