



ORIGINAL RESEARCH

THE RELATIONSHIP OF FAMILY SUPPORT WITH COMPLIANCE WITH POST STROKE MEDICATION IN ELDERLY AT HOSPITAL

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Article Info	Abstract
<p>Article History: Received: 19 December 2023 Revised: 25 December 2023 Accepted: 28 December 2023</p> <p>Keywords: Stroke; family support; medication adherence.</p> <p>Corresponding Author: Friska Prima Rita Muhammadiyah University of Gorontalo</p> <p>Email: fransiska@gmail.com</p>	<p>Background: Stroke is a cerebrovascular disease (brain blood vessels) that is characterized by impaired brain function due to damage or death of brain tissue due to blockage of blood and oxygen flow to the brain.</p> <p>Purpose: The aim of this study was to determine the relationship between family support and adherence to taking medication after stroke in the elderly.</p> <p>Methods: This research design uses an analytical survey with a cross-sectional approach. Sampling, using accidental sampling, obtained 30 respondents.</p> <p>Results: show that family support in caring for elderly people suffering from post-stroke disease is 40% in the good category and 60% in the poor category. Compliance with taking medication in post-stroke patients was 33.3% in the adherent category and 66.7% in the non-adherent category. The results of the chi square test using SPSS software obtained a value of $p\text{Value} = 0.000$ with $\alpha < 0.05$.</p> <p>Conclusion: it can be concluded that there is a relationship between family support and adherence to taking medication after stroke in the elderly.</p>

Background

An elderly person is someone who has reached the age of 60 and over. The elderly are an age group of humans who have entered the final stages of their lives. This group, which is categorized as elderly, will experience a process called the aging process. Old age, as the final stage of the life cycle, is a normal stage of development that will be experienced by every individual who reaches old age. This is a reality that cannot be avoided by every human being (Notoatmodjo, 2018). Based on population projection data in Indonesia in 2017, it is estimated that there are 23.66 million elderly people (9.03%). This number is predicted to continue to increase in the following year, with predictions for 2020 reaching 27.08 million people and 2035 reaching 48.19 million people (Sunarti et al., 2019). High life expectancy (UHH) is one indicator of success in achieving national development, especially in the health sector. Since 2004–2015, there has been an increase in UHH in Indonesia from 68.6 years to 70.8 years, and the projection for 2030–2035 reaches 72.2 years. The morbidity rate is one of the factors used to measure the health status of the population. The morbidity rate for the elderly population in 2014 was 25.05%, meaning that for every 100 elderly people, 25 of them were sick. Health complaints do not always result in disruption of daily activities, but the occurrence of health complaints and the types of complaints experienced by residents can roughly describe the level or degree of health. In 2015, the percentage of elderly people with health complaints in the past month decreased to 47.17%. The prevalence of elderly people who experience stroke at the age of 55–64 years is 33, 65–74 years old is 46.1, and 75+ years old is 67, and data from Riskesdas Indonesia 2018 is 713,783 people. With increasing age,

physiological function decreases due to the aging process, so that non-communicable diseases often appear in the elderly.

Changes that occur in the elderly after stroke include paralysis and disability, communication disorders, emotional disorders, pain, sleep disorders, depression, dysphagia, and many others (Lingga, 2018). After having a stroke, a person's level of dependence on other people will increase, so that people are not independent in carrying out their daily independent activities. Functional damage causes a person to suffer from disability, so stroke sufferers become unproductive. Functional disorders experienced by people after stroke are one of the factors that influence independence in carrying out activities. Efforts to restore limb movement are made through rehabilitation. Rehabilitation not only restores functional disorders but also helps ease the tasks of those around the post-stroke person and increases the spirit of the post-stroke person.

