

Overview Of Family Knowledge Level About Stroke Patient Care At prof. Dr. H. Aloei Saboe Hospital

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Abstract

Stroke is a condition or disease caused by a disorder in blood circulation in the brain, either because there is a blockage or bleeding due to rupture of blood vessels that result in paralysis or reduced strength in all or part of the body's muscles (hemiparesis). This condition can cause stroke sufferers to experience limitations in meeting their needs so that they need treatment and recovery assistance from the closest people such as family. Therefore, the family who plays a role in this must have knowledge about the care of family members who have had a stroke. This study aims to find out the overview of the level of family knowledge about the care of stroke patients at Prof. Dr. H. Aloei Saboe Hospital. This research is a quantitative research with a descriptive research design. The sampling technique used was *accidental sampling* with a sample of 92 respondents. The results of the study found that respondents had a good level of knowledge as many as 11 respondents (12%), a sufficient level of knowledge as many as 33 respondents (35.9%), and a lack level of knowledge as many as 48 respondents (52.1%). The conclusion of the study was that the majority of respondents had a low level of knowledge about the care of stroke patients.

Keywords: Family, Knowledge, Stroke Patient Care.



INTRODUCTION

According to the World Stroke Organization (WSO), stroke is still the number two cause of death and the number three cause of disability deaths worldwide. From 1990 to 2019, there was an increase of 70.0% of stroke cases in the world and 43.0% of deaths due to stroke in the world (Feigin et al., 2022). Indonesia's stroke prevalence data based on diagnosis to people with the age of ≥ 15 years reached 10.9% (Ministry of Health of the Republic of Indonesia, 2018). In Gorontalo Province, the highest number of stroke patients is at Prof. Dr. H. Aloie Saboe Hospital, which is 695 patients in 2022 and increased to 905 patients in 2023.

Stroke is a condition or disease caused by problems in the blood circulation of the brain caused by blockages or bleeding due to ruptured blood vessels (Theresa, Susyanti, & Pratama, 2022). The impact caused by stroke is reduced strength in all or part of the muscles in parts of the body, both face/face, hands/arms, legs and legs. Paralysis or weakness of the side of the body is commonly called hemiparesis. This condition can result in a stroke sufferer's limitations in terms of meeting the needs of daily activities (Kurniasih, Fatmawati, & Yualita, 2020) To meet the needs of daily activities such as eating, cleaning themselves and mobilizing, stroke survivors need help from others, especially those closest to them such as their family members (Yona, 2022).

Family has an important role in the treatment and recovery of stroke patients because it is the family that has the closest relationship with the patient and understands and knows the most about the patient's health conditions and needs on a daily basis (Adila & Handayani, 2020). As expressed by Friedman (2003) in Nadirawati (2018), one of the functions of the family is as a health maintainer for other family members such as providing a sense of comfort and security to the surrounding environment, assisting the development and growth process and facilitating the process of rest and the healing process of family members who are sick. Therefore, to provide care for stroke patients, the family must have knowledge of it (Adila & Handayani, 2020).

According to Jhonson & Leny (2010), one of the duties of the family in terms of health is to have knowledge of the right actions for families who have health problems. In the research conducted Kurniasih et al., (2020), explained that family knowledge related to the treatment of patients suffering from stroke is still in the sufficient range, even most of the family knowledge is still in the range of the category of lack. In a similar study conducted by Halimatusyadiah, Melia, & Supriyanto (2019) shows that the level of family knowledge is mostly in the poor category which is influenced by several factors, namely lack of information sources, experience and having an elementary education background and equivalent. From the description of several studies above, it shows that family knowledge related to the provision of care for stroke patients is still classified



as sufficient and inadequate.

