Community integration among individuals with stroke: a scoping review protocol

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Abstract

Objective Successful community integration involves active participation in the community, broadly defined as having independence, relationships, and engagement in meaningful activities. This review aims to identify the literature focusing on community integration of individuals with stroke aged 18 years and older in the community over the past two decades.

Methods This review will be based on the methodological framework given by Arksey and O'Malley (2005). We will include studies from SCOPUS, PubMed, Web of Science, Google Scholar, CINAHL, EBSCO, ClinicalKey, Wiley Online, ProQuest, and Cochrane Library databases published from January 2000 onwards. Both quantitative and qualitative data will be analyzed separately to identify various assessments, interventions, and factors that influence the community integration of individuals with stroke.

Conclusion This scoping review will help to explore studies focusing on community integration among individuals with stroke aged 18 and older living in the community. It can further assist professionals who are addressing the concerns of individuals with stroke in the community.

Keywords Community integration · Occupational therapy · Stroke · Community participation

Introduction

Stroke is among the leading causes of disability among adults (Mozaffarian et al. 2015). It reportedly accounts for 17.9 million deaths each year worldwide, with a particularly high burden in low- and lower-middle-income countries (WHO 2020). Among adults aged 35 to 64 years, mortality due to stroke increased from 14.7/100,000 in 2010 to 15.4/100,000 in 2016 (Virani et al. 2021). The wide array of impairments and complexity of stroke results in severe disability, which may be associated with early retirement (Alavinia and Burdorf 2008). Such impairments disrupt daily activities, relationships, and expectations of the future (Wallenbert and Jonsson 2005). These losses influence individuals' ability to participate in everyday occupations across their life span (Arntzen et al. 2015).

Participation or integration in a community is an essential goal of rehabilitation. In stroke rehabilitation, the transition from acute care to inpatient rehabilitation to community rehabilitation is a sign of progressive recovery (Lindsay et al. 2014).

Poor community integration affects the functioning of stroke survivors. With an emphasis on this, it is vital to understand how community integration can be a targeted outcome in interventions for individuals with stroke (WHO 2001). Successful community integration involves active participation in the community, broadly defined as having independence, relationships, and engaging in meaningful activities. It is seen as an opportunity to live in the community and be valued for one's uniqueness and abilities, like everyone else (Salzer and Baron 2006). In community-based clinical practice, it is important to learn about various factors that influence community integration and interventions used for stroke recovery in community rehabilitation services. For this review, we will consider community integration as an intervention that is focused on improving an individual's participation in three main areas: paid employment or other productive activity, independent living, and social activities.

Community-based rehabilitation is a critical component of recovery to help patients regain lost skills and relearn tasks

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and thus regain independence. The principles of intervention to enable community integration are directed toward the barriers to employment after stroke (Treger et al. 2007) such as mood, working memory (Hommel et al. 2009), fear of deterioration (McLean 2007; Alaszewski et al. 2007), architectural barriers, weak local economy, transportation challenges, and stereotyping of individual with disabilities. Post-stroke rehabilitation helps patients to achieve community integration and self-sufficiency in employment. Therefore, developing a framework of rehabilitation goals and interventions for efficient outcomes is essential (Dobkin and Dorsch 2013).

Rehabilitation for individuals with stroke focuses mainly on community-based interventions that aim to enhance an individual's participation in daily living (Rijken and Dekker 1998). The outcome of an intervention may focus on improving the engagement of patients in the community (Arntzen et al. 2015). The rehabilitation should continue until community integration is achieved. Initially, rehabilitation for stroke should concentrate on education and prevention of complications, and later focus on the long-term rehabilitation plan. After dealing with this crucial aspect of self-care, mobility, communication, and homemaking, the further focus of the intervention should be on social competency and participation, community mobility, and financial and health management. Further rehabilitation of an individual with stroke should progress to employment and education (Duncan et al. 2005).

Previous studies (Walsh et al. 2015, Hui et al. 2021) have revealed a gap in rehabilitation research on community integration of individuals with stroke, and have emphasized the need to focus on the re-integration of individuals with stroke in paid occupations as part of their rehabilitation program. Thus, this scoping review is planned to explore and summarize the available rehabilitation literature on the subject. It will provide professionals an overview of various available assessments and rehabilitation interventions for individuals with stroke in the community and the factors influencing them. This information will in turn help to bridge the current gap between patients' independence and participation, resulting in greater inclusion of individuals with stroke in the community.

