

Benefits of Caregiver Preparedness to Maintain Quality of Life In Caring for Stroke Patients: A Literature Review

Supriadin^{1,2*}, Regidor III Dioso¹, Mohamed Saifulaman Mohamed Said¹, Hafizah Che Hassan¹

¹Lincoln University College, Wisma Lincoln, 12-18, Jalan SS 6/12, 47301 Petaling Jaya, Selangor Malaysia

²Nursing Study Program, Faculty of Public Health, Stikes Yahya Bima, West Nusa Tenggara, Indonesia

***Corresponding Author:**

E-mail ID: supriadinmyusuf@gmail.com

Cite this paper as: V. Duraisami, Prof. R. Mohana Krishnan, (2025) Benefits of Caregiver Preparedness to Maintain Quality of Life In Caring for Stroke Patients: A Literature Review. *Journal of Neonatal Surgery*, 14 (6), 346-367.

ABSTRACT

Introduction: Stroke can cause neurological impairment that impacts a person's quality of life. Quality of life includes mental, physical, and social health. To achieve optimal quality of life, support from family and health workers is very important. Caregiver readiness in stroke patients is the preparation made by caregivers to accompany patients during the care process in order to support healing and improve their health status.

Objectives: This literature review aimed to understand how caregiver preparedness can improve their quality of life when caring for stroke survivors.

Methods: This study phase began with selection based on the year of publication and availability of full text. Subsequently, articles and journals deemed less relevant were excluded from the list. The literature used in this study was drawn from 10 relevant articles, which were obtained through Google Scholar with keywords such as "Benefits", "Nurse Preparedness", "Quality of Life", "Caring", and "Stroke".

Results: After reviewing the selected articles, it was found that caregiver preparedness positively impacts family readiness in caring for stroke patients. The family readiness also contributes to improving the quality of life of stroke patients. Some factors that play an important role in this include the moderating role of caregiver preparedness, togetherness, and benefits obtained among family caregivers of stroke patients. In addition, caregiver burden and experience, dyadic psychoeducational interventions for stroke patients and caregivers, and the support provided to caregivers also greatly affect success in caring for stroke patients. However, there was one study that showed a negative relationship, namely the experience of caregiver fatigue in caring for stroke patients. The high level of need for stroke patients causes the caregiver's burden to increase and results in a decrease in the caregiver's quality of life. Therefore, caregiver readiness is needed in caring for stroke patients, which can ultimately improve rehabilitation activities, prevent disease complications, and increase compliance in taking medication and undergoing routine controls.

Conclusion: Improving quality of life for stroke patients' caregivers is important, as this can support rehabilitation activities, prevent disease complications, and ensure patients adhere to medication and regular check-up schedules.

Keywords: Caregiver Readiness, Quality of Life, Patients, Stroke

1. INTRODUCTION

Stroke is a leading cause of disability and one of the leading causes of death worldwide. In the United States, more than 795,000 people experience a stroke each year, while in Europe, approximately 1.1 million people are also affected. As the population ages and the number of elderly increases, a significant increase in stroke frequency and other health conditions is expected (Petrizzo et al., 2022). Stroke can be stressful, which impacts the victim's caregiver responsibilities. In this situation, social support and support groups become very important for family caregivers in dealing with the various challenges that arise while caring (Sajwani, 2023).

Based on data from the World Health Organization (WHO), stroke has become the leading cause of disability and ranks second as a cause of death worldwide. According to Global Stroke Facts published in 2022, the lifetime risk of having a stroke has now increased by 50% in the last 17 years, with an estimated 1 in 4 people experiencing a stroke in their lifetime. Between 1990 and 2019, stroke incidence rates increased by 70%, while stroke deaths increased by 43%. In addition, the

prevalence of stroke disease jumped by 102%, and disability-adjusted life years (DALYs) increased by 143%. Most strikingly, the global stroke burden, which accounts for 86% of total stroke deaths and 89% of annual deaths, is predominantly experienced by low- and lower-middle-income countries. This disproportionate burden poses great challenges to families in these countries, especially those with limited resources.

In Indonesia, one of the leading causes of death is stroke, which is mostly experienced by people over the age of five. Stroke accounts for approximately 15.4% of all deaths, with a mortality rate of 99 per 100,000 and years of life lost due to disability of 685 per 100,000 by age and sex. The prevalence of stroke in rural areas was recorded at 0.0017%, while in urban areas it reached 0.022%. Prevalence was higher in adults, at around 0.5% and 0.8% overall. According to the latest RISKESDAS study, the overall stroke prevalence reached 10.9 per 1,000,000 population, with different variations in the rates in each province. In West Nusa Tenggara, the current stroke prevalence ranks the disease as one of the ten diseases with the highest incidence rate, indicating that there is still a high incidence of stroke in the area. Stroke negatively impacts the patient and the caregivers who provide most of the care during the recovery process. Caregivers have a very important role in supporting stroke survivors. However, they often experience negative impacts on their mental health, especially in the first year after a stroke patient is discharged from the hospital. It is estimated that more than 40% of stroke caregivers experience psychological distress and depression due to their care burden, which can then impact their quality of life. Depression and quality of life are interrelated and interact closely between the spouses of stroke survivors and their caregivers. However, few studies have explored these two variables together. The strong relationship between depression and quality of life, both physical and emotional, in spouses of stroke survivors and their caregivers is well understood. Thus, it is clear that there is a reciprocal influence between caregiver quality of life and the sustainability of stroke survivors' quality of life (Pucciarelli et al., 2022). The sudden nature of stroke forces caregivers to make major adjustments in their lives. The impact is felt on their relationships, roles and activities, ultimately impacting their health (Jammal et al., 2024). Understanding the psychosocial factors that affect caregivers can be an important step in identifying stroke patients, as well as caregivers who are at high risk of experiencing more severe long-term cognitive symptoms after experiencing a stroke (Blake, 2025). In a study conducted by Okonkwo (2022), the quality of life of nurses caring for stroke patients with cognitive impairment was moderate, while the level of stress experienced was at a high level. On the other hand, nurses in charge of Enteral Nutrition patients at home also face major challenges that significantly affect their quality of life, especially related to financial stress and depression. Therefore, addressing these issues through a comprehensive support system is crucial to improving nurses' well-being (Folwarski, 2024).

Improving quality of life is a major goal in post-stroke care. Improving quality of life after stroke relies heavily on quality management and care. This effort requires the involvement of health workers and professional caregivers in caring for stroke patients, where health workers play an important role, and families are expected to understand and gain knowledge about the course of the disease. Many factors influence caregiver quality of life, and most of these factors can be modified through appropriate interventions. Therefore, it is crucial for public policy to support family caregivers in caring for stroke patients. Healthcare professionals can also play an important role in increasing protective factors and addressing risk factors, thus improving caregiver quality of life (Tavares, 2024). The transition from hospital to home is a challenging period in the rehabilitation and recovery process after a stroke (Chen MNg, 2021). The heavier the burden caregivers face, the more their quality of life decreases, even though this contributes to improving the patient's quality of life. Physical disabilities experienced by patients certainly affect the workload of caregivers but do not affect the health status of the patients themselves. Therefore, to improve the quality of life of families, it is essential to develop intervention programs that provide optimal support for patients as well as adequate assistance for health workers (Ibanez-Davo, 2022). Methods of care and continuity of care during the rehabilitation and adaptation process are governed by the planned readiness of caregivers. Caregiver readiness is their ability to meet patients' physical and emotional needs, including caregivers' perceptions of their ability to coordinate services for care recipients, handle emergencies, and cope with the stroke patients they care for. Caregivers are required to be highly motivated to carry out their role. However, other factors can inhibit caregiver work motivation which has great potential to affect their quality of life (Gutierrez-Baena & Romero-Grimaldi, 2022). The role of nurses is very important, both as communicators and in maintaining patients' health. However, challenges that often arise are the lack of knowledge about stroke and the lack of attention from the family (Muhrodji, 2022).