After an initial review of the research at Prof. Dr. H. Aloie Saboe Hospital by interviewing 3 families of stroke patients, it was found that the results were mixed related to stroke treatment knowledge. The first family interviewed did not know about the correct sleeping and sitting position and did not know about the provision of range of motion exercises to stroke patients. The second family did not know about the patient's personal hygiene needs. The last family interviewed did not know about proper feeding for stroke patients. The source of information from all the families interviewed was only sourced from health workers in the hospital.

From all the descriptions above, it can be concluded that family knowledge related to stroke patient care is important in the recovery of stroke patients and there is a diversity of knowledge by patients' families about stroke care. Thus, the researcher is interested in conducting a study titled Overview of the level of family knowledge about the treatment of stroke patients at Prof. Dr. H. Aloie Saboe Hospital.

RESEARCH METHODS

This research was conducted at Prof. Dr. H. Aloei Saboe Hospital in the neural polyclinic room and the neural room (G3). Data collection will be carried out from May 8 to June 3, 2024. A type of quantitative research with a descriptive research design.

The population in this study is the family of patients with stroke. The exact number of populations in this study cannot be known, so the minimum sample size is determined using the Lemeshow formula. The sampling techniques used are *accidental sampling* and the number of samples found was 92 respondents. The research instrument used was a questionnaire on the level of family knowledge sourced from the research Grace *et al.* (2020).

RESEARCH RESULTS

Characteristics of Respondents

Table 1. Characteristics of Respondents

No	Characteristics	Category	Frequency (n)	Presentase (%)
1	Age	17–25 years old	18	19.6
		26–35 years old	25	27.2
		36–45 years old	18	19.6



		46–55 years old	22	23.9
		56–65 years old	8	8.6
		>65 years old	1	1.1
2	Gender	Male	29	31.5
		Female	63	68.5
3	Education	Primary School	7	7.6
		Junior High School	11	12.0
		Senior High School	52	56.5
		College	22	23.9
4	Jobs	Not working	54	58.7
		Laborer	6	6.5
		Self-employed	25	27.2
		PNS	7	7.6
5	Patient Relations	Husband/Wife	34	37.0
		Saudara	12	13.0
		Children	42	45.7
		Grandson	4	4.3
6	Long Suffering	< 1 year	59	64.1
		≥ 1 year	33	35.9
7	Frequency of Attacks	First	58	63.0
		Second	20	21.7
		Third	9	9.8
		Fourth	5	5.5
8	Duration of Treatment For Stroke Patient	First time	40	43.5
		1–6 months	20	21.7
		6–12 months	13	14.1
		>12 months	19	20.7
9	Resources	Media	15	16.3
		Friends/Neighbors	10	10.9
		Health Workers	52	56.5
		Others	15	16.3

Source: Primary Data 2024



Overview of the Level of Family Knowledge about Stroke Patient Care at Prof. Dr. H. Aloei Saboe Hospital

Table 1. Family Knowledge about Stroke Patient Care

No	Family Knowledge Level	Frequency (n)	Presentase (%)
1	Good	11	12
2	Moderate	33	35.9
3	Poor	48	52.1
Total		92	100,0

Source: Primary Data 2024

DISCUSSION

From previous research, it was found that most of the respondents' knowledge levels were in the category of lacking as many as 48 respondents (52.1%). Then respondents with a level of knowledge in the sufficient category were 33 respondents (35.9%) and respondents with a level of knowledge in the good category were 11 respondents (12%).

The level of family knowledge about the treatment of stroke patients in the good category was 11 respondents (12%). In the results of the study, it was found that 11 respondents were able to correctly answer questions related to the sleeping position of stroke patients, namely by positioning their heads 30° higher or being supported by 2 pillows. As stated in the national guidebook for stroke management, stroke patients must be positioned with a head position that is raised 30° indoors with a comfortable and quiet environment (Ministry of Health of the Republic of Indonesia, 2020). This is in accordance with the results of Agustin's (2018) research which states that the application of sleeping positions as high as 30° is proven to reduce the level of headache so as to increase comfort in stroke patients. In addition, all respondents in the category of good knowledge level were also able to correctly answer questions related to the time to change positions in patients when in bed, which is done every 2 hours. As explained by Margareth (2017), stroke patients must change their position every 2 hours and must be adhered to to prevent damage to the patient's skin structure and tissues caused by body pressure when lying in bed.

The data from the study showed that 11 respondents in the knowledge level of the good category had high final education, namely high school and college. In line with the statement of



Wawan (2010), namely education can affect a person's level of knowledge where the higher a person's education, the better the level of knowledge. In line with the research of Azali et al., (2021), which states that education is the factor that has the most dominant influence on family knowledge in providing care to stroke patients. This is supported by the results of Megawati's (2022) research, namely that most of the respondents have a good level of knowledge because the majority of respondents have a higher level of education, which causes higher respondents' knowledge related to the handling and treatment of stroke patients.

The data from the study showed that most of the respondents in the category of knowledge level were female. As explained by Septianingrum et al., (2024) that women are more identical in terms of caring for sick families because they have maternal nature, have more patience and are more diligent than men. The data from the study also showed that most of the respondents in the level of knowledge were children of stroke patients. This is in line with the research of Badaru et al., (2019) which has research results that children of stroke patients are the most respondents as caregivers of families suffering from stroke. A child who takes care of his sick parents can provide care with affection and can fulfill his obligations as a child to be able to help care for parents who are sick (Atmojo, 2020).

The level of family knowledge about the treatment of stroke patients in the adequate category was 33 respondents (35.9%). Many respondents answered correctly questions related to complications if range exercises were not carried out, namely joints becoming stiff, muscles shrinking until foot drop occurred. As explained by Margareth (2017), range of motion exercises are carried out to prevent joint stiffness, joint deformities, paralysis, improve muscle tone and improve joint mobility. However, there are still many respondents who incorrectly answer questions related to personal hygiene about the process of changing clothes for patients. Changing the clothes of patients who have had a stroke should be done from the sick side first. This is in accordance with the explanation of Handayani et al., (2019), namely that stroke patients when wearing clothes such as shirts and pants must start from the side that experiences weakness first to make it easier for patients in the process of wearing clothes. According to the results of the research Fujita et al., (2015) also explained that the process of wearing clothes in patients with stroke can improve motor function in the affected parts of the body such as the extremities and can train balance in stroke patients.

From the data from the research results, most of the respondents' information sources came from health workers. In line with the statement of Rachmawati et al., (2017), that the source of information can affect a person's level of knowledge. Information that is given repeatedly,



clearly and focused on one thing can shape a person's knowledge. However, the data from the study showed that most of the respondents' age was in the age range of late adulthood and above. According to Zaini (2023), a person who is in the age range at the end of the information capture does not guarantee that the person will be able to treat stroke patients correctly, because a person in the age range of late adulthood and above is prone to physical and psychological stress which causes a person's knowledge and ability to grasp the information received to be hampered, so that the older a person is, the higher his knowledge will be. In line with the statement of Azali et al., (2021) who in their research stated that age factors can affect the level of family knowledge in the care of patients with stroke. The more mature a person is, the more information and knowledge can be obtained through the learning process. However, if you get older, a person's catching power will also decrease.

The level of family knowledge about treatment in stroke patients with the under-category was 48 respondents (52.1%). In the results of the study, the most respondents answered incorrectly to the question about patient feeding, which was related to how to prevent constipation or constipation. In the research of Windahandayani (2021), it is explained that the danger of constipation in stroke patients can have an impact on increasing intracranial pressure when the patient is straining and can expand the stroke area and can even end in death, therefore knowledge of constipation prevention measures is needed so that it does not have a negative impact on the patient. In accordance with the statement of Handayani et al., (2019) in their book it is written that to overcome stroke patients who experience bowel disorders such as constipation or constipation, foods with high fiber content can be given which can be obtained through vegetables and fruits. From the results of the study, it can also be seen that the most respondents answered incorrectly to questions related to problems caused by aspiration in stroke patients. As explained by Armstrong & Mosher (2011), stroke patients with swallowing disorders who often experience aspiration during drinking can increase the risk of pneumonia in stroke patients. In the study, Grossmann et al., (2021), explained that position modification assistance in patients, especially when the patient swallows, can prevent aspiration in patients so that it can reduce the incidence of pneumonia in stroke patients.

From the results of the study, it can also be seen that respondents in the low category of knowledge still answer incorrectly to questions related to the position of the patient's feet while sleeping on the mattress. The correct position of the soles of the feet when the patient sleeps on the mattress should have a flat base on the bottom of the soles of the feet such as a board or the back of the lower bed. According to Margareth (2017), the use of boards on the soles of the feet



when patients sleep on the mattress can maintain the position of the feet of stroke patients at the right angle and can prevent foot deformities and prevent the heel from becoming short due to muscle contractures in stroke patients.

According to the data from the study, most of the respondents stated that they were caring for a family suffering from a stroke for the first time. In the results of the research of Alyaa et al., (2015), the level of knowledge in a person who has a longer duration of care for stroke patients is much better when compared to someone who has a shorter duration of care, because one can learn from the experience gained while caring for patients suffering from stroke. In line with the statement of Notoatmodjo (2012), one way to gain knowledge is by learning from personal experiences that can be used to face the same problems in the future.

The data from the study also showed that most of the respondents at the level of knowledge in the underserved category were caring for families who had suffered a stroke with their first stroke. In a study conducted by Bo'leng & Tepal (2019), it was explained that families who treated family members with a stroke with the first attack did not have experience compared to the family who treated patients with recurrent strokes so the family did not have good knowledge either. In addition, from the data from the research results, it can also be seen that most of the respondents are taking care of families who suffer from stroke with a long illness period of <1 year. In accordance with research conducted by Atmojo (2020), respondents whose families suffered from stroke within <1 year still need health education and education with the intention of increasing knowledge because they do not have much experience related to treatment for families who have suffered strokes.

In addition to the experience factor, from the results of the study, it can be seen that there are several respondents who have low final education. In a study conducted by Rahayu (2021), it was explained that a person's level of knowledge can be influenced by their educational background, namely the higher the level of education, the higher a person's knowledge will be, and vice versa. In addition, it can be seen from the data from the research that the source of information by some respondents did not come from health workers. As explained by Putri et al., (2019) in the results of the research obtained, it is stated that a person's knowledge of stroke can vary depending on the level of education and the source of information obtained. One method to improve a client's knowledge is to provide health education by the health worker who is responsible for the matter. Health education conducted by health workers has been proven to have a significant influence on a person's level of knowledge and can even change a person's behavior in an effort to improve health.



CONCLUSION

The results of the previous study, it was concluded that families with the highest level of knowledge about the care of stroke patients were in the poor category with 48 respondents (52.1%) compared to the other two categories, namely 33 respondents (35.9%) and good as many as 11 respondents (12%).

FUTURE DIRECTIONS

Based on research findings that show that most families of stroke patients have a level of knowledge about the care of stroke patients in the underserved category, further research is recommended to focus on the development and evaluation of effective educational interventions for families. These interventions can be in the form of structured health education, audiovisual media, family-based modules, or the use of digital technology such as social media or health applications to increase family knowledge in caring for stroke patients at home. In addition, future research needs to examine factors that affect low levels of family knowledge, such as education level, experience caring for stroke patients, access to health information, and health worker support. Qualitative approaches can also be used to delve deeper into the perceptions, barriers, and needs of families in understanding stroke patient care. Follow-up research is also suggested to assess the relationship between family knowledge level and treatment practices, adherence to rehabilitation programs, as well as stroke patient outcomes, such as independence from daily activities and prevention of complications. Thus, the results of the research are expected to be the basis for planning a more targeted and sustainable family-based education program.

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