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FACTORS AFFECTING PATIENTS AND FAMILIES IN REHABILITATION OF NON-HEMORRHAGIC STROKE PATIENTS: A LITERATURE REVIEW

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Abstract
Stroke is one of the leading causes of death worldwide and also leads to paralysis in the extremities. Medical rehabilitation becomes very important for stroke patients to return to normal or to minimize residual symptoms that may occur. This research aims to analyse the factors that influence patients and families in the rehabilitation of non-stroke patients. The design of this study is a literature review using databases such as Google Scholar, Semantic Scholar, PUBMED, and ScienceDirect. From the total number of articles, after analysing the titles, abstracts, and relevance of the content, around nine articles were reviewed in this writing, resulting in eight articles. The research findings indicate that the factors influencing patients and families in the rehabilitation of non-haemorrhagic stroke patients include patient motivation and family support, family knowledge, income, accessibility, attack status, as well as healthcare service, patient socio-demographic characteristics, education and employment, patient psychology, surrounding environment, family roles, distance and transportation, knowledge and sources of information, emotional support from family, age, number of treatment sessions, duration of CVA, and FIM scores. Recommendations are specifically given for healthcare professionals in the field of medical rehabilitation to provide more support in delivering information regarding stroke-related matters and the importance of medical rehabilitation for stroke patients.

Keywords: Non-Hemorrhagic Stroke, Rehabilitation, patients and families

INTRODUCTION

A stroke results in the sudden death of some brain cells due to a lack of oxygen when blood flow to the brain is interrupted by a blockage or rupture of an artery leading to the brain. Non-traumatic cerebral circulation disorders that appear suddenly, rapidly, and progressively also cause symptoms such as unilateral facial or limb paralysis, changes in consciousness, slurred or unclear speech, visual disturbances, and others. (Kemenkes, 2019).

According to the Global Burden of Disease (GBD) 2019, stroke is the second leading cause of death and the third leading cause of disability worldwide. The latest data from the World Stroke Organization (WSO) shows that there are more than 12.2 million new stroke cases each year and over 101 million people living with the disease. The data also indicates that approximately 6.5 million people die each year due to stroke, as well as more than 143 million people suffering from stroke-related disabilities. (Feigin, Brainin, Norrving, Martins, Sacco, Hacke, Fisher, et al., 2022).

The impact of a stroke on post-stroke patients is usually difficult to prevent and endure, often causing disruptions that require time to adjust to the patient's lifestyle and psychology. Someone who experiences this is unable to

engage in activities as they did before become ill and requires a lot of time to adapt. A person's ability to respond varies, so post-stroke patients have different levels of success for each individual, depending on the positive inner strength derived from the situation. This can affect the individual's own ability to interpret the situation. Changes in the condition of patients after a stroke can lead to feelings of discomfort and a lack of independence in performing simple activities; this condition will affect the quality of life of the patients. (Oktaviani et al., 2020).

Disruption of vital brain functions due to a stroke, such as balance disorders, coordination issues, sensory disturbances, movement reflex impairments, and postural control problems, will significantly reduce an individual's functional abilities and lead to an increase in dependency rates. Therefore, it can lead to long-term disabilities, resulting in the greatest health effects and financial burdens on stroke patients. This makes rehabilitation an important form of treatment for stroke patients in order to minimize the impact of the stroke and the disabilities that may occur in stroke patients. (Harmayeti, 2020).

In general, mobility, pain, and mental health, such as depression or anxiety, all play a role in determining a person's quality of life. The three characteristics of quality of life can be measured and used as indicators of health status. The Stroke Specific Quality of Life (SSQOL) assessment is used to evaluate the quality of life of stroke patients. The post-stroke condition experienced by patients has a negative impact both physiologically, psychologically, and socially, based on the evidence presented and the phenomena that occur. The type of stroke, the duration of time after the stroke, and family support all impact the quality of life for stroke patient's post-stroke. Stroke patients will continue to live with physical weakness for a long time, which lowers their quality of life. Factors that influence a person's quality of life include age, gender, education level, employment status, and marital status. (Hartaty, 2020).