According to research conducted by Williams Agyemang-Duah (2024), there is a significant negative relationship between caregiver burden and health-related quality of life (HRQoL) in the care of stroke patients. Caring for stroke patients can cause stress for caregivers, although they also report benefits and progress in the experience of caring for stroke patients. Other findings suggest the importance of developing two types of support interventions for caregivers: respite support and psychosocial support. This is particularly relevant for women who face a high caregiving burden and/or care for people with high levels of anxiety or depression (Villa-García et al., 2024). The experience of stroke survivors and caregivers in the transition care process from hospital to home is a dynamic journey characterized by major challenges at each stage (Lin, 2022). Thus there was an increase in the perceived preparedness of family caregiver participants in dealing with various aspects of care for cognitively impaired individuals (Ung, 2023). Coping with the sense of loss and grief that arises from the experience of caring is essential. This process allows us to re-establish meaning in life that can support caregiver well-being (Choo, 2022). The burden experienced by caregivers in the late stages of the chronic phase after stroke is a significant issue,

given that almost half of caregivers experience considerable distress (Jaracz, 2024).

Caring for our loved ones provides practical benefits, such as increased knowledge and skills for the caregiver, and enriches inner awareness. This process enables caregivers to cope better with stress and develop a more conscious personality. In addition, caregivers can accept the reality of the stroke survivor's condition, appreciate everything they have, and value the survivor's life more. Caregivers also become more patient, sensitive to the needs of others, and more humble in communication. Once they start providing care, they will feel many benefits after caring for stroke patients. These benefits include internal values, such as feeling more useful and fulfilled, as well as extrinsic values, such as gratitude from families and admiration from relatives and neighbours. Achieving these values brings happiness and satisfaction to the caregivers as they learn new skills and strategies and face challenges while providing care. In addition, the progress made by stroke survivors is an achievement and satisfaction for nurses. Therefore, training nurses to be able to carry out the task of caring for patients and helping them feel confident not only increases benefits for themselves but also improves the quality of rehabilitation for stroke survivors (Mei et al., 2020). It can identify gaps in caregiver readiness so interventions can be tailored to maximize the transition home and minimize the negative impact of caregiving (Camicia, 2023). Meeting the needs of caregivers with problem-solving approaches and support that go beyond conventional education and training is essential. More research is needed on dosage, interventions, care settings, and achieving consistent outcomes (Mack, 2023). While quantitative data is of high value, qualitative data provides an opportunity to identify concrete solutions and tangible steps for improvement. Rochette (2020) argues that families must be seriously and systematically involved in stroke rehabilitation. In addition, it also has a statistically significant impact on the quality of life of family caregivers, especially concerning their social relationships and autonomy (Scimago Institutions Rankings, 2023). as well as supporting stroke survivors to be active in social life while alleviating the multitasking burden faced by family caregivers (Liao, 2024).

The novelty of this literature observation is that stroke has a negative impact not only on the victim but also on the caregivers who provide most of the care during the recovery process. As stated by Jaracz (2024), the burden experienced by caregivers in the late chronic phase after stroke is a significant issue, considering that almost half of the caregivers face a considerable burden. Some researchers have only focused on stroke patients but rarely have researched caregiver burden, depression, quality of life, or other challenges faced by caregivers, such as family members while caring for stroke patients. Therefore, this study aims to examine burden, depression, and quality of life, and the purpose of this literature review is to understand the benefits of caregiver preparedness in caring for stroke patients, their burden, depression, and quality of life.

2. METHOD

This article is a literature review summarising previous findings on a particular topic. The wealth of available information provides valuable opportunities but also demands systematic review methods so that the researcher can optimally utilize the data to complete this study. The researcher himself conducted the literature search, and the extracted documents were then independently reviewed by another researcher to ensure that only relevant and appropriate documents were included in the study. The search was conducted through the Google Scholar database using keywords such as "benefits", "caregiver readiness", "maintaining", "quality of life", "caring", and "stroke patients". The article search process began on February 20, 2017. "The article search process began on July 20, 2024, until July 30, 2024, based on the keywords that had been determined. Finally, the author collected ten journals and articles, which were then reviewed to take the core of the discussion and some important points from each reference. The final step is writing the article itself (Nursalam, 2020).

3. RESULTS

The search review was conducted by identifying and filtering based on predetermined variables. After that, an eligibility test was conducted, which resulted in 10 journals meeting the desired criteria. The journals were retrieved from the search engines used in this study, namely Google Scholar and PubMed.

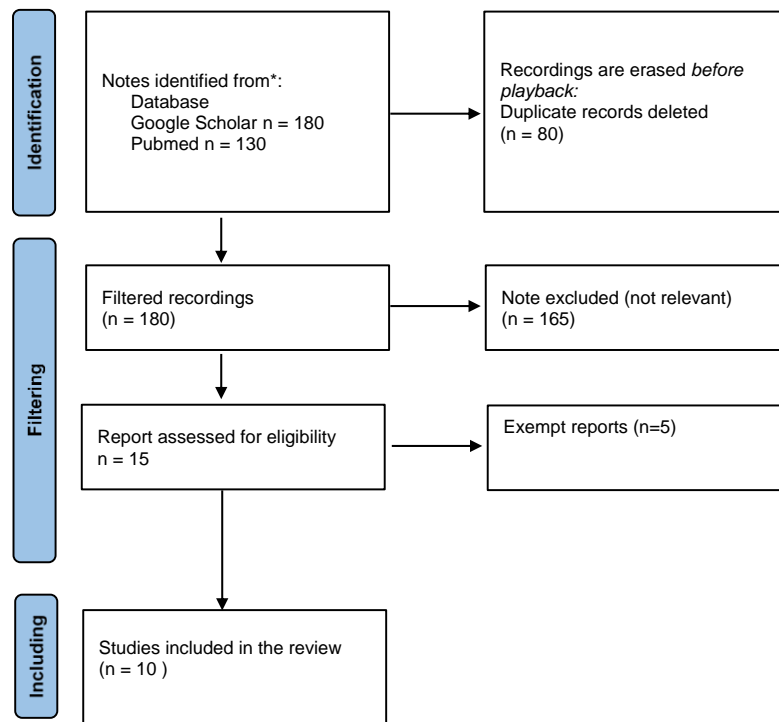


Figure 1. Flowchart of the study (PRISMA Flowchart)

Table 1. Comparative Overview of International Research on Stroke Caregiving and Survivor Outcomes

Title	Purpose of study	Country	Participants	Design of study	Measurement tools	Findings	Reference citation
The moderating role of caregiver readiness on the relationship between depression and stroke-specific quality of life in spouses of stroke survivors: a longitudinal study	To examine the moderating role of caregiver readiness on the relationship between stroke survivor depression and stroke-specific quality of life dimensions.	Italy	A sample of 243 spouses of stroke survivors and their caregivers were included in this study.	Longitudinal Design	1. To measure depression in stroke survivor, we used the Hospital Depression Scale (HDS) which is one of two scales from the Hospital Anxiety and	Involving nurses directly in the care process, through psycho-educational training, means having better prepared nurses and consequently healthier stroke survivors. Given that preparedness includes coping with stress, responding to and managing	Petrizzo et al., 2022b

