

The Importance of Management Family-Centered Care Model in Stroke Recovery : A Comprehensive Examination

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ABSTRACT

Stroke is a substantial health issue that affects numerous individuals and their families. Stroke survivors and their carers sometimes face difficulties when transitioning from the hospital to their home. Implementing a family-centered care approach throughout rehabilitation is crucial for properly addressing the needs of both parties. Although advantageous, this strategy may give more importance to the worries of family members rather than those of the stroke survivors themselves. The objective of this study was to assess the efficacy of a family-centered care approach in stroke rehabilitation by an analysis of existing research literature and the examination of outcomes. This integrated literature study employs a methodology that investigates databases like Scopus, PubMed, Researchgate, and Google Scholar across several nations such as the United States, Canada, Australia, England, South Korea, the Netherlands, Japan, and others. The results indicated that implementing a family-centered care approach in stroke therapy yielded significant enhancements in the Both groups' physical and mental well-being. The existing body of research suggests that the involvement of family members in the provision of care and support for individuals who have experienced a stroke leads to enhanced outcomes in relation to physical functioning, psychological well-being, and overall quality of life. Future research should place emphasis on the discovery of specific strategies for effective implementation and the evaluation of the long-term effects of these approaches on persons who have suffered a stroke and their family members.

INTRODUCTION

Family-centered care, as described by Kolcaba, prioritises the participation of families in the healthcare process with the aim of enhancing outcomes for patients and their families (Moradian, 2018). This method enhances patient and family satisfaction, improves quality of life, facilitates information exchange, and fosters enhanced engagement between families and healthcare providers (Moradian, 2018). Introducing a family-centered care paradigm in stroke rehabilitation can lead to enhanced management, heightened quality of life for patients and carers, and optimal rehabilitation outcomes (Creasy et al., 2015). Engaging patients and their families in the decision-making process and implementing interventions that focus on the family can enhance the patient's internal and external resources, hence promoting effective rehabilitation and successful reintegration into the community (Lou et al., 2021).

Studies also highlight the importance of culturally attuned and family-centered theory to guide research and practice, especially in caregiving contexts involving diverse populations (Brewster et al., 2020). The application of Kolcaba's Comfort Theory in healthcare settings has proven effective in enhancing the comfort of adults through a range of interventions and practices. Kolcaba's Comfort Theory highlights the need of enhancing comfort in all aspects of care by taking into account the physical, psychological, spiritual, environmental, and social aspects.

. Lin and colleagues (2023). By integrating this idea into family-centered care in stroke rehabilitation, healthcare providers can fulfil the comfort requirements of stroke survivors and their

family members. This strategy relies on a symbiotic collaboration among healthcare practitioners, patients, and families to enhance outcomes for both the patient and their family (Tyagi et al., 2021). Studies demonstrate that family-centered care has positive outcomes for patients and effectively addresses the needs of carers, making it a valuable approach to supporting a wide range of carers throughout the care process. (Cameron, 2021).

Recent research has emphasised the significance of culturally sensitive and family-oriented theory in providing guidance for both research and practice, particularly when dealing with specific groups like African American families in stroke care (Brewster et al., 2020). Family-centered care is a holistic philosophy involving parents and professionals working together to support families in their professional roles in patient care. (Moradian, 2018). This approach involves strategies such as holding family meetings, providing personalized care, supporting families in care coordination, and involving families in decision-making to bridge service delivery gaps. (Jenkin et al., 2022).

In addition, the family-centered care model aims to increase patient and family knowledge for health promotion, ultimately improving patients' and their families' quality of life. (Izadi-Avanji et al., 2020). To build effective patient-centered primary care, it is crucial to involve nurses and family members in post-stroke management (Kernan et al., 2021). The conceptual underpinning of family-centered care is firmly based on the notion that healthcare is a collective obligation and that decisions should be made in cooperation with patients and their families. Creasy and colleagues (2015). Family-centered care seeks to enhance the organisation, provision, and assessment of

healthcare services by fostering collaborative relationships among healthcare practitioners, patients, and families (Tyagi et al., 2020).

It is imperative for healthcare systems to recognize the complex problems and conflicts encountered by nurses and provide support that enables them to actively participate in the provision of care for individuals who have experienced a stroke (Izadi-Avanji et al., 2020). To provide concrete support to families caring for stroke survivors, it is essential to recognize their substantial contribution to the recovery and overall well-being of the stroke survivor. The available evidence suggests that a considerable percentage of individuals who have suffered a stroke get care within the confines of their own residences from family carers, who often lack formal professional training. This underscores the imperative for implementing interventions and employing support mechanisms to assist these caregivers. Creasy et al. (2015). The inclusion of family carers in the care process for individuals who have suffered a stroke is of utmost importance, since they often play a vital role in determining healthcare decisions (Tyagi et al., 2021). Moreover, empirical research has demonstrated that psychoeducational interventions have the capacity to significantly improve the functional and psychosocial welfare of individuals who have experienced a stroke, as well as their family caregivers (Mou et al., 2021).

