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REVIEW ARTICLE

Integrated approaches to advancing rehabilitation in primary healthcare in Bangladesh: A narrative review

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Abstract

Background: Rehabilitation is a core component of universal health coverage, yet it remains inadequately integrated into primary healthcare systems in many low- and middle-income countries, limiting early intervention, functional recovery, and long-term quality of life. This study aims to explore global models and innovative strategies for strengthening the integration of rehabilitation into primary healthcare in Bangladesh to inform context-appropriate policy and service reforms.

Methods: A narrative review was conducted using a structured literature search of major bibliographic databases (Sciverse Scopus, PubMed, Embase, Web of Science, and Cochrane Library) and World Health Organization institutional repositories for literature published between 2014 and 2025. The search terms covered rehabilitation integration, primary healthcare, health system strengthening, and technological innovations. Studies from global and low- and middle-income countries were prioritised. Study selection and screening followed a structured selection process, and the included studies were thematically synthesized to develop a context-specific framework for Bangladesh.

Results: Physical disabilities represent a significant share of rehabilitation needs; however, access to and the quality of available rehabilitation services remain limited. In Bangladesh, service provision is primarily influenced by three factors: inadequate physical infrastructure, shortages of trained personnel, and insufficient financing, which contribute to the concentration of services in urban areas. Although community-based rehabilitation initiatives have demonstrated improved service reach and acceptability, the integration of physical and mental health rehabilitation within primary healthcare remains limited. International experiences, including Chile's comprehensive rehabilitation system and selected models from the Brazil, Russia, India, China, South Africa countries, highlight effective approaches to integrating rehabilitation into primary healthcare. Technological applications, particularly telerehabilitation and other low-cost digital platforms, have the potential to expand access to services.

Conclusion: Strengthening rehabilitation in Bangladesh's primary health care requires integrating basic services, training health workers, and establishing referral pathways, alongside expanding low-cost digital and community-based care to improve access in underserved areas.

Key messages

The integration of rehabilitation into primary healthcare requires systematic policy changes, workforce development, and technological innovation. Global lessons from the World Health Organization Rehabilitation 2030 initiative experience from low and middle income countries, combined with emerging technologies such as telemedicine and robotics, offer promising pathways to strengthen Bangladesh's rehabilitation services within the framework of universal health coverage.

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Introduction

Rehabilitation addresses a person's physical, mental, and social limitations caused by ageing or medical conditions like an acute or chronic illness, disorder, accident, or trauma [1]. Rehabilitation may be needed regardless of age, gender, or socioeconomic status [2]. Rehabilitation helps individuals recognize and manage their impairments and maintaining their independence and engaging in meaningful activities of daily living (ADLs), such as work and school [3].

The World Health Organization's (WHO's) 2022 World Rehabilitation Alliance (WRA) serves as a global network of stakeholders advocating for the Rehabilitation 2030 Initiative and promoting the integration of rehabilitation services into healthcare systems [4]. The global demand for rehabilitative services is becoming more apparent. One in every three persons needs rehabilitation during illness or injury worldwide [5]. The 2022 world report on health equity for persons with disabilities estimates that 1.3 billion people, or 16% of the global population, experience moderate to severe medical disabilities [6].

The estimated prevalence of disabilities in Bangladesh is 14% [7]. Rural women and the elderly people have higher disability rates [8]. The most common disabilities include Vision impairment had the highest incidence of disability (29.1%), followed by hearing impairment (16.5%), mobility problems (14.7%), and any other condition that prevented engagement in paid work (1.6%) [9]. Additionally, there is a greater need for rehabilitation services in Bangladesh due to the high prevalence of chronic and incapacitating illnesses [10].

Many individuals lack access to rehabilitation treatment [11]. Primary healthcare (PHC) system has not been aligned include rehabilitation policies as essential to universal health care [12, 13]. Health policy, planning, and rehabilitation decision-making require more local evidence to plan, fund, administer, and oversee high-quality rehabilitation services, including staffing and infrastructure, for those in need. This narrative study integrates worldwide approaches for integrating rehabilitation into primary healthcare and examines pertinent technological advancements to propose a contextualised implementation framework for Bangladesh.

Methods

We report the steps taken to conduct a comprehensive narrative review of global strategies for rehabilitation integration and technological innovations suitable for Bangladesh's healthcare context.