					<p>Depression Scale (HADS).</p> <p>2. To evaluate the quality of life of specific stroke survivors, we used SIS 3.0.</p> <p>3. To evaluate caregiver readiness, we use for the Caregiver Readiness Scale (CPS).</p>	<p>emergencies, assessing help and information may require specific interventions aimed at improving quality of care.</p> <p>improve nurses' skills and knowledge on stroke patient management.</p>	
Stroke survivors' and caregivers' experiences during transitional care from hospital to home: A qualitative longitudinal study	To evaluate the experiences of stroke survivors and their family caregivers during hospital-to-home transition care in China.	China	23 stroke survivors/caregivers participated, with a total of 92 individual interviews	qualitative longitudinal study	<p>1. Identifying one main theme (optimism and hope) in the first stage</p> <p>2. four main themes in the second phase (worries and emotional reactions before hospital discharge)</p>	The experiences of stroke survivors and caregivers during transition care from hospital to home is a dynamic process with enormous challenges at each phase. The findings have implications for policy makers and the healthcare system in	Lin et al.2022

					ge Lack of knowledge and information about stroke care and difficulties in performing home health care in the third phase (high level of post-discharge stress, inaccessibility to post-discharge care services and health resources).	developing an enabling environment for successful hospital-to-home transition care. Collaboration with healthcare professionals, accessible rehabilitation services and follow-up support after hospital discharge, as well as available community and social support should be integrated into transition care to help stroke survivors and caregivers to facilitate their journey from hospital to home.	
Benefit finding among family caregivers of stroke survivors in China: a qualitative descriptive study	The purpose of this study was to explore the benefits perceived by family caregivers of stroke survivors in a Chinese community setting.	China	for stroke survivors aged 18 years and above who have a formal diagnosis of cerebrovascular disease and have functional disability (Barthel Index <100, provided at	Qualitative and Descriptive	Interviews were semi-structured, and a topic guide was written.	Family caregivers of stroke survivors experience multiple benefits from caregiving. There are internal benefits (increased knowledge and skills, developmen	Mei, Lin, Zhang, Yang, Wang, Zhang, Sze, et al, 2020

			least 4 hours of care daily in the past 4 weeks and can communicate in Chinese and are willing to take part in the interview.			t of positive attitudes, and development of a sense of worth and achievement) and external benefits (family growth and acquisition of social support), which interact to create a healthy lifestyle.	
The relationship between disability, depression, anxiety, stress, and quality of life among stroke survivors and their family caregivers: Exchanges between Actors and Partners	To explore the effects of symptoms of disability, depression, anxiety and stress on the quality of life (QOL) of patients and their partners using the actor-partner interdependence model (APIM).	Indonesia	183 couples with stroke and their family caregivers in Indonesia	A cross-sectional study using the actor-partner interdependence model	The World Health Organization Disability Assessment (WHODAS 2.0), Depression, Anxiety and Stress (DASS-42) and Rand Health Survey Short Form (SF-36) were used to measure symptoms of disability, depression, anxiety and stress and quality of life of stroke survivors and family caregivers. Interdependence models between actors and spouses were tested using multilevel modeling. The actor-spouse interdependence mediation model (APIMeM) was applied to reflect direct and indirect effects.	These findings suggest that stroke survivors and their family caregivers may influence each other during the process of caregiving and social life. Disability in stroke survivors, and symptoms of depression, anxiety and stress in stroke survivors and family caregivers affect their own and their partners' quality of life. Disability in stroke survivors	Yuliana, 2022

						directly decreases their overall quality of life, both physically (PCS) and mental (MCS). In addition, indirectly through symptoms of depression, anxiety and stress in stroke survivors reduces the physical (PCS) and mental (MCS) quality of life of stroke survivors and their family caregivers.	
Caring for stroke patients: Burdens and experiences of primary caregivers in Uganda - A qualitative study	To assess nurses' burden and experience in caring for stroke patients in Kampala, Uganda.	Uganda	A sample of 25 primary caregivers was consecutively recruited for this study.	qualitative cross-sectional	In-depth face-to-face interviews were conducted by the first author and a social scientist.	Twenty-five caregivers were involved. Four themes were identified from qualitative analysis of caregivers' experiences of caring for stroke patients, taking on new responsibilities, factors that protect caregivers from failure, limited resources, and experiences regarding patient	Gertrude, 2019

						outcomes. Our findings highlight the need for interventions to support stroke patients and their caregivers.	
Implementing a Caregiver Support Program in a Regional Stroke System	to describe system-level facilitators and barriers to implementation of the nurse support program in the regional stroke system.	Canada	Representatives from each of the 11 regions of the Ontario Stroke System and representing the disciplines described above were eligible to participate.	Qualitative descriptive research design	<ol style="list-style-type: none"> 1. To maximize the credibility of the findings 2. to discuss the data, alternative interpretations, and generate themes. 3. to capture emerging ideas during data collection and analysis 4. to contribute to the certainty and reliability of the findings. 	<p>Four themes have been identified:</p> <ol style="list-style-type: none"> 1. establish the need to implement a caregiver program within an integrated health care system 2. incorporate caregiver programs into 	Tseung, 2019

						o the ser vic e sys te m acr oss the co nti nu um of car e	
						3. un cer tai nty ov er ow ner shi p an d im ple me nta tio n res po nsi bili ty ad dre sse s reg ion al var ia ti ons in acc ess , ava ila bili	

						ty, an d cul tur e	
Experiences and needs of stroke nurses in Malaysia-A phenomenological exploration	<ol style="list-style-type: none"> 1. To understand the experiences and needs of family caregivers in providing care to stroke survivors in their families based on the caregivers' own experiences. 2. To understand the experience of accessing stroke care services from the perspective of caregivers (CG) 	Malaysia	12 healthcare providers and 10 primary caregivers of stroke survivors were involved	This research is a qualitative study with a phenomenological approach. In-depth interviews with participants were the main method of data collection.	<ol style="list-style-type: none"> 1. to explore the experiences of various specialists involved in stroke rehabilitation; therefore, healthcare providers were selected from different professions and service environments. 2. To get a diverse background of the caregivers; therefore, we included caregivers by age group and gender (for both caregivers and care receivers), relation 	The role of informal caregivers is important for the stroke continuum of care. Because caregivers take on their roles and responsibilities that contribute to stroke rehabilitation immediately after hospital discharge. The results of this study highlight the need to provide systematic support to caregivers to engage them in effective stroke care, especially in the field of stroke	Platz et al., 2022

