

BMJ Open Healthy ageing and occupational therapy in South Asian countries: a scoping review protocol

Shashank Mehrotra ,^{1,2} Prachi Pundir ,³ Ranjitha S Shetty ^{4,5}

To cite: Mehrotra S, Pundir P, Shetty RS. Healthy ageing and occupational therapy in South Asian countries: a scoping review protocol. *BMJ Open* 2021;**11**:e044657. doi:10.1136/bmjopen-2020-044657

► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2020-044657>).

Received 10 September 2020
Revised 20 April 2021
Accepted 21 April 2021

ABSTRACT

Introduction The increasing population of older adults is one of the most significant challenges faced by various countries across the world. South Asian region is accommodating almost a quarter of the world's population, with nearly 6% of them being >65 years of age. There is a lack of awareness regarding the role of occupational therapists in community settings, the assessments and interventions used by occupational therapists to facilitate healthy ageing among community-dwelling older adults. This scoping review is planned to systematically identify the literature from the last two decades, related to various assessments and interventions provided by occupational therapists to promote healthy ageing among older adults in South Asia.

Methods This scoping review will be based on the methodological framework given by Arksey and O'Malley and Levac *et al.* and will include data from January 2000 onwards. The following databases will be included in the search—SCOPUS, MEDLINE (PubMed), Web of Science, CINAHL, EBSCO, Clinical key, Wiley Online, ProQuest and Cochrane library. Screening of titles and abstracts and full texts will be carried out by two reviewers independently in consultation with the third reviewer. Both quantitative and qualitative data will be analysed separately to identify the assessments carried out, interventions provided and factors that influence healthy ageing among community-dwelling older adults aged ≥60 years in South Asia. Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews will be used for collating and reporting the results.

Ethics and dissemination As this scoping review uses data from already available literature, it does not require ethics approval. Results will summarise and present the existing literature related to healthy ageing among community-dwelling older adults. We plan to disseminate the results through a peer-reviewed journal, targeting occupational therapists, other rehabilitation workers and researchers from South Asia.

INTRODUCTION

The increasing population of older adults is one of the most significant challenges faced by various countries in the world. The global community of people aged >60 years is expected to become 1.2 billion by the year 2025. By 2050, it will reach 2 billion, with about 80% living in developing countries.

Strengths and limitations of this study

- The study will be the first ever scoping review to identify assessments and interventions specific to healthy ageing among community-dwelling older adults from South Asian countries.
- The review will highlight the rationale for selecting a particular assessment and intervention methods to bring about healthy ageing among community-dwelling older adults in different regions of South Asia.
- Identifying facilitators and barriers for implementing community-based interventions by the occupational therapists in South Asia will guide the future researchers in planning their research work in this area.
- Being a scoping review, it may not be feasible to assess the quality of the published studies that get included in the review.

By the onset of the 21st century, this growing population will further impose various social and economic demands on the nations.¹ In South Asia, this steady increase in older population is evident with the life expectancy changing from 62.8 years in 2000 to 69.5 years in 2018.^{2 3} To address such requirements, the WHO⁴ has devised a global strategy and an action plan to contribute to ageing and health.

Healthy ageing, as referred by the WHO, is a continuous process that covers everyone, not just a person who is currently free of disease. It is defined as the process of developing and maintaining the functional capacities of people that enable their well-being in the older age. The functional ability of a person depends on the intrinsic capacity, which further includes the interplay of a person's physical and emotional health and the environment in which the person lives.¹

Managing one's health and well-being through health-promoting activities can have a positive impact on person's health and quality of life. Occupational therapy practitioners are instrumental in helping older



© Author(s) (or their employer(s)) 2021. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

For numbered affiliations see end of article.