Aim This scoping review aims to identify the available literature focusing on community integration (employment/other productive activities, independent living, social participation) of individuals with stroke aged 18 years and older in the last two decades (January 2000 onwards).

Objective

1. To provide an overview of various studies related to community integration (employment/other productive activities, independent living, social participation) among individuals with stroke aged 18 years and older.

2. To provide a summary of various assessments and interventions used by professionals to facilitate community integration among individuals with stroke.
3. To determine what factors influence the interventions provided to facilitate community integration in individuals with stroke.

Method and analysis

We will follow the method informed by Arksey and O'Malley's (2005) methodological framework and other studies (Georlee et al. 2020). This scoping review aims to identify the literature from January 2000 onwards focusing on community integration (employment/other productive activities, independent living, social participation) of individuals with stroke in the community. Table 1 depicts the stages of the scoping review process, which are described in more detail in the subsequent sections.

Developing a research question

A broad research question was developed to ensure that the scoping review would not only include a particular type of studies, but would also be able to capture the diversity and scope of literature available. The previous section depicts the developed objectives for this scoping review.

Research question What is the existing literature focusing on community integration of individuals with stroke aged 18 years and older in the community?

Study identification

The search will identify data from SCOPUS, PubMed, Web of Science, Google Scholar, CINAHL, EBSCO, ClinicalKey, Wiley Online, ProQuest, and Cochrane Library electronic databases. We will search the reference lists of the articles to ensure the inclusion of all relevant literature. Studies will be selected according to the criteria listed in Table 2. We selected the databases in consultation with a subject expert to ensure proper identification of all relevant literature articles. We will conduct an initial search of a selection of related databases, followed by the title and abstract screening by

Table 1 Methodological framework

Step 1: Identifying the research question
Step 2: Identifying relevant studies
Step 3: Study selection
Step 4: Charting the data
Step 5: Collating, summarizing, and reporting the scoping review results

Table 2 Study selection criteria

Inclusion criteria	Exclusion criteria
All available articles with community integration focusing on three main areas: employment/other productive activities, independent living, and social participation	Conference proceedings and abstracts
All available studies including a group of people diagnosed with stroke (either acute, subacute, or chronic, having any physical or cognitive disability) aged 18 and older living in the community	
All peer-reviewed, non-peer-reviewed, and grey literature articles in the English language published from January 2000 onwards	

two independent reviewers. Also, we will analyze the text articles and keywords used in the articles. Articles that do not meet the inclusion criteria will be removed. Through a systematic search of Medical Subject Headings (MeSH) terms on MEDLINE, we selected the keywords that will be utilized to search the articles.

We conducted an initial preliminary screening to avoid using broad searches that would result in an unmanageably large number of results. Also, the results of the initial preliminary screening were discussed with a subject expert to refine and finalize the search string (Table 3). The cutoff date to be applied for the search strategy screening will be 28 February 2021. Besides, the reference lists of the included articles will be searched to ensure that all relevant studies are included.

Study selection for the review

We will strictly limit the search terms used. There will be no restrictions by country for the initial screening. Studies published within the past two decades (January 2000 onwards) will be included in the review. We will use additional database-specific filters including time span and age groups to obtain clear information and to avoid unmanageably vast search results obtained in the full search.

We have chosen the preliminary inclusion and exclusion criteria as a general guideline to select the studies for the review. Therefore, we will include all the studies that meet our inclusion criteria regardless of the quality and rigor of the research. We consulted a subject expert to determine the final databases and search strategies. All imported citations will be uploaded into the Mendeley platform to manage the project. Mendeley will be used to upload the abstracts and

titles captured in the initial screening. Two independent reviewers (ST) and (V) will screen all imported literature to determine its eligibility for selection into the scoping review. In case of any disagreement, another reviewer will be involved until we get a consensus. Full-texts of the articles will be uploaded for the articles that meet the inclusion criteria. For this scoping review, we will use the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Protocols (PRISMA-P) flow diagram to document the search and visually represent all the studies identified in each step of the study selection process.

Charting the data for scoping review

We will use a descriptive-analytical method to ensure that collected information can be disseminated in a concise format. This approach will assist the researchers in identifying previous data that will answer the research question, organizing the current literature, and identifying significant themes and patterns within the literature. We will ensure proper care when charting the data to maintain accuracy.