	and rehabilitation service providers (HCP).				ship (spouse, child, sibling), education level, and duration of caregiving.		
The Relationship Between Readiness to Care and Spiritual Well-Being in Stroke Patient Nurses	to determine the relationship between readiness to care and spiritual well-being in nurses of stroke patients	Turkey	was conducted on 130 primary caregivers of hospitalized patients with a diagnosis of stroke in a neurology clinic of a hospital.	Descriptive and cross-sectional research	Data were collected using the Personal Information Form, Caring Readiness Scale, and Spiritual Wellbeing Scale. The patient group's level of independence in activities of daily living was determined using the modified Barthel Index.	The results of this study indicate that the spiritual well-being of caregivers of stroke patients is important in improving readiness to provide care. In this context, to ensure that caregivers of stroke patients feel prepared in the caregiving process, it is recommended to ignite their level of preparedness, support them in preparation for the caregiving role, and identify their spiritual needs.	Tuncay, 2024
Predictors of health-related quality of life for stroke patients: A prospective longitudinal study of stroke	To find out how the readiness and competence of nurses in predicting HRQOL of	Korea	A total of 158 patient-family pairs were recruited from June to September	A prospective longitudinal study.	Our dataset consists of paired data from patients and their family caregivers. Data were collected at	The findings of this study suggest the importance of family caregiver preparedness	Seok RN, 2023

patient and matched pairs	stroke patients.		2021.		<p>two time points:</p> <ol style="list-style-type: none"> 1. at baseline, when stroke patient demographics and demographic characteristics of stroke patients and family caregivers as well as family caregiver demographic and care characteristics, family caregiver preparedness and sense of competence, and stroke patient HRQOL were measured. 2. after 3 weeks from the baseline survey (average hospitalization period 	s and sense of competence in predicting changes in patients' HRQOL.	
---------------------------	------------------	--	-------	--	---	---	--

					for rehabilitation care), when stroke patients', HRQOL was measured. The outcome variable was change in HRQOL of stroke patients, the predictor variables were family caregiver readiness and sense of competence, and potential confounders were stroke patient-related demographic characteristics and stroke patient-related demographic characteristics. - Caregiver-		
--	--	--	--	--	---	--	--

					related characteristics and family caregivers.		
A Holistic Approach to Expressing Caregiver Burden for Stroke Patients	to determine the mediating effect of resilience on the correlation between burden and Quality of Life (QoL) in Family Caregivers (FC) of stroke patients.	Explore the challenges faced by stroke nurses, addressing the global impact of stroke and the expected increase in the number of stroke survivors in the coming decades.		Systematic Review Systematic Analysis and Meta-analysis (PRISMA)	A thorough literature search found 34 relevant studies published between 2018 and 2023.	increase understanding of nurses' experiences and provide actionable insights to improve stroke care and rehabilitation	Tziaka, 2024

4. DISCUSSION

In caring for stroke patients, caregiver preparedness is a very important aspect. Involving caregivers in the care process is a must. Unfortunately, caregivers are often not involved in rehabilitation, as the main focus is more concentrated on stabilizing stroke patients. This unproportional focus leads to rehabilitation programs tending to only address the patient, while the important role of the caregiver is often overlooked in the recovery and care process. Caregiver readiness is actually a modifiable factor that can be easily integrated into various interventions and programs aimed at rehabilitation. By preparing caregivers well for their role, the care they provide can have a positive impact not only on patient outcomes but also on improving the quality of life of patients and caregivers themselves. This is especially important when patients are discharged from the hospital and potentially face high depressive symptoms (Pucciarelli et al., 2022). The needs of caregivers and their readiness act as a bridge that connects family resilience with the discovery of benefits that accrue to families in a caregiver role (Zhao, 2024), so identifying differences in caregiver readiness is essential for interventions to be well-tailored. This identification aims to optimize the transition home process and minimize any negative impacts from caregiving (Michelle Camici, 2023). Therefore, it is important to support caregivers in planning the discharge process with the family (Nursiswati, 2022). Given the vital role of nurses in providing care to stroke patients, their contribution is very influential (Theresa L. Green, PhD, RN, 2021). The patient's quality of life is greatly influenced by his ability to carry out self-care directly and indirectly. This factor is also influenced by the support provided by caregivers, who play an important role in supporting the self-care process (Gabriele Caggianelli, 2022). Palliative care needs often arise after a stroke and must be met throughout

the disease (Claire J. Creutzfeldt, 2024).

Caregiver preparedness is a form of preparation made by caregivers to meet patients' physical and emotional needs (Eun Uhm et al., 2023a). In this context, caregiver preparedness acts as a moderating factor that influences the impact of depression on the caregiver and survivor's quality of life (Tsiakiri et al., 2023). Involving caregivers in the care process makes them better prepared and helps stroke survivors achieve a healthier state. In addition, it can increase understanding of the healthcare workers' experience and provide insights that can be applied to improve the quality of care and rehabilitation of stroke patients (Tziaka et al., 2024). One of the preparatory steps that can be taken is to implement the Partnership Care Model (PCM) Program, which is very effective in improving quality of life (QOL) and activities of daily living (ADL) for stroke survivors (Mohammadi, 2021). In addition, preparedness can also be carried out through Bartoli's (2024), research activities showing that strong support for the application of telehealth, especially at the stage of discharge of patients from hospitals and rehabilitation centres, is very important, especially for stroke patients and their caregivers. Likewise, research conducted by Ahmed Elsheikh (2021) shows that improvements in psychological and social aspects are likely to be influenced by the interventions provided. In this context, the role of informal nurses is very important to ensure the smooth care of stroke patients. After the patient is discharged from the hospital, informal caregivers are responsible for independently supporting the stroke rehabilitation process (Sidek, 2022). To improve caregivers' ability, it is important for them to attend caregiver training, which has been shown to positively impact stroke patients' self-efficacy (Ibrahim, 2021). Nurses have a very important role as communicators and in maintaining patient health. However, problems often arise related to a lack of knowledge about stroke and a lack of attention from the family (Muhrodji, 2021).

Coping strategies can be an important psychological support in stroke rehabilitation and play an active role in improving the quality of life for nurses and stroke patients (Tsiakir, n.d.). Thus, there is a need for various kinds of training development, such as that conducted by Nicole Yun Ching Chen (2024); there are several main benefits that can be felt from this intervention, including the use of communication tools, a forum for sharing and support, as well as opportunities for reflection, mindset change, goal setting, and value evaluation. In addition, dyadic psychoeducational interventions are effective in increasing the functional independence of stroke survivors and reducing the burden felt by family caregivers in the short term. These interventions also can potentially improve stroke survivors' quality of life in the long term (Mou, 2021). In addition, family-focused dyadic psychoeducation programs are of good quality and positively received by stroke survivors. The program also provides beneficial early effects for those experiencing the condition (Mou, 2022). In addition, this study aims to investigate how physiological, psychological and social factors affect the dyadic health of young and middle-aged stroke survivors and their partner caregivers (Dandan Xiang, 2025). Furthermore, nurses and other healthcare providers can utilize this program to support FCG Family Nurses in caring for PWS (Edrisi, 2021). Stroke Patients More Effectively One important aspect of caring for stroke patients is the preparation of available devices and technology. These tools can play an important role in meeting patients' accommodation needs after a stroke (Gurgel-Juarez, 2022).

