

## Analysis of Knowledge about Early Mobilization in Stroke Patients

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### Abstract:

Stroke sufferers have problems meeting basic needs, one of which is related to mobilization. The mobilization mechanism for stroke sufferers has its mechanism, so there must be guidance. This research aims to analyze the level of knowledge of stroke patients regarding early mobilization. This research has a descriptive-analytical design using 25 patient respondents. The measuring tool used is a knowledge questionnaire on early mobilization in stroke patients. The results obtained were that most of the respondents' knowledge level was Poor (36%). Poor or not optimal knowledge can be caused by the client not being ready because, for patients a stroke is a sudden and sudden illness. Several other studies suggest that early mobilization is important in improving the patient's healing process. Early mobilization of stroke patients is an important strategy in the rehabilitation of respondents. This involves starting physical activity as soon as possible after a stroke to promote recovery of body function, reduce the risk of complications, and improve the patient's overall quality of life.

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## INTRODUCTION

Stroke is a disease that is ranked third in the cause of death and functional disability in the human body after cancer and heart disease (Irwan, 2022). Every year, there are approximately 500,000 cases of stroke or new cases of stroke. Of the 500,000 cases that occurred, 350,000 of them are still alive (Herawati, 2023). According to the World Health Organization (WHO), in 2020, almost 17 billion new stroke cases occurred every year throughout the world. The number of deaths due to stroke cases was 5.5 billion or 29%, while 89% survived. Of the world's population, the highest number of strokes is ischemic stroke, namely 80%, hemorrhagic stroke 10% -15% and subarachnoid hemorrhage 5%. The average age affected by stroke is people aged 60 years or more. Stroke is the third cause of death in Indonesia, with an estimated 500,000 people affected by stroke. Of this number, a third can recover, another third experiences mild to moderate functional impairment, and the remaining third experiences severe functional impairment that requires the sufferer to continue to be on bed rest.

In the first 30 days of a stroke, the mortality rate is around 30%. Hemorrhagic strokes have a higher death rate compared to ischemic strokes, which have a lower prevalence of death (Arviyani, 2020). Treatment with thrombolytic drugs and early therapy can save brain cells and restore blood circulation to the brain, all of which can only be used if the patient is hospitalized within the first three hours after a stroke. More than 50% of stroke sufferers have a survival of five years or more; by providing good treatment when a stroke occurs, the patient's survival rate is better, and treatment and a good understanding of activity disorders in stroke cases are the priority in

maintaining health (Hutaroll, 2021). Stroke has a bad influence or impact on patients, namely dependence on activities of daily living (ADL), which is very high after a stroke, and the decline in these activities occurs very significantly and quickly. According to data obtained after a stroke, the first disturbance experienced by patients in activities of daily living (ADL), which occurs in almost 75%; only 57% of people can survive a stroke (Alfisyah et al., 2021; Fauzi et al., 2022).

Functional disability reflects the disturbance experienced as a result of stroke pathology, for example, disturbance in 3 transfer activities and walking, inability to work, and inability to participate in social activities and recreational activities in free time (Payung & Anneke, 2022). Neurological improvement will occur within one to three months after the stroke. Furthermore, comprehensive motor and sensory improvements occur in the sixth month to one year later (Perdani & Rahayu, 2021). Weakness in functional activities that occur in stroke patients will continue. In contrast, improvements in daily living (ADL) activities will gradually return in the first to sixth months after a stroke. Still, this improvement will only be good if it is supported by adequate treatment. also good, and if measured in the Barthel index, the score must be above 60, and rehabilitation treatment from an early age will help in improving activities that experience weakness (Maesarah & Supriyanti, 2024; Adhitama et al, 2023).

Early rehabilitation in stroke cases aims to improve and restore the independence of stroke patients, such as functional activity, mental and emotional function. One of the rehabilitations carried out is early mobilization, which can be carried out after the patient is treated within 24 hours to 14 days after the attack because, currently, the level of damage that has occurred is not yet serious (Listari et al., 2023). Early mobilization aims to ensure that disability due to a stroke is as minimal as possible and that the remaining functional function of the sufferer is trained to improve the patient's quality of life and the best thing is to be able to work again, with movement patterns that are close to normal. If carried out correctly, early mobilization will provide good results after a stroke and maximize other muscle activity (Nugraha, 2020; Purwandari et al, 2019).

In inpatient treatment of stroke patients in hospitals, in general, not all patients apply early mobilization after a stroke because of various factors and problems that influence recovery, including age, maturity of the damaged area, the function of the remaining area, size of the lesion, exercises are given, and environment. It is hoped that early mobilization treatment can be given to all post-stroke patients who have been declared medically stable for the sake of a better quality of life for patients after a stroke. So, this research aims to analyze knowledge of early mobilization in post-stroke patients.

