

Relationship between Family Support and Independent *Activity Daily Living* (ADL) in Elderly Post-Stroke at Neurology Polyclinic, Sufina Aziz General Hospital Medan in 2020

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ABSTRACT

Stroke in the elderly should get attention, especially the family in the form of providing support to the elderly after stroke. Family support for the elderly after stroke is expected to increase the independence of the elderly in daily living (ADL) activities. The purpose of this study was to determine the relationship between family support and the level of independence in activity daily living (ADL) in the elderly after stroke at the Neurology Polyclinic of Sufina Aziz General Hospital Medan. This study uses descriptive correlation with a cross sectional approach. This study was carried out on March 21, 2022 to April 2, 2022. The sampling technique used was accidental sampling with a total of 30 patients. Then the data is processed starting from editing, coding, tabulating, entry and processing. The results showed that the support given by the family to the elderly after stroke who sought treatment at the Neurology Polyclinic of Sufina Aziz General Hospital Medan was quite good and the level of independence in Activity Daily Living (ADL) in the Post-Stroke Elderly at the Neurology Polyclinic of Sufina Aziz General Hospital Medan was mild dependence. Based on the results of the chi-square test, it can be concluded that the relationship between family support and the level of independence in daily living (ADL) in the elderly after stroke at the Neurology Polyclinic of Sufina Aziz General Hospital Medan with p value = 0.012 $a < 0.05$.

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1. Introduction

Elderly (elderly) are people who have reached the age of 60 years and over who have the same rights in the life of society, nation and state. Lansia is the final stage and will certainly occur in all living things. Aging is not a disease but a gradual process and results in biological, psychological, social and spiritual changes (Kiik et al., 2018). In the elderly there is a decrease in the structure and function of the body's organs so that the elderly are more susceptible to various diseases, both degenerative and infectious. Various health problems in the elderly such as hypertension, kidney failure, coronary heart disease, gouty arthritis and stroke. The highest proportion of causes of death in the elderly is stroke (Sunarti et al., 2019).

Stroke is a cerebrovascular disease in which the occurrence of impaired brain function associated with disease of the blood vessels that supply blood to the brain. Stroke occurs due to disruption of blood supply to the brain due to rupture of blood vessels or due to blockage of blood vessels. Blockage of blood vessels causes the supply of oxygen and nutrients to be cut off which results in damage to brain tissue. Common symptoms of a stroke include sudden numbness or numbness in the face, hands or feet, usually on one side of the body. (Suwaryo et al., 2019).

Stroke is the 5th most deadly disease and the number one disease that causes disability (Amila et al., 2018). Stroke is divided into two types, namely ischemic and hemorrhagic stroke. The number of patients with ischemic stroke is more, which is 87% of all stroke patients. (Powers et al., 2019). The results of the 2019 Basic Health Research (Riskesdas) stated that 10.9 people per mile had a stroke. This number is an increase from previous research in 2018 which resulted in 7 people per mile.

Based on data from the World Health Organization (WHO) in 2018, stroke is the third largest cause of death in the world. Every year 15 million people worldwide suffer a stroke of which 5 million people die, another 5 million experience permanent disabilities whose lives depend on their families and 5 million others can recover as before (WHO, 2019). In the United States, stroke attacks more than 795,000 people every year and 140,000 of them die from a stroke. About 610,000 of these people have a first stroke, and about 185,000 others have had recurrent strokes (have had a stroke before) (CDC, 2018).

The results of Riskesdas 2018 show an increasing number of people with stroke in Indonesia. When compared with the 2017 research results, the prevalence of people with stroke rose from 7% per mil to 10.9% per mil. Of all the incidence of stroke in Indonesia, the prevalence of the highest incidence is in the elderly. At the age of 65-70 years as many as 45.3% per mil and at the age of 75 years as much as 50.2% per mil (Ministry of Health RI, 2019). Based on the results of the 2018 North Sumatra Basic Health Research, it was stated that the prevalence per mil stroke diagnosed by doctors in the population >55 years showed that 4,938 people had a stroke at the age of 55-64 years, 2,149 people had a stroke at the age of 65-74 years and 819 people experienced a stroke. stroke at the age of >74 years (Riskesdas Sumut, 2018).

