

The Relationship Between Self Efficacy And Self Care Practices In Stroke Patients At The Neurology Clinic Rsud Dr Mohamad Soewandhie Surabaya

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ABSTRACT

Stroke is one of the leading causes of long-term disability that affects patients' ability to perform self-care. One important factor influencing self-care behavior is self-efficacy, which refers to an individual's belief in their capability to carry out self-care activities. High self-efficacy can enhance patient participation in the recovery process and improve quality of life. This study aims to examine the relationship between self-efficacy and self-care behavior among stroke patients at the Neurology Clinic of RSUD Dr. Mohamad Soewandhie Surabaya. The research method employed a cross-sectional approach. The study population consisted of 228 stroke patients at the Neurology Clinic of RSUD Dr. Mohamad Soewandhie Surabaya. A sample of 146 patients was selected using purposive sampling technique. The independent variable was self-efficacy, while the dependent variable was self-care behavior. Research instruments included the Stroke Self-Efficacy Questionnaire (SSEQ) to measure self-efficacy and the Barthel Index (BI) to assess self-care behavior. Data analysis was performed using the Chi-Square test with a significance level of <0.05 . The results showed that the majority of respondents had high self-efficacy (80.8%) and good self-care behavior (79.5%). Statistical analysis revealed a significant relationship between self-efficacy and self-care behavior ($p = 0.001$). It can be concluded that there is a significant relationship between self-efficacy and self-care behavior among stroke patients at the Neurology Clinic of RSUD Dr. Mohamad Soewandhie Surabaya. This finding underscores the importance of enhancing self-efficacy to support stroke patients' recovery and independence.

Keywords: Stroke, Self-efficacy, Self-care

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INTRODUCTION

Stroke is a significant cause of death and disability worldwide. In addition, stroke is also a leading cause of long-term disability (Feigin et al., 2023). This disability greatly impacts the self-care management of stroke patients who experience paralysis in their limbs, making it difficult for them to meet their own care needs in daily activities (Putri, 2022). Self-care is fundamental to achieving overall health and well-being. When self-care is practiced correctly and becomes part of daily life, it can enhance emotional, physical, and spiritual health (Lawler, 2021; Pratt, 2021).

According to data from the World Health Organization (WHO), there are 15 million new stroke cases annually, with approximately 5.5 million deaths resulting from stroke (WHO, 2024). Meanwhile, data

from the Indonesian Health Survey (Survei Kesehatan Indonesia, 2023) show that the prevalence of stroke in Indonesia reached 8.3 per mille, or per 1,000 population aged over 15 years in 2023. The stroke prevalence in East Java in 2021 was 12.4%, which is still above the national average (Dinkes Jatim, 2021). Based on patient visit data at the neurology outpatient clinic of RSUD Dr. Mohamad Soewandhie Surabaya, in the three-month period from August to October 2024, the average number of post-stroke patient visits per week was 228.

Stroke is a neurological condition that occurs due to a disruption of blood flow to certain parts of the brain caused by bleeding or blockage. This can lead to deficits or disabilities in the associated body parts, and can even result in death (Retnaningsih, 2023). A person who has suffered a stroke (post-stroke) will become dependent on assistance from others or family members in performing Activities of Daily Living (ADLs), such as eating and drinking, bathing, dressing, and so on. The patient's independence and mobility will decrease or even be lost (Sugiyarto & Khadijah, 2021).

The post-stroke period can be considered a difficult time for stroke patients, as they will experience disabilities and an inability to engage in activities as they once did. These disabilities significantly impact their psychological state, potentially leading to depression with symptoms of helplessness and shame about their condition, which can result in decreased self-efficacy (Henny et al., 2023). The ability to perform self-care can be influenced by internal factors, such as self-efficacy and knowledge about the disease, including its causes and symptoms, as well as external factors like family support (Sulistiyowati et al., 2020).

Self-efficacy is one of the important factors that influence individuals to engage in self-care and to plan and manage their illness to prevent it from worsening (Sulistiyowati et al., 2020). Self-efficacy plays a vital role in improving a person's overall health in managing chronic diseases. Individuals with high self-efficacy will have more effective responses to fatigue, stress, life satisfaction, physical performance, and significant improvements in self-care activities (Hourzad et al., 2018). Post-stroke patients who have strong confidence in performing self-care will aid in their motor recovery and boost their self-esteem (Sulistiyowati et al., 2020).