Post-stroke rehabilitation is a patient-cantered process aimed at maximizing the functional independence of patients suffering from various disabilities due to a stroke. The primary goal of post-stroke rehabilitation is to assist stroke patients in returning to their premorbid functions or normal functions before the stroke, whether in the family environment, community, or even the workplace. (Whitehead & Baalbergen, 2019). The comprehensive rehabilitation program provided to stroke patients begins in the hospital and includes physical exercises (physiotherapy), occupational therapy, and speech therapy (Harmayetty, Ni'mah, & Firdaus, 2020). For post-stroke patients, medical rehabilitation interventions are necessary so that they can become independent in taking care of themselves and performing daily activities without continuously being a burden to their families. However, not all patients have the opportunity to continue the stroke rehabilitation program after leaving the care facility. Most of it is caused by the unavailability of medical rehabilitation facilities near the patients' residences. In general, stroke rehabilitation in the subacute and chronic phases can be managed through simple medical rehabilitation interventions that do not require advanced equipment. (Zhao et al., 2022).

Currently, patient non-compliance in following rehabilitation programs remains a serious issue for healthcare providers. (Nadila, Syahrul, Suherman,

Mamfaluti & Firdausa, 2021). The lengthy healing and rehabilitation process sometimes makes stroke patients feel reluctant to engage in rehabilitation.

Focusing on efforts to prevent complications from immobilization that could lead to a deterioration of condition and to restore independence in daily activities, with the hope that patients can achieve a better quality of life. Primary healthcare plays a very important role. Stroke can also lead to depression, so family support is needed for stroke patients to engage in activities. It is hoped that families will create a calm environment and develop beneficial activities for the independence of post-stroke individuals. (Adeniji et al., 2023). Maximize functional independence, the patient's ability to continue their lifestyle or roles as before the illness. The importance of stroke patient rehabilitation and early mobilization helps prevent complications and improve the functional abilities of patients, with a multidisciplinary medical team and a holistic rehabilitation program to ensure that stroke patients receive the best care.

Seeing the phenomenon from that background, there are several overlapping risk factors between the two age groups, but there are also some clearly distinct risk factors for ischemic and haemorrhagic strokes. Therefore, to understand the risk factors for stroke, they can be discussed and analysed comprehensively in this literature review. Currently, it is assumed that there is an ongoing discussion about ways to factor in the rehabilitation of stroke patients. However, it is very important that the factors related to stroke patient rehabilitation are systematically explored. Therefore, this study aims to conduct a scoping review to explore the factors associated with stroke patient rehabilitation.

METHODS

The research method used in writing this article is a literature review, which involves a search of literature conducted using databases such as Google Scholar, Semantic Scholar, PUBMED, and ScienceDirect. The criteria for selecting articles based on the preparation of the Literature Review include the similarity of topics in the Literature Review, the publication year of the articles within the last 10 years, the availability of full-text articles, and the relevance of the articles to the objectives of the Literature Review being used. The articles obtained are 8 articles based on the criteria of a Literature Review. The author conducted a systematic literature search in September 2024. The process of selecting articles to be used involves the alignment of the article titles with the objectives of the Literature Review. The procedure for the selection process based on the found article titles is as follows: The inclusion criteria adopted are the analysis of rehabilitation factors for non-haemorrhagic stroke patients using the framework of Participant (Stroke Patients), Intervention (Rehabilitation), Comparator (Optional), and Outcome.

In the initial search stage, 1200 articles were obtained using the keyword "factor analysis of non-haemorrhagic stroke." After that, the search was refined with the keyword "factor analysis of non-haemorrhagic stroke rehabilitation," which resulted in duplicate articles. The search was then limited to full text, quantitative studies, and aligned with inclusion criteria, yielding 607 articles. The process was repeated using the IMRAD abstract criteria, resulting in 31 articles. From this number, after analysing the titles, abstracts, and content relevance, approximately nine articles were reviewed in this article writing,

leading to a final result of eight articles. The review process in this literature uses a critical appraisal checklist for both quantitative and qualitative research.