The impact that can be caused after a stroke is paralysis and disability, communication disorders, emotional disturbances, pain, sleep disturbances, depression, dysphagia, and many others. (Ulandari & Soebyakto, 2019). After having a stroke, a person's level of dependence on others will increase, so that people are not independent in carrying out daily independent activities (Purba & Utama, 2019).

The level of independence in the elderly can be seen from the ability of the elderly to carry out daily activities, such as bathing, dressing neatly, going to the toilet, changing places, being able to control urination or defecation, and being able to eat alone. (Ahsan et al., 2018). Elderly independence means without supervision, direction or personal assistance who is still active and can do *Activity Daily Living* (ADL). Activity Daily Living (ADL) is a self-care activity that patients must do every day to meet the needs and demands of daily life (Aria & Nurlaily, 2019).

Patients can gradually carry out ADL independently and need family support in the rehabilitation process to help recover post-stroke patients (Tatali et al, 2018). Family support in maintaining and motivating positive values of life and promoting good health behavior is becoming increasingly important (Tatali et al., 2018).

Optimal family support encourages the health of the elderly to improve, besides that the daily activities of the elderly become regular and not excessive. Part of social support is love and affection which must be seen separately as part of care and attention in the effective functioning of the family. (Primary, 2019).

A person suffering from a stroke will increasingly depend on others in carrying out daily living (ADL) activities, so therapy is needed. Giving therapy only improves motor nerves so that the patient does not depend on others or reduces the patient's dependence on others in doing ADL (Vika et al., 2018).

There are several ways of handling so that families are able to support ADL independence in the elderly, namely family members are expected to create a new atmosphere, family members must motivate the elderly to increase independence, often provide physical activity exercises (MAULANA, 2019). Family support can be obtained from family members (husband, wife, children, and relatives), close friends or relatives. Family support in the form of emotional support, appreciation support, instrumental support and informative support. The existence of family support makes people after stroke not experience depression, because communication is still established with other people (Primary, 2019).

Based on the results of a survey conducted at the Neurology Polyclinic of Sufina Aziz General Hospital, it was found that the number of elderly people who had a stroke who went to the clinic in 2021 was 214 people, with 126 male and 98 female. In November 2021, it was found that the number of elderly stroke patients seeking treatment at the Neurology Polyclinic of Sufina Aziz General Hospital was 23 people, in December 2021 as many as 12 people and in January 2022 as many as 19 people. The total average of elderly stroke patients who seek treatment at the Neurology Polyclinic of Sufina Aziz General Hospital in 2021 is 18 people per month (Profile of Sufina Aziz General Hospital, 2022).

Based on the results of interviews with 10 families who brought the elderly after a stroke in January 2022, it was found that 8 people said that the elderly after a stroke were always accompanied by their wives/husbands or children during control or treatment. Meanwhile, 2 other people mentioned that they were sometimes accompanied by their families if their families were not busy working. Meanwhile, from interviews about ADL in post-stroke patients, 7 people said that they felt dependent on their family in carrying out daily activities such as bathing, controlling bowel movements and urinating and eating. They also feel that they are a burden to other family members. Meanwhile, 3 other people say that it is the responsibility of the family.

2. Research methods

2.1 Types of research

This study is a descriptive correlation research, which is research directed at explaining the relationship between two independent variables and the dependent variable (Notoadmodjo, 2014). That is to see the relationship between family support and the level of independence in activity daily living (ADL) in the elderly after stroke at the Neurology Polyclinic, Sufina Aziz General Hospital, Medan.

2.2 Research design

Research design using cross sectional approach, namely research that aims to explain relationship between Family Support and Activity Daily Living (ADL) Independence in Elderly Post-Stroke at Neurology Polyclinic, Sufina Aziz General Hospital Medan.

2.3 Research Location and Time

This research has been carried out at the Neurology Polyclinic of Sufina Aziz General Hospital Medan. Considering the large number of post-stroke elderly who check themselves in the polyclinic, there has never been a study with the same title, there is a sufficient population and sample, and there are supporting references.

This research has been carried out on March 21, 2022 to April 2, 2022 namely starting to conduct literature searches, preparation of proposals, proposal seminars, research, data analysis and preparation of final reports.