Quantitative and qualitative data will be analyzed to identify the factors that influence the community integration of individuals with stroke. The primary researcher (ST) and secondary reviewer (SM) will independently identify themes and establish subthemes from the data sources included in the review. Following this, they will together discuss the themes and subthemes without debating in the case of disagreement. A third reviewer (LP) will be separately approached to clarify any disagreements between the first two reviewers (ST and SM). Before grouping, themes and qualitative data will be described. Such practice will assist in identifying gaps in the existing literature.

We will extract and tabulate the following general information: author name(s), name of the journal, publication year, country, study methodology (population, aims/objectives/question, research setting, and study-design), and findings. Data will also be extracted from the following areas: assessments, interventions, and factors influencing the community integration (employment/other productive activities, independent living, social participation) of individuals with stroke.

Table 3 Keywords derived from the Medical Subject Headings terms (MeSH)

TOPIC: Community Integration and Community Participation
AND TOPIC: Stroke
AND TOPIC: Community
AND TOPIC: Rehabilitation
AND TOPIC: Assessment OR Intervention

Summarizing, collating, and reporting the results of the scoping review

We will present a descriptive and narrative summary of the study findings using summary tables to describe the components of each study. From the included research studies, key findings will be identified to describe community integration among individuals with stroke. The results of this scoping review will then be presented in an article having applications to community-based rehabilitation. This will also help professionals in exploring the knowledge of community integration among individuals with stroke and the factors influencing community integration.

Study timeline The proposed timeline of the study is described in Table 4.

Patient and public involvement

There will be no participation of any patients or the general public in the scoping review.

Discussion

To our knowledge, this scoping review examining the concept of community integration among individuals with stroke is the first of its kind. This review has the potential to improve the understanding among professionals caring for individuals with stroke. In this review, we aim to review and appraise the articles focusing on community integration in the areas of employment/other productive activities, independent living, and social participation among individuals with stroke aged 18 and older, various assessments and interventions

available, and factors influencing the application of such interventions. This will give us a better understanding of patients' independence and participation resulting in community inclusion of individuals with stroke, which will inform further research, practice, and training.

Ethics and dissemination

As a secondary analysis, this scoping review does not require ethics approval. Results will summarize existing research related to community integration among individuals with stroke. We will further disseminate the results through peer-reviewed journals and conferences targeting clinicians, academics, and researchers.

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Authors' contributions Shashank Mehrotra and Sanjana Shirish Tipnis initiated the idea of this research, followed by discussion among all authors, which contributed to finalizing the research idea. Shashank Mehrotra and Sanjana Shirish Tipnis contributed to the conceptualization of the research title, aim, and objectives. Following this, four authors (Sanjana Shirish Tipnis, Vaishnavi Vilas Pawar, Rahul Arun Shinde, and Lavanya Padmashali) searched different electronic databases to understand the background of the research. This was supervised by the corresponding author, Shashank Mehrotra. The methodology was drafted by Deeksha Kumari and Shashank Mehrotra. It was further revised by Sanjana Shirish Tipnis and Lavanya Padmashali. Shashank Mehrotra and Lavanya Padmashali drafted the manuscript and revised it further.

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Availability of data and materials Not applicable.

Declarations

Ethical approval This review study does not require ethics clearance, as we are taking only secondary data from the available literature.

Consent to participate There will be no participation of any patients or the general public in the scoping review.

Consent for publication Not applicable.

Competing interests The authors declare that have no conflict of interest.

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Table 4 Study timeline

Stage 1: Identifying the research question: The research questions have been formulated to develop the scoping review protocol and to initiate the planning of the scoping review to follow.
Stage 2: Identifying relevant studies: The databases and search strategy have been determined in consultation with a subject librarian. Relevant articles for this scoping review will be identified accordingly.
Stage 3: Study selection: Inclusion and exclusion criteria have been formulated. Based on these, we will decide on the inclusion of articles for the scoping review.
Stage 4: Charting the data: The data will be charted once step 3 has been completed in its entirety. The researchers will have 30 working days to conduct the descriptive analysis and to tabulate all the research findings.
Stage 5: Summarizing, collating and reporting the results of the scoping review: Once phase 4 has been completed, phase 5 will be initiated. The scoping review findings will be compiled in an article to ensure optimal dissemination of the results.

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