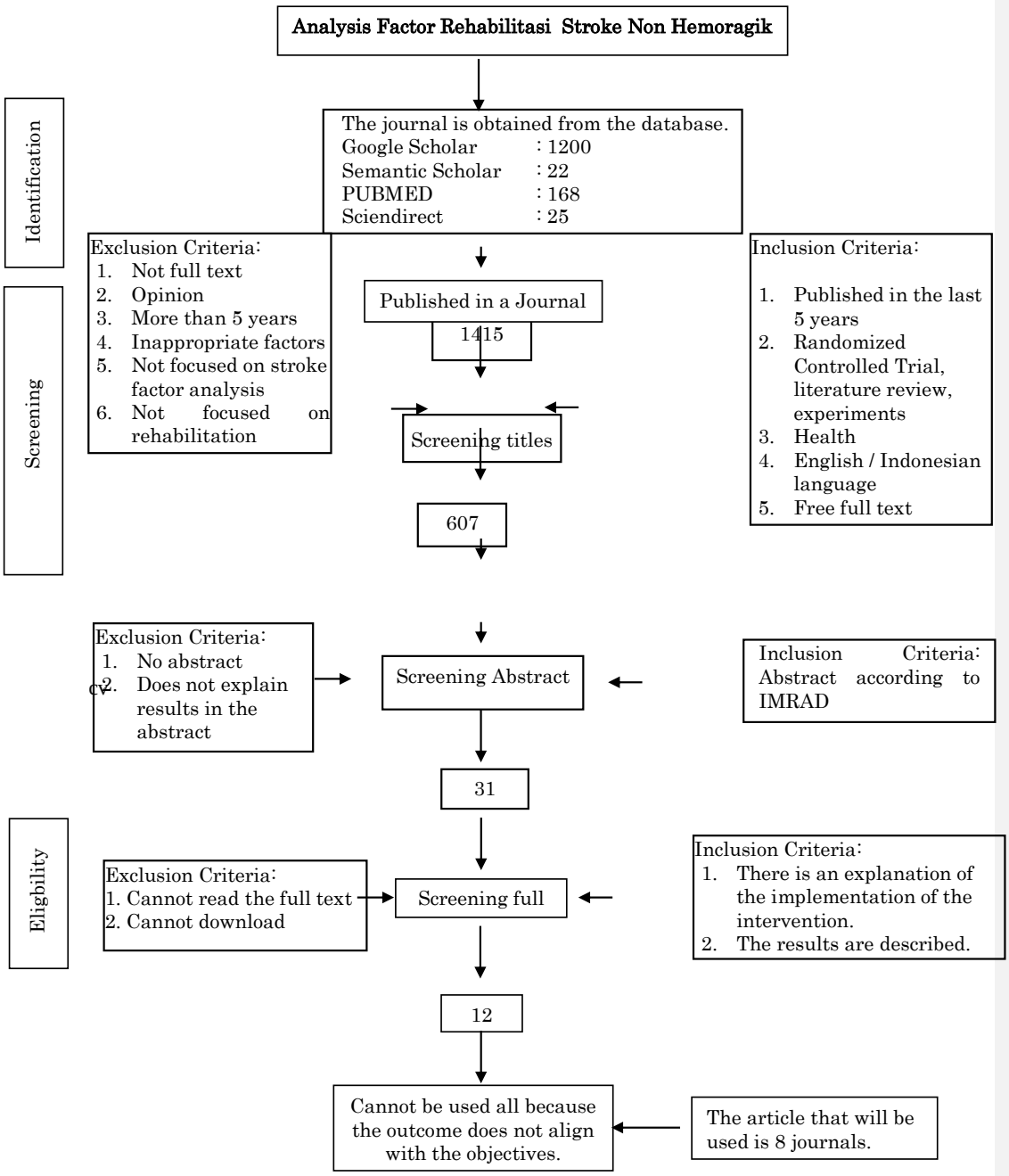

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Figure 1
Flowchart of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)