Correspondence to

Dr Ranjitha S Shetty;
ranjitha.shetty@manipal.edu

adults retain performance in all areas of occupation when participation suffers as a result of the decline in health.⁵ Occupational therapists have a wide spectrum of roles in working with the communities and impacting community health. Although the spectrum of their roles is broad, the core functions include working with individuals suffering from chronic disease, disabilities, relationship building with community organisations and improving access to services.^{6,7} Previous literature⁷ shows that involving individuals in the day-to-day activities play a vital role in maintaining the health and well-being of community-dwelling older adults.

However, there is a lack of awareness regarding the role of occupational therapists in community settings and the assessments and interventions used by them to facilitate healthy ageing among community-dwelling older adults.⁶ With the rising geriatric population, it is essential to empower the community-dwelling older adults by making them aware of healthy ageing and the roles of an occupational therapist in improving their overall health and well-being by increasing their participation. To the authors' knowledge, studies focused on healthy ageing among older adults have been conducted,^{8,9} however, such a review of evidence on assessments and interventions provided by occupational therapists to promote healthy ageing among community-dwelling older adults has not been done among South Asian population so far. This scoping review aims to identify and review the research studies conducted in the last two decades (from January 2000 onwards) focusing on various assessments and interventions carried out by occupational therapists to promote healthy ageing among community-dwelling older adults in the South Asian countries. The objectives of this scoping review are as follows:

1. To provide an overview of various assessments and interventions carried out by occupational therapists to facilitate healthy ageing among community-dwelling older adults in South Asia.
2. To determine the factors that were considered while selecting a particular assessment and developing an intervention for older adults to promote healthy ageing in South Asian countries.
3. To ascertain any prevailing facilitators and barriers in implementing selected interventions by the occupational therapists in South Asia.

METHODS AND ANALYSIS

We will follow the framework given by Arksey and O'Malley¹⁰ and Levac *et al.*¹¹ provided in the Joanna Briggs Institute (JBI) methodology.¹² This scoping review would consist of the following stages:

Stage 1: identifying the research question

A constant process of brainstorming and refining the ideas was carried out by the team to generate the research question. A relatively broad question was created to facilitate a comprehensive review of the literature. Based on the terminology, current trends and authors' understanding in ageing populations and occupational therapy interventions addressing ageing among community-dwelling older adults, the following research questions were finalised:

1. Q1: What are the various assessments conducted by occupational therapists to promote healthy ageing among community-dwelling older adults in South Asia in the last two decades?
2. Q2: What are the factors that are considered while selecting and implementing assessments and interventions for older adults in South Asia?

The objectives of the study were formulated according to the above research questions.

Stage 2: study identification

The search will identify data from the electronic databases. The reference lists of the included articles will be searched to ensure that all the relevant literature is included. The inclusion of the articles will be based on the population–concept–context framework defined by JBI.¹² Study selection criteria are given in table 1.

The following databases have been selected in consultation with a subject expert: EBSCO, MEDLINE (via PubMed), CINAHL, Clinical key, Wiley Online, and Cochrane library, SCOPUS, ProQuest and Web of Science. We expect a greater number of articles related to the subject from these databases and also considering the available subscription of the databases. Initially, a search for selection of relevant databases will be carried out, followed by an analysis of text words in the title and abstract, as well as the index terms used to describe the article.

A Boolean search string will be developed through the systematic process of reviewing Medical Subject Heading terms on MEDLINE. In consultation with the subject expert and input from the research team, the initial search terms will be prepared for each database.

Table 1 PCC framework for selection of studies

Criteria	Determinants
P (population)	Older adults aged ≥60 years
C (concept)	Healthy ageing and occupational therapy
C (context)	South Asia (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka)

Table 2 Search strategy

Concept	Alternative words
Healthy ageing	Ageing well OR Healthy Ageing OR Successful Ageing OR Positive Ageing
Older adults	Elderly, OR Functionally Impaired Elderly OR Older Adults OR Older Adult OR Aged OR Geriatric* OR Senior*
Occupational therapy	Occupation* OR Occupational Therapy*
South Asia	India OR Bangladesh OR Bhutan OR Maldives OR Nepal OR Pakistan OR Sri Lanka OR Afghanistan

A preliminary search will be conducted to avoid using broad searches that would result in an unmanageably large number of results. The results for the initial preliminary search (online supplemental file 1) will be discussed further to refine and finalise the screening. To ensure that all relevant studies are included, additional, peer-reviewed literature will be searched using the reference lists of the included articles. [Table 2](#) shows the preliminary search strategy.

