

### Title: [Integrated approaches to advancing rehabilitation in primary healthcare in Bangladesh: A narrative review](#)

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Reviewer A: Palash Chandra Banik, [ORCID: 0000-0003-2395-9049](#), [COI: None](#), [AI disclosure: None](#)

1. **Comment** Please provide your comments on the following box. Author should respond to these comments including the line numbers where the changes have been done in the revised manuscript. Clarify the methodological approach. Either commit to a systematic review or revise the text to accurately describe a narrative review informed by a systematic search, removing the explicit claim of PRISMA adherence. Restructure the Results section to present synthesized findings from the literature, moving all interpretive and context-specific commentary (e.g., on technology suitability for Bangladesh, cost-effectiveness) to the Discussion. Strengthen the discussion by using it to critically analyze the results, compare and contrast the presented models, and explicitly build the argument for the five-phase framework proposed for Bangladesh.

**Author response:** Thank you for your valuable comment. We would like to clarify that our article is a narrative review informed by a comprehensive, systematic literature search. We have revised the text to accurately reflect this methodological approach and removed any explicit claims of adherence to PRISMA.

2. **Comment** Please, correct the methodological error in the screening process (Step 2). Improve the connection between the Bangladesh-specific data and the global lessons to make the synthesis more powerful. Proofread the manuscript to shorten complex sentences and improve overall flow.

**Author response:** Thank you for the helpful suggestions. The methodological description of the screening process has been corrected and clarified. The connections between Bangladesh-specific data and global lessons have been strengthened to improve the overall synthesis. The manuscript has also been carefully proofread to improve sentence structure, clarity, and overall readability.

3. **Comment** Please comment on the quality and appropriateness of the data visuals (tables, figures, images, etc.), if any. The tables are excellent and significantly enhance the manuscript. They are a primary strength. The only visual that presents an issue is the PRISMA flow diagram, and that issue is entirely methodological rather than a problem with the visual itself. Addressing the methodological inconsistency will resolve the concern regarding this figure.

**Author response:** Thank you for the positive feedback regarding the tables. In response to the methodological concern, the figure has been revised to present a general literature search flowchart, and references to PRISMA have been removed to ensure consistency with the narrative review design.

4. **Comment** Please comment whether the references are appropriate and up-to-date. The references are highly appropriate for the manuscript's topic and scope. They successfully blend global policy, cutting-edge technological research, and context-specific evidence from LMICs and Bangladesh. While a handful of older references could potentially be updated, the overall reference list is current, comprehensive, and of high quality. It provides a solid evidentiary base for the arguments and the proposed framework.

**Author response:** Thank you for the constructive feedback. The reference list has been carefully reviewed and updated where appropriate to ensure accuracy, relevance, and consistency with the scope of the manuscript.

5. **Comment** Please comment on the clarity, readability, and overall standard of English of the manuscript, and indicate whether language editing is required. Professional language editing is strongly recommended.

**Author response:** Thank you for the recommendation. The manuscript has undergone careful language editing to improve clarity, readability, and the overall standard of English throughout the text.

Reviewer B: Taslim Uddin, [ORCID: 0000-0002-2884-9212](#), [COI: None](#), [AI disclosure: None](#)

6. **Comment** Please provide your comments on the following box. Author should respond to these comments, including the line numbers where the changes have been made in the revised manuscript  
Title: appears too long and not specifically focused

**Author response:** Thank you for the suggestion. The title was carefully reconsidered; however, it was retained as it accurately reflects the scope of the review, highlighting both global approaches and their relevance to strengthening rehabilitation within primary healthcare in Bangladesh.

**7. Comment** Background/Introduction and Objective of the Review: Introduction :I did not find a clear topic, explanation of significance, or previous studies; it highlights the recent developments and reasoning, narrowing the scope and aim of the review. For example, in the sentence 'Rehabilitation reduces a person's awareness of impairment and maximizes functioning to reduce the impact of health issues on daily living' I could not understand the meaning of the text. Inconsistent disability statistics were used eg. "Estimated prevalence of disabilities in Bangladesh is 3%", "Over 20 million people", "Estimated prevalence 14%." This will create confusion among the readers of the article.

**Author response:** Thank you for the valuable comments. The Introduction has been revised to clearly present the topic, significance, and objectives of the review. The previously unclear sentence describing the role of rehabilitation has been rephrased for clarity. In addition, disability statistics have been reviewed and clarified with appropriate references to ensure consistency and avoid confusion for readers.

**8. Comment** The objective is unclear. "...assess the state of PwD rehabilitation services" is vague. It does not specify which aspects are being assessed (availability, accessibility, quality, capacity, policy environment, etc.). d. Methods: PwD should be defined at first use in the manuscript. Considering six elements is vague: It does not clearly indicate whether the elements were framework components, analytical domains, or assessment criteria. For clarity, precise wording may be as such: "using the six components of..." / "guided by the six domains of..." / "based on the six building blocks of...". More, Reference number 7 does not match to the text what the authors meant for. There was a narrative review vs systematic review confusion throughout in the text, the authors need to clarify each component adequately for reproduction. incomplete search Strategy and there were missing search strings, Boolean operators etc. also there was missing quality appraisal and no tools (eg.JBI) were mentioned in the text. Unclear data extraction part- clear information are required e.g. who extracted, what are the variabilities extracted and when did the last search was done

**Author response:** Thank you for the helpful observations. The objective has been revised to more clearly specify the aspects of rehabilitation services addressed in this review. The term Persons with Disabilities (PwD) has been defined at its first occurrence, and the description of the six elements has been clarified. Reference 7 has also been corrected to match the intended citation. Furthermore, the Methods section has been revised to clearly describe the narrative review approach and to improve transparency in the literature search and synthesis process.