Search strategy

A comprehensive literature search was conducted across major electronic databases, including SciVerse Scopus, PubMed, Embase, Cochrane Library, Web of Science, and WHO institutional repositories. The search was conducted across published articles from 2014 to 2025. A combination of keywords, including "rehabilitation," "PHC" "health system integration," "WHO Rehabilitation 2030," "telemedicine," "virtual reality," "robotics," "mobile health," "Bangladesh," were used. Low- and middle-income countries (LMIC) studies. Bangladesh-relevant literature was selectively gathered from in-country databases and targeted websites.

The literature was screened in stages, including duplicate removal, preliminary title and abstract review, and full-text assessment for relevance to rehabilitation integration and technological innovations in LMIC settings.

Information synthesis

Relevant literature on the integration of rehabilitation services across PHC, and community-based healthcare systems, as well as technological innovations that support rehabilitation delivery in LMICs, including Bangladesh, was reviewed. We looked at new technologies also that can help with rehabilitation in LMICs, like Bangladesh. We synthesised information from the selected literature into a narrative, focusing on rehabilitation integration models, implementation strategies, technological applications, policy alignment, feasibility, scalability, and health system performance outcomes. Special care was taken to find patterns in success factors, barriers to implementation, and system-level strategies that could help improve rehabilitation services in LMIC health systems.

No statistical analysis was conducted, and the results were examined through thematic synthesis and comparison with global models.

Thematic synthesis

The study was designed as a narrative review informed by a thematic synthesis. The narrative technique was used to include empirical studies, policy documents, and grey literature to compare worldwide rehabilitation approaches and technology advancements relevant to Bangladesh's health system. A thorough search and organised screening procedure found relevant material, but narrative interpretation and synthesis focused on conceptual relevance, implementation insights, and policy applicability rather than quantitative effect size.

Results

Findings from the LMICs, specially BRICS countries (Brazil, Russia, India, China, South Africa), are summarised and presented below **(Table 1)**.

Chile's comprehensive approach

Health disorders that benefit from rehabilitation account for at least 50% of all disability-adjusted life years [14]. The WHO has identified Chile's 2004 pilot programme, which included rehabilitation services in PHC, as a practical example of removing obstacles to integrating PHC rehabilitation [14]. The Chilean Ministry of Health funded and implemented the

Comprehensive Rehabilitation Programme in the Health Network in 2007, including the first Comprehensive Rehabilitation Programme in PHC (RehabPHC) as a major innovation [14].

RehabPHC uses three strategies to provide services: Rural rehabilitation teams, integrative rehabilitation rooms, and community rehabilitation rooms [14, 15]. Chile's 2004 pilot programme that successfully integrated rehabilitation into PHC has important implications for Bangladesh .

Among African countries Rwanda is another good example. Rwanda has been engaging community health data use tables that has led to wider population coverage [16, 17].

BRICS experience

The BRICS nations offer important insights for Bangladesh, as India's mHealth applications for physiotherapy [18,19] and Brazil's community-oriented rehabilitation frameworks provide potential solutions, particularly in rural regions with limited access to healthcare [20, 21]. Some consider rehabilitation as a dynamic and complex notion that requires multidisciplinary cooperation to adapt to changing sociopolitical discourse that impacts disabled people [22]. The BRICS countries are implementing healthcare reforms to reach universal health coverage [23]. Community-based health professionals provide PHC services with limited training within the public health systems of these nations [24, 25]. In India Public–private partnerships integrate rehabilitation into primary health care, supported by mHealth apps for physiotherapy guidance and progress tracking, leading to improved adherence and patient monitoring; emphasizes scalable, low-cost mobile platforms [26, 27]. China integrated Rehabilitation into community health centres, using virtual reality and robotics-assisted therapies, resulting in effective post-stroke and musculoskeletal recovery and scalable tele-rehabilitation platforms [28, 29].

Exploding technology in rehabilitation

It marks a major change in how healthcare providers deliver rehabilitation treatments, leveraging digital tools, data-driven insights, and improved communication to enhance patient outcomes [30]. This paradigm shift affects diagnosis, treatment planning, therapy, data management, interdisciplinary collaboration, remote monitoring, and patient participation [31]. Findings are presented in **Table 2.**

Telerehabilitation

Telemedicine has enabled medical experts to assess, diagnose, and treat patients in remote areas it includes remote patient monitoring, real-time video consultations, and digital platforms for doctor-patient communication [32]. Telerehabilitation, a branch of telemedicine, is the technique of remotely overseeing rehabilitation [33]. Multiple studies reported that telerehabilitation produced outcomes comparable to in-person therapy in stroke and musculoskeletal rehabilitation [34, 35, 36] with comparable patients satisfaction [37].