Nurses, as healthcare providers, play a strategic role in enhancing the capabilities of families and patients in managing care independently. The role of nurses as educators, counselors, and facilitators for patients involves providing support through a supportive-educational system by offering health education or counseling aimed at enabling patients to manage their stroke care independently. This requires a good level of self-efficacy or confidence in managing home care independently. With good self-efficacy and the application of self-care management provided to stroke patients, it can enhance awareness and behavioral changes to maintain a healthy lifestyle. In light of this background, the researchers are interested in studying "The Relationship Between Self-Efficacy and Self-Care Behavior in Stroke Patients at the Neurology Clinic of RSUD dr. Mohamad Soewandhie Surabaya."

METHODS

This research uses a type of correlational quantitative research with a Cross Sectional approach. This research method uses correlational methods, namely research methods to find the relationship between two or more variables. The sampling technique used in this study is non-probability sampling, which is a method where members of the population do not have an equal chance of being selected (Aryoko, 2024). Meanwhile, the sample was determined using purposive sampling, which involves selecting samples based on specific criteria or objectives relevant to the study (Aryoko, 2024).

The study population consisted of 228 stroke patients at the Neurology Clinic of RSUD Dr. Mohamad Soewandhie Surabaya. A sample of 146 patients was selected using purposive sampling technique. The independent variable was self-efficacy, while the dependent variable was self-care behavior. Research instruments included the Stroke Self-Efficacy Questionnaire (SSEQ) to measure self-efficacy and the Barthel Index (BI) to assess self-care behavior. Data analysis was performed using the Chi-Square test with a significance level of <0.05 .

RESULTS

General data includes characteristics such as age, gender, education, region, income, and occupation, which are presented in the following table.

Table 1. Characteristics of respondents based on gender.

Gender	F	%
Male	68	47 %
Female	78	53 %

Based on the results of table 1, it shows that almost all respondents (53 %) as many as 78 respondents were female.

Table 2. Characteristics of respondents based on age.

Age	F	%
18-30 Years	0	0 %
31-43 Years	6	4 %
44-56 Years	44	30 %
> 56 Years	96	66 %

Based on the results of table 2, it shows that most respondents (66 %) as many as 96 respondents aged > 56 years.

Table 3. Distribution of respondents based on the level of education.

Level of Education	F	%
No Formal Education	5	3 %
Elementary School	53	36 %
Junior High School	27	18 %
Senior High School	55	38 %
Bachelor's Degree	6	4 %

Based on the results of table 3, it shows that nearly half (38%) of the respondents, totaling 55 individuals, had senior high school as their highest level of education.

Table 4. Distribution of respondents based on occupation

Occupation	F	%
Self-employed	27	18 %
Unemployed	108	74 %
Employee	11	7 %

Based on the results of table 4, the majority (74%) of respondents, totaling 108 respondents, were unemployed.

Table 5. Distribution of respondents based on the duration of stroke treatment

No	Duration of Stroke Treatment	Frekuensi (n)	Persentase (%)
1	< 1 Year	109	75%
2	> 1 Year	37	25%

Based on the results of table 5, that almost (74%) of the respondents, totaling 108 respondents, had been receiving treatment for more than one year

Table 6. Distribution of respondents based on self efficacy

No	Self Efficacy	Frekuensi (n)	Persentase (%)
1	High	118	80.8%
2	Low	28	19.2 %

Based on the results of table 6, it shows that almost all respondents (80.8%) had high self-efficacy, totaling 118 respondents.

Table 7. Distribution of respondents based on self care

No	Self Care	Frekuensi (n)	Persentase (%)
1	Good	116	79.5%
2	Poor	30	20.5%

Based on the results of table 7, it shows that almost all respondents (79.5%) had good self care, totaling 116 respondents.

Table 8. Cross tabulation data of the relationship between self efficacy and self care

Self efficacy	Self Care						P Value
	Good		Less		Total		
	n	%	n	%	n	%	
High	101	69.2%	17	11.6%	118	80.8%	0.001
Low	15	10.3%	13	8.9%	28	19.2%	
Total	116	79.5%	30	20.5%	146	100%	

Based on the results Table 8, the Chi-Square test conducted to examine the relationship between self-efficacy and self-care behavior in stroke patients, a p-value of 0.001 was obtained.