Stage 3: study selection

This scoping review will follow a three-step article selection process. There will be restrictions by country for the initial screening. Studies published within the last two decades (January 2000 onwards) will be included in the review. Limitations will, however, include the additional database-specific filters, namely timespan, age groups, articles only and the specific filters if any based on the database.

Preliminary inclusion and exclusion criteria have been drafted as a general guideline as shown in [table 3](#) to select the studies for the review. Therefore, studies meeting the inclusion criteria will be selected regardless of the quality and rigour of the research. There will be no restriction on type of study, and we will be including quantitative, qualitative and mixed-methods studies as well as reviews, commentaries and conference proceedings.

In consultation with an information scientist, databases and search strategies will be determined. All literature

will be uploaded onto the Mendeley platform to manage the project. Duplicates will be removed before the initiation of the review process. Mendeley will initially be used to upload the abstracts and titles captured in the initial screening. The first and second author will independently screen all captured literature to determine its eligibility for inclusion into the scoping review. Where consensus is not achieved, the third author will be involved in debating any disagreements until an agreement is reached. Full texts of the articles will be uploaded for items that meet the inclusion criteria.

The recommendations given by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews¹³ checklist will be used for collating and reporting the results. Preferred Reporting Items for Systematic Reviews and Meta-analysis Protocols flow diagram will be referred to document the search and to map the selected studies.

Stage 4: charting the data

A predesigned data charting format will be used to extract pertinent information from the included studies. This ‘descriptive-analytical’ method will ensure that the authors collect standard information that will be useful to disseminate the findings in a concise and user-friendly format. This approach will assist the researchers in identifying and organising the existing literature. Also, it will help to identify significant patterns and links within the research. Care will be taken while charting the data so

Table 3 Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
The studies which involve an occupational therapist to conduct assessment or intervention.	Studies conducted among community-dwelling older adults with any specific comorbid conditions such as low vision, Parkinson, dementia, Alzheimer, stroke, etc.
All available studies from South Asian countries (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka) with participants being older adults aged ≥60 years living in a community.	Studies not done in South Asian countries.
Studies reporting on assessment tools used to measure the various components of health in old age.	Articles published before January 2000.
Studies published in the English language from January 2000 onwards.	Studies done among institutionalised older adults.
Studies focused on interventions tried by occupational therapists to promote healthy ageing among the older adults in the community.	

Table 4 Framework for data extraction

Bibliometric information	Characteristics of the quantitative studies	Proposed categories of qualitative data
<ul style="list-style-type: none"> ▶ Title of the study ▶ Authors ▶ Source/journal ▶ Year of publication ▶ Country ▶ Affiliation of the author ▶ Study design 	<ul style="list-style-type: none"> ▶ Research question/aim(s) ▶ Objectives(s) ▶ Study population ▶ Observation(s) ▶ Intervention(s) ▶ Duration ▶ Location ▶ Frequency of intervention ▶ Outcome(s) ▶ Key findings 	<ul style="list-style-type: none"> ▶ Description of healthy ageing ▶ Assessment tools ▶ Interventions ▶ Theoretical/conceptual framework used for development of intervention ▶ Facilitators and barriers to healthy ageing ▶ Experiences/ perspectives of older adults

that the accuracy of the information is maintained. Two authors will independently extract necessary information about each of the included studies using the framework designed (table 4). The third author will resolve the disagreements until consensus is achieved.