**9. Comment** Results/discussion: Results section reads like discussion; example is the opening sentence. There was Lack of structured synthesis as well. Example structure recommended: Global PHC rehabilitation models, workforce strategies, community-based rehabilitation, and digital technologies. I find limited synthesis of included studies—the manuscript mostly lists information rather than synthesizing evidence. As a reader, I would love to see a sentence example, instead of "Telerehabilitation has helped people with stroke, breast cancer..." (Line 211-212) would be better: "Multiple studies reported that telerehabilitation produced outcomes comparable to in-person therapy in stroke and musculoskeletal rehabilitation." Discussion not well linked to results: It repeats general statements rather than interpreting findings. A thorough re-writing is suggested.

"XAI platforms provide concise explanations"

-Oversimplified. XAI improves interpretability but does not always produce clinically intuitive explanations. Should be qualified.

**Author response:** Thank you for the constructive feedback. The Results and Discussion sections have been revised to improve structure and clarity. The Results section now presents a more structured synthesis of the evidence, and several statements have been rewritten to better reflect synthesized findings rather than listing information. The Discussion has also been revised to more clearly interpret the findings and link them to the results presented. Other diseases were omitted, and the focus remained on stroke and musculoskeletal rehabilitation.

**10. Comment** Conclusion: The conclusion is too long and repetitive. I suggest rewrite after fixing the objectives, methods, results and discussion sections with key findings, implications and future research

**Author response:** Thank you for the helpful suggestion. The conclusion section has been revised to be shorter and more focused, highlighting the key findings, implications for Bangladesh's healthcare system, and the importance of strengthening rehabilitation within primary healthcare. Redundant statements have been removed to improve clarity and conciseness.

**11. Comment** References: Some are duplicated, many are irrelevant to rehabilitation systems, and they are formatting inconsistent.

**Author response:** The reference list has been carefully reviewed and revised. Duplicate references were removed, irrelevant citations were excluded, and formatting was corrected to ensure consistency and relevance to rehabilitation systems and the scope of the review.

**Responsible editor:** M Mostafa Zaman, **ORCID:** 0000-0002-1736-1342

**12. Comment** Please revise the whole story as a narrative review. The PRISMA flowchart can be kept.

**Author response:** Thank you for the valuable guidance. The manuscript has been thoroughly revised to ensure consistency with a narrative review approach. The methodology and related sections have been rewritten to reflect narrative review methods, and systematic review terminology has been removed or clarified where necessary. The flowchart has been removed because this is not a systematic review.

**13. Comment** Align the conclusion with the story above (Abstract)

**Author response:** Dear editor, thank you for your valuable comments. We have updated the conclusion (abstract section) according to your suggestions. Please rewrite the conclusion in the revised manuscript as given below.

Conclusion (abstract): Establishing referral channels, educating community health workers, and incorporating basic rehabilitation into critical services are all necessary to strengthen rehabilitation in Bangladesh's primary healthcare system. With coordinated policy implementation and oversight, increasing access in disadvantaged regions may be achieved by expanding low-cost telerehabilitation and mHealth options in addition to scaling up community-based treatments.

**14. Comment** Insert a references

**Author response:** Dear editor, thank you for your valuable comments and constructive suggestions. Please write the following sentence as replace of the previous (The most common disabilities include visual, verbal, mental, and hearing, impairments followed by physical disabilities (14.1%, 4.1%, 8.4%, 7.0%, and 42.4% respectively)) and add this reference.

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%).

Ref: Islam FM, Bhowmik JL, Islam SZ, Renzaho AM, Hiller JE. Factors associated with disability in rural Bangladesh: Bangladesh Population-based Diabetes and Eye Study (BPDES). *PLoS one*. 2016 Dec 9;11(12):e0165625.

**15. Comment** Check references

**Author response:** Dear editor, thank you for your comment. We have carefully checked all the references (75,76), and found they are correct.

**16. Comment** Insert data (In table 1)

**Author response:** Thank you, editor, for your constructive suggestions. Please find the requested updated information for the table and additional references filled as per content addition for Chile, Russia, South Africa in the table below.

Green color marked references are for add-on of three countries

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

**17. Comment** PHC infrastructure in urban and rural areas should be described

**Author response:** We appreciate the editor's comment. Please replace the previous text with the following.

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.[1,2]

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.[2,3]

Additional References

[1] Hamid SA, Begum A. Responsiveness of the urban primary health care delivery system in Bangladesh: A comparative analysis. *Health Planning & Management* 2018;34:251–262. <https://doi.org/10.1002/hpm.2626>.

[2] Torsha N, Rahman FN, Hossain MS, Chowdhury HA, Kim M, Rahman SMM, et al. Disability-friendly healthcare at public health facilities in Bangladesh: a mixed-method study to explore the existing situation. *BMC Health Serv Res* 2022;22:1178. <https://doi.org/10.1186/s12913-022-08538-6>.

[3] Sarker T, Xie W, Ahsan A, Atker F, Hossain MM, Anan A, et al. The Readiness of Primary Healthcare Facilities to Address Noncommunicable Diseases in Rural Bangladesh 2025. <https://doi.org/10.21203/rs.3.rs-7977902/v1>.