DISCUSSION

The research findings show that the majority of stroke patients at the Neurology Clinic of Dr. Mohamad Soewandhie Regional Public Hospital Surabaya have a high level of self-efficacy, amounting to 80.8%. This indicates that patients have a fairly strong belief in their ability to cope with post-stroke conditions and perform daily activities. These results suggest that several factors influence self-efficacy, including age, gender, education, occupation, and duration of treatment.

According to the data in Table 1, out of 146 respondents, the majority (53%) were female, totaling 78 individuals. The researchers suggest that women often take on greater roles compared to men. Women are frequently responsible as both housewives and working professionals. In such conditions, women must be able to manage and fulfill their responsibilities to the fullest. Therefore, the researchers argue that women tend to have higher self-efficacy than men. This finding is consistent with the study by (Wildasari et al. 2023), which indicated that gender is one of the factors influencing self-efficacy. Women who take on dual roles—both as homemakers and professionals—tend to have higher self-efficacy than men who are employed.

Based on the data in Table 2, out of 146 respondents, the majority (66%) were over 56 years old. As age increases, elderly individuals experience a decline in body functions such as muscle strength, vision, hearing, and memory. This may lead them to feel less capable of carrying out daily activities, ultimately reducing self-efficacy. On the other hand, older adults also have more life experience. If these experiences are positive and successful, they can enhance self-efficacy through what is known as "mastery experience." This is in line with the study by (Nellisa et al. 2022), which found that elderly individuals with good self-efficacy tend to have a better quality of life in managing their treatment. Table 3 shows that out of 146 respondents, nearly half (38%) had completed senior high school as their highest level of education, totaling 55 individuals. Education is one of the important indicators that enables individuals to solve problems. The researchers argue that the level of education is closely related to a person's self-efficacy. The higher the level of education, the better the individual's understanding,

knowledge, and skills in facing various situations, including managing their health. This aligns with research by Gipfel & Fitria (2021), which states that higher education leads to improved knowledge quality and intellectual maturity, thereby increasing self-efficacy.

Data from Table 4 show that the majority of respondents (74%) were unemployed. From interviews conducted with several stroke patients, it was found that physical weakness led respondents to focus more on improving their health status by undergoing recommended therapies. The researchers argue that employment conditions can also be a source of stress that may reduce an individual's ability to cope with problems. Stress is one of the risk factors that can lead to decreased motivation, lower self-efficacy, and reduced ability to meet self-care needs.

According to Table 5, out of 146 respondents, most (75%) had been undergoing treatment for more than one year, totaling 109 individuals. The researchers believe that coping mechanisms developed during the illness period can enhance the individual's self-confidence in performing activities and fulfilling self-care needs. Personal experiences can serve as a guide for future actions to avoid repeating past mistakes. Firsthand experiences become the primary source in the development of self-efficacy. In addition, observing the experiences of others can also help patients learn how to manage their illness and maintain adaptive coping strategies (Widyawati, 2012 in Peni Puji, 2019).

Based on the data in Table 6, the results of the study show that the majority of stroke patients at the Neurology Clinic of RSUD Dr. Mohamad Soewandhie Surabaya have a high level of self-efficacy, amounting to 80.8%. This indicates that the patients have a fairly strong confidence in their ability to cope with post-stroke conditions and carry out daily activities. However, the 19.2% of patients who still exhibit low self-efficacy represent a group that requires special attention. Low self-efficacy in this group is often correlated with several risk factors. Post-stroke depression, experienced by approximately 30% of patients according to Hapiana et al. (2022), can significantly reduce motivation and self-confidence. A lack of understanding about the long-term nature of rehabilitation may also lead to unrealistic expectations, which, when unmet, further diminish self-belief. In addition, social isolation and a lack of support from close surroundings can worsen the psychological condition of patients. As a solution, nursing staff need to actively provide continuous educational and motivational interventions to stroke patients, both during hospitalization and after discharge. Approaches such as psychological counseling, gradual training in daily activities, and verbal encouragement from nurses and family members can strengthen patients' self-efficacy and accelerate the recovery process.