Not only do they experience disability, stroke patients also tend to experience depression. In this case, the role and support of people around you, especially family, are very necessary to influence the person not to become depressed. This is because, basically, humans have always lived in an environment since they were born. In the environment, reciprocal relationships must occur, which will later influence humans (Gerungan, 2018). Stroke is a cerebrovascular disease that is the main cause of death in Indonesia. Stroke is a disease that attacks the arteries leading to the brain. This disease causes disability. Disabilities experienced by post-stroke patients can prevent them from carrying out daily activities such as bathing, walking, climbing stairs, preparing meals, and traveling (Ummaroh, 2019). Strokes are often triggered by hypertension, which is called the silent killer, diabetes mellitus, obesity, and various disorders of blood flow to the brain. Strokes often attack men due to unhealthy lifestyles such as smoking, a lack of physical activity, and high levels of stress. According to the World Stroke Organization, 1 in 6 people in the world will experience a stroke in their lifetime; the incidence of stroke in the world is approximately 200 per 100,000 population in a year. Meanwhile, according to data from the American Health Association (AHA), every 40 seconds there is 1 new case of stroke, with a prevalence of 795,000, and every year, approximately every 4 minutes, 1 stroke client dies. And in Indonesia, it is estimated that every year, 500,000 people suffer from strokes, and around 25%, or 125,000 people, die, while the rest experience mild disabilities or even serious disabilities. The prevalence of stroke in Indonesia in 2018 was 10.9% and has increased by 3.9% in the last five years. (Hartono et al., 2019)

Based on the RI Ministry of Health's Riskesdas report, stroke sufferers are in the productive age range of 1.2 million, with most sufferers aged between 55 and 64 years. Age is the main risk factor for stroke because there is a decrease in cardiovascular function, which can trigger degenerative diseases. According to the Characteristics of Gorontalo Province, Riskesdas 2018, the proportion of stroke controls going to health service facilities among the population over 15 years old was 33.36% of men who had regular controls, 49.51% of them not routinely, and 17.12% of them who did not have rechecks. Meanwhile, 24.14% of women did it regularly, 57.97% did not do it routinely, and 31.98% did not check again. Based on data taken from the Medical Record Subdivision Room, the number of elderly stroke cases in RSUD. Prof. Dr. Aloe Saboe, Gorontalo City, from January to March 2020 consisted of intracerebral hemorrhage, namely 162 patients, cerebral infarction, 1,249, and stroke, not specified as hemorrhage or infarction; there were 100 patients.

Success factors in stroke recovery can be done in several ways, one of which is medical treatment aimed at dealing with emergencies in acute strokes and preventing recurrent

strokes, and administering medication, physiotherapy, and physical exercise to restore daily movement abilities. Apart from that, stroke sufferers are not advised to eat fatty foods such as fried foods, peanuts, durian, egg yolks, coconut, meat, and coconut milk, and not to drink alcoholic drinks or smoke. Stroke sufferers are advised to consume healthy foods such as fruit, vegetables, whole grains, and protein with healthy fats. Family support is very influential in the recovery of stroke patients. Strong family support and good family function can motivate sufferers to continue their lives to ensure that many people successfully recover from stroke and then carry out normal activities (Irnawati et al., 2018). According to Friedman (2018), family support plays a very important role in accompanying stroke patients because it can increase success in undergoing rehabilitation. The family is very influential for all individuals involved in problems. One of them is the health problem of elderly family members, where elderly people who are no longer independent and depend on other people cannot carry out their own activities and need a caregiver.

Strokes suffered by the elderly can cause problems; the biggest problem is compliance with taking medication. For the elderly, family support is very necessary because their body function generally decreases. Elderly stroke sufferers cannot be separated from taking medication every day, so the people closest to them need to always remind them of their medication-taking schedule. Failure to comply with the treatment process can increase the risk of developing or worsening diseases suffered by the elderly. (Harmayetty et al., 2020). Stroke patient compliance while undergoing a rehabilitation program can influence the speed of the patient's recovery from disability. The more regularly stroke patients undergo rehabilitation, the more they can prevent and reduce the risk of complications, as well as speed up the return of body function. On the other hand, if rehabilitation is not carried out regularly, it can accelerate permanent paralysis. Research conducted by Karunia (2018) stated that the high need for family support for elderly people with post-stroke conditions must be balanced with the presence of families who are willing to spend time caring for post-stroke patients. (Ummaroh, 2019) Research conducted by La Grecea in Whardani & Martini (2017) explains that age is a very important factor in a person's compliance behavior, namely that the younger a person is, the higher the level of compliance, and the motivation of those who are older. more difficult than someone who is still young. (Visvanathan et al., 2020)