Mapping of the available literature by reporting the studies which describe various assessments and interventions carried out by occupational therapists to facilitate healthy ageing will be done for the first objective by extracting bibliometric information and characteristics of study mentioned in table 4. The data extraction for quantitative and qualitative studies will be conducted for addressing the second and third objective of the review for determining the factors related to interventions and assessments for health ageing. Data from the quantitative studies will be extracted for the elements in table 4 and any effect measures (such as OR, risk ratio or mean difference) will be stated. Codes and excerpts will be extracted for qualitative data under the proposed themes mentioned in table 4. The themes can be expanded based on the type of data available in the literature. Data from mixed-methods studies will be extracted under both quantitative and qualitative domains. Along with the information extracted as mentioned in table 4, narrative data will be obtained from the following areas—the strategies and guidelines that were used by the occupational therapists to enable healthy ageing, types of assessment and/or intervention, the factors that influence the assessments and interventions, including the timelines for intervention selected by occupational therapists. This process will assist in identifying gaps in the existing literature.

Stage 5: collating, summarising and reporting the results

A descriptive and narrative summary of the review findings will be presented in a report format. Summary tables will be used to portray the vital elements of the selected studies, such as study area, types of assessments used among the elderly population, types of interventions carried out, study findings and conclusions. Factors available from the quantitative studies will be reported narratively and/or if effect measures are available, it will be summarised under each factor. The qualitative data will be analysed using thematic analysis to identify the factors that influence occupational therapists to promote healthy

ageing among community-dwelling older adults. Coding of the data will be done, followed by development of subthemes. The subthemes will be organised into categories to develop common themes in the scoping review, under which the results will be described. Each factor will be narratively synthesised, and factors that are related to a common theme may be clubbed together. The factors that are common in quantitative and qualitative studies, will be reported together. To determine what literature has been produced over the last two decades, we will tabulate a list of South Asian countries and sources from which research about healthy ageing among community-dwelling older adults has been extracted. From the literature included in the scoping review, key quotes and ideas will be extrapolated to describe the factors related to intervention and assessments for healthy ageing among community-dwelling older adults. The findings will be synthesised into a coherent article with applications to research and clinical practice.

Study timeline

The proposed details about the study timeline are described in table 5.

Patient and public involvement

The scoping review to follow on this protocol will not require the participation of any patients or the general public.

DISCUSSION

The proposed scoping review aims to explore various assessments and interventions carried out by occupational therapists to promote healthy ageing among community-dwelling older adults in South Asian countries. It will also identify the knowledge gaps regarding healthy ageing among occupational therapists in South Asian countries. The findings of this review will help the professionals to design and implement appropriate intervention programmes focusing on healthy ageing among community-dwelling older adults.

Results will summarise and disseminate the existing literature related to healthy ageing among community-dwelling older adults. We plan to disseminate the results

Table 5 Study timeline

Already achieved	Stage 1: Identifying the research question: research questions have been formulated to develop the scoping review protocol and to initiate the planning of the scoping review to follow.
Weeks 1–6	Stage 2: Identifying relevant studies: the databases and search strategy have been determined in consultation with an information scientist. An initial search has been run. However, the identification of relevant studies is still being confirmed. Stage 3: Study selection: a provisional inclusion and exclusion criteria have been formulated. However, the selection process criteria will be further refined once the scoping review commences.
Weeks 7–13	Stage 4: Charting the data: the data will be charted once stage three has been completed entirely. The researchers will have allocated 30 working days to conduct the descriptive analysis and to tabulate all the research findings.
Weeks 14–20	Stage 5: Collating, summarising and reporting the results: once step 4 has been completed, stage 5 will be initiated. A descriptive and narrative summary of the study findings will be presented in a manuscript format. The scoping review findings will be written to ensure the optimal dissemination of the results.

through conference presentations and publications in peer-reviewed journals, targeting occupational therapists, other rehabilitation workers, researchers and policy makers. Authors do accept that it may not be feasible to assess the quality of the selected study data as part of this scoping review.