The results of table 7, show that 79.5% of stroke patients at the Neurology Clinic of RSUD Dr. Mohamad Soewandhie Surabaya are able to perform self-care well, reflecting success in achieving basic independence after stroke. This finding indicates that most patients have sufficient ability to meet their daily needs, such as eating, dressing, and maintaining personal hygiene. However, 20.5% of patients still show poor self-care ability, indicating challenges in the recovery and post-stroke adaptation process. This is in line with Orem's self-care theory (2001), which states that an individual's ability to care for themselves is influenced by internal factors such as physical and psychological conditions, as well as external factors such as family support and access to health services. Low self-care ability in certain patients may be caused by physical impairments, emotional dependence, lack of understanding about the care process, and insufficient social support. Therefore, continuous and structured health education efforts are needed, along with active family involvement in the care process and nursing interventions focused on training in daily living activities. Through the implementation of these strategies, patients' self-care ability is expected to improve gradually, thereby accelerating recovery and enhancing their quality of life.

Based on the crosstabulation data in Table 8, the distribution of the relationship between the level of self-efficacy and self-care behavior in stroke patients can be observed. The results show that the majority of respondents with high self-efficacy demonstrated good self-care, with 101 individuals (69.2%), while only 17 individuals (11.6%) in this group exhibited poor self-care. In total, respondents with high self-efficacy accounted for 80.8% of the entire sample. Meanwhile, among those with low self-efficacy, 15 individuals (10.3%) showed good self-care, and 13 individuals (8.9%) had poor self-care. The total number of respondents with low self-efficacy made up only 19.2% of the sample. This distribution clearly indicates a trend that the higher a person's self-efficacy, the more likely they are to have good self-care behavior. This is in line with Barbara Riegel's theory (2012) as cited in Alvi (2018), which emphasizes the importance of self-confidence in the rehabilitation process. The analysis indicates that high self-efficacy influences self-care behavior through three main mechanisms. In the cognitive

aspect, patients with strong self-efficacy tend to set realistic and measurable rehabilitation goals, such as the ability to walk independently within a certain timeframe, which then guides their daily self-care activities. From the motivational perspective, good self-confidence enables patients to persevere in facing physical challenges during rehabilitation—such as fatigue or pain—making them more consistent in performing independent exercises. Meanwhile, on the emotional dimension, self-efficacy acts as a buffer against stress and anxiety, helping patients manage negative emotions that often arise during the long and exhausting recovery process.

According to Albert Bandura's theory (2009, in Ghufon & Risnawita, 2018), self-efficacy is defined as an individual's belief in their ability to organize and carry out actions to achieve specific outcomes. Bandura identified four main sources of self-efficacy: mastery experiences, vicarious experiences, verbal persuasion, and physiological states. In this context, stroke patients who have successfully performed activities independently are more likely to have higher self-efficacy. Furthermore, Orem's self-care theory—particularly the supportive-educative system—emphasizes the importance of educational support in enhancing patients' confidence to care for themselves independently.

The crucial role of self-efficacy in the management of self-care among stroke patients is undeniable. However, this relationship does not stand alone; it is influenced by various external factors. Family support emerges as a key element that strengthens this relationship, both through practical assistance in daily activities and psychological encouragement that enhances the patient's self-confidence. In addition, the availability and accessibility of healthcare facilities also serve as supporting factors that enable the transformation of belief into concrete action. Adequate rehabilitation facilities, competent healthcare professionals, and appropriate assistive devices significantly enhance patients' ability to implement optimal self-care, while also reinforcing their belief in their own capabilities. Thus, the relationship between self-efficacy and self-care in stroke patients is multidimensional and mutually reinforcing, where improvement in one aspect positively impacts the other (Ainiyah, 2021).

CONCLUSION

Based on this study, the Chi-Square test conducted to examine the relationship between self-efficacy and self-care behavior in stroke patients, a p-value of 0.001 was obtained. Since the p-value is less than 0.05, the null hypothesis (H_0) is rejected, indicating that there is a significant relationship between self-efficacy and self-care behavior in stroke patients at the Neurology Clinic of RSUD Dr. Mohamad Soewandhie Surabaya

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