

ORIGINAL ARTICLE

Determinants of Social Participation in Locomotor Disabled: A Scoping Review Protocol

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ABSTRACT

Introduction: Globally, ensuring social inclusion for individuals with disabilities requires a comprehensive strategy that involves active cooperation among health, social welfare, rural and urban development, and legal fields. This approach highlights the significance of community social participation. Despite the recognized importance of social engagement, there is limited information available about the social participation of this demographic and the factors that influence it. Consequently, the objective of this scoping review is to examine the existing literature on social participation and its determinants specifically for individuals with locomotor disabilities. It also aims to identify any gaps in the current research, indicating where additional studies are needed to enhance support quality and social involvement for this population.

Methods: This scoping review will follow the methodological framework for scoping reviews outlined by Arksey & O'Malley and Levac. The study will involve searching three electronic databases: MEDLINE, SPORTDISCUS, and grey literature. The scope of the search will encompass studies published in English from the establishment of each database up to the current date. The reference lists of all included articles will be manually examined for additional findings. Two independent reviewers will assess the titles and abstracts to determine eligibility based on the established criteria. Data will be extracted and displayed both in tabular format and through a narrative summary that corresponds with the objectives of the review.

Ethics and dissemination: The results of this scoping review are expected to be published in peer-reviewed journals as well as in easy-to-understand formats to reach a broader audience. No ethical approval will be necessary for this scoping review.

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Conclusion: The study will pinpoint gaps in the literature, generating insights that will guide future research and inform policy decisions. The results of this study will assist in identifying priority areas for individuals with locomotor disabilities.

KEYWORDS

• Social participation or Social Engagement • Locomotor disability or Physical disability • Factors affecting social participation

INTRODUCTION

World Health Organization (WHO) defines disability as impairment, limitation, or restriction in activity caused mainly by health issues and environmental factors¹. Across the globe, approximately 15% of the population, experience some form of disability, with 20% of these individuals encountering significant functional limitations². Given that 80% of those living with disabilities reside in developing countries, it is crucial to prioritize their inclusion in all aspects of life¹.

Based on the secondary data analysis from the NFHS-5 survey conducted between 2019 and 2021, the prevalence of disability in India was found to be 4.52%. Among these disabilities, locomotor conditions represented 44.70% of the total.³ This increasing population of individuals with disabilities will present India with significant structural and financial challenges. Furthermore, the presence of concurrent chronic conditions is positively correlated with both functional and physical disabilities.^{4,5} In low and middle-income countries, non-communicable diseases (NCDs), such as cardiovascular and musculoskeletal disorders, contribute to 66.5% of disability-adjusted life years (DALYs).⁶

The “bio-psycho-social model” has transitioned from a medical focus to a social approach regarding disability, which considers factors such as individuals’ environments, personal characteristics, quality of life, and levels of independence.⁷ The International Classification of Functioning, Disability, and Health (ICF) categorize disabilities into various types, including hearing, visual, speech, mental, and locomotor. In India, the predominant type is locomotor disability.⁸ Individuals with disabilities (PwD) often suffer from negative socioeconomic impacts, including poverty, physiological stress, and inequitable access to vital resources like education, healthcare, employment, and community involvement⁹.

Women with disabilities encounter unique obstacles concerning services and information on reproductive and sexual health¹⁰. As India gears up for its upcoming decennial census and honors its commitments to the Committee on the Rights of Persons with Disabilities and the Sustainable Development Goals (SDGs), there is a pressing need to assess and report on the rates of disability within the country¹¹. Only few PWDs receive the services for disabled. A governmental support, too, has a few researches on the seriousness of the disabled. Where they live, people can be different from the people’s cultural and backing and depending on their entertainment. There is no abundant evidence of the clarity of participation in life.

People with loco motor disabilities face substantial health risks associated with a physically inactive lifestyle. Unfortunately, even when individuals with disabilities want to increase their physical activity levels, they are often confronted with many more barriers than the general population. This limits or restricts their opportunities to improve their own health. The participation of younger and older individuals with loco motor disabilities in physical activity must become one of the highest priorities for public and private organizations responsible for improving the health of every citizen in this nation. As health care practitioners, it is important to have an understanding of the common barriers to and facilitators for loco motor disability. Therefore with giving importance of social participation for active life in locomotor disabled, this scoping review protocol will be done to examine the extent of available evidence in given field and will help to identify the gaps in existing literature.