2.4 Population and Sample

The population is the entire object of research or the object under study. The population in this study were all post-stroke elderly who checked themselves at the Neurology Polyclinic of Sufina Aziz General Hospital Medan, which averages 18 people per month.

The sample is part of the number and characteristics possessed by the population. Sampling uses Accidental Sampling, namely sampling that is carried out by chance with the proviso that anyone who coincidentally meets the researcher can be used as a sample. So the number of samples will be obtained based on the number of post-stroke elderly who check themselves in Neurology Polyclinic of Sufina Aziz General Hospital Medan within 2 weeks i.e. start March 21, 2022 to April 2, 2022 with the number of samples obtained as many as 30 elderly.

3. Results and Discussion

3.1 Result

1. Characteristics of Respondents

The characteristics of the respondents studied in this study include: Age, gender, education and work history can be seen in the table

TABLE 1
CHARACTERISTICS OF RESPONDENTS IN NEUROLOGY POLYCLINIC OF SUFINA AZIZ GENERAL HOSPITAL MEDAN

No	Characteristics	Frequency (f)	Percentage (%)
1	Respondent's Age		

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	<50 Years	3	10.0
	50-60 Years	11	36.7
	61-70 Years	13	43.3
	>70 Years	3	10.0
	Amount	30	100.0
2	Gender		
	Man	15	50.0
	Woman	15	50.0
	Amount	30	100.0
3	Education		
	SD	2	6.7
	JUNIOR HIGH SCHOOL	7	23.3
	SENIOR HIGH SCHOOL	20	66.7
	College	1	3.3
	Amount	30	100.0
4	Work		
	Doesn't work	14	46.7
	Self-employed	12	40.0
	civil servant	1	3.3
	Private sector employee	3	10.0
	Amount	30	100.0

Based on the table it can be seen from 30 people Elderly Post-Stroke who seek treatment at the Neurology Polyclinic of Sufina Aziz General Hospital Medan it can be seen that the majority of the elderly are 61-70 years old as many as 13 people (43.3%), the gender of the elderly men and women are the same, namely 15 elderly people (50%), the majority of elderly education is high school level 20 people (66.7%) and the majority of the work is no longer working as many as 14 people (46.7%).

2. Family Support for Elderly Post-Stroke at Neurology Polyclinic, Sufina Aziz General Hospital Medan

To see Family Support for Elderly Post-Stroke at Neurology Polyclinic, Sufina Aziz General Hospital Medan can be described in the table.

TABLE 2
FAMILY SUPPORT IN POST STROKE ELDERLY AT THE NEUROLOGY POLYCLINIC OF SUFINA AZIZ GENERAL HOSPITAL, MEDAN

No	Family support	Frequency (f)	%
1	Not good	1	3.3
2	Pretty good	15	50.0
3	Well	14	46.7
	Amount	30	100

From the table, it can be seen that the majority of the support given by the family to the elderly after stroke who seek treatment at the Neurology Polyclinic of Sufina Aziz General Hospital Medan is quite good as many as 15 people (50%).

3. The Level of Independence in Activity Daily Living (ADL) in the Elderly Post-Stroke at the Neurology Polyclinic of Sufina Aziz General Hospital Medan

To see The Level of Independence in Activity Daily Living (ADL) in the Elderly Post-Stroke at the Neurology Polyclinic of Sufina Aziz General Hospital Medan can be described in the table.

TABLE 3
LEVEL OF INDEPENDENCE IN ACTIVITY DAILY LIVING (ADL) IN ELDERLY POST STROKE AT NEUROLOGY POLYCLINIC, SUFINA AZIZ GENERAL HOSPITAL, MEDAN

No	Level of Independence in Activity Daily Living (ADL) in Elderly Post-Stroke	Frequency (f)	%
1	Moderate Addiction	6	20.0
2	Mild Addiction	13	43.3
3	Independent Amount	11	36.7
		30	100

From the table it can be seen that the majority of The level of independence in Activity Daily Living (ADL) in the Elderly Post-Stroke at the Neurology Polyclinic of Sufina Aziz General Hospital Medan is light dependence as many as 13 people (43.3%).