Ethics and dissemination

As a secondary analysis, this scoping review does not require ethics approval. Results will summarise existing research related to healthy ageing among community-dwelling older adults in South Asia. It will describe various interventions and assessments used by occupational therapists in community settings. We will disseminate the results through peer-reviewed journals and conferences targeting clinicians, academics and researchers.

Author affiliations

¹Department of Occupational Therapy, Manipal College of Health Professions, Manipal Academy of Higher Education, Manipal, Karnataka, India

²Center for Studies on Healthy Aging, Manipal College of Health Professions, Manipal Academy of Higher Education, Manipal, Karnataka, India

³Public Health Evidence South Asia (PHESA), Prasanna School of Public Health, Manipal Academy of Higher Education, Manipal, India

⁴Department of Community Medicine, Kasturba Medical College, Manipal Academy of Higher Education, Manipal, Karnataka, India

⁵Centre for Indigenous Population, Kasturba Medical College, Manipal Academy of Higher Education, Manipal, Karnataka, India

Contributors All authors have made substantive intellectual contributions to the development of this protocol. SM and RSS: conceived the idea of this research, followed by a discussion that contributed to finalising the research idea. SM and PP: drafted the methodology, both worked on preparing the draft of this protocol, editing and finalising the manuscript. All the three authors reviewed and edited the protocol draft.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not required.

Provenance and peer review Not commissioned; externally peer reviewed.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content

includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

ORCID iDs

Shashank Mehrotra <http://orcid.org/0000-0002-6015-8702>

Prachi Pundir <http://orcid.org/0000-0002-9056-7611>

Ranjitha S Shetty <http://orcid.org/0000-0002-3210-2293>

REFERENCES

- World Health Organization. World report on ageing and health, 2015. Available: https://apps.who.int/iris/bitstream/handle/10665/186463/9789240694811_eng.pdf;jsessionid=8E762893D00A615BD88884631BD9352D?sequence=1
- Hamiduzzaman M, De Bellis A, Kalaitzidis E. Factors impacting on elderly women's access to healthcare in rural Bangladesh. *Indian Journal of Gerontology* 2016;30:235–60.
- Rahman MS. Aging and negligence in Bangladesh. *J Gerontol Geriatr Res* 2017;06:1–2.
- World Health Organization. Global strategy and action plan on ageing and health, 2017. Available: <https://www.who.int/ageing/WHO-GSAP-2017.pdf?ua=1>
- Foster ER, Bedekar M, Tickle-Degnen L. Systematic review of the effectiveness of occupational therapy-related interventions for people with parkinson's disease. *American Journal of Occupational Therapy* 2014;68:39–49.
- Foster ER, Hershey T. Everyday executive function is associated with activity participation in Parkinson disease without dementia. *OTJR* 2011;31:S16–22.
- Lauckner H, Leclair L, Yamamoto C. Moving beyond the individual: Occupational therapists' multi-layered work with communities. *British Journal of Occupational Therapy* 2019;82:101–11.
- Stancanelli J, Waldman-Levi A. Resilience factors: how may they promote healthy aging? *American Journal of Occupational Therapy* 2018;72:7211505102p1.
- Cassidy TB, Richards LG, Eakman AM. Feasibility of a lifestyle redesign[®]-inspired intervention for well older adults. *Am J Occup Ther* 2017;71:7104190050p1.
- Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol* 2005;8:19–32.
- Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. *Implement Sci* 2010;5:69.
- Peters MDJ, Godfrey CM, Khalil H, et al. Guidance for conducting systematic scoping reviews. *Int J Evid Based Healthc* 2015;13:141–6.
- Tricco AC, Lillie E, Zarin W, et al. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Ann Intern Med* 2018;169:467–73.