Aim of the study

Social participation is a major challenge to people with disability. Social participation may differ by means of ethnicity, life style and geographical area. Social participation may

affect by various factors. Social participation may relay on various factors such as socio demographic factors and personal physical and mental health. Knowledge about these factors can play a major role to remove barriers for locomotor disabled to engage themselves in all the sphere of life. Currently, it is unclear what is known and unknown about these. Scoping reviews are useful for examining emerging evidence when it is still unclear what other, more specific questions can be posed¹². The aim of this scoping review is to establish the body of evidence regarding factors that affects the social participation in locomotor disabled.

METHODS

The methods of this scoping review were developed based on the methodological framework for scoping review recommended by Arksey & O'Malley (2005).¹³

According to Arksey and O'Malley's framework, there are five methodological stages to follow:

Stage 1: Identifying the research question.

Stage 2: Identifying relevant studies.

Stage 3: Selecting studies.

Stage 4: Charting the data.

Stage 5: Collating, summarizing and reporting the results.

Stage 1: Identifying the research question

Our aim was to establish evidence regarding factors that affects social participation and active participation in community for locomotor disabled. To meet these objectives this review asks the following questions:

What evidence exists about factors that affect social participation among locomotor disabled?

What are the barriers or facilitators of social participation?

Our ultimate goal is to understand the determinants of social participation in locomotor disabled so with this we can add additional questions based on our findings along with review process.

Stage 2: Identifying relevant studies

A initial search was done in MEDLINE. The text words in the titles and abstracts of relevant articles, and the index terms used to describe

the articles were used to develop a full search strategy for MEDLINE and SPORT Discus. The MEDLINE database is one of the largest and encompasses a wide range of open-access journals. The main elements guiding the search focused on locomotor disabilities and social/ community participation. A preliminary search strategy was formulated in MEDLINE. (Table 1). Second search strategy was developed in Sport Discus with using same key words. (Table 2) Key terms determined were "social participation" OR "social engagement" in combination with the following terminologies: determinants of social participation in disabled OR locomotor disabled, factors affecting social participation. Furthermore, the reference lists of the most relevant articles will be manually reviewed to enhance the accuracy of the search to the greatest extent possible. The studies included will primarily focus on individuals with locomotor disabilities, specifically in relation to social or community participation and engagement. A secondary search will utilize all relevant keywords and index terms across all selected databases. Additionally, an exploration of unpublished studies and grey literature will be performed through general searches like Google Scholar. Systemic search will follow for final analysis for latest studies.

Stage 3: Selecting studies

Studies will be considered for inclusion if they include social participation in person with locomotor disabilities. Last ten years published article will be included in the study. The inclusion criteria will be developed. The search will be limited to English language articles available online. This review will exclude case reports, reviews, personal opinions, protocols, letters, posters and conference abstracts. Free full text and full text articles till the age group of 45 years will be included for the study. Duplicates will be excluded from the study. The selection process will comprise two phases. First, two independent reviewers will assess the titles and abstracts according to the established inclusion criteria. Next, all potentially relevant full-text articles will be obtained and final selection of articles will be done. Any disagreements that arise will be addressed through discussion between the two reviewers during the screening phase. The exclusion of full-text papers that do not conform to the inclusion criteria will be documented and included in the scoping

Table 1: Initial search (MEDLINE database)

Search	Key terms used	Record retrieved
#1	("social participation"[MeSH Terms] OR social participation [Text Word]) OR ("community participation" [MeSH Terms] OR community participation [Text Word]) Filters: in the last 10 years	23408
#2	"disabilities" [All Fields] OR "disability"[All Fields] OR "disablement"[All Fields] OR "disablements"[All Fields] OR "disabling" [All Fields] OR "disablity" [All Fields] OR "persons with disabilities" [MeSH Terms] OR ("persons" [All Fields] AND "disabilities" [All Fields]) OR "persons with disabilities" [All Fields] OR "disabled" [All Fields]	206027
#3	("analysis" [MeSH Subheading] OR "analysis" [All Fields] OR "determination" [All Fields] OR "determinant"[All Fields] OR "determinants" [All Fields] OR "determinate" [All Fields] OR "determined" [All Fields] OR "determinates" [All Fields] OR "determinating" [All Fields] OR "determinations"[All Fields] OR "determine" [All Fields] OR "determined" [All Fields] OR "determines"[All Fields] OR "determining" [All Fields]) AND (y_10[Filter])	5152127
#4	#1 And (#2 And #3)	1058

Note: MEDLINE via Pubmed. Search conducted on 6th November, 2024.