Key technologies

Neuropsychological rehabilitation simulates real-world events and creates compensating mechanisms through cognitive simulations and computerised examinations [38]. The "NeuroVR" system is a sophisticated technology that enhances flow and presence, empowering patients throughout rehabilitation [39]. Only platforms offer secure video conferencing for medical and educational consultations [40]. Wearable sensors Enable real-time

Table 1 Best practices in Chile and BRICS[a] countries on technological innovations in rehabilitation within primary healthcare (PHC)

Country/ region	Integration model	Key technological innovation	Outcomes / impact	Lessons for Bangladesh	Reference
Brazil	Community-based rehabilitation integrated into Family Health Strategy	Tele-rehabilitation through community clinics and mobile units	Better continuity of service and increased access to rehabilitation for remote people	Integrate rehabilitative services into mobile outreach initiatives and community health stations.	20, 21
Chile	Rehabilitation integrated into PHC network	Tele-rehabilitation and digital health platforms.	Improved access, service coverage, and continuity of care.	Strengthen PHC-based tele-rehabilitation systems nation-wide	14, 15
China	Integration of rehabilitation into community health centres	Virtual reality and robotics-assisted motor rehabilitation	Effective post-stroke and musculoskeletal recovery; scalable tele-platforms	Pilot low-cost virtual reality and telerehabilitation models in district hospitals	28, 29
India	Public–private partnerships for rehabilitation centres at primary health care level	mHealth apps for physiotherapy guidance and progress tracking	Enhanced adherence and patient monitoring	Develop low-cost mobile rehabilitation platforms through local telecom networks	26 ,27
Russia	Rehabilitation integrated into polyclinics and state health system	Tele-rehabilitation and artificial intelligence-supported diagnostic tools	Improved access, early diagnosis, and remote therapy delivery.	Introduce AI-supported screening and tele-rehabilitation in PHC	24, 25
South Africa	Community-based rehabilitation linked with PHC outreach	Mobile health (mHealth) and tele-rehabilitation services	Increased access in underserved and rural populations	Use community health workers with mobile-based rehab support	18, 19

[a]Brazil, Russia, India, China, South Africa

tracking of motion, gait, and muscle activity, improving adherence and clinician monitoring [41, 42]. The mHealth apps Support patient education, reminders, and self-management, enhancing adherence in low-resource settings [43, 44]. Artificial intelligence tools: Enable personalized exercise recommendations and predictive outcomes, supporting precision rehabilitation [45– 47]

Robotics and assistive technology

Robotic technology may transform rehabilitation facilities and enhance patient outcomes by providing accurate, repetitive, and task-specific therapies [48]. Robotic technology, including exoskeletons, assisted training tools, and brain-computer interface systems, can promote patient autonomy and functional rehabilitation [49– 51]. One popular technique in rehabilitation, particularly for regaining motor abilities, is robotic mechanotherapy [52]. According to the study, robotic therapy may greatly enhance dexterity, strength, coordination, and motor function. Robotic gadgets also increase neuroplasticity by helping patients restore motor skills through frequent, precise, and regulated exercises. Additionally, home-based stroke rehabilitation uses robotic technologies to enable patients to participate in treatment outside clinical settings [53]. Robot-assisted arm training has shown potential to enhance post-stroke ADLs, arm function, and arm muscle strength [54]. Virtual reality and robot-assisted therapy are promising alternative treatments for motor function and quality of life. The computer-patient interface in virtual reality treatment simulates environmental interactions using hardware and software [55, 56]. This enables the development of sensory connections that closely resemble reality, with the additional advantages of instantaneous feedback and simultaneous task execution [57]. Robot -assisted therapy has shown potential to restore lost motor function or compensate for deficits after stroke [58].

Implementation barriers and facilitators

Implementation of telerehabilitation, VR, robotics and other digital tools is influenced by health system factors at multiple levels. Key barriers are poor infrastructure and connectivity, insecure or complex platforms, limited digital skills among providers and patients, higher perceived workload, and inadequate funding and reimbursement. At the policy level, scale‐up is constrained by weak integration of rehabilitation into national health systems, fragmented governance, and unclear legal and regulatory frameworks (e.g. data protection, liability). Facilitators include strong leadership and local "champions", supportive national policies and financing for rehabilitation and assistive technologies, intersectoral collaboration, provider training and support, and technologies that are familiar, easy to use, and clearly beneficial to patients and professionals [59, 60].