Table 1
Article Analysis

Author Name, Article Title, Type of Literature	Year	Objective	Result
Factors Related to Compliance with Medical Rehabilitation in Stroke Patients (A Study at RSI Sunan Kudus) Ajeng Ayu M. Jannah1*, Mahalul Azam1 1Department of Public Health, Semarang State University	2020	to identify the factors associated with adherence to medical rehabilitation in stroke patients at RSI Sunan Kudus.	- The research results indicate that the factor related to adherence to medical rehabilitation in stroke patients is patient motivation (p=0.017). - The factor associated with adherence to medical rehabilitation in stroke patients is family support (p=0.001). - Family knowledge shows a value of p=0.442, indicating no relationship between family knowledge and adherence to rehabilitation. - Income shows a value of p=0.664, indicating no relationship between income and adherence to medical rehabilitation in stroke patients. - Healthcare service shows a value of p=0.712, indicating no relationship between healthcare service and adherence to medical rehabilitation in stroke patients. - Family support shows a value of p=0.001, indicating a relationship between family support and adherence to medical rehabilitation in stroke patients.
Factors that influence the success of rehabilitation for post-stroke patients. Agnes Bintang Kartika	2021	Knowing these factors is important to consider during the rehabilitation process of post-stroke patients. .	- - Research in Romania indicates an improvement in Quality of Life (QOL) after one year of rehabilitation in young individuals (<60 years old). - Gender has a significant

1 Program of Medical Education, Faculty of Medicine, University of Lampung			relationship with HQOL outcomes in terms of physical and psychosocial aspects. - Patients with lower education levels show greater improvement in mood (reducing depression), which is one of the factors influencing rehabilitation outcomes. Post-stroke depression is related to functional independence in activities of daily living (ADL). This depression negatively affects the functional recovery process after discharge from the hospital. This is also supported by research that shows a good functional improvement is related to a positive mood. - Motivation and family support, along with the continuous attention provided by therapists, will enhance rehabilitation outcomes. Aphasia is associated with poor functional recovery outcomes. - - Comorbidities not only serve as risk factors for stroke but also affect rehabilitation outcomes. The sooner and more intensively rehabilitation is conducted for acute stroke patients, the better the results will be in terms of motor functional recovery and independence.
Compliance of Post-Stroke Patient Rehabilitation at the Dr. Zainoel Abidin Regional General Hospital in Banda Aceh Intan Elia Fauzia1, Ahyana2, Laras	2022	to understand the picture of rehabilitation compliance of stroke patients at the Dr. Zainoel Abidin Regional General Hospital in Banda Aceh.	- The average age of the respondents is 58 years, - with 70 respondents (50.7%) being male, marital status being married, which includes 127 respondents (92.0%), and having a secondary education, which accounts for 83 respondents (60.1%).

Cyntia Kasih3 1Student of the Nursing Study Program, Faculty of Nursing, Syiah Kuala University, Banda Aceh 2,3Department of Medical-Surgical Nursing, Syiah Kuala University, Banda Aceh			- The number of respondents who are not working is the same as those who are retirees, with each group consisting of 43 respondents (31.2%). - The majority live with their immediate family, totalling 134 respondents (97.1%), and 78 respondents (56.5%) are accompanied by their spouse during rehabilitation. - Next, in terms of distance from home, the average respondent visiting the medical rehabilitation facility lives 1-5 km away from the rehabilitation centre, with a total of 63 respondents (45.7%). - All respondents who visited used health insurance coverage. Patients who suffered a stroke 1-3 years ago include 123 respondents (89.1%), and those who did not experience a recurrent stroke include 108 respondents (78.3%). - According to the duration of rehabilitation, the majority of respondents have undergone rehabilitation for a period of 1-6 months, totalling 107 respondents (77.5%), with the highest number of rehabilitation sessions being more than 10 times, which accounts for 71 respondents (51.4%). - Based on accompanying diseases, the average respondents suffer from hypertension, with 47 respondents (34.1%), and diabetes mellitus, with 17 respondents (12.3%).
Factors related to family knowledge in providing care for stroke patients post-hospitalization. Lalu M. Panji Azali*,	2021	to identify the factors related to knowledge of post-hospitalization stroke patient care, including age, education,	- Education with a p value of 0.008 - Age with a p value of 0.19 - Source of information with a p value of 0.016 - That there is no significant effect between