Given that preparedness includes stress management, response and handling of emergencies, and assessment of assistance and information, specific interventions are needed to improve nurses' skills and knowledge regarding managing stroke patients (Petrizzo et al., 2022b). Nursing care is a long and difficult process. Society, medical institutions and families should pay full attention to the feelings and needs of stroke caregivers in the care process and provide appropriate support for them (Wang, 2023). Devotional values encourage caregivers to be better prepared while expanding the application of the Caregiver Empowerment Model of Mengying Yu MS, RN (2024). In addition, effective programs can be developed to provide informational support to caregivers to reduce their level of burden (Nimitphuwadon, 2024). The more burden faced, the more the caregiver's quality of life decreases, which improves the patient's quality of life. On the other hand, the physical incapacity of the patient also has an impact on the level of workload that the caregiver has to bear (Maria Ibanez-Davo BSC, 2022b). So, steps must be taken to prepare and support caregivers (L.W. Mahinda, 2023). Family resilience directly affects service utilization by family caregivers and indirectly affects service utilization through caregivers' needs and motivations. The caregiver's needs and caregiver motivation play a mediating role in family resilience and caregivers' finding benefits for families (Muhrodji, 2021; Zhao, 2024). Then, family-centered rehabilitation practices (Lampshire, 2024). As such, it illustrates the potential benefits of family conferencing and the feasibility of implementing its virtual format in the stroke rehabilitation care process (Benjamin R Ritsma, 2022). Researchers in Thailand also pointed out that strong psychometric traits among stroke nurses are essential in investigating their role in supporting stroke patients' self-care, especially in diverse cultural contexts (Klinjun, 2023).

In previous studies, higher caregiver readiness has been shown to reduce caregiver burden and depression and improve caregiver quality of life. In particular, depression was a significant independent factor associated with caregiver readiness. Additional efforts are needed to improve caregiver readiness, including training caregivers and providing resources through community or web-based centres. Therefore, strategies to improve caregiver readiness are essential to reduce caregiver burden and improve service quality (Uhm et al., 2023). We found that caregiver preparedness moderates the impact of depression on caregiver quality of life. In other words, if stroke caregivers are better prepared to care for stroke survivors, even if they or the patient are depressed, then the impact of depression on their quality of life can be reduced (Pucciarelli et al., 2022). , 2024). Hence, addressing resilience interventions in palliative care can ease the burden and improve the quality

of life of stroke survivors (Handayani et al., 2024). since adequate support and preparation are key factors that facilitate stroke nurses in carrying out their duties (Wen Xiu Samantha See Toh, 2022), then Interventions can be used to improve readiness to provide care and provide better support for family caregivers involved in-home care in particular (Norinder, 2023). An optimal level of emotional well-being, significant support from the family or social environment, and self-readiness among caregivers are all important foundations for their empowerment (Isac, 2021).

Better preparedness of caregivers can contribute significantly to their understanding of the needs of stroke survivors. Well-trained caregivers usually have adequate skills to improve communication with stroke survivors, as well as better understand the physical and emotional aspects they face. The importance of caregiver preparedness lies in their ability to understand the psychological needs of stroke survivors, which has implications for how they communicate more effectively. This fact suggests that the provider's role in communicating with stroke survivors is moderate. Better caregiver preparedness can have positive implications because when patients can express their concerns and even anger more clearly, they can better understand what patients need. As such, this may reduce the level of depression among stroke survivors and, in turn, help ease the burden borne by caregivers (Petrizzo et al., 2023). Positively impact and increase the effectiveness of interventions for families of stroke survivors and their partners (Bakas, 2022). One effective form of intervention is Training-Based Teleoccupational Counseling (CTG), which has been shown to increase stroke survivors' participation in performing activities of daily living according to Lawton's indicators (IADLs) and encourage their intrinsic motivation. In addition, CTG also has the potential to provide significant benefits to caregivers while reducing the burden of care they face (Zhang, 2022).

The effectiveness in facilitating education and preparation for caregivers and discharge planning for patients before they integrate into society after stroke rehabilitation is critical. This demonstrates the significant potential benefits of family conferencing and the feasibility of its application in the stroke rehabilitation process (Ritsma, 2022a). Experience in caring for patients, families, and staff can provide valuable insights that can facilitate increased engagement of all parties. This experience is particularly important for preparing home-based rehabilitation for stroke survivors and their caregivers (Bulsara, 2021). Caregiver involvement in stroke management tailored to different levels of care has the potential to reduce unmet needs and improve ongoing interactions with medical professionals (Lobo, 2021). By improving patient education, we can contribute to improving nursing practice and help reduce the number of patients experiencing unexpected re-treatment (Robinson, 2024). This text can provide a deep understanding of health education is importance in self-management and stroke prevention (Afrin, 2023). As such, a detailed transitional care plan should be developed that identifies those responsible for monitoring and supporting the patient and their family during this transition period (Thiengtham, 2024). The preparation of a spiritual care program has been shown to contribute towards improving the sleep quality and spiritual health of stroke patients. Therefore, nurses need to consider these aspects in an effort to provide holistic care (Yousofvand, 2023).

5. CONCLUSIONS AND RECOMMENDATIONS

Better caregiver readiness is an indicator of reduced burden and depression. It also has positive implications for caregivers' quality of life, allowing them to care for stroke survivors more effectively. With high preparedness, caregivers can improve rehabilitation, prevent disease complications, and ensure adherence to medication and routine controls.

Conflict of Interest

The authors declare no conflict of interest in this research.

ACKNOWLEDGMENTS

The authors would like to thank Lincoln University College, Malaysia and Stikes Yahya Bima, Indonesia.

ADVANTAGES AND DISADVANTAGES IN RESEARCH

Advantages and disadvantages of systematic reviews:

Advantages

It can enhance the evidence from previous research and represent information from the various research questions available in the study.

Disadvantages

Fulfilling the requirements of a research question takes a considerable amount of time, and during a thorough literature search, some important studies may be overlooked, which may affect the conclusions

REFERENCES

- [1] Ahmed Elsheikh. (2021). Effect of a customized multidimensional intervention on burden of care among family caregivers of stroke survivors: a randomized controlled trial. *BMJ JOURNAL*, 12(e049741), 1-12. <http://dx.doi.org/10.1136/bmjopen-2021-049741>
- [2] Amanda Mack. (2023). Interventions for Caregivers of People Who Have Had a Stroke: A Systematic Review.

The American Journal of Occupational Therapy, 77(1). <https://doi.org/10.5014/ajot.2023.050012>