Research conducted by Harmayetty et al. (2018) shows that the elderly experience a slowdown, so the ability to restore body functions also slows down. From the research above, it can be concluded that family support is very influential in treating post-stroke patients to speed up the healing and recovery process. Based on the background above, researchers are interested in conducting research on the relationship between family support and adherence to taking medication after stroke in the elderly at RSUD. Prof. Dr. Aloei Saboe, Gorontalo City.

Method

The design of this study uses an analytical survey with a cross-sectional approach (Purnamasari et al., 2022), which aims to determine the relationship between family support and adherence to taking medication after stroke among the elderly in RSUD. Prof. Dr. H. Aloei Saboe, Gorontalo City. This research will be conducted in October 2021 with a population of all elderly post-stroke sufferers who are being treated at the Regional Hospital, and the sample in this study is elderly people who have been treated at the Regional Hospital. Prof. Dr. Aloei Saboe uses the accidental sampling technique. Inclusion criteria: elderly after stroke who are treated repeatedly; elderly aged 60–75 years; elderly with stroke who do not

regularly take medication; elderly who are willing to be respondents; and exclusion criteria: elderly who do not have a stroke; elderly who experience severe disability. who can't talk.

The research instrument used in this research is a standardized questionnaire, where for family support, it is a family support questionnaire with 12 questions, and for medication adherence, the MMAS questionnaire is 8 questions. The results of the validity test can be seen from the *r* table value of 0.576, which means that the questionnaire questions are declared valid and have also been declared reliable with a Cronbach Alpha value of 0.795. Each question is divided into favorable and unfavorable questions to determine data scoring. The data were analyzed using the Pearson correlation test with a significance level of $\alpha=0.05$. Before the correlation test was carried out, a normality test was carried out using Kolmogorov-Smirnov. This research has paid attention to the ethics that must be adhered to in its implementation, considering that research is directly related to humans. The research ethics that have been implemented are respect for human dignity, anonymity, beneficence and nonmaleficence, confidentiality, veracity, and justice, as well as providing informed consent before respondents participate in research. Before data collection was carried out at the hospital, this research also obtained a research permit from the hospital with the number SDN/2021/04/1178.

Results

Table 1 Distribution of Respondent Characteristics table Distribution of respondents based on characteristics of age, gender, education as in the following table:

NO	AGE	F	%
1	60-70	26	86.7%
2	71-75	4	13.3%
GENDER			
1	Man	19	63.3%
2	Woman	11	36.7%
EDUCATION			
1	Low education	14	46.7%
2	higher education	16	53.3%

The frequency distribution table based on the age of the most respondents suffering from post-stroke in this study was 60–70 years, with 26 respondents (83.3%). Based on gender, the largest number of respondents in this study were men, with 19 respondents (20.0%). Based on the highest level of education, the highest number of respondents in this study was higher education, with 16 respondents (53.3%).

Table 2 distribution of respondents based on family support variables

NO	Family support	F	%
1	Good	12	40.0%
2	Totally Less	18	60.0%
		30	100%

Based on the table, the respondents with the most family support variables in this study had the least family support: 18 respondents (60.0%). And good family support for 12 respondents (40.0%).

Table 3 distribution of respondents based on medication adherence variables

No	Compliance with taking medication	F	%
1	Obedient	10	33.3%
2	Not obey	20	66.7%
	Total	30	100%

Based on the table, the respondents with the highest medication adherence variable in this study were 20 respondents (66.7%). And 10 respondents (33.3%) adhered to taking medication.