Ririn Afrian Sulistyawati, Galih Setia Adi 3 Kusuma Husada University Surakarta		occupation, gender, caregiving experience, and sources of information.		the gender variable and the stroke skills of family caregivers. In this study, it was found that experience has no correlation with the level of knowledge or skills of stroke caregivers.
Factors of Family Support Affecting Stroke Patient Care at Home in the Working Area of Rasanae Timur Health Centre, Bima Regency Fadlillah Nisa (2021)	2021	to determine the relationship between family support and nursing care for stroke patients in the working area of the Rasanae Timur Health Centre in Bima City		- Emotional support factors are related to the care of stroke patients. - Assessment support has a connection with the management of stroke patients. - Supportive factors are associated with the care of stroke patients in the working area of the Rasanae Timur Health Center in Bima City. - Informational support is related to the care of stroke patients. The instrumental influence of supportive factors is connected to the care of stroke patients in the working area of the Rasanae Timur Health Center in Bima City.
A study on the factors influencing functional improvement in stroke rehabilitation Onur ALTUNTAS Serkan Taÿ Department of Occupational Therapy, Faculty of Health Sciences, Hacettepe University, Ankara, Turkey	2021	to determine the influence of age, gender, affected extremity, severity of disability, type of treatment, ethology of cerebrovascular accident (CVA), number of treatment sessions, and duration of CVA on the functional improvement of stroke patients participating in a physical medicine and rehabilitation program.	-	- It was found that the FIM scores of patients upon discharge showed a significant increase ($p < 0.05$). - It was found that age, number of treatment sessions, duration of CVA, and FIM scores at admission were determining parameters in the improvement of FIM levels ($p < 0.05$), - while gender, affected extremities, and ethology of CVA were not effective in improving FIM levels ($p > 0.05$). - Age, gender, affected extremities, duration of CVA, number of treatment sessions, ethology of CVA, type of treatment, and

			admission FIM score explain 34.1% of the total variance in FIM acquisition
Psychosocial Factors Related to Stroke Patient Rehabilitation Moon Joo Cheong, Hyung Won Kang, Yeonseok Kang Integrative Medicine Research Institute for Rare Diseases, Jangheung Integrative Medical Center, Wonkwang University, 121 Lohas-ro, Anyang-myeon 59338, Korea;	2021	to identify the psychosocial factors that influence the rehabilitation motivation of stroke patients.	- Internal factors include depression, cognition, self-efficacy, self-esteem, acceptance of disability, willpower, communication, resilience, empowerment, and uncertainty. - External factors include sleep patterns, quality of life, daily life activities, physical function, social support, financial burden, disease-related characteristics, and the rehabilitation environment.
Post-Stroke Rehabilitation in Terms of Motor Function: A Systematic Review Lya Marliana, Yurike Septianingrum, Lono Wijayanti, Umdatus Soleha, Siti Nur Hasina.	2023	Stroke patient rehabilitation and early mobilization help prevent complications and improve patients' functional abilities. A multidisciplinary medical team and a holistic rehabilitation program are essential to ensure that stroke patients receive the best care.	- The rehabilitation system identifies occupational therapy, - creates prototypes, and evaluates technology-based prototypes. In addition, economic analysis is also needed to enable affordable occupational therapy systems to be implemented in Indonesia.