Bangladesh-specific considerations

Rehabilitation services in Bangladesh are fragmented, urban-focused, and poorly integrated into PHC. The WHO's Rehabilitation 2030 Initiative is timely global initiative and relevant for improving service delivery. It addresses national health system constraints and growing rehabilitation needs through political leadership, integration into universal health coverage and PHC, workforce development, and scalable service models.

Current healthcare infrastructure

PHC infrastructure in urban and area should be described. The PHC is delivered in the urban areas primarily by city corporations and municipal facilities, such as urban primary health centres, ward level clinics, and NGO clinics with provision of basic outpatient care, MCH, immunization, family planning, and limited NCD care with referral to tertiary hospitals. Services are disjointed, with disability friendly infrastructure lacking, despite being better geographically available [61, 62].

Table 2 Technological advances in rehabilitation relevant to primary healthcare (PHC) in low- and middle-income countries

Technology type	Function/ application	Evidence of effectiveness	Potential barriers	Feasible adaptation strategies	Reference
Tele-rehabilitation platforms	Remote therapy sessions and monitoring	Effective for stroke, orthopedic, and post-coronavirus disease patients	Internet connectivity, cost, lack of training	Use mobile-based low-bandwidth platforms; integrate with government e-health initiatives	15, 18, 21, 26, 35, 36
Wearable sensors	Track motion, gait, and muscle activity	Enhances patient adherence and clinician monitoring	Device cost and maintenance	Develop affordable local devices; academic–industry collaboration	28, 29, 41, 42
Virtual/ augmented reality	Cognitive and motor function training	Increases motivation and functional recovery	Equipment cost, technical expertise	Simplify using smartphone-based virtual solutions	29, 56
Robotics and exoskeletons	Support for motor rehabilitation and strength training	High efficacy in controlled trials	High cost, electricity need	Introduce low-cost mechanical aids before robotics	29, 50, 51
Artificial intelligence tools	Personalized exercise recommendations, predictive outcomes	Emerging evidence supports precision rehab	Limited data systems and workforce skill	Train health workers; integrate AI modules in PHC digital systems	45, 46, 47
Mobile health (mHealth) apps	Patient education, reminders, self-management	Proven to improve adherence in low- and middle-income countries	Digital literacy, language barriers	Develop apps in Bangla with voice guidance and community support	18, 26, 43, 44

PHC is structured in the rural setting in terms of community clinics, union health and family welfare centres, and upazila health complexes that provide 24/7 outpatient and inpatient services, as well as basic preventive/curative care, as referral centres. Despite a broad coverage, lack of trained personnel, rehabilitation, and disability inclusive infrastructure constrain effective access by people with disabilities [62, 63].

Over 20 million handicapped people live in Bangladesh, 10% of whom have major mobility, self-care, and daily life issues at home and work [64]. There has been much discussion over the prevalence of disability statistics. The estimated prevalence of disability is 14% [7]. Rural, elderly, and female residents have higher disability rates. Bangladesh Disability Classification includes autism, cerebral palsy, Down syndrome, multiple impairments, and physical, psychological, visual, verbal, intellectual, hearing, and hearing-visual diseases. Physical restrictions predominate (22.5%) [65].

Health bulletin Directorate General of Health Services 2017 shows 5.34 doctors per 10,000 and 93,763 registered physicians. The DGHS lists 5630 public and private hospitals with 137,024 beds. Metropolitan areas employ most doctors. Only 2.8% of earnings go to health care [66].

Community-based rehabilitation (CBR) initiatives like Bangladesh's Promotion of Human Rights of Persons with Disabilities combine mental health therapies. Stigma and accessibility remain issues [67].

Social businesses as long-term rehabilitation models have been studied. A rural Bangladesh case study showed how these models might provide early intervention and rehabilitation services, sustaining revenues beyond setup expenses [68]. This review suggests a five-stage model of enhancing rehabilitation services in Bangladesh based on synthesis of the global models and technological innovations **(Table 3)** . The Framework represents a five-phase strategic framework for integrating rehabilitation into Bangladesh's PHC system. The phases are: (I) Institutionalization of rehabilitation in PHC [15, 69, 70]; (II) Capacity and workforce development [21, 71, 72]; (III) Technological innovation through cost-effective digital tools [18, 26, 73, 74]; (IV) Implementation and nationwide scale-up [20, 26, 75, 76]; and (V) long-term sustainability through monitoring and evaluation [77, 78, 79, 80]. For each phase, the table lists strategic focus, key actions, core stakeholders (e.g., MoHFW, DGHS, universities, NGOs, ICT Division), expected outcomes, and potential challenges such as funding constraints, workforce migration, and digital literacy gaps.