Table 4 The relationship between family support and adherence to taking medication after stroke among the elderly in RSUD. Prof. Dr. H. Aloei Saboe

Variable	Compliance				Total	P value
	Obedient with taking medication	Not obey				
	N	N %	N %	N %	N %	
Family support						
Good	10	83.3%	2	16.7 %	12	33.3 %
Not enough	0	0%	18	100.0 %	18	66.7 %
	10	100%	20	100%	30	100%

Based on the table above, it shows that family support is good, with 10 respondents (83.3%) complying with taking medication. Compared with non-compliance with taking medication, there were 2 respondents (16.7%) with good family support. Meanwhile, compliance with taking medication was 0 (0%) compared to non-compliance with family support, which was 18 respondents (66.7%).

From the results of the chi-square test using SPSS software, the value $p = 0.000$ with $\alpha < 0.05$, it can be concluded that there is a relationship between family support and adherence to taking medication after stroke in the elderly at RSUD Prof. Dr. Hi. Aloei Saboe, Gorontalo City.

Discussion

Based on the results of data collection from respondents in October 2021 and after processing it, researchers will discuss the relationship between family support and adherence to taking medication after stroke in the elderly at RSUD. Prof. Dr. H. Aloei Saboe. This study used a questionnaire with 2 variables, namely family support, consisting of 30 questions with the answers "never" with a value of 1, "sometimes" with a value of 2, "often" with a value of 3, and "always" with a value of 4. Meanwhile, the medication adherence variable in this study uses the MMAS-8 score, which consists of 8 questions with the answer "yes" or "no," where the answer "yes" has a score of 1 and the answer "no" has a score of 0. Based on this scale, the score that respondents can achieve is 8 in the compliant category and 7-1 in the non-compliant category.

This research was carried out by distributing questionnaires to elderly people who came to visit the Neurology Clinic room and elderly people who were treated in the Neuro G3 room at the Regional Hospital. Prof. Dr. H. Aloe Saboe, after distributing the questionnaire, provided an explanation of the research objectives and how to fill out the questionnaire. If the respondents agreed, then the research continued.

Respondent Characteristics

Age

Based on data from research that has been carried out, the frequency distribution based on the age of the most respondents in this study was 60–70 years with 26 respondents (86.7%) and 71–75 years with 4 respondents (13.3%). The results of this research were carried out in the Neurology Polyclinic Room and in the Neuro G3 Prof. Hospital. Dr. Hi. Aloe Sobee This is in line with research by Herda Payumi (2014), which states that maturity is not measured by age but rather by how a person can respond to a problem with a positive mindset and not in a childish way. The age factor does not guarantee that people are called adults. Many people are mature, but their maturity is questionable. But there are also many who are still young, and their level of maturity already exceeds that of people their age.

According to researchers' assumptions, age is a very important factor in a person's compliance behavior; namely, the younger a person is, the higher the level of compliance. The motivation of older people is more difficult than that of young people, and there is less support from the family, such as reminding them of their drinking schedule. drug.

Gender

Based on research data obtained from the frequency distribution based on gender, the largest number of respondents in this study were 19 respondents (63.3%) men and 11 respondents (36.7%) women.

This is in line with research by Ferry Effendi et al. (2018), which showed that women's medication adherence was higher than that of men. Gender is the nature of women and men, such as norms, roles, and relationships between groups of men and women, which are socially constructed. Gender can differ from one social group to another and can change over time.

According to the researchers' assumptions in this study, men are more likely to suffer from stroke. This is due to men's unhealthy lifestyles, such as smoking habits, and quite high stress levels.

Last education

Based on the research results, it shows that the largest number of respondents who experienced post-stroke had high education, namely 16 respondents (53.3%), and low education, namely 14 respondents (46.7%). The lowest education in this study was elementary school (SD) and junior high school (SMP), and the highest education in this study was senior high school (SMA). Patient education can increase compliance, as long as the education is active (Suparyanto, 2018).