- [3] Anna Tsiakir. (n.d.). A Scoping Review of Stroke Nurses' Coping Strategies and Quality of Life: An Often Underestimated Variable in the Stroke Recovery Process? *MDPI*, 2023. <https://www.mdpi.com/2673-8430/3/3/29>
- [4] Annie Rochette. (2020). *Family involvement in stroke rehabilitation: Perceptions of the quality of care they receive in the context of outpatient, inpatient, and early supported hospitalization services*. <https://www.tandfonline.com/doi/abs/10.1080/10749357.2020.1790731>
- [5] Benjamin R Ritsma. (2022a). virtual family conferencing in stroke rehabilitation: Education, preparation, and transition planning. *Sage Journals Home*, 37(8), 1099-1110. <https://journals.sagepub.com/doi/pdf/10.1177/02692155221146448>
- [6] Benjamin R Ritsma. (2022b). Virtual family conferences in stroke rehabilitation: Education, preparation, and transition planning. *Sage Journals Home*, 37(8), 1099-1110. <https://journals.sagepub.com/doi/pdf/10.1177/02692155221146448>
- [7] Caroline Bulsara. (2021). Reflecting on the experience of care: an exploratory qualitative descriptive study of stroke survivor, family, and staff perspectives. *Bjm Journal*, 11(e047559.), 1-8. <http://dx.doi.org/10.1136/bmjopen-2020-047559>
- [8] Chen, N. Y. C., Chee, A., & Dong, Y. (2024). Perceived benefits and challenges of an employment skills training workshop after stroke: a qualitative study with stroke survivors and caregivers. *Disability and Rehabilitation*, 1-8. <https://doi.org/10.1080/09638288.2024.2402507>
- [9] Chandrani Isac (2021). Elderly with chronic illness - Caregiver burden in the Asian context: A systematic review. *PEC*, 104(0738-3991), 2912-2921. <https://doi.org/10.1016/j.pec.2021.04.021>
- [10] Claire J. Creutzfeldt, M. (2024). Palliative and End-of-Life Care in Stroke: A Scientific Statement From the American Heart Association. *AHA ASA Journal*, 56, e75-e86. <https://doi.org/10.1161/STR.0000000000000479> February 2025 e75Stroke available at www.ahajournals.org/journal/strAHA SCIENTIFIC STATEMENTPalliative Care and End-of-Life Care in Stroke: A Scientific Statement from the American Heart AssociationAmerican Academy of Neurology affirms the value of this statement as an educational tool for neurologists.Claire J. Creutzfeldt, MD, Chair; Julia Bu, MD; Amber Comer, PhD; Susan Enguidanos, PhD; Barbara Lutz, PhD, RN, FAHA; Maisha T. Robinson, MS, MD; Darin B. Zahuranec,
- [11] Dandan Xiang. (2025). Mechanisms of physio-psycho-social interactions in the health of young and middle-aged stroke surviving spouses and their spousal caregivers: a longitudinal observational study protocol. *BMJ JOURNAL*, 13(e065767), 1-8. <https://doi.org/10.1136/bmjopen-2022-06576>
- [12] Davide Bartoli. (2024). Impact of telehealth on stroke-caregiver couples in home rehabilitation: A systematic review. *Wiley Online Library*. <https://doi.org/10.1111/jan.16177>
- [13] Eesa Mohammadi. (2021). Evaluation of "partnership care model" on quality of life and activities of daily living in stroke patients: A randomized clinical trial. *Wiley Online Library*, 19(1). <https://doi.org/10.1111/jjns.12448>
- [14] Eftychia Tziaka. (2024). *A Holistic Approach to Expressing Caregiver Burden for Stroke Survivors: A Systematic Review*. *Nursing: Research and Reviews*. <https://www.mdpi.com/2227-9032/12/5/565>
- [15] Eun Uhm, K., Jung, H., Woo Woo, M., Eun Kwon, H., Oh-Park, M., Ram Lee, B., Joo Kim, E., Hwan Kim, J., Ah Lee, S., Lee, J., Sanchez-Gutierrez, T., Freeman Chong, W., Akbarfahimi, M., & Rashedi, V. (2023a). Effect of preparedness on caregiver burden, depression, and quality of life in caregivers of persons with disabilities. *Front. Public Health*, 11, 1153588. <https://doi.org/10.3389/fpubh.2023.1153588>
- [16] Eun Uhm, K., Jung, H., Woo Woo, M., Eun Kwon, H., Oh-Park, M., Ram Lee, B., Joo Kim, E., Hwan Kim, J., Ah Lee, S., Lee, J., Sanchez-Gutierrez, T., Freeman Chong, W., Akbarfahimi, M., & Rashedi, V. (2023b). Effect of preparedness on caregiver burden, depression, and quality of life in caregivers of persons with disabilities. *Front. Public Health*, 11, 1153588. <https://doi.org/10.3389/fpubh.2023.1153588>
- [17] Farzaneh Edrisi. (2021). The effect of self-management programs on social support felt by family caregivers of stroke patients. *J Multidiscip*, 10(2), 65-69. <https://doi.org/10.34172/jmdc.2021.13>
- [18] Fatma Özkan Tuncay. (2024). The Relationship Between Caring Readiness and Spiritual Well-Being in Caregivers of Stroke Patients. *Journal of Religion and Health*, 63, 2760-2776. <https://doi.org/https://doi.org/10.1007/s10943-024-02033-4>
- [19] Gabriele Caggianelli. (2022). The relationship between caregivers' contribution to self-care and patients' quality of life in heart failure: A longitudinal mediation analysis. *International Congress on Peer Review and Scientific Publication*, 19(3), 1-11. <https://doi.org/10.1371/journal.pone.0300101>

- [20] Gutierrez-Baena, B., & Romero-Grimaldi, C. (2022). *A predictive model for family caregiver preparedness levels*. 28(3). <https://doi.org/10.1111/ijn.13057>
- [21] Handayani, F., Safitri, N., Kusumaningrum, D., & Dwidiyanti, M. (2024). *The Relationship Between Caregiver Burden and Quality of Life in Family Caregivers of Stroke Patients: The Mediating Role of Resiliency*. 14, Pages 91-102. <https://doi.org/10.2147/NRR.S435548>
- [22] Huanyu Mou. (2022). Effects of a family-focused dyadic psychoeducational intervention for stroke survivors and their family caregivers: a pilot study. *SpringerLink Natural Link*, 21(235), 1-17. <https://doi.org/10.1186/s12912-022-01145-0>
- [23] Jammal, MI, Kolt, GS, Y Liu, KP, Dennaoui, N., & George, ES (2024). *The impact of caregiving on the valued roles and activities of stroke caregivers: A systematic review of qualitative studies*. 19(5), 1-22. <https://doi.org/10.1371/journal.pone.0304501>
- [24] Jason A Blake (2025). Caregiver Psychosocial Factors & Cognitive Outcomes of Stroke Patients: A REGARDS-CARES Cohort Study. *Wiley International Journal of Geriatric Psychiatry*, 40(e70046), 1-10.
- [25] Krystyna Jaracz. (2024). Caregiver burden after stroke: a 10-year follow-up study of caregivers of stroke patients in Poland. *SpringerLink Natural Link*, 23(584), 1-10. <https://doi.org/10.1186/s12912-024-02251-x%0A>
- [26] Lampshire, S. (2024). Stroke Professionals' Views and Experiences of Supporting Young Stroke Survivors (Yss) with Dependent Children. *University of East London*.
- [27] Langduo Chen MNg. (2021). *Enabling and constraining factors in hospital-to-home transition care for stroke survivors and caregivers: A systematic review*. WILEY, *Journal of Clinical Nursing*. <https://onlinelibrary.wiley.com/doi/abs/10.1111/jocn.15807>
- [28] Li Zhang. (2022). Effects of Training-Based Teleoccupational Guidance for Home-Based Stroke Survivors. *Int. J. Environ. Res. Public Health*, 19(16355), 1-13. <https://doi.org/10.3390/ijerph192316355>
- [29] Lin, S., Wang, C., Wang, Q., Xie, S., Tu, Q., Zhang, H., Peng, M., Zhou, J., & Redfern, J. (2022). Stroke survivors' and caregivers' experiences during transitional care from hospital to home: A qualitative longitudinal study. *International Journal of Nursing Studies*, 130, 104213. <https://doi.org/10.1016/J.IJNURSTU.2022.104213>
- [30] Lobo, E. H. (2021). Caregiver Involvement in Stroke Care: Opportunities and Challenges in Australia and Denmark. *Frontiers*, 9, 1-6. <https://doi.org/10.3389/fpubh.2021.758808>
- [31] L.W. Mahinda. (2023). Evaluation of Informal Nurses' Burden in the Care of Stroke Patients at Kenyatta National Hospital. *Journal of Kenya Association of Physicians*, 5(2), 1-62. <http://hdl.handle.net/11295/99057>
- [32] Mahabuba Afrin. (2023). Effectiveness of a Health Education Program for Stroke Patients and Their Caregivers by Controlling Modifiable Risk Factors to Reduce Stroke Recurrence in a Tertiary Hospital in Bangladesh: Protocol for a Randomized Controlled Trial. *JMIR Publications*, 12(e51178), 1-11. <https://doi.org/10.2196/51178>
- [33] Marcin Folwarski. (2024). *Quality of life of caregivers of patients on enteral nutrition at home*. Elsevier. [https://pdf.sciencedirectassets.com/272493/1-s2.0-S0261561424X00084/1-s2.0-S0261561424002401/main.pdf?X-Amz-Security-Token=IQoJb3JpZ2luX2VjEI3%2F%2F%2F%2F%2F%2F%2F%2F%2F%2FwEaCXVzLWVhc3QtMSJHMEUCIQD3QdSN0v7UpUeLZ49Mc%2FqceG0ilXYzlovHkmn1rQIOTAIgK%2BT%2BnG](https://pdf.sciencedirectassets.com/272493/1-s2.0-S0261561424X00084/1-s2.0-S0261561424002401/main.pdf?X-Amz-Security-Token=IQoJb3JpZ2luX2VjEI3%2F%2F%2F%2F%2F%2F%2F%2F%2F%2F%2FwEaCXVzLWVhc3QtMSJHMEUCIQD3QdSN0v7UpUeLZ49Mc%2FqceG0ilXYzlovHkmn1rQIOTAIgK%2BT%2BnG)
- [34] Marcus Luciano de Oliveira Tavares. (2024). *Determinants of quality of life decline in family caregivers of care-dependent patients: a longitudinal study*. SpringerLink Natural Link. Marcus Luciano de Oliveira Tavares
- [35] María Ibáñez-Davó BSC. (2022a). *Quality of life of patients and caregivers in southern Spain: Living with obstructive pulmonary disease and after stroke*. Wiley Home Page. <https://onlinelibrary.wiley.com/doi/abs/10.1111/hsc.13706>
- [36] María Ibáñez-Davó BSC. (2022b). Quality of life of patients and caregivers in southern Spain: Living with obstructive pulmonary disease and after stroke. *Wiley Online Library*, 30(5), e2631-e2637.
- [37] Maria Norinder. (2023). Improving readiness to care among family caregivers in specialized home care by using the Caregiver Support Needs Assessment Tool Intervention. *Palliative Support Care*, 22, 236-242.
- [38] Mei, Y.-X., Lin, B., Zhang, W., Yang, D.-B., Wang, S.-S., Zhang, Z.-X., & Cheung, D. S. K. (2020). Benefit findings among Chinese family caregivers of stroke survivors: a qualitative descriptive study. *BMJ Open*, 10(10), e038344. <https://doi.org/10.1136/bmjopen-2020-038344>
- [39] Mei, Y.-X., Lin, B., Zhang, W., Yang, D.-B., Wang, S.-S., Zhang, Z.-X., Sze, D., & Cheung, K. (2020). Benefit findings among Chinese family caregivers of stroke survivors: a qualitative descriptive study. *BMJ Open*, 10,