Bangladesh could overcome problems such as limited access in rural areas and a shortage of workers by using strategies like Rural Rehabilitation Teams and Integrative Rehabilitation Rooms, especially in areas that don't get enough help.

Table 3 Suggested framework for primary health care (PHC) system in Bangladesh

Phase	Strategic focus	Key actions	Evidence base	Core stakeholders	Expected outcomes	Potential challenges	Reference
Phase I: integration	Institutionalize rehabilitation in primary health care	Develop national policy; establish referral pathways; include rehab in Essential Service Package; train CHWs in basic screening	Chile PHC integration model demonstrating successful system-level inclusion	MoHFW, DGHS, NGOs, professional associations	Formal inclusion of rehab in PHC; improved early access and continuity of care	Lack of policy priority, limited workforce, funding constraints	15, 69, 70
Phase II: capacity and workforce development	Strengthen human resources and training systems	Integrate rehab modules into curricula; short training for physiotherapists and rehab assistants; promote task-shifting	BRICS workforce models an task-shifting approaches; HPSR evidence	Universities, training institutes, Bangladesh Physiotherapy Association, NGOs	Skilled human resources, better service quality	Workforce migration, limited institutional collaboration	21, 71, 72
Phase III: technological innovation	Introduce cost-effective digital and assistive technologies	Pilot tele-rehab and mobile apps; deploy low-cost wearables; collaborate with local startups	Tele-rehabilitation and mHealth evidence showing effectiveness and feasibility	ICT Division, startups, telecom operators, academia	Improved accessibility and patient engagement	Cost, internet connectivity, digital literacy	18, 26., 73, 74
Phase IV: implementation and scale-up	Expand proven rehabilitation innovations nationwide	Integrate digital rehab into PHC systems; establish teleconsult hubs; ensure public–private partnerships	Community-based rehabilitation scale-up models; WHO system strengthening	MoHFW, DGHS, private providers, donor agencies	Equitable access across rural and urban settings	Fragmented implementation, lack of coordination	20, 26, 75, 76
Phase V: sustainability and evaluation	Institutionalize innovation within health system	Create monitoring indicators; conduct cost-effectiveness evaluations; secure sustainable financing; foster research–policy partnerships	Digital monitoring, AI-based tools; economic and policy evidence	Health Economics Unit, universities, NIPORT, development partners	Long-term sustainability, evidence-driven policy, improved functional outcomes	Insufficient evaluation capacity, short-term funding, data gaps	77, 78, 79, 80

CHW indicates community health worker; MoHFW, Ministry of Health and Family Welfare; DGHS, Directorate General of Health Services; NGO, non-governmental organization; PHC, primary health care; ICT, information and communication technology; NIPORT, National Institute of Population Research and Training; HPSR, health policy and systems research; BRICS, Brazil, Russia, India, China, South Africa

Discussion

This review explores LMIC rehabilitation technologies using multi-country evidence. Policy-focused, it aligns with the WHO Rehabilitation 2030 framework and Bangladesh's health system needs. A structured literature search and screening approach guided the narrative synthesis, increasing transparency.

Synthesis of global lessons

The Rehabilitation 2030 Call for Action was issued by the WHO [81]. This initiative aims to strengthen health systems to deliver rehabilitation and ensure service availability at all levels and across the continuum [82]. Health Policy and Systems Research (HPSR) studies how health systems and policies affect health determinants using health and social sciences. Evidence shows its usefulness in rehabilitation, prompting health system officials and policymakers to pay more attention. Rehabilitation is rarely provided at all levels of care and is generally considered as a disability service provided in external facilities [81].

The most pressing issue is probably workforce development, which calls for creative solutions beyond the conventional professional training paradigm [83]. Health governance and human resource systems must be strengthened to address workforce concerns and transform the health system.

The WHO created the CBR strategy to help disabled persons in low- and middle-income countries access rehabilitation services [84]. The CBR technique complements the infrastructure of Bangladeshi community health workers and may help expand rehabilitation services [85].