This is in line with the theory put forward by DA (2018), namely that knowledge is the result of remembering something, including events that have been experienced intentionally or unintentionally, and this occurs after people make contracts or observe a certain object.

Education determines whether or not it is easy for a person to absorb and understand the knowledge they acquire; increasing a person's education teaches individuals to make the best decisions for themselves.

According to researchers' assumptions, education helps shape a person's thinking patterns, perception patterns, and decision-making attitudes. Increasing a person's education can teach individuals to make the best decisions for themselves. The higher a person's education, the better their knowledge. However, a low level of education will not always prevent someone from learning from other people's experiences and using them as a reference for themselves. Low education in post-stroke patients can affect their level of knowledge regarding stroke.

Family support

From the results obtained from the family support variable, namely, 12 (40.0%) respondents had good family support and 18 (60.0%) had poor family support, Lack of family support is because most families are indifferent to the patient's condition. This shows that the majority of post-stroke patients do not receive enough family support when undergoing treatment. Good family support, with 10 respondents (83.3%) complying with taking medication. Compared with non-compliance with taking medication, there were 2 respondents (16.7%) with good family support. Meanwhile, compliance with taking medication was 0 (0%) compared to non-compliance with family support, which was 18 respondents (66.7%).

In this study, respondents answered more statements about emotional support and appreciation support, in accordance with the results of the questionnaire that good family support was obtained from respondents who chose the answer "always" to the question "My family participates in monitoring the progress of my treatment." Meanwhile, in the less family support category, most respondents answered "sometimes" to the question "I get reprimanded from my family if I don't take my medicine". Meanwhile, non-compliance with taking medication with good family support was obtained from the question "did you finish your medication yesterday?" The respondent's answer was "no". This is in line with the theory of Notoatmodjo (2010) that the lack of family support in caring for post-stroke patients will have an impact on the recovery of post-stroke sufferers. Most families do not reprimand patients when they stop taking medication, and sometimes families do not provide time to communicate and interact with patients, so that many patients feel unappreciated in the family. For the elderly, family support is very necessary because their body function generally decreases. Family support is said to be good if the elderly person feels that they have received help, sympathy, and empathy provided by their family in the form of goods, services, information, or advice, which makes the sufferer feel appreciated and gives them the enthusiasm or motivation to always be healthy.

According to Wardani's theory (2017), family support that can be given to patients includes emotional support, namely by providing affection and respect that the patient needs; informative support, namely by providing advice and direction to the patient to take medication; instrumental support, namely by preparing medication and monitoring medication taking; and assessment support, which provides praise to patients if they take medication on time.

The results of this research are in line with research conducted by Sarafino (2012), who found that individuals need other people to provide support to achieve comfort. The family is a

meaningful support system; it can provide clues about the sufferer's mental health, events in their life, and the support system they receive, so that the family can increase enthusiasm and motivation to behave healthily (Irnawati, 2016). Researchers concluded that family support can increase compliance in post-stroke patients by providing encouragement to recover from treatment, informing them about the benefits and risks of not adhering to taking medication, reminding them to take medication if the sufferer forgets, and being willing to take the sick family to treatment. The family is the closest person to the sufferer and is always ready to provide support in the form of information, instrumental support, and emotional appreciation for the sufferer. The family support provided means that sufferers are not burdened by the disease they suffer from; this is due to the attention of their family, so sufferers do not feel alone.

Compliance with taking medication

From the results obtained, there were 20 respondents (66.7%) who were non-compliant with the medication-taking compliance variable, and 10 respondents (33.3%) were compliant with the medication-taking compliance variable, in accordance with the questionnaire results, which showed that medication-taking compliance was non-compliant because most respondents answered "yes" to the question "have you ever forgotten to take your medicine?", and the obedient category was obtained from the question "did you finish your medicine yesterday?" The respondent's answer was "yes".