38344. <https://doi.org/10.1136/bmjopen-2020-038344>

- [40] Mengying Yu MS, RN, N. (2024). The relationship between filial values and preparedness in adult-child caregivers of chronic heart failure patients: A cross-sectional study. *Geriatric Nursing*, 59, 669-676. <https://doi.org/10.1016/j.gerinurse.2024.08.008%0AGetrightsandcontent%0A>
- [41] Michelle Camici. (2023). Assessment of readiness for home transition after stroke predicts key domains of caregiver health. *Taylor and Francis Online Homepage*, 30(4), 384-392. <https://doi.org/10.1080/10749357.2022.2038835>
- [42] Mou, H. (2021). Effectiveness of a dyadic psychoeducational intervention for stroke survivors and family caregivers on functional and psychosocial health: A systematic review and meta-analysis. *International Journal of Nursing Studies*, 120(103969). <https://doi.org/10.1016/j.ijnurstu.2021.103969>
- [43] Muhrodji, P. (2021). *The Role and Problems of Stroke Caregivers: A Qualitative Study in Yogyakarta, Indonesia*. <https://pmc.ncbi.nlm.nih.gov/articles/PMC8822138/>
- [44] Nalia Gurgel-Juarez. (2022). Technologies to maintain oral care after stroke: considerations for patient-centered practice. *Taylor and Francis Online Homepage*, 17(8), 916-926. <https://doi.org/10.1080/17483107.2020.1822450>
- [45] Namale Gertrude (2019). Caring for stroke patients: Burden and experiences of primary caregivers in Uganda - A qualitative study. *Meet Our Wiley Research Heroes*, 6(4), 1551-1558. <https://doi.org/https://doi.org/10.1002/nop2.356>
- [46] Nicole Yun Ching Chen. (2024). *Perceived benefits and challenges of an employment skills training workshop after stroke: a qualitative study with stroke survivors and caregivers*. Taylor and Francis Online Web Site. <https://www.tandfonline.com/doi/full/10.1080/09638288.2024.2402507?scroll=top&needAccess=true>
- [47] Nimitphuwadon, S. (2024). Factors predicting burden among male caregivers of older adults with stroke. *Emerald Logo Discover Journals, Books & Case Studies*, 7(13), 1366-3666. <https://www.emerald.com/insight/content/doi/10.1108/WWOP-08-2022-0032/full/html>
- [48] Norsima Nazifah Sidek (2022). Experiences and needs of caregivers of stroke survivors in Malaysia-A phenomenological exploration. *Frontiers in Neurology*, 13(996620), 1-10. <https://doi.org/10.3389/fneur.2022.996620>
- [49] Nuntaporn Klinjun. (2023). Psychometric evaluation of the Thai version of the Caregiver Contribution to Self-Care of Chronic Illness Inventory Version 2 in stroke nurses. *International Journal of Nursing Studies*, 10(4), 456-467. <https://doi.org/10.1016/j.ijnss.2023.09.021>
- [50] Nursiswati Nursiswati. (2022). Nursing Dependence of Hospitalized Stroke Patients Based on Family Caregiver and Nurse Assessments: A Comparative Study. *Health*, 10(1007), 1-9. <https://doi.org/10.3390/>
- [51] Paryono Muhrodji. (2022). The Role and Problems of Stroke Caregivers: A Qualitative Study in Yogyakarta, Indonesia. *National Library of Medicine Biotechnology Information Center*, 10(380), 1-24. <https://doi.org/10.12688/f1000research.52135.2>
- [52] Petrizzo, A., Lyons, KS, Bartoli, D., Simeone, S., Alvaro, R., Lee, CS, Vellone, E., & Pucciarelli, G. (2022a). ORIGINAL RESEARCH The moderating role of caregiver readiness on the association between depression and stroke-specific quality of life in stroke spouses: a longitudinal study. *European Journal of Cardiovascular Nursing*, 22, 53-63. <https://doi.org/10.1093/eurjcn/zvac037>
- [53] Petrizzo, A., Lyons, KS, Bartoli, D., Simeone, S., Alvaro, R., Lee, CS, Vellone, E., & Pucciarelli, G. (2023). The moderating role of caregiver readiness on the relationship between depression and stroke-specific quality of life in stroke spouses: a longitudinal study. *European Journal of Cardiovascular Nursing*, 22(1), 53-63. <https://doi.org/10.1093/eurjcn/zvac037>
- [54] Ping Ying Choo (2022). Loss of life in stroke care: A qualitative systematic review of a systematic review of psycho-socio-emotional challenges and coping mechanisms. *Sage Journals Home*, 1-26. <https://doi.org/10.1177/17474930221104908%0A>
- [55] Platz, T., Obembe, A., & Yarfi, C. (n.d.). *Experiences and needs of caregivers of stroke survivors in Malaysia-A phenomenological exploration*. 1-10. <https://doi.org/10.3389/fneur.2022.996620>
- [56] Pucciarelli, G., Lyons, KS, Petrizzo, A., Ambrosca, R., Simeone, S., Alvaro, R., Lee, CS, & Vellone, E. (2022). The Protective Role of Caregiver Preparedness on the Relationship Between Depression and Quality of Life in Stroke Spouses. *Stroke*, 53(1), 145-153. <https://doi.org/10.1161/STROKEAHA.120.034029>
- [57] Qitong Zhao. (2024a). The mediating role of caregiver needs and caregiver readiness in the relationship between family resilience and benefit seeking in family caregivers of stroke patients in China. *Taylor and Francis Online*