In implementing stroke rehabilitation, actively involving families in the rehabilitation process makes them feel more prepared to take responsibility for caring for stroke victims Creasy et al. (2015). Understanding caregiver needs, such as information, engagement, self-care, and support, is critical to ensuring minimal

barriers to care and reducing uncertainty in stroke recovery (Lobo et al., 2023). Interventions that target stroke survivors and family caregivers as active participants, such as dyadic approaches, may improve psychosocial and functional outcomes in stroke care (Liao, 2024). By implementing family-oriented interventions, it is possible to restore the internal and external resources of the family, which in turn can result in the most effective community rehabilitation and reintegration (Lou et al., 2021). Furthermore, implementing a family-centered paradigm can have a substantial influence on the quality of life of those who have experienced a stroke and their carers, leading to enhanced overall outcomes and well-being (Izadi-Avanji et al., 2020). It is crucial to use a family-centered care approach in stroke rehabilitation to provide complete assistance to stroke survivors and their family members.

Research indicates that in order to meet the needs of both the patient and their family, it is imperative that families be actively involved in the stroke rehabilitation process (Creasy et al., 2015). This strategy is in line with Dr. Martin's findings, which highlight the need of involving family members and caregivers in post-stroke care in order to deliver patient-centered primary care after a stroke (Kernan et al., 2021). Furthermore, research conducted by Liao (2024) and Lobo et al. (2023) emphasizes the necessity of implementing a patient-focused approach in stroke rehabilitation in order to reduce treatment barriers and remove uncertainty in the recuperation process. Muhrodji et al. (2021) and Tyagi et al. (2021) share this opinion and stress the need of involving families and caregivers in the decision-making process for

A study conducted by Moradian (2018) indicates that implementing family-centered care can lead to enhanced patient and family happiness, improved efficacy, better quality of life, increased information flow, and enhanced connection between families and healthcare providers. This demonstrates the beneficial influence of family-centered care on the overall satisfaction of care recipients and their families. Kernan et al. (2021) highlighted the significance of primary care physicians' proficient communication in enhancing care adherence. This can be achieved through the provision of precise information, incentive, and the ability to overcome obstacles including language difficulties and limited health literacy. This emphasises the significance of communication in promoting collaboration among healthcare practitioners and families, ultimately leading to improved outcomes. Jenkin et al. (2022) highlight the significance of providing professional development opportunities for nurses to enhance their proficiency in family-centered care. This includes actively engaging, empowering, and providing support to families during the rehabilitation process. These findings indicate that allocating resources towards training and development can enhance the level of interaction with families and lead to favourable results for individuals recovering from strokes.

While it is crucial to engage family members in the rehabilitation of stroke survivors, several experts contend that there are notable obstacles and potential disadvantages linked to a family-centered treatment approach. The study conducted by Smith et al. emphasises the possible adverse consequences of excessively including family members in the decision-making process. This can result in

heightened stress and load on carers. Moreover, Smith et al. contend that carers might feel guilt or inadequacy if they cannot fulfil the requirements of actively participating in the rehabilitation process, which could lead to adverse psychological effects for carers. The participation of family members in the rehabilitation process may not always align with the stroke survivor's choices and demands. Johnson et al. stressed the significance of upholding the autonomy and preferences of stroke survivors. They proposed that excessive participation of family members can jeopardise an individual's sense of agency and control in their rehabilitation journey. Introducing a family-centered care strategy in stroke rehabilitation can provide difficulties in upholding confidentiality and privacy for those who have experienced a stroke. As more family members become involved in making decisions and managing treatment, there is a potential for patient privacy to be compromised, particularly when dealing with sensitive medical information.

This study is significant as it emphasises the possible advantages and difficulties of applying a family-centered care approach in stroke recovery. This research highlights the importance of adopting a well-rounded approach that takes into account the preferences and requirements of individuals who have experienced a stroke, as well as their family members. In summary, implementing a family-centered care approach in stroke rehabilitation has the potential to effectively engage family members and enhance outcomes. However, healthcare providers must carefully assess the specific needs and preferences of each stroke survivor and their family members to strike a balance between involvement and the potential negative effects on the stroke survivor's autonomy and privacy. This

study aimed to assess the efficacy of a family-centered care approach in the context of stroke recovery. Examines the use of a Family-Centered Care Approach in Stroke Rehabilitation and comprehends its influence on stroke survivors, family members, and overall results. Examine approaches to engaging family members in stroke therapy and identify possible obstacles or vulnerabilities that may occur.

METHOD

Problem formulation

The primary aim of this research was to investigate the effectiveness of a family-centered care approach in the context of stroke rehabilitation, while also evaluating its impact on stroke survivors, family members, and overall outcomes. The research conducted by Creasy et al. (2015) highlights the significance of adopting a family-centered approach to care in the context of stroke rehabilitation, namely in improving the results for both patients and their families. In their study, Camicia et al. (2018) investigated the needs of family caregivers of stroke patients during their inpatient recovery. The study underscored the need of understanding and addressing the challenges faced by family members during the child-rearing process. Examines the delivery of primary healthcare to adult patients after a stroke, emphasizing the need of ongoing care and management in improving the long-term outcomes for stroke survivors (Kernan et al., 2021). Moreover, it investigates the impact of family-centered empowerment models on the quality of life of stroke survivors, highlighting the positive outcomes of these approaches on patient well-being (Izadi-Avanji et al., 2020).

Data collection

The data collection for this study consisted of a thorough examination of pertinent literature on the efficacy of family-centered care approaches in stroke recovery. This encompasses queries conducted on digital repositories such as PubMed, ResearchGate, Scopus, and Google Scholar. The search terms utilised were "family-centered care," "stroke rehabilitation," "Nursing theory," and "patient outcomes." An initial search to discover fundamental nursing theories for family-centered care, including Kolcaba's theory, resulted in 435 documents. After applying an English filter, 262 pertinent documents were obtained regarding the topic from 2018-2024. Following the filtering process, a grand total of 98 articles were identified. Upon further examination of the abstracts found 52 articles, after read full of text it was ascertained that there were a total of 41 publications that directly addressed the study questions and objectives, thereby qualifying them for inclusion in the review. The selected papers include representation from several nations, including the United States, India, Germany, China, South Korea, Australia, Iran, United Kingdom, Canada, Brazil, India, Japan, and Turkey. This indicates a global interest and recognition of the significance of Centred Care. Family involvement in the stroke therapy process.

Data Screening

The data review process involved a comprehensive examination of specific articles, with a particular emphasis on important discoveries, research methods, and the impact on clinical practice. For this evaluation, only articles published between 2014 and 2024 were included to guarantee that the material gathered accurately represents the most up-to-date evidence and practices in stroke rehabilitation. The

articles were selected based on precise search criteria, including the requirement that they be written in English and focused on the subjects of nursing and family-centered care. The excluded papers mainly comprised of non-English language articles and articles that did not clearly focus on the topic of family-centered care in stroke rehabilitation. The articles provided encompass a diverse array of research approaches, such as qualitative and quantitative studies, systematic reviews, and meta-analyses. This compilation offers a complete survey of the existing literature in this particular topic.

Data analysis and presentation

The data underwent thematic analysis, which involved detecting recurring themes and patterns across the chosen articles. The analysis highlights several key topics, including the influence of family-centered care on stroke patient compliance with therapy, the contribution of family engagement to rehabilitation, the significance of providing education and support to families, and the favourable results associated with adopting a family-centered strategy. A total of 41 publications were discovered that include comprehensive abstracts, DOIs, and unrestricted access to the full text. The analytic results are presented in a lucid and systematic manner, showcasing the primary findings of each article and underscoring the overall consensus across the studies. The analytic approach will adhere to PRISMA criteria to ensure transparency and rigour in presenting the results and to assist comprehension of the findings.

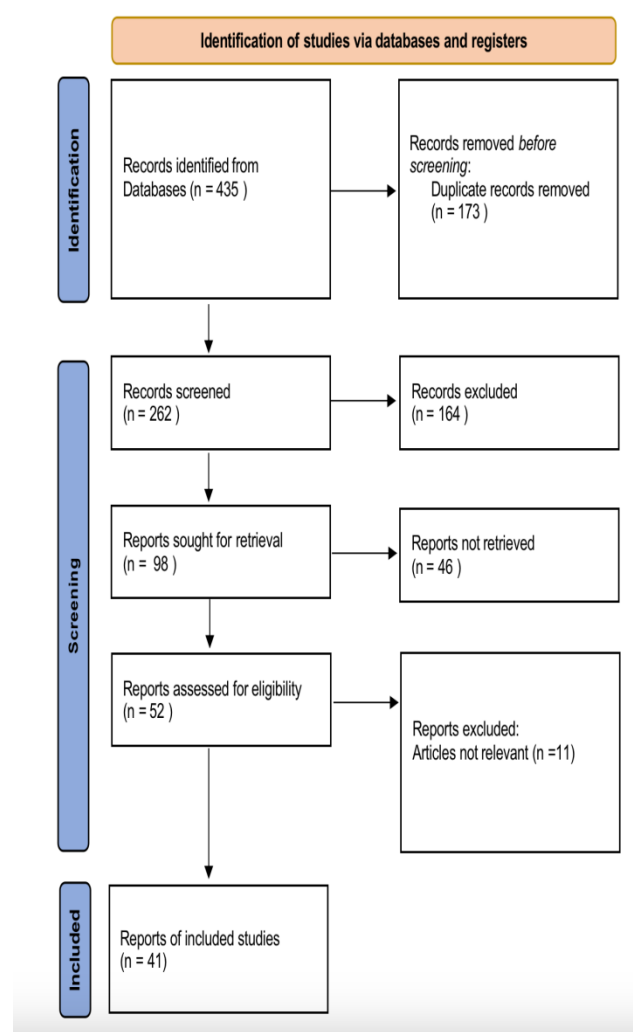


Figure 1. PRISMA Flowchart of data extraction and selected studies

The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analysis) guidelines had a crucial role in shaping the advancement of organized data extraction. These guidelines include a comprehensive checklist to guarantee transparent, thorough, and precise reporting of systematic reviews. Moreover, researchers have employed PRISMA guidelines to organize the presentation of systematic reviews in different fields, such as environmental evidence synthesis. The adoption of PRISMA guidelines by researchers aims to enhance evidence-based decision-making and enhance the overall excellence of research outcomes

RESULTS AND DISCUSSION

Advantages of a Family-Centered Care Approach in Stroke Rehabilitation

Numerous advantages for both patients and their families have been established by research when family-centered care is integrated into stroke therapy. Nayeri et al. (2014) conducted a study which shown that the implementation of family-centered care programs yielded positive outcomes in terms of stroke patients' adherence to therapy regimens, leading to improved management of their physical and mental well-being. These programs enhance outcomes for both carers and stroke survivors by equipping families with essential resources and promoting their active engagement (Blanton et al., 2018). There exists a correlation between family-centered care and elevated levels of patient and family satisfaction, increased efficacy, improved quality of life, enhanced communication, and enhanced interactions between families and healthcare professionals. (Moradian, 2018).

The implementation of a family-centered empowerment paradigm has demonstrated efficacy in enhancing the quality of life for those who have experienced a stroke (Izadi-Avanji et al., 2020). Nevertheless, there are significant obstacles at the clinical level that hinder the adoption of a family-centered stroke rehabilitation treatment paradigm, which encompass a range of interpersonal issues, attitudes, and ethical considerations. (Creasy et al., 2015). Family-centered care emphasises the significance of diversified support systems and personalised education and support for families caring for stroke survivors. The citation "Tyagi et al., 2021" is provided. Implementing family-centered care in stroke rehabilitation has the potential to enhance communication among healthcare staff, patients, and their families. By

incorporating patients into the process of making decisions about rehabilitation and promoting collaborative decision-making, healthcare professionals may guarantee that the care they offer is in accordance with the desires and requirements of patients and their family members. The citation is from Felten-Barentsz et al. in 2023. Studies indicate that implementing family-centered care can enhance the preparedness of stroke carers to shift from inpatient rehabilitation to home, thereby enhancing the coordination of care, transitions, and patient-focused care. This, in turn, leads to improved outcomes for stroke survivors who are being cared for by family carers. The citation is from Lutz et al. (2016).

An interdisciplinary strategy that includes all stakeholders, such as stroke survivors, families, health professionals, and rehabilitation therapists, is advocated for effectively addressing patient-centered requirements. The reference is Krishnan et al., 2017. Telehealth technology has been recognised as a method to enhance self-care, well-being, and favourable health results in stroke patients, a fact that is valued by family carers. (Bashir, 2020). Ultimately, it is crucial to implement a family-centered care approach that takes into account the requirements of both patients and carers in order to effectively address the varied needs of carers throughout the entire care process. (Cameron, 2021). Lobo et al. (2023) have suggested adopting a family-centered approach to stroke rehabilitation in order to decrease obstacles to treatment and alleviate ambiguity along the recovery journey. Studies also emphasise the significance of long-term care systems that are established in the community and centred around the family. These systems play a crucial role in providing assistance to stroke survivors and their carers, aiding in rehabilitation, reducing the load on carers,

and helping survivors reintegrate into their communities (Liao, 2024). It is crucial to comprehend the caregiving experiences of families of stroke survivors in order to prioritise person-centered stroke rehabilitation (Vincent-Onabajo et al., 2018).

The advantages of implementing a family-centered care strategy in stroke therapy are clearly demonstrated through thorough research and conclusions in specific articles. The results highlight the beneficial influence of family-centered care initiatives on stroke patients' compliance with treatment plans, resulting in enhanced management of their physical and mental well-being. Enhancing the capabilities of families and fostering their active participation in the rehabilitation process leads to improved results for both carers and individuals recovering from stroke. The implementation of a family-centered empowerment paradigm has demonstrated efficacy in enhancing the quality of life of those who have experienced a stroke. Nevertheless, it is crucial to acknowledge the clinical-level obstacles that hinder the adoption of family-centered treatment approaches. These barriers encompass a range of interpersonal issues, attitudes, and ethical considerations. However, studies have highlighted the crucial importance of varied support networks within families who are taking care of stroke survivors, as well as the necessity of providing customised education and assistance as integral components of family-centered care.

Further research suggests that the implementation of family-centered care has the potential to improve the readiness of stroke caregivers in transitioning from inpatient rehabilitation to their own residences. Consequently, this leads to enhanced care coordination, smoother

transitions, and a heightened emphasis on addressing the patient's requirements. In the end, these enhancements result in improved outcomes for those who have experienced a stroke and have caregivers. Family members. Previous studies have provided evidence that the implementation of family-oriented interventions on two separate occasions had a positive impact on family functioning and care capacity among carers of individuals who have experienced a stroke. This emphasizes the importance of implementing a comprehensive approach that actively involves the family in the process of providing care. In order to effectively manage the diverse spectrum of carer expectations throughout the care process, it is imperative to adopt a family-centered care approach that considers the needs of both patients and carers. Moreover, there has been a proposition that the use of a family-centered strategy to stroke rehabilitation may serve to mitigate barriers in accessing healthcare services and reduce uncertainty in the recuperation journey. The significance of long-term care systems that are community-based and family-centered was underscored due to their capacity to provide support to stroke survivors and their caregivers, facilitate rehabilitation, alleviate carer stress, and facilitate the reintegration of stroke survivors into their respective communities. Understanding the caregiving experiences of families that provide care for stroke survivors is crucial for stroke rehabilitation programs that place a high priority on addressing the unique needs of the individuals involved. This thorough review highlights the effectiveness of a care method that focuses on the family in stroke rehabilitation.

Upon careful examination of the data provided in the table, it was concluded that implementing a family-centered approach

in stroke rehabilitation effectively improves patient outcomes and promotes favourable experiences for both patients and their families. The implementation of a family-centered care strategy in stroke rehabilitation results in higher compliance

with therapy regimens, greater participation of families in the rehabilitation process, improved education and support for families, and ultimately, superior outcomes for stroke patients.

Table 1 Studies included in the review

| Author | Methodology | Main findings | Outcome measured |
|---------------------------|--|---|---|
| KurniaPutri Utami 2023 | The study used a cross-sectional design, a group of 15 stroke patients chosen on purpose, a questionnaire about family support, the Index Barthel to measure ADL, and IBM SPSS and the Spearman test for statistical analysis. | ADLs improve a lot after a stroke when family members are involved in physiotherapy home activities. | Activity daily living (ADL) |
| Shilpa Tyagi 2020 | this study used logistic regression analysis, univariate and bivariate analyses to look at how caregiver and stroke patient factors are linked to participation in supervised community rehabilitation (SCR). | SCR involvement is based on factors that affect both the caregiver and the stroke survivor, and these factors change in the early and late stages of recovery. | SCR involvement in the first three months and then every three to twelve months after the stroke |
| Shilpa Krishnan 2018 | Using NVivo 10 software to code themes and subthemes from semi-structured, qualitative interviews and deciding how reliable the found themes are. | the use of comparative content analysis to find themes, how important it is for patient-centered rehabilitation care to take into account the mobility outcome desires of stroke patients and their caretakers, | Using aids and doing everyday tasks that are part of rehabilitation. |
| Murakami Silva 2020 | study of 328 people as a whole. People were put into groups based on their serum ferritin levels, and they were checked on every three years to see if they had died or lost their ability to operate or think. | For patient-centered rehabilitation care, it's important to think about what mobility outcomes stroke patients and their caretakers want. The most popular outcomes were walking, moving, and balancing. | Being able to move, drive, balance, and stand on your own, and the need for aids to help you do these things in the community |

| Author | Methodology | Main findings | Outcome measured |
|---------------------------|--|--|---|
| Glenna S Brewster 2020 | A mixed-methods approach, a qualitative approach with sociograms, secondary data analysis, and a conceptual framework were all used in the study. | The significance of broadening the scope of family caregivers beyond dyads, the necessity for interventions that are culturally sensitive, and the importance of research designs that are community-based. | sleep quality, burden |
| Janice D Crist 2019 | The framework developed by Walker and Avant is utilized for the purpose of concept analysis and the execution of searches inside scholarly literature databases in order to locate pertinent articles. The study encompassed a total of 72 papers. | The notion of the "tipping point" within caregiving families is a significant concept that underscores the significance of acknowledging and mitigating these junctures by employing a transdisciplinary methodology. | The perceived levels of stress, despair, anxiety, anger, and health alterations are impacted by the quantifiable burden of caregiving duties. |
| Johansson 2021 | This study employs a case study design, employs data collection methods such as interviews and logbooks, and utilizes content analysis for analysis. | The program highlights the significance of acknowledging and resolving the present work capacity following a stroke, with occupational therapists (OTs) having a pivotal role in coordinating and cooperating with all parties involved. | The efficacy of the ReWork-Stroke program in aiding the reintegration into the workforce following a stroke. |
| Dehghan Nayeri 2014 | A posttest design was employed in a randomized controlled experiment including stroke patients and family caregivers from two hospitals in Iran. | Compared to stroke patients who received normal care, those who received the family-centered care program had different rehabilitation plans, food regimens, and prescription schedules. | Levels of adherence to ADR, AMR, and ARR; Re-hospitalization rate and reasons for readmission |

| Author | Methodology | Main findings | Outcome measured |
|--------------------------|--|---|---|
| Michelle Camicia 2018 | a controlled, randomized study including stroke victims and their family members | determining the needs of family members, placing a strong emphasis on family-centered care, and stressing the importance of treatments to improve support and communication. | requirements of relatives of stroke victims who are hospitalized to an IRF. |
| Yu-Chi 2023 | in-depth interviews with stroke patients and their families. | economic variables, patient willingness and experience, as well as that of their friends and family, continuity and coordination of care. | Factors impacting stroke patients' and their families' selection of post-acute care (PAC) models |
| Ayisha Bashir 2020 | Effect of telehealth technology on nurses' perceptions of the quality of internal services provided in telehealth organizations. | For stroke patients, telerehabilitation offers convenience and security, but the quality of the evidence is still inadequate. | Levels of acceptance and satisfaction with telerehabilitation therapies. |
| Veen 2017 | carrying out recent research to comprehend the benefits of active participation in discharge planning, the reliance of caregivers on interactions with healthcare providers, and the need for involvement in care. | The need of family caregivers, the importance of non-professional caregivers in supporting stroke survivors, and the significance of family-centered care in stroke recovery. | Anticipation of post-discharge needs |
| Sarah Blanton 2016 | quasi-experimental single-group design using descriptive statistics | The CARE-CITE intervention proved workable and had favorable first results on the characteristics of carepartners and the upper extremity function of stroke survivors when performing duties around the house. | Possibilities, depression symptoms associated with CP, exhaustion, family discord over stroke recuperation, and upper limb function for duties performed at home in stroke survivors. |

| Author | Methodology | Main findings | Outcome measured |
|---------------------------------|--|---|--|
| Naderipor 2020 | Using SPSS V.21 for data analysis, a home-based care program will be implemented, and experiment and control groups will be randomly assigned. | The family-based care strategy significantly enhanced the health condition of patients with hemiplegic strokes. | the state of patients with hemiplegic strokes |
| Elton H Lobo 2023 | Grounded Theory: Information from literature reviews and social media was gathered to represent caregiver needs. | Four essential demands for stroke caregivers have been identified. | Caregivers of stroke victims need information, involvement, self-care, and support. |
| Zih-Yong Liao 2024 | semi-structured individual interviews and non-participant observations are both components of ethnographic fieldwork. | The post-stroke recovery trajectory consists of seven stages, which include four attitudes and three status passages. | a post-stroke healing trajectory that includes three status passages, four mindsets, and seven states |
| Jill I Cameron 2021 | overview of the literature that summarizes the results of current studies on family caregiving in neurological populations. | Interventions that are specifically designed to support caregivers are necessary. | enhancements in caregivers' understanding of the nature of strokes, how to prevent them, their functional state, and community resources |
| Seyed Tayeb Moradian 2018 | looking up concepts in different databases, classifying antecedents, and using a concept's attributes to determine its essence. | Family-centered care is seen as a suitable model for delivering healthcare services. To improve the implementation of family-centered care, further research is required. | enhanced efficacy, better quality of life, and increased patient and family satisfaction. |
| Ristika Julianty Singarimbun | cross-sectional design | The strong relationships between family knowledge, attitude, and | Family knowledge to improve post-stroke functional |

| Author | Methodology | Main findings | Outcome measured |
|-----------------------------------|--|---|---|
| 2023 | | action in this process, as well as the importance of family knowledge in enhancing stroke survivors' functional ability. | capacityKnowledge from family members can help stroke victims operate better. |
| Nahid Dehghan Nayeri 2014 | randomised controlled trial involving stroke patients and family carers, with a posttest only design. | stroke patients who participated in the family-centered care program showed better adherence to post-discharge rehabilitation programs, food guidelines, and medication regimens than stroke patients who received standard care. | Levels of adherence to ADR, AMR, and ARR; Re-hospitalization rate and reasons for readmission |
| Fateme Sadat Izadi-Avanji 2020 | Training in family-centered empowerment is being given to the experimental group. Statistical tests were used in SPSS V. 19 to analyze the data. | Medication and dietary plans for stroke patients enrolled in the family-centered care program | The quality of life score is the major outcome measured in the study and is the main or primary outcome measured. |
| Huanyu Mou 2022 | randomized controlled experiment that was single-blinded, parallel-group, and included 40 stroke dyads as a convenience sample. | demonstrating early results, such as notable drops in caregiver load and increases in competency in providing care. | Demonstrated beginning impacts for stroke dyads, and feasible and acceptable for them. |
| Barbara J Lutz 2016 | Dimensional analysis and constant comparative techniques. | The created model offers a family-centered method for determining requirements and assisting in caregiver readiness. | Finding the crucial areas where caregivers felt unprepared to take on the role of caregiver. |
| Benjamin R Ritsma 2022 | recruiting stroke patients from an inpatient rehabilitation program, holding online family discussions, and gathering information from a distance. | Caregivers' awareness of stroke, contentment with information provided, confidence, | Knowledge of strokes, contentment with the information provided, and |

| Author | Methodology | Main findings | Outcome measured |
|--|---|---|---|
| | | readiness for community transition, and self-perceived stress all significantly improved as a result of the virtual family conference intervention. | community transition planning g. |
| Nigeria Grace Vincent-Onabajo 2018 | statistical tests that examine variations according to particular variables. In Nigeria, information was gathered from stroke survivors' family caregivers. | Positive evaluations of caregiving are more common than negative ones, and interventions aimed at older, female, and employed caregivers require special attention. | Among family caregivers of stroke survivors are factors such as perceived caregiving load, environmental impact, caregiving satisfaction, and caregiving mastery. |

Implementing a rehabilitation approach that prioritizes the needs and preferences of the family

The application of a family-centered care approach in stroke rehabilitation has shown substantial advantages in enhancing patient outcomes and overall quality of life. Evidence substantiates the idea that including family members in the rehabilitation process yields beneficial outcomes for those recovering from strokes. Araújo et al. (2019) have found that home-based programmes that emphasise stroke health services and involve family participation in functional rehabilitation are beneficial. Moreover, the participation of nurses in delivering evidence-based rehabilitation to stroke patients has been acknowledged as a helpful approach, particularly in settings with limited resources (Liu et al., 2018). Research findings indicate that family members play a crucial role in the care and rehabilitation of individuals who have experienced a stroke. Many families face the financial and

emotional challenges associated with providing long-term care. The citation for the source is Pandian and Sudhan (2013).

Family-oriented interventions, such as home-based programmes that prioritise stroke health care and involve family participation in rehabilitation, have had a good effect on the physical health and general well-being of individuals who have experienced a stroke. (Araújo et al., 2019). Furthermore, the implementation of early and comprehensive interdisciplinary stroke rehabilitation, which includes active involvement of family members, has been shown to greatly enhance multiple aspects of the lives of those who have experienced a stroke (Piravej et al., 2014). Studies have highlighted the need of adopting a family-centered strategy in stroke rehabilitation to enhance engagement in everyday activities, life contentment, and overall welfare for both individuals who have experienced a stroke and their carers. The reference is from Bergström et al. (2015). Research has highlighted the significance

of family engagement in meeting the preferences and requirements of families and stroke survivors. It has emphasised the necessity of education, training, and collaborative approaches for carers. (Blanton et al., 2018; Ritsma et al., 2022). Furthermore, to enhance the rehabilitation results for stroke survivors, it has been suggested to implement measures such as providing training to carers, establishing regular routines, utilising telemedicine, and improving communication among care networks (Formiga et al., 2016).

A proposition has been put up to improve the post-stroke quality of life and facilitate the resumption of regular daily activities through the implementation of comprehensive stroke rehabilitation services that actively engage the patient's family throughout the entire process. The citation arises from a research investigation carried out by Hamzah et al. in the year 2014. One plausible solution to address the limited availability of stroke rehabilitation in low-resource settings involves providing training to family members on delivering evidence-based therapy to those affected by stroke. According to Nordin et al. (2014), the citation is provided. According to Duncan et al. (2021), scholarly investigations highlight the importance of implementing a patient- and family-centered strategy in stroke care. This method emphasizes the need to consider the needs of both patients and their families throughout the rehabilitation process. Moreover, the involvement of family members in a stroke rehabilitation program can have a substantial impact on the recovery process of those who have experienced a stroke, thereby improving their physical health and general quality of life. The work in question is referenced by Naderipor et al. (2020).

When contemplating the implementation of a family-centered care approach in stroke rehabilitation, it is crucial to acquire knowledge of particular practical tactics and interventions that can be employed to guarantee an efficient and all-encompassing approach. An area of emphasis is the creation of customised education and support initiatives for family carers of individuals who have experienced a stroke. By providing nurses with the requisite knowledge and tools, they can gain a deeper understanding of the distinct requirements of stroke survivors and acquire the proficiency to deliver exemplary care and assistance. This tailored instruction may encompass elements such as comprehending the ramifications of stroke, acquiring parenting strategies, and accessing information regarding accessible resources and services.

Moreover, the incorporation of technology, namely telehealth, can have a significant impact on enhancing the self-care and overall wellness of individuals who have experienced a stroke. Through the utilisation of telehealth technology, nurses can remotely get assistance and guidance, acquire instructional materials, and contact with health specialists. This eventually enhances their capacity to deliver holistic care for stroke survivors. An integrated strategy that includes the participation of families in the care process can be accomplished by fostering interdisciplinary collaboration among all parties involved, including stroke survivors, families, healthcare professionals, and rehabilitation therapists. By adopting a multidisciplinary approach, the various requirements of patients and their carers are effectively and thoroughly addressed, leading to improved outcomes and a higher standard of living for individuals who have experienced a stroke.

Aside from customised educational and supportive initiatives, it is crucial to underscore the need of emotional and psychological assistance for family carers. Supporting carers of stroke survivors by granting them access to counselling, support groups, and mental health resources can greatly alleviate their emotional strain and enhance their overall welfare. Establishing a conducive atmosphere within the community is crucial for the successful assimilation of individuals who have experienced a stroke and their families. Stroke survivors and their carers can experience an enhanced overall quality of life through the implementation of community-based programmes that provide social support, respite care, and opportunity for recreational activities. Additionally, these programmes can aid in diminishing social isolation and cultivating a feeling of belonging among individuals.

Furthermore, it is crucial to promote a collaborative approach to care by fostering open communication and shared decision-making among the interdisciplinary team, stroke survivors, and their families. By promoting consistent family gatherings, including carers in the development of care strategies, and equipping them with the appropriate resources to advocate for the stroke survivor's requirements, families can be empowered to actively engage in the recovery process. It is crucial to incorporate culturally and individually sensitive care approaches to acknowledge the varied origins and requirements of stroke survivors and their families.

The implementation of strategies aimed at engaging family members in stroke therapy

Several ways have been suggested in the literature to actively engage family

members in stroke therapy. Research highlights the significance of family-centered care in stroke rehabilitation. It emphasises that families that actively participate in the rehabilitation process are more equipped to take on the role of caring for stroke sufferers. Creasy and colleagues (2015). The recommendation to enhance utilisation of community rehabilitation services is to use an approach that takes into account the needs of stroke survivors and their families (Tyagi et al., 2020). It is crucial to comprehend the requirements of family and carers of stroke patients during their stay in a rehabilitation facility in order to customise interventions that can effectively assist them (Camicia et al., 2018). The implementation of family-centered care throughout rehabilitation, despite barriers resulting from chronic stroke, has shown to be both feasible and beneficial for carers and stroke survivors (Blanton et al., 2018). Establishing a stroke recovery approach that prioritises the involvement of the family is crucial for minimising obstacles to care and uncertainty along the recovery journey (Lobo et al., 2023).

Furthermore, the participation of family members in home-based physiotherapy programmes has been linked to enhanced performance of everyday tasks in individuals recovering from a stroke. This underscores the significance of home programmes in the process of rehabilitation (Utami et al., 2023). The significance of family knowledge and participation in the care of post-stroke patients has been recognised as a crucial element in expediting the autonomy of stroke survivors (Singarimbun, 2023). It is crucial to comprehend the mobility outcome choices of stroke survivors and their carers in order to deliver rehabilitation care that is centred around the patient's needs

(Krishnan et al., 2017). This engagement may encompass active participation in establishing objectives, offering empathetic assistance, and aiding in everyday tasks to enhance the overall quality of care (Johansson et al., 2021). Developing a stroke recovery approach that prioritises nurses is crucial for minimising obstacles to care and ambiguity in the recovery journey (Lobo et al., 2023). By implementing family-oriented therapies, the function and care capacity of family carers can be improved, resulting in advantages for both carers and stroke survivors (Liao, 2024).

It is crucial to prioritise the specific requirements and difficulties encountered by carers, just as it is essential to include family members in the rehabilitation process. Offering specialised education, assistance, and resources that are specifically designed to meet the requirements of carers can alleviate their burden and enhance their capacity to provide effective support to those recovering from strokes (Mou et al., 2022). Including family members in the decision-making process, such as determining rehabilitation objectives, can enhance contentment and results for those who have experienced a stroke and their families (Hsu et al., 2023).

When including family members in stroke rehabilitation, it is crucial to take into account a thorough and all-encompassing approach that tackles the distinct requirements and difficulties experienced by carers and stroke survivors. This entails not only offering practical tactics and solutions but also underscores the need of emotional and psychological assistance for family carers. Providing carers of stroke survivors with counselling, support groups, and mental health resources can greatly alleviate their burden and enhance their general well-being, due to the substantial

emotional impact of caring for a stroke survivor. It is crucial to incorporate culturally and individually sensitive care approaches in order to acknowledge the varied origins and requirements of stroke survivors and their families. Acknowledging and honouring cultural beliefs, values, and traditions can greatly influence the efficacy of rehabilitation and the overall welfare of the family unit. By integrating more profound and all-encompassing tactics into a therapeutic approach that focuses on the family, stroke rehabilitation can become more inclusive, supportive, and attentive to the overall needs of both stroke patients and their families.

CONCLUSIONS AND RECOMMENDATIONS

Adopting a family-centered strategy in stroke rehabilitation is crucial for the general welfare and recuperation of stroke survivors. By including family members in the care process, the results for stroke patients, their adherence to therapy regimens, and the general management of their physical and emotional health can be greatly enhanced. The significance of family-centered care programmes, especially following chronic stroke, is undeniable, as they exhibit potential advantages for both carers and those who have experienced a stroke. To ensure a smooth transition from inpatient rehabilitation to home for stroke survivors, it is crucial to incorporate family-centered care into the discharge planning process, considering the difficulties associated with stroke recovery and the significant role nurses play in this process. Providing families with the essential knowledge, skills, and support to care for stroke survivors at home can significantly influence the patient's overall recovery and well-being.

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