In line with research by Niven (2018), family support is good for non-compliance with taking medication because post-stroke patients do not comply with treatment procedures, and compliance with taking medication does not cure and does not reduce recurrence 100 percent; compliance with taking medication only reduces recurrence and hospitalization of post-stroke patients. In line with the theory (Suparyanto, 2018), compliance is a form of behavior that arises as a result of interactions between health workers and patients so that patients understand the plan with all its consequences, agree to the plan, and carry it out.

In accordance with the results of Widyastuti's research (Lestari, 2020), elderly stroke sufferers cannot be separated from taking medication every day, so the people closest to them need to always remind them of their medication-taking schedule. The level of compliance influences the success of post-stroke treatment. If the patient complies with taking medication, then the patient will recover with the treatment recommended by the doctor or nurse, and if compliance with taking medication is poor, then the post-stroke sufferer will experience a subsequent recurrence with a more severe stroke.

This is in line with research conducted by Khairul Anwar and Rusni Masnina (2019), whose results show that elderly people tend to forget to take medication due to old age, so that respondents experience problems being able to fully comply with taking medication.

According to Puspitorini's (2019) theory, there are several factors that can influence a person's level of compliance with treatment, namely education, understanding of knowledge, family support, confidence, and economic level. One of the causes of relapse that occurs from several triggers is the patient's non-compliance with taking medication, resulting in the patient experiencing a relapse and being hospitalized again.

Researchers concluded that support can be directed through attitudes, namely by providing attention, for example, by maintaining food, including portions, types, frequency in daily life, nutritional adequacy, reminding patients when to take medication and rest, and when it is time to control and provide motivation to stroke patients. Patients with stroke really need support from the people closest to them, namely family. Family support is the patient's closest and most inseparable part. Patients will feel happy and at ease if they receive attention and support from their family, because this support will increase their confidence to face or manage their illness better, and patients will be willing to follow the suggestions given by their family to support the management of their illness.

The relationship between family support and adherence to taking medication after stroke in the elderly

In this study, researchers used the chi-square test, which is useful for seeing the relationship between two variables and significant data results using SPSS software, namely $\alpha = 0.05$, which means if the p value ≤ 0.05 indicates a significant relationship, but if the p value ≥ 0.05 indicates there is no significant relationship. This research shows that after carrying out the chi square test on family support with adherence to taking medication after stroke in the elderly in RSUD, Prof. Dr. H. Aloei Saboe, Gorontalo City, obtained a statistical test value (p = 0.00), with p < 0.005, meaning that in this study Ho was rejected and Ha was accepted. So, it can be concluded that there is a relationship between family support and adherence to taking medication after stroke in the elderly.

The results of this research are in accordance with the research results of Baik Heni Risprawati (2019) at the NTB Provincial General Hospital regarding "the relationship between family support and adherence to taking medication in hypertensive patients," with a p value of $0.00 < 0.05$, there is a relationship between family support and adherence to taking medication in hypertensive patients at the Provincial Hospital Nusa Tenggara Barat.

In line with research by Niven (2018), family support is good for non-compliance with taking medication because post-stroke patients do not comply with treatment procedures, and compliance with taking medication does not cure and does not reduce recurrence 100 percent; compliance with taking medication only reduces recurrence and hospitalization of post-stroke patients.

According to Wibawa's theory (2017), factors that influence patient persistence in seeking treatment include income level, patient education level, ease of access to health facilities, age, and the availability of health insurance, which makes it easier for patients to pay medical costs. Good family support describes the family's ability to recognize health problems in each family member who experiences changes in health status. Good family support and non-compliance in taking medication are because the family is still not optimal in paying attention to post-stroke disease due to a lack of information about the disease, so that post-stroke elderly people tend not to understand the importance of complying with treatment.

The theory, according to Rieseva Fitria and Christin Angelina Febriani (2016), is that there is a relationship between family support and adherence to taking medication. Family support is needed because the family can be a strong motivator for the patient if they always make themselves available to accompany and remind the patient if they forget the control schedule.

It is hoped that family support can increase medication compliance while undergoing treatment so that patients are well monitored.

In line with research conducted by Sulistyawati (2018) at PKU Muhammadiyah Hospital Yogyakarta, post-stroke patients received more good family support than bad family support. The support received from families in this study was in the form of encouragement to recover from treatment, informing them about the benefits and risks of not adhering to taking medication, and reminding them to take medication if the patient forgot, apart from providing encouragement in the form of taking sick relatives to treatment.

This is in line with research by Devi Widyaningrum, Dwi Retraningsih, and Tamrin (2019), namely that patient compliance is highly required when undergoing long-term treatment so that the condition of post-stroke patients can improve. This is in line with research conducted by Septia at the Arifin Achmad Pekanbaru Hospital in 2017, which stated that family support influences post-stroke patient treatment compliance, where the better the family support, the more compliance will increase, and vice versa. This means that family support has an important role in patient compliance when undergoing treatment, because post-stroke patients take medication at a much higher rate when they get family support than when they don't get family support.

According to the researchers' assumption that family support is an intervention that can increase medication adherence in post-stroke patients, the support obtained from the family is in the form of encouragement to recover during treatment, informing people about the benefits and risks of not complying with medication, and reminding people to take medication if the patient forgets. Apart from that, it provides encouragement in the form of taking sick families for treatment. The family can be a very influential factor in determining an individual's health beliefs and values and can also determine the treatment program they can undergo. The support provided by family members is an important factor in post-stroke patient compliance with the medical treatment they are undergoing. This shows that there is a significant relationship between family support and adherence to taking medication in elderly post-stroke sufferers. Family support is one of the factors that influences compliance with treatment for post-stroke patients, where the family functions as the main support system for sick family members.

Research Limitations

In this study, the researcher realized that there were research limitations, which focused on the relationship between family support and medication adherence in post-stroke patients in the elderly. This research also did not involve a control group and only used a questionnaire sheet that was given to respondents to obtain data.

Conclusion

Based on research on the relationship between family support and compliance with taking medication in elderly people after stroke in the Neurology and Neuro Polyclinic Room at Prof. Hospital. Dr. H. Aloei Saboe Gorontalo City, several conclusions can be drawn. First, 40% of elderly people receive family support in the good category, while the other 60% receive support in the poor category. Second, only 33.3% of post-stroke patients adhered to

taking medication, while 66.7% did not comply. The results of the Chi-Square analysis showed that there was a significant relationship between family support and adherence to taking medication in the elderly after stroke (p value = 0.000). Suggestions that can be given include facilitating RSUD in family support interventions for post-stroke patients, using the results of this research as a reference for further research related to variables that have not been explored, as well as recommendations for future researchers to develop more varied data collection methods such as interviews and involving a control group. for a more comprehensive understanding.

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Conflict of Interests

There is no conflict of interest in this research.

References

- American Heart Association. (2018). Health Care Research: Coronary Heart Disease.
- Anggraeni, D., & Sarwono. (2018). Qualitative and Quantitative Research Methodology in the Health Sector. Nuha Medika.
- Arikunto. (2010). Research Procedures A Practical Approach. Rineka Cipta.
- Arya Ramadia, et al. (2019). The Relationship between the Ability to Change Negative Thoughts and Depression and Helplessness in Stroke Clients. STIKes Al Insyirah Pekanbaru Nursing Study Program, Postgraduate Faculty of Nursing, University of Indonesia.
- Amry, YR, Hikmawati, MA, & Rahayu, AB. (2021). TheoryHealth Belief ModelUsed as an analysis of medication adherence in stroke sufferers. *Journal of Nursing*, 13(1).
- Ayu Septiandini Dyah. (2017). Nursing Care for Clients Who Experience it Non-Hemorrhagic Stroke With Physical Mobility Barriers in the ICU Salatiga Regional Hospital. D3 Nursing Study Program, Kusuma Husada College of Health Sciences.
- Azizah. (2018). Elderly nursing. Graha Ilmi.
- Dellima Damayanti Reicha. (2019). Nursing Care for Non-Stroke Clients Hemorrhagic With Self-Care Deficit Nursing Problems (Study InKrissan Room, Bangil Pasuruhan Hospital). Diploma III Study Program Nursing, Jombang Medical Scholars College of Health Sciences.
- Dr. Zainoel Abidin. (2017). Appropriate nutrition for Ellyoun Stroke patients.
- Evadewi P, Luh Made Karisma S. (2018). Compliance with medication consumption in post-stroke patients. Udayana University.

- Fajar Rahmawati Utami. (2015). Relationship between Prevention and Efforts Recurrent Stroke Incidence in Stroke Sufferers.
- Geldard, K and Geldard, D. (2011). Integrative Approach Counseling Practice Skills. Student Library.
- Gladding, ST. (2012). Comprehensive Professional Counseling.
- Hidayat, AA. (2018). Nursing Research Methods and Data Analysis Techniques. Salemba Medika.
- Index. (2018). "Lifestyle Description in Stroke Patients". Bachelor's Degree in Nursing Health Development Stickers PPNI Mokokerto.
- Medical records. (2021). Data on Stroke Patients in the G3 Neuro Room at Prof. Dr. Aloe Saboe Hospital, Gorontalo City.
- Ministry of Health of the Republic of Indonesia. (2018). Republic Health Profile Indonesia.
- Ministry of Health, R.I. (2018). Basic Health Research; RISKESDAS.
- Ministry of Health. R.I. (2019). "Everyone's Healthy Stroke Day".
- Novi Nurul Amasati. (2017). Description of the helplessness of post-stroke patients in the Neurology Hospital Hospital. PMI Bogor, Bogor Nursing Study Program, Health Polytechnic Ministry of Health.
- Nur'aeni Yuliatun Rini. (2017). Nursing Care for Non-Stroke Clients Hemorrhagic Problems with Ineffective Cerebral Tissue Perfusion in Remembrance Room Dr. RSUD. Soedirman Kebumen. DIII Study Program Nursing Academy Muhammadiyah Gombong College of Health Sciences.
- Nursalam. (2016). Nursing Science Research Methodology. Salemba Medika.
- Pieper, J. & Uden, M. V. (2012) Religion in Coping and Mental Health Care.
- Purnamasari, A., Prima, A., Harahap, D., & Andas, A. M. (2022). The relationship between body temperature and diet on typhoid fever among toddlers aged 3 – 5 years. *The Journal of Palembang Nursing Studies*, 1(3), 101–106. <https://doi.org/10.55048/jpns.v1i3.28>
- Rida.Doratin. (2017). Analysis of Hemorrhagic Stroke Mortality Predictor Factors.
- RISKESDAS. (2020). Data on stroke sufferers in Gorontalo Province.
- Santoso Lois Elita. (2018). Increasing Motor Strength in Non-Stroke Patients Hemorrhage with Rubber Ball Grasping Exercise (Indoor Study Flamboyant Hospital Jombang). Undergraduate Study Program Thesis Nursing.
- Setyabudi. (2012). Family Nursing Care: Concepts and Case Applications.
- Siti Maryati Puspita Sari. (2019). The Role of the Family in Caring for Elderly Patients After Stroke.
- Siti Nur aliyah, et al. (2019). Description of Coping Mechanisms and Helplessness Responses in Stroke Patients in the Hospital Neurology Clinic. PMI Bogor, Bogor Nursing Study Program, Bandung Ministry of Health Polytechnic.
- Sugiyono. (2018). Educational Research Methods Quantitative, Qualitative and R&D Approaches. Alfabeta.
- Widyaningrum, D., Retraningsih D., & Tamrin. (2019). Relationship between family support and medication adherence in elderly stroke sufferers. Health Journal.
- World Health Organization. (2017). Department of Mental Health Substance.