The results of the search from the eight selected articles were obtained from research conducted from 2020 to 2024. The studies were conducted in several locations, with 7 studies carried out in Indonesia, 1 study in Turkey, and 1 study in Korea. The research methods used include eight articles employing selected methods such as Literature Review (2), Scoping Review (1), analytical surveys (2), analytical observations (1), and cross-sectional studies (2). There is 1 article published in 2020 that utilized a cross-sectional study. There are 5 articles published in 2021 and 3 articles published in 2022. In this study, the following factors related to rehabilitation were identified. in the article

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Article	Related factors	Unrelated factor
1	Motivation, family support.	Family knowledge, income, affordability, assessment of attack status, and health service personnel.
2	Age, gender, education, depression, aphasia, time to start rehabilitation.	
3	Age, gender, marital status, education, occupation, living with family, person accompanying, distance, source of rehabilitation funding, duration of stroke, recurrent strokes, duration of rehabilitation, comorbidities.	
4	age, education, occupation, caregiving, and sources of information	Gender, experience.
5	emotional support from family, there is a relationship between assessment support, informational support, and instrumental support in stroke patient care.	
6	Age, number of treatment sessions, duration of CVA, and FIM score.	gender, affected extremities, and etiology of CVA
7	Internal factors include depression, cognition, self-efficacy, self-esteem, acceptance of disability, willpower, communication, resilience, empowerment, and uncertainty. External factors encompass sleep patterns, quality of life, daily living activities, physical function, social support, financial burden, disease-related characteristics, and the rehabilitation environment.	
8	Economy	Occupational therapy, creating prototypes, and evaluating technology-based prototypes.

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DISCUSSION

Jannah's article (2020) concludes that there is a relationship between patient motivation and family support with adherence to the recovery process

(Medical Rehabilitation) in stroke patients at RSI Sunan Kudus. Economic status (income), accessibility, attack status, and healthcare service quality also relate to adherence to the recovery process (Medical Rehabilitation) in stroke patients. Motivation is a state within an individual or organism that drives them towards a goal. Psychologically, a strong motivation in sufferers to express something will encourage their ability to speak and move/action. In general, patients tend to be more enthusiastic about undergoing rehabilitation when they are in good condition. Therefore, a stroke patient who is undergoing rehabilitation to recover quickly must have high motivation, as having high motivation during the recovery process will make it feel faster and more engaging, leading to optimal results in rehabilitation. Family support is an important factor that can influence a person's adherence to treatment or therapy. The family is the unit closest to the patient, serving as a motivator or supporter, as well as an educator for other family members in carrying out health programs independently. The family also acts as the primary caregiver for other family members experiencing health issues. Thus, if there is a family member who is ill, the other family members should provide support or motivation for their recovery. If there is no support from the family, then the success of recovery (rehabilitation) becomes increasingly small. Therefore, family support is essential in accompanying stroke patients during rehabilitation. (Hudan, 2023).

The article by Kartika (2021) discusses several factors that can influence rehabilitation outcomes in patients. One of the factors that can influence this is the socio-demographic characteristics of the patients. The characteristics include age, gender, education, and occupation. The research found that older patients (>65 years) had worse rehabilitation outcomes compared to younger patients. Education and occupation can also influence patients' rehabilitation results. The higher the education, the better the results of rehabilitation. Additionally, the higher the job position, the higher the income, which leads to better rehabilitation outcomes. This can occur because patients with higher education tend to have better intellect, making them more proactive in seeking help for themselves. Another factor that can influence patient rehabilitation outcomes is the patient's psychological state. Patients experiencing post-stroke depression have a negative impact on the functional recovery of patients and yield worse outcomes compared to patients without depression. Better improvements in patients with motivation and support lead to the emergence of self-will to recover, making this an important factor in the rehabilitation process for post-stroke patients. (Kariyawasam, 2020).

Fauzia Atikel (2022) states that identifying and managing the factors that influence rehabilitation compliance can significantly enhance the quality and effectiveness of treatment and rehabilitation. Patients and their surrounding environment are factors that can affect patient compliance. Pishkhani et al. (2019) also mention that older individuals are unable to participate effectively in rehabilitation programs due to pain, fatigue, and age-related disabilities, and therefore have limited adherence to medical orders, family recommendations, and rehabilitation. On the contrary, the younger a person is, the higher their level of compliance. (Harmayetty et al., 2020).