## METHOD

The research method used is descriptive-analytic. This research was conducted in a hospital inpatient room. The variable that will be examined in this study is the level of knowledge of early mobilization in stroke patients. The population in this study was stroke patients. The sampling technique used was total sampling, using the criteria of patients with a medical stroke diagnosis in the hospital inpatient room. The sample in this study consisted of 25 respondents. The instrument used was a questionnaire regarding early mobilization knowledge for patients. Then, this early mobilization questionnaire was used to collect data on respondents. Data was obtained by measuring respondents' knowledge about the benefits of early mobilization. Data analysis uses percentages related to the level of knowledge with a Likert scale, including good, quite good, poor, and not good.

## RESULT

Results are presented through numerical data in the form of tables. The following is a table of knowledge analysis related to the early mobilization of stroke patients.

Table 1. Data on Respondent Characteristics

Respondent Characteristics	Frequency (f)	Percentage (%)
<b>Age</b>		
40-49 Years	2	8
50 -59 Years	6	24
60-69 Years	6	24
70-79 Years	11	44
<b>Education</b>		
Elementary school	11	44
Junior High School	6	24
Senior High School	4	16
College/University	4	16
<b>Work</b>		
Laborer	6	24
Farmer	9	36
Private	6	24
Civil Government	4	16
<b>Gender</b>		
Man	10	40
Woman	15	60
<b>Resources</b>		
Hospital	24	96
Other media (social media, television, etc.)	1	4

Table 2. Level of Knowledge of Stroke Patients Regarding Early Mobilization

Respondent's Knowledge Level	Frequency (f)	Percentage (%)
Good	4	16
Pretty good	5	20
Not good	9	36
Not good	7	28
<b>Total</b>	<b>25</b>	<b>100</b>

Based on Tables 1 and 2, the results show that almost half of the respondents had poor knowledge (36%), and only those had good knowledge (16%).

## DISCUSSION

The results of research on knowledge and education showed that nine people had poor knowledge, five had junior high school education, and four had elementary school education. This is due to influencing factors, including the respondent's educational background. From the data above, it can be assumed that the higher a person's education, the easier it will be to receive information, and conversely, the lower the level of education, the less knowledge he will have because it is difficult to receive information. This is in accordance with the opinion expressed by Oktaviari (2020), who stated that the higher a person's level of education, the easier it is for them to receive information and, ultimately, the more knowledge they have. On the other hand, if a

person's level of education is low, it will hinder the development of a person's attitude toward accepting newly introduced information and values (Bakri et al, 2020).

From the research results between knowledge and type of work, it was found that nine people had poor knowledge, seven of whom had jobs as farmers. The second factor that influences a person's level of knowledge is employment. Most of the respondents work as farmers, and these farmers often gather only with their own or other groups. They gather to discuss or share knowledge according to their respective experiences, so their knowledge cannot develop because the knowledge they obtain is only small and limited, only surrounding the knowledge and experience of the group itself. This is in accordance with several research results which show that the higher a person's education, the easier it is for them to receive information and ultimately the more knowledge they have, and the work environment can enable a person to gain experience and knowledge both directly and indirectly (Jessyca & Sasmita, 2021; Putri & Afandi, 2022)

Meanwhile, other results were obtained between knowledge and age, and nine people had a poor level of knowledge, 4 of whom were aged 70-79. The age factor greatly influences a person's level of knowledge because, in old age, there is a decline in thought processes due to cell degeneration. This is related to a decrease in memory when receiving information. This is in accordance with the opinion of several studies that suggest that the older a person is, the better the mental development process; however, at a certain age, the mental development process is slower than when he was a teenager. Thus, it can be concluded that age influences knowledge levels. someone who will experience their peak at a certain age and will decrease their ability to accept or remember things as they get older (Hutagulung, 2021; Sya'id, 2023; Rifai et al, 2021).

## CONCLUSION

Research on Knowledge Analysis of Early Mobilization in Stroke Patients highlights several crucial conclusions. First, we realize the importance of providing appropriate education and information to stroke patients and their families regarding the benefits of early mobilization. This can increase their understanding and motivate patients to participate more actively in rehabilitation. Second, the support provided by the medical team and therapists plays an essential role in strengthening the patient's confidence to start physical activity early after a stroke. However, challenges such as physical weakness, concerns about additional injuries, and limited resources must also be overcome. Third, this study reflects a paradigm shift in stroke management that emphasizes physical recovery and a holistic approach that pays attention to patients' understanding of the importance of physical activity in overall recovery. However, further research is needed to understand the factors influencing patient knowledge and behavior and the best strategies to increase the effective implementation of early mobilization. This conclusion confirms that understanding early mobilization in stroke patients is an essential aspect of the rehabilitation process, which requires continued efforts to improve understanding and best practices.

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