The approaches to rehabilitative integration into the PHC are diverse international but their role in the health system of Bangladesh is obvious. Just like most of the LMICs, Bangladesh is facing a problem of manpower shortages, inadequate infrastructure, and unequal distribution of rehabilitation services. Chile, Brazil, and Rwanda have integrated rehabilitation in PHC using a community-based service provision, sharing of tasks with community health professionals, and digital health technologies. The local adaptation of these ideas can be done through the PHC network and increasing digital infrastructure that Bangladesh has.

Technology integration opportunities

Technological advancements offer previously unprecedented possibilities to address Bangladesh's rehabilitation challenges, but practicality and sustainability must be considered [86]. In PHC settings, procurement, supply chain reliability, maintenance expenses, and specialized and recurrent human resource training limit advanced robotics, exoskeletons, and immersive virtual reality systems. Bangladesh benefits from low-cost, scalable telemedicine platforms, mobile-based telerehabilitation software, and simple digital monitoring tools. PHC infrastructure can combine these technologies to improve health worker task-sharing, expand rehabilitation services in rural and underserved areas, and reduce long-term financial and operational expenses. Thus, Bangladesh's PHC system must prioritise inexpensive and context-appropriate digital advances to continue rehabilitative services.

The COVID-19 pandemic demonstrated that telehealth could be effective in Bangladesh, as evidenced by the success of other experimental projects [87]. Sustainable adoption requires infrastructure improvements, regulatory frameworks, and interaction with existing health services. [88]. Clinical trials, treatment plans, and devices are developed by scientists. Robotics and sensor-based assistive devices promote clinical rehabilitation, although PHC in LMIC rarely uses them [89]. Bangladesh's high smart phone user rates and growing internet access make mobile health apps appealing. However, regulatory oversight of integration with official health services and quality assurance remains necessary [90].

Cost-effectiveness

Rehabilitation programmes consistently have good cost-effectiveness ratios, especially when considering societal benefits like reduced disability, better production, and improved quality of life [91]. Studies have shown that telerehabilitation may reduce patient expenses by 40–60% while maintaining therapeutic effectiveness, making it a very cost-effective option [92].

Bangladesh healthcare cost-effectiveness studies should incorporate direct costs and economic effects including reduced caregiver stress, improved work performance, and prevented secondary problems [93]. Workforce development and rehabilitation infrastructure investments in the long run increase economic output and population health [93].

Challenges

Many obstacles must be overcome for proper implementation. Resource limits need innovative funding and prioritising of low-cost, high-impact treatments [94]. Prioritise building stable power and internet in medical institutes, especially isolated ones [95].

Workforce growth: Insufficient training, career incentives, and urban-rural disparities hinder workforce growth. Rural enrollment and health professional training colleges have suffered from urban migration. This issue exposes a policy implementation gap that must be addressed promptly to improve rural school operations [96].

Limited technology access: Recognizing rural healthcare shortages and educating doctors on AI robotics and other technology use ensures technological uptake in these systems [97].

Quality assurance: As task shifting and technology-enabled delivery expand services, quality assurance is another major concern [98]. It is crucial to develop appropriate standards, monitoring programmes, and processes for ongoing quality improvement [99].

Limitations

The narrative review design precludes quantitative synthesis or meta-analysis. Heterogeneity of included

sources limits direct comparability across interventions and settings. In addition, English only literature may have obscured local evidence in many countries.

Conclusion

The PHC system in Bangladesh should incorporate rehabilitation via policy and service interventions. These involve incorporating basic rehabilitation services into the Essential Service Package, establishing referral channels among various levels of PHC, and educating community health workers on screening and offering basic rehabilitation services. By including more affordable solutions, such as telerehabilitation through mobile devices, and mHealth apps in Bangla, it is possible to make it easier to obtain assistance, particularly in rural locations. Community-based rehabilitation teams and district-level rehabilitation units are pilot programmes that should be increased nationwide, depending on their effectiveness. The long-term inclusion of rehabilitation services in PHC requires strengthening continuous collaboration among the health, social welfare, and ICT sectors, along with established monitoring frameworks and secured funding.

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Author contributions

Conception and design, or design of the research; or the acquisition, analysis, or interpretation of data: MAKA, MMR, AP. *Drafting the manuscript or revising it critically for important intellectual content:* FHN, GFR, MZH, MAKA. *Final approval of the version to be published:* AP, FHN, MMR, GFR, MZH, MAKA. *Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved:* AP, FHN, MMR, GFR, MZH, MAKA.

Conflict of interest

We do not have any conflict of interest.

Data availability statement

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

Supplementary file

None

AI disclosure

The authors did not use any AI tools in the preparation of this work.

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