Patients who have a partner (husband or wife) have someone who will help and remind them of their medication or therapy schedule, as well as accompany them to therapy, resulting in a higher level of adherence. This is also

supported by demographic data from this study, which shows that the majority of respondents were accompanied by their partners (husbands or wives) for rehabilitation, totalling 78 (56.5%) respondents. In this case, the role of the family in motivating the patient to exercise, care for, and accompany them is also very helpful in the success of the rehabilitation itself. (Okwari et al., 2017)

Distance and transportation are among the factors that influence the compliance of stroke patients in rehabilitation. This is because distance and transportation are determining factors for the ease with which stroke patients can access healthcare facilities or rehabilitation centres. Hardianto & Adliah (2020) state that various factors can be obstacles for patients to access rehabilitation programs in hospitals or clinics, one of which is the long distance from home to the hospital or clinic. If the distance that patients have to travel from home to the healthcare facility is shorter, they will find it easier to visit regularly, which in turn helps them adhere to their therapy schedule. (Fadlilah et al., 2019).

Fauzia's article (2021) states that the factors influencing rehabilitation are knowledge, education, and sources of information. In general, age is one of the factors that influences an individual's knowledge. The older a person gets, the more knowledge or information they possess. Age is related to a person's growth and development process and the time that has passed in shaping current knowledge. Therefore, in education, it is important to consider age (the client's developmental process) and its relationship with the learning process. Education is closely linked to a person's knowledge; the more educated a person is, the higher the quality of that individual. The broader the scope of information, the better the knowledge they possess. The level of education referred to above is the formal education that a person has undergone. An individual's level of education plays a crucial role in their learning outcomes. The higher a person's education, the easier and better they are at absorbing, processing, and applying new information or ideas, whether acquired through direct or formal teaching and learning processes, or through self-study from media and other informal sources. That information is then organized as a foundation for building better knowledge. The better the foundation, the better the knowledge that individual develops.

Information can come from personal experiences, the environment, stories heard, or the experiences of others. The information they obtain does not solely come from the internet, so anyone can access information about post-hospitalization care for stroke patients. Meanwhile, previous research has stated that individuals who frequently seek information have a better level of knowledge. (Lin, 2017).

The theory suggests that information can be obtained from both formal and non-formal education. Sources of information can be in the form of print media as well as electronic media, such as television, radio, computers, newspapers, books, and magazines. Someone who can easily access information will acquire knowledge more quickly. (Kosasih 2018). The advancement of technology can influence the public's knowledge about new innovations that can have an impact, leading to changes or an enhancement of knowledge.

Nisa's article (2021) states that the factor of emotional support from family shows a relationship between assessment support, informational support, and instrumental support in the care of stroke patients. The role and support of the family play a crucial part in the rehabilitation process for stroke patients. This is because stroke survivors, in carrying out their daily activities, will heavily rely on others, especially their immediate family and the surrounding social environment. Family support is the only place that is very important for providing health care support such as instrumental support, informational support, assessment support, and emotional support. High family support leads to independence in activities for post-stroke patients because family support is an interpersonal support that includes attitudes, actions, and acceptance towards other family members, making family members feel that someone cares and is concerned about them. Family support is one of the most important factors in the lives of stroke patients, as they will experience changes both physically, mentally, and emotionally. Family support is crucial for stroke patients because it can assist them in rehabilitation during the recovery process, allowing patients to regain independence in their activities more quickly. (Farida, 2018).

The article by Altuntas (2021) found that age, number of treatment sessions, duration of CVA, and FIM score at admission are determining parameters in the improvement of FIM levels. The results of this study reveal that an increase in length of hospital stay or number of treatment sessions enhances FIM outcomes and efficiency levels. Ring et al. found that the length of hospital stay was the best predictor of functional outcomes, and patients who began rehabilitation earlier had lower FIM admission scores compared to those who started later, but they also experienced greater functional improvement. The current results reveal the importance of early rehabilitation applications and indicate that long-term follow-up for stroke patients may be beneficial. This research reveals that providing rehabilitation in inpatient and outpatient settings does not affect rehabilitation outcomes. The number of previous studies on this subject in the literature is insufficient. Inpatient care is preferred when patient follow-up is mandatory, access to care centers is difficult, there is significant loss of mobility, and it is requested by the patients themselves. The duration of illness, age, number of sessions, and FIM acceptance scores of inpatient and outpatient patients are similar in this study. Decisions are made solely by considering the difficulty of access to care and patient preferences. Therefore, the results of the rehabilitation were not affected, as expected.

The article by Cheong (2021) states that the factors influencing rehabilitation motivation have not been adequately understood. ESZR exploration, which may encourage each researcher to develop individual programs based on it. Eighteen factors related to rehabilitation motivation have been identified. Internal factors include depression, cognition, self-efficacy, self-esteem, acceptance of disability, willpower, communication, resilience, empowerment, and uncertainty. External factors encompass sleep patterns, quality of life, daily living activities, physical function, social support, financial burden, disease-related characteristics, and the rehabilitation environment. Based on these findings, intervention models should be developed to provide social support to stroke patients.

Marliyana (2023) Based on the literature review conducted, it can be concluded that a systematic literature review is a method for identifying,

evaluating, and interpreting all research evidence in order to address a specific research problem. There are 67 articles, which were then filtered, resulting in a main study conclusion selected from 9 journals that meet the inclusion and exclusion criteria. The conclusion drawn is that the majority support the researchers to be interested in the title, as evidenced by the results showing various types of rehabilitation that can be performed on post-stroke patients. However, on one hand, a significant amount of funding is needed to prepare a technology-based rehabilitation system, making it difficult to access in developing countries like Indonesia. Therefore, the author is motivated to conduct a review article on medical rehabilitation for post-stroke patients in terms of motor function. The search for articles was carried out by selecting articles related to stroke management and medical rehabilitation for post-stroke patients.

For post-stroke patients, medical rehabilitation interventions are necessary so that they can become independent in taking care of themselves and performing daily activities without continually being a burden to their families. However, not all patients have the opportunity to continue the stroke rehabilitation program after leaving the hospital. Most of it is due to the unavailability of medical rehabilitation facilities near the patients' residences. In general, stroke rehabilitation in the subacute and chronic phases can be managed through simple medical rehabilitation techniques that do not require advanced equipment. (Zhao et al., 2022). Post-stroke rehabilitation that is faster and more orderly can gradually and quickly restore patients' motor strength, allowing their health to fully recover. A regular physiotherapy program undertaken by stroke patients has successfully shown positive results, such as improvements in lower limb strength, movement abilities (balance and walking), and quality of life. (Guo et al., 2023)

The results of this study indicate that the factors strongly correlated with rehabilitation motivation related to improved therapy outcomes for stroke patients are, in order of decreasing effect, social support (from family and healthcare providers), self-efficacy, willingness, depression, quality of life, and activities of daily living. Therefore, support from healthcare providers, family, and friends is predicted, as an external factor, to enhance stroke patients' rehabilitation motivation, thereby increasing the effectiveness of rehabilitation. Furthermore, an increase in the stroke patients' self-confidence as an internal factor of willingness and drive is expected to boost their motivation to engage more actively in rehabilitation.

CONCLUSION

Based on the collection of literature studies conducted, it can be concluded that this is a literature review. There is an article, which was filtered, and the conclusion of the main study selected 8 journals that met the inclusion and exclusion criteria. It can be concluded that the factors influencing rehabilitation in non-haemorrhagic stroke patients are the relationship between the patients' socio-demographic characteristics, education and employment, the patients' psychological state, their surrounding environment, family roles, distance and transportation, knowledge and sources of information, emotional support from family, age, number of therapy sessions, duration of the CVA, and FIM scores. Advice for patients is to be more consistent in undergoing medical rehabilitation, to regularly take medication as prescribed by the doctor, and to engage in light

exercise or physical activities. For families, it is hoped that they will provide more support by encouraging and motivating the patient to consistently participate in recovery, offering attention and affection, and always accompanying the patient so that the recovery efforts are successful and the patient can regain independence without relying on others.

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