4. Relationship between Family Support and Activity Daily Living (ADL) Independence in Elderly Post-Stroke at Neurology Polyclinic, Sufina Aziz General Hospital Medan

To see Relationship between Family Support and Activity Daily Living (ADL) Independence in Elderly Post-Stroke at Neurology Polyclinic, Sufina Aziz General Hospital Medan can be seen in the Table.

TABLE 4
THE RELATIONSHIP OF FAMILY SUPPORT WITH THE LEVEL OF INDEPENDENT ACTIVITY DAILY LIVING (ADL) IN THE ELDERLY POST STROKE AT THE NEUROLOGY POLYCLINIC OF SUFINA AZIZ GENERAL HOSPITAL, MEDAN

No	Family support	Activity Daily Living (ADL) Independence Level in Elderly Post-Stroke						Total	Score P	
		Moderate Addiction		Mild Addiction		Independent				
		N	%	N	%	N	%			
1	Not good	1	100.0	0	0	0	0	1	100	0.012
2	Pretty good	3	20.0	10	66.7	2	13.3	15	100	
3	Well	2	14.3	3	21.4	9	64.3	14	100	
	Total	6	20.0	13	43.3	11	36.7	30	100	

Based on the table above, it can be seen that the majority of family support is quite good with a level of independence *daily living* (adl) in the elderly after stroke at the Neurology Polyclinic of Sufina Aziz General Hospital Medan is a mild dependence of 66.7%. Then based on the results of the chi square test, the value of $p = 0.012 \leq 0.05$ then H_0 is rejected, meaning that there is a relationship between family support and the level of independence of daily living (ADL) in the elderly after stroke at the Neurology Polyclinic of Sufina Aziz General Hospital Medan.

3.2 Discussion

1. Family Support for Elderly Post-Stroke at Neurology Polyclinic, Sufina Aziz General Hospital Medan

Support is a pattern of positive interaction or helpful behavior given to individuals in the face of a stressful event or event. The support felt by the individual in his life makes him feel that he will be loved, appreciated, and recognized as well as making himself more meaningful and able to optimize the potential that exists within him. People who receive support will feel part of the support provider (Kinasih, 2017).

The family functions as a support system for family members, who view that supportive people are always ready to provide help and assistance if needed, both in health and illness. With family support, the needs of post-stroke patients can be met properly (Sumiyati, 2021).

Based on the results of the study, it was found that The majority of the support given by the family to the elderly after stroke who seek treatment at the Neurology Polyclinic of Sufina Aziz General Hospital Medan is quite good. This is due to the fact that the majority of the elderly still have families, both nuclear and extended families who can provide mental and physical support to help the elderly in carrying out their daily lives, such as accompanying the elderly so that they are not lonely, providing solutions and motivation so that the elderly remain enthusiastic in undergoing treatment. and accompany them to find information and solutions to prevent the elderly from having repeated strokes and often remind the elderly to take medication according to a schedule and invite the elderly to do the exercises recommended by the doctor.

In this study, it was found that 1 elderly said that they did not get support from their families such as the family being impatient and taking less time to accompany the elderly after stroke so that the elderly tend to feel lonely, besides the lack of motivation given by the family to the elderly so that the elderly also rarely do exercises according to the doctor's advice.

In line with research Sumiyati (2021) states that family support such as giving praise, support and positive assessment and motivation can improve the recovery of the elderly after stroke because they feel more excited to do exercises and take medicine. This is supported by Manurung's research (2017) that the motivation given by the family to post-stroke patients is very influential in the recovery of ROM of post-stroke patients..

Optimal family support encourages the health of the elderly to improve, besides that the daily activities of the elderly become regular and not excessive. Part of social support is love and affection which must be seen separately as part of care and attention in the effective functioning of the family (Pratama, 2019).

According to the researcher's assumption that family support has a positive effect on the recovery rate of the elderly after stroke because with the support of the elderly family, they will be more enthusiastic and feel that their health is highly expected by all families so that the elderly routinely do exercise and take medicine and avoid and maintain their food so that they do not have repeated strokes. in the elderly.

2. The Level of Independence in Activity Daily Living (ADL) in the Elderly Post-Stroke at the Neurology Polyclinic of Sufina Aziz General Hospital Medan

Independence is the state of a person who can determine himself where he can stand alone, so that he can determine himself which is expