# The Patient's Family Knowledge Level About Self-Care In Family Members Who Have Stroke

<sup>1</sup>Nuswatul Khaira, <sup>2\*</sup>Asri Jumadewi, <sup>3</sup>Putro Simeulu, <sup>4</sup>Hilma Yasni, <sup>5</sup>Mutajaridah

1,3,4,5 Nursing Study Program, Poltekkes Kemenkes Aceh, Indonesia <sup>2</sup>Medical Laboratory Technology Study Program, Poltekkes Kemenkes Aceh, Indonesia *Corresponding email: asrijumadewi@poltekkesaceh.ac.id* 

#### Abstract:

Stroke is a disease that takes a long time to heal. The recovery of stroke patients is strongly influenced by the knowledge of patients and family members in performing self-care. The purpose of this study was to describe the level of family knowledge about self care in family members who experienced stroke at Yulidin Away Hospital Tapaktuan. The research design used is a quantitative design with a descriptive method. The sampling technique is accidental sampling with the number of respondents as many as 20 people. The results showed that the level of family knowledge about Self-Care based on the Knowledge Level was in the sufficient category, namely 90%, the knowledge level based on the Understanding Level was in the good category, namely 60%, and the knowledge level based on the Applying Level was in the good category, namely 60%. This study shows the level of family knowledge about Self-Care as a whole is in the good category. Thus, it is hoped that Yulidin Away Hospital can increase information about Self-Care and motivate families in carrying out preventive and rehabilitative efforts in stroke patients.

## **Keywords:**

Knowledge Level, Self-Care, family

JEL: 110, 118, 119

#### INTRODUCTION

Stroke is a cerebrovascular disease that is often found in developed countries, nowadays there are also many in developing countries, one of which is Indonesia. One in six people in the world will have a stroke. The problem of stroke in Indonesia is becoming increasingly important because Asia ranks first with an increasing number of cases. Stroke is one of the non-communicable diseases which is still an important health problem in Indonesia. Along with increasing morbidity and mortality at the same time, where in Indonesia an increase in cases can have a negative impact on the economy and productivity of the nation, because stroke treatment takes a long time and requires large costs (Ministry of Health, 2014).

In 2020, it is predicted that around 7.6 million people will experience mortality due to stroke and 15% of cases will occur at a young and productive age. The prevalence of stroke in Aceh based on doctor's diagnosis in the population aged 15 years was ranked 28th out of 34 provinces with a prevalence of 5%. The prevalence of stroke based on age and sex is more common in male patients with a prevalence of 11% and aged 75 years with a prevalence of 50.2%. (Riskesdas, 2018).

There are two main types of stroke, namely ischemic stroke due to reduced blood flow due to blockage (thrombosis, embolism), and hemorrhagic stroke due to bleeding (WHO, 2014). Blood that comes out and spreads to the brain parenchyma tissue, cerebrospinal space, or a combination of both is the result of a ruptured brain blood vessel known as a hemorrhagic stroke (Goetz, 2007). The highest presentation of stroke is ischemic stroke, which occurs due to blockage of blood flow. Blockage can occur due to fatty deposits containing cholesterol (called plaque) in large blood vessels (carotid arteries), medium blood vessels (cerebral arteries) or small blood vessels (Sustrani, et al., 2004).

Stroke will have an impact on decreasing the level of productivity and can cause socio-economic disruption of the family. The impact of stroke on each patient varies depending on the part of the brain affected by the injury, the severity of the injury, and a person's health status, but in general these impacts can be grouped into four namely physical or biological impacts, psychological impacts, social and spiritual impacts. The impact of the stroke causes the patient to experience a self-care deficit or dependence on others and requires continuous nursing assistance so that gradually the patient and family can carry out self-care independently. Stroke sufferers need family assistance in fulfilling self-care (Pujiastuti, 2003).

Irdawati (2009) in her research, there is a relationship between the knowledge of the family of stroke sufferers to the health level of stroke patients themselves. The low level of family knowledge about stroke causes increased severity, patients do not have independence, repeated attacks occur, and even causes death. The family affects the healthy behavior of each family member, as well as the individual's health status affects the family's function and ability to achieve goals (Potter, 2005).

The recovery of stroke patients from disability is influenced by the patient's adherence to self-care. Therefore, to be able to increase and maintain the activities of stroke patients, self-care can be done to patients. The more regularly stroke patients do self-care, the risk of complications can be prevented and there is a rapid return of function. On the other hand, if self-care is not carried out properly, it can accelerate the occurrence of permanent paralysis. One of the factors that affect patient compliance is the knowledge and support of the family about self-care (Hidayat & Santoso, 2009).

Based on the description above, the authors are interested in conducting research with the title "Knowledge of the Patient's Family about Self-Care (Self Care) for Family Members who have Stroke at Yulidin Away Hospital Tapaktuan.

## LITERATURE REVIEW Family

Family is a life bond or alliance on the basis of marriage between adults of the opposite sex living together or a man or a woman alone with or without children, either their own children or adopted and living in a household (Suprajidno, 2004 in Setiadi, 2008). 2005). The family is the smallest unit of society consisting of the head of the family and several people who are gathered and live in one place under one roof in a state of interdependence (Effendi, 2005). The family is the main support system for the elderly to maintain their health.

The family's obligation to the elderly is to pay attention to the elderly and to strive for the elderly so that they are not too dependent on others and help themselves. Families play an important role in the lives of the elderly, 80% of families will support the elderly and usually adult children who are a source of support for the elderly as many as 75% of elderly people over 65 years are cared for by their own family members, of which a quarter are spouses and more than a third are cared for by partners. and adult children (Fatimah 2010).

#### **Self-Care**

Basically all humans have the need to take care of themselves and have the right to do self-care independently, unless that person is unable. Self according to Orem (2001) is an activity to meet the needs in maintaining the life, health and well-being of individuals both in health and illness that is carried out by the individual himself. Self-care is self-care that is carried out to maintain health, both physically and psychologically. The fulfillment of self-care is influenced by various factors, including culture, social values in individuals or families, knowledge of self-care and perceptions of self-care (Hidayat, 2009).

## Stroke

Stroke is a functional brain disorder that occurs suddenly (within a few seconds) or quickly (within a few hours) with clinical signs and symptoms both focal and global lasting more than 24 hours, caused by obstruction of blood flow to the brain due to bleeding (stroke). hemorrhagic) or blockage (ischemic stroke) with symptoms and signs according to the part of the brain affected, which can recover completely, heal with disability, or die (Junaidi, 2011).

According to Geyer (2009) stroke is a clinical syndrome characterized by the sudden development of persistent focal neurological deficits secondary to vascular events. Stroke is the number one cause of disability in the world and the second cause of death in the world. Two-thirds of strokes occur in developing countries. In western society, 80% of patients have ischemic stroke and 20% have hemorrhagic stroke. The incidence of stroke increases with age (Dewanto et al, 2009).

#### RESEARCH METHODOLOGY

This type of research is a quantitative design with a descriptive method, namely research conducted to describe or describe the Patient's Family Knowledge Level about Self-Care (Self-Care) in Family Members who have Stroke. This research was conducted at the Neurology Polyclinic of the Yulidin Away Regional General Hospital Tapaktuan for 2 days, namely Friday, February 28 to Monday, March 2, 2020.

The population in this study were all families/companions of stroke patients seeking treatment at the Neurology Polyclinic of the Yulidin Away Regional General Hospital Tapaktuan. The sampling technique used is Accidental Sampling, which is a sampling technique by chance, where consumers coincidentally meet with researchers during the research, which is for 2 days. The sample in this study was the family or companion of stroke patients who were treated at the Neurology Poly Hospital of Yulidin Away Tapaktuan. The instrument is a measuring tool for data collection in order to strengthen the research results. The measuring instrument for data collection used in this study is a questionnaire made by the researcher and refers to the literature which consists of several true and false statements that must be answered by the respondent.

After the data is collected and obtained through a questionnaire that meets the requirements, then proceed with data processing using the following steps: a). Editing; b). Coding; c). Transferring; and d). Tabulating. The measurement method used in this study is to use the Guttman scale, which provides a firm response consisting of two alternatives "true and wrong" and "yes no". The data analysis method used in this study is univariate analysis, namely the analysis is carried out for one variable or variable. Univariate analysis is also known as descriptive analysis or descriptive statistics which aims to describe the condition of the phenomenon under study. The univariate analysis model displays the results of measurement numbers, measures of central tendency, data presentation or data slope.

Data analysis was carried out for each research variable using the distribution frequency based on the percentage of each variable. Categorization of each variable is done by determining the mean using the formula, namely:

$$Mean \ x = \frac{\sum x}{n}$$

Information:

x =Average value

 $\sum x$  = the total value of the respondent's data

n = Sample

Determination of the percentage of each variable using the formula:

$$P = \frac{f}{n} \times 100\%$$

Information:

P = Percentage

f = Observed frequency

n =The number of respondents into the sample

## RESULT & DISCUSSION Research result

The collection of research data began on February 28 to March 2, 2020 at the Yulidin Away Tapaktuan Regional General Hospital. The number of samples obtained during the study were 20 people. The data collection technique was carried out on the respondents by

conducting a knowledge level test in the form of filling out a questionnaire containing questions in the form of a checklist statement  $(\checkmark)$ .

The results of the study were entered into a frequency distribution table to see a description of the family's knowledge about Self-Care in stroke patients at the Yulidin Away General Hospital Tapaktuan. Below are the frequency distribution tables of the results of the study on "Family Knowledge about Self-Care in family members who have had a stroke at the Neurology Polyclinic of Yulidin Away Regional General Hospital Tapaktuan.

Level of Family Knowledge about Self-Care for Family Members who have Stroke at the Neurology Polyclinic of Yulidin Away Regional General Hospital Tapaktuan. Based on the way of processing the data contained in chapter 3, the data that has been collected is tabulated on each research variable. The measurement results obtained from the total variables of the Level of Family Knowledge about Self-Care in Family Members who experience Stroke are categorized as good if x 28, sufficient if x 14-27, and less if x <14. Table of the total frequency distribution of the variables of Family Knowledge Level about Self-Care in Family Members who experience Stroke at the Yulidin Away Tapaktuan Regional General Hospital in the good category, namely 80%. Specifically, from each variable, the following results are obtained:

## a. Knowledge based on Knowledge Level

The measurement results obtained from the Family Knowledge Level variable about Self-Care in Family Members who experience Stroke based on the level of knowledge are categorized as good if x 5, sufficient if x 3-4, and less if x <3. The table of variable frequency distribution based on the level of tofu is as follows:

Table 1
Frequency Distribution by Level of Tofu (N=20)

No	Knowledge Level	Frequency	Percentage
1.	Well	2	10
2.	Enough	18	90
3.	Not enough	0	0
	Total	20	100

Based on the table above, it is found that the distribution of Family Knowledge Levels about Self-Care in Family Members who experience Stroke at the Yulidin Away Tapaktuan Regional General Hospital based on the Tofu Level is in the sufficient category, namely 90%.

## b. Knowledge based on Understanding Level

The measurement results obtained from the variable Level of Family Knowledge about Self-Care in Family Members who have Stroke based on the level of understanding are categorized as good if x 13, sufficient if x 6-12, and less if x <6. Table of variable frequency distribution based on the level of understanding is as follows:

Table 2
Frequency Distribution by Level of Understanding (N=20)

No	Knowledge Level	Frequency	Percentage
1.	Well	12	60
2.	Enough	8	40
3.	Not enough	0	0
	Total	20	100

Based on the table above, it is found that the distribution of Family Knowledge Levels about Self-Care in Family Members who experience Stroke at the Yulidin Away Tapaktuan Regional General Hospital based on the Understanding Level is in the good category, namely 60%.

## c. Knowledge by Application Level

The measurement results obtained from the variable Level of Family Knowledge about Self-Care in Family Members who experience Stroke based on the level of application are categorized as good if x 13, sufficient if x 6-12, and less if x <6. The variable frequency distribution table based on the level of application is as follows:

Table 3
Frequency Distribution by Application Rate (N=20)

No	Knowledge Level	Frequency	Percentage
1.	Well	12	60
2.	Enough	8	40
3.	Not enough	0	0
	Total	20	100

Based on the table above, it is found that the distribution of Family Knowledge Levels about Self-Care in Family Members who experience Stroke at the Yulidin Away Tapaktuan Regional General Hospital based on the Application Level is in the good category, namely 60%.

#### **DISCUSSION**

Based on the description in the previous chapter, that this study is intended to obtain an overview of the level of family knowledge about self-care in family members who experience stroke at the Yulidin Away Tapaktuan Regional General Hospital in terms of three variables including: Knowledge based on level of knowledge, knowledge based on level of understanding, and knowledge based on the level of application. The table describes the level of Family Knowledge about Self-Care in Family Members who experience Stroke at the Yulidin Away General Hospital Tapaktuan, the highest is in the Good category, namely 16 respondents (80%). The level of knowledge of patients who are in the sufficient category is only 4 respondents (20%) and the category is less than none (0%). It can be concluded that most of the respondents have good knowledge about self-care for family members who have had a stroke, a small proportion have sufficient knowledge and almost none of the respondents who have less knowledge. This different knowledge is caused by internal and external factors. Internal factors include age and last education. External factors include experiences and sources of information which contribute to the family's level of knowledge (Lenni, 2010).

#### 1. Knowledge based on Knowledge Level

The results of the study describing the Level of Family Knowledge about Self-Care in Family Members who experienced Stroke at the Yulidin Away Tapaktuan Regional General Hospital based on the variable level of knowledge obtained the highest distribution was in the sufficient category, namely 18 respondents (80%). This illustrates that most families who care for family members who have had a stroke have a fairly good knowledge of self-care. Know is defined as remembering a material that has been studied previously. Included in this level of knowledge is recalling something specific from all the material studied or stimuli that have been received (Notoadmojo, 2011).

According to Irmayati (2007), several things that affect a person's level of knowledge are education and information exposure. Education is a process of changing attitudes and behavior of a person or group as well as efforts to mature humans through teaching and training efforts. The higher the level of education, the more knowledge and knowledge gained. The level of knowledge is also influenced by how much a person is exposed to information. Information as knowledge transfer. Information can be found in everyday life and passed on through interpersonal communication or through mass media such as television, radio, newspapers, magazines, and the internet.

According to the researcher's assumption that most of the respondents have a fairly good knowledge of self-care because it is based on the level of education possessed by the respondent. Most of the respondents have a high school level education (SMA) and a small part have taken the S1 and DIII higher education levels. The higher a person's

education level, the better the ability to receive and absorb information. In addition, the era that is all advanced and sophisticated and based on technology also allows one to access information quickly and easily, for example through radio, television and the internet.

## 2. Knowledge based on Understanding Level

The results of the study describe the Level of Family Knowledge about Self-Care in Family Members who experience Stroke at the Yulidin Away Tapaktuan Regional General Hospital based on the level of understanding variable, the highest distribution is in the good category, namely 12 respondents (60%). This illustrates that most families who care for family members who have had a stroke have very good knowledge about self-care.

Understanding is defined as an ability to explain correctly about known objects, and can interpret the material correctly. People who already understand the object or material must be able to explain, mention examples, conclude, predict, and so on against the object being studied (Notoadmojo, 2011).

According to Hendra (2008) Intelligence greatly affects a person's level of knowledge in understanding the information received. Intelligence is defined as an ability to learn and think abstractly in order to adjust mentally in new situations. Intelligence is one of the factors that influence the outcome of the learning process. Intelligence for a person is one of the capital to think and process various information in a directed manner so that he controls the environment. Thus, the difference in intelligence of a person will also affect the level of knowledge.

According to the researcher's assumption that a person's level of understanding is influenced by a person's ability to remember and absorb the information received. This really depends on the intelligence possessed by each individual.

## 3. Knowledge by Application Level

The results of the study describing the Level of Family Knowledge about Self-Care in Family Members who experienced Stroke at the Yulidin Away Tapaktuan Regional General Hospital based on the application level variable, the highest distribution was found in the good category, namely 12 respondents (60%). This illustrates that most families who care for family members who have had a stroke have very good knowledge about self-care.

Application is defined as the ability to use the material that has been studied in real (actual) situations or conditions. Application here can be interpreted as the application or use of laws, formulas, methods, principles, and so on in other contexts or situations (Notoadmojo, 2011).

According to Hendra (2008), several factors that affect the level of knowledge besides intelligence are also influenced by age and experience possessed by a person. The older a person is, the processes of mental development get better, but at a certain age, the increase in this mental development process is not as fast as when he was a teenager. One of the factors that influence a person's memory is age. From this description it can be concluded that increasing age can affect the increase in knowledge gained, but at certain ages or near old age the ability to accept or remember knowledge will decrease.

According to Notoadmojo (2011) Besides age, experience greatly affects the level of knowledge. Experience is an effort to gain knowledge. In line with the age of a person, the experience also increases. A person tends to apply his previous experience to solve the problems at hand. Experience is the best teacher. The saying can be interpreted that experience is a source of knowledge to obtain the truth of knowledge. Therefore, personal experience can be used as an effort to gain knowledge. This is done by repeating the experience gained in solving problems faced in the past

According to the assumption of the researcher that the level of knowledge in applying is influenced by the age and experience of the respondent. Based on the results of the study seen from demographic data, most of the respondents' ages were in the late adult category as many as 7 respondents, early elderly 6 respondents and late elderly 4 respondents. The older a person's age, the process of mental development processes improves so that increasing age can affect the increase in knowledge gained. In line with the age of a person, the experience also increases. A person tends to apply his previous experience to solve the problems at hand. Experience is the best teacher.

### CONCLUSION

Based on the results of the research that has been carried out, it can be concluded that the description of the Level of Family Knowledge about Self-Care in Family Members who experience Stroke at the Yulidin Away Tapaktuan Regional General Hospital based on the Knowledge Level Variable is in the sufficient category, namely 90%. The description of the level of family knowledge about self-care in family members who experience stroke at the Yulidin Away Tapaktuan Regional General Hospital based on the Variable Level of Understanding is in the good category, namely 60%. The description of the level of family knowledge about self-care for family members who experience stroke at the Yulidin Away Tapaktuan Regional General Hospital based on the Variable Level of Application is in the good category, namely 60%.

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