MeSH: Medical subject headings

Table 2: Initial search (SPORTDiscus database)

Search	Key terms used	Record retrieved
#1	all_fields: (social participation or social engagement)	367
#2	all_fields: (locomotor disability or physical disability or person with disability)	681
#3	all_fields :(social determinants or determinants)	5000
#4	#1 AND (#2 AND #3)	194

Note: Sport Discus database via library search. Search conducted on 6th November, 2024.

review. The complete results of the search will be detailed in the final scoping review and presented using a flow diagram in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-analyses for Scoping Reviews guidelines.^{14,15}

Stage 4: Charting the data

Data extraction tool will be developed by the two independent reviewers which will be used to extract the papers included in the scoping review. The tool we developed similar to that recommended by the Joanna Briggs Institute. It includes logical descriptive summary of the results that aligns with objectives and questions of scoping review. The initial data extraction will be done to extract details study design, methods, participants and findings. (Table 3)

Two reviewers will individually extract data from each selected study utilizing a standardized data extraction form. The preliminary version of this form is based on the template from the Joanna Briggs Institute, which outlines evidence details, characteristics,

and results, as shown in Table 4. This tool may be adjusted and updated as necessary during the data extraction process for the included studies. In cases of missing data or the need for additional information, the authors will be reached out to accordingly. A pilot test of the data extraction process will also be conducted.

Stage 5: Collating, summarizing and reporting the results

The collected data will be organized and presented in a descriptive summary table or visually represented in a way that supports the goals of this scoping review. The narrative will concentrate on the various types of qualitative studies and will describe how the findings address the aims and questions of this review.

DISCUSSION

Our review aims to describe emerging evidences on factors affecting social participation in locomotor disabled. Numerous prior studies have explored these influences on social participation. This scoping

Table 3: Initial data extraction form

Bibliographic information
Authors
Year of publication
Country where the study was published/conducted
Methodology
Aims/purpose
Study population and sample size within source of evidence (locomotor disabled till the age of 45)
Method (Quantitative/qualitative/mix method)
Outcome details, if applicable/ theme described
Key findings related to the research question
Conclusion

Table 4: Data extraction tool:

Scoping review details:	
Review objective/s	
Review question/s	
Inclusion & exclusion criteria:	
Population:	Person with Locomotor disabilities
Concept:	Social participation of locomotor disabled
Context:	Determinants of social participation
Types of evidence source:	Quantitative and qualitative studies
Evidence source details:	
Citation details:	Author/s, date, title, journal, volume, issue and pages
Country:	
Study objectives:	
Participants:	Person with locomotor disabilities till the age of 45 years including both genders
Details extracted from the evidences:	
Sample size:	
Participants' characteristics:	
Exposure variables	Socio demographics factors(age, gender, marital status, education, employment, and socioeconomic status), physical and mental health, relationship with friends, neighbors or relatives, help from government/NGOs, physical environment, assistive devices
Outcomes:	Determinants of social participation in terms of barriers or facilitators/ both
Theme used:	
Study findings:	
Comments:	

review will be conducted to examine the currently available evidence related to the determinants of social participation and to

suggest directions for future research targeting factors influencing social participation within specific cultural and ethnic populations.

The six-stage methodological framework developed by Arksey and O'Malley serves as a foundation for this scoping review, offering a systematic and transparent approach to map new research areas and identifying gaps in the existing evidence, and summarizing and sharing research findings.

The scoping review serves as a suitable approach to explore the scope, breadth, and characteristics of research activities in the current quantitative literature regarding the factors that affect social participation among individuals with locomotor disabilities. A quality assessment of the articles featured in this scoping review will not be conducted, as this falls outside the scope of our review's objectives. For qualitative studies, we will favor narrative descriptions, meaning that the methodology may not provide a comprehensive overview of all the papers obtained during the search.

This review will serve as the initial phase of a research project focused on identifying the factors influencing community and social participation among individuals with locomotor disabilities. The results of this scoping review will add knowledge as well as gaps pertaining to different factors linked to social participation. The insights gained from this review will assist future researchers in exploring the determinants, specifically the barriers and facilitators impacting social participation in the rehabilitation process for individuals with locomotor disabilities, thus supporting their long-term community integration.

CONCLUSION

Basically, this study focuses on the inclusion of individuals with locomotor disabilities across various aspects of life, providing an overview of the challenges and supports they encounter. While previous research has been conducted, it is essential to comprehend and value the existing evidence, as well as to pinpoint gaps and strategies that can promote barrier-free environment to participation at various levels in the community. This review will produce insights to steer future research and inform policy decisions. The findings may help development organizations, governments, and other stakeholders prioritize areas of need for people with locomotor disabilities. In the results and discussion sections, we will

explore any similarities or differences in the approaches taken in India.