Web Site. <https://doi.org/10.1080/10749357.2024.2387482>

- [58] Qitong Zhao. (2024b). *The mediating role of caregiver needs and caregiver readiness in the relationship between family resilience and benefit seeking in family caregivers of stroke patients in China*. Taylor and Francis Online Website. <https://www.tandfonline.com/doi/abs/10.1080/10749357.2024.2387482>
- [59] SCIMAGO INSTITUTIONAL RANKING. (2023). *Quality of life in caregivers of elderly stroke survivors in southern Brazil: Diacak*. Scielo Brasil. <https://doi.org/10.1590/1518-8345.5935.3657>
- [60] Shuanglan Lin PhD (2022). Experiences of stroke survivors and caregivers during transitional care from hospital to home: A qualitative longitudinal study. *Elsevier Science Direct*, 130, 104213. <https://doi.org/10.1016/j.ijnurstu.2022.104213>
- [61] Sri Yuliana. (2022). The relationship between disability, depression, anxiety, stress, and quality of life among stroke survivors and family caregivers: An Actor-Partner Interdependence Model. *Wiley Online Library Journal of Advanced Nursing*, 79(1), 135-148. <https://doi.org/https://doi.org/10.1111/jan.15465>
- [62] Supavadee Thiengtham. (2024). Transitional Care Experiences Among Thai-Isan Elderly Stroke Survivors and Their Family Caregivers. *Sage Journals Home*, 34(12). <https://doi.org/10.1177/1049732324123293>
- [63] tamilyn bakas. (2022). Systematic Review of Evidence for Stroke Family and Spouse Caregiver Interventions. *AHA ASA Journal*, 53, 2093-2102. <https://www.ahajournals.org/doi/pdf/10.1161/STROKEAHA.121.034090>
- [64] Theresa L. Green, PhD, RN, F. (2021). Care of the Patient with Acute Ischemic Stroke (Post-Hyperacute and Pre-Hospital Discharge): An Update to the 2009 Comprehensive Nursing Care Scientific Statement: Scientific Statement of the American Heart Association. *AHA ASA Journal*, 52, e179-e197. <https://www.ahajournals.org/doi/pdf/10.1161/STR.0000000000000357>
- [65] Tsiakiri, A., Vlotinou, P., Paschalidou, A., Konstantinidis, C., Christidi, F., Tsiptsios, D., Detsaridou, G., Petridou, A., Gkantziou, A., Karatzetzou, S., Tsamakis, K., Giannakou, E., Emmanouilidou, M., Vadikolias, K., & Aggelousis, N. (2023). *A Scoping Review of Stroke Nurses' Coping Strategies and Quality of Life: An Often Underestimated Variable in the Stroke Recovery Process?* 3(3), 350-368. <https://doi.org/10.3390/biomed3030029>
- [66] Tziaka, E., Tsiakiri, A., Vlotinou, P., Christidi, F., Tsiptsios, D., Aggelousis, N., Vadikolias, K., & Serdari, A. (2024). *A Holistic Approach to Expressing Caregiver Burden for Stroke Survivors: A Systematic Review*. <https://doi.org/10.3390/healthcare12050565>
- [67] Uchenna Prosper Okonkwo, P. (PT). (2022). *Burden and Quality of Life of Caregivers of Stroke Patients with Cognitive Impairment in Selected Health Facilities in Anambra State, Nigeria*. Sage Journals Home. <https://journals.sagepub.com/doi/full/10.1177/23337214221126329>
- [68] UNG, Y.-E. (2023). An Outpatient-Based Training Program Improves Family Caregivers' Readiness to Care for People with Mild Cognitive Impairment: A Randomized Controlled Trial. *JNR Nursing Research*, 31(1), 1-11. <https://doi.org/10.1097/jnr.0000000000000541>
- [69] Vahid Yousofvand. (2023). Impact of a spiritual care program on sleep quality and spiritual health of Muslim stroke patients: A randomized controlled trial. *Complementary Therapies in Medicine*, 77(102981), 1-8. <https://doi.org/10.1016/j.ctim.2023.102981>
- [70] Victrine Tseung, P. (2019). Implementing a Caregiver Support Program in a Regional Stroke System. *AHA ASA Journal*, 3585-3591. <https://www.ahajournals.org/doi/pdf/10.1161/STROKEAHA.119.026660>
- [71] Villa-García Id, L., Salvat-Plana, M., Slob Id, J., Pé Rez De La Ossa, N., Abilleira, S., Ribó, M., Nica Hidalgo-Benítez, V., Inzitari, M., & Riberai, A. (2024). *Care-related quality of life of informal caregivers of stroke survivors: A cross-sectional analysis of a randomized clinical trial*. <https://doi.org/10.1371/journal.pone.0307930>
- [72] Wang, L. Md (2023). Caregiving experiences of stroke caregivers: A systematic review and meta-synthesis of qualitative studies. *Medicine*, 102(13), e33392. <https://doi.org/10.1097/MD.00000000000033392>
- [73] Wen Xiu Samantha See Toh (2022). Experiences of spouses and adult caregivers of stroke survivors of transitional care: A qualitative systematic review. *Wiley Gender Equity in Healthcare e Multi Journal Special Issue*. <https://doi.org/10.1111/jan.15420>
- [74] Williams Agyemang-Duah. (2024). Caregiver burden and health-related quality of life: A study of informal caregivers of the elderly in Ghana. *SpringerLink Natural Link*, 43(31), 1-14. <https://doi.org/10.1186/s41043-024-00509-3>
- [75] Yeaji Seok RN, M. (2023). *Predictors of health-related quality of life for stroke patients: A prospective longitudinal study of matched pairs of stroke patients and family caregivers*. QUANTITATIVE EMPIRICAL

RESEARCH. <https://onlinelibrary.wiley.com/doi/full/10.1111/jocn.17173>

- [76] Zara Sajwani. (2023). Caregivers' experiences of social support after stroke. *Journal of Stroke and Cerebrovascular Disease*, 32(9). <https://doi.org/10.1016/j.jstrokecerebrovasdis.2023.107253>
- [77] Zih-Yong Liao. (2024). Biographical continuity: recovery of stroke survivors and their family caregivers in Taiwan. *Cambridge University Press*, 25(e2), 1-9. <https://doi.org/10.1017/S1463423623000610>
-