ETHICS AND DISSEMINATION

No ethical clearance will be required for this study as it will be literature based survey. Results will summarize existing research related to the determinants of social participation in locomotor disabled. Our plan for the review will include publishing results in a scientific journal and presenting at relevant conferences targeting clinicians, academicians and researcher.

Conflicts of interest:

The authors declare no conflict of interest.

REFERENCES

1. World Health Organization (WHO), 2001, International classification of functioning, disability and health, WHO, Geneva.
2. Awasthi A., Pandey C.M., Dubey M., Rastogi S. Trends, prospects and deprivation index of disability in India: Evidences from census 2001 and 2011. *Disabil Health J.* 2017 Apr; 10(2): 247-256. doi: 10.1016/j.dhjo.2016.10.011. Epub 2016 Nov 12. PMID: 27876288.
3. Pattnaik Sweta, Murmu Jogesh, Agrawal Ritik, Rehman Tanveer, Kanungo Srikanta, Pati Sanghamitra. Prevalence, pattern and determinants of disabilities in India: Insights from NFHS-5; *Frontiers in Public Health*, Vol. 11, 2023 (URL=<https://www.frontiersin.org/articles/10.3389/fpubh.2023.1036499>)
4. Kumar, S., Pradhan, M.R. Self-rated health status and its correlates among the elderly in India. *J Public Health (Berl.)* 27, 291-299 (2019). <https://doi.org/10.1007/s10389-018-0960-2>
5. Hairi N.N., Bulgiba A., Cumming R.G., Naganathan V., Mudra I. Prevalence and correlates of physical disability and functional limitation among community dwelling older people in rural Malaysia, a middle income country. *BMC Public Health.* 2010 Aug 18; 10: 492. doi: 10.1186/1471-2458-10-492. PMID: 20716377; PMCID: PMC2933720.
6. Raina P., Gilsing A., Mayhew A.J., Sohel N, van den Heuvel E., Griffith LE. Individual and population level impact of chronic conditions on functional disability in older adults. *PLoS One.* 2020 Feb 20; 15(2): e0229160. doi: 10.1371/journal.pone.0229160. PMID: 32078637; PMCID: PMC7032687.

7. Mahmud I., Clarke L., Ploubidis G.B. Socio-demographic determinants of the severity of locomotor disability among adults in Bangladesh: a cross-sectional study, December 2010-February 2011. *Arch Public Health*. 2017 Nov 20; 75: 47. doi: 10.1186/s13690-017-0217-5. PMID: 29181151; PMCID: PMC5694906.
8. Padhyegurjar M.S. Factors affecting treatment seeking behaviour of individuals with locomotor disabilities. *National Journal of Medical Research*. 2012 Jun 30; 2(02): 145-8.
9. Groce N., Trani J. Disability and the millennium development goals. United Nations Publication. 2011.
10. Ganle J.K., Baatiema L., Quansah R., Danso-Appiah A. Barriers facing persons with disability in accessing sexual and reproductive health services in sub-Saharan Africa: A systematic review. *PLoS One*. 2020 Oct 12; 15(10): e0238585. doi: 10.1371/journal.pone.0238585. PMID: 33044966; PMCID: PMC7549766.
11. Dandona R., Pandey A., George S., Kumar G.A., Dandona L. India's disability estimates: Limitations and way forward. *PLoS One*. 2019 Sep 6; 14(9): e0222159. doi: 10.1371/journal.pone.0222159. PMID: 31491011; PMCID: PMC6730860.
12. Munn, Z., Micah, D.J., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC Medical Research Methodology*, 18, 1-7. <https://doi.org/10.1186/s12874-018-0611-x>
13. Hilary Arksey & Lisa O'Malley (2005) Scoping studies: towards a methodological framework, *International Journal of Social Research Methodology*, 8:1, 19-32, DOI: 10.1080/1364557032000119616
14. Tricco, A.C., Lillie, E., Zarin, W., O'Brien, K., Colquhoun, H., Kastner, M., Levac, D., Ng, C., Sharpe, J.P., Wilson, K., Kenny, M., Warren, R., Wilson, C., Stelfox, H.T., & Straus, S.E. (2016). A scoping review on the conduct and reporting of scoping reviews. *BMC Medical Research Methodology*, 16, 1-10. <https://doi.org/10.1186/s12874-016-0116-4>
15. Tricco, A.C., Lillie, E., Zarin, W., O'Brien, K.K., Colquhoun, H., Levac, D., Moher, D., Peters, M.D.J., Horsley, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M.G., Garritty, C.,...Straus, S.E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine*, 169(7), 467-473. <https://doi.org/10.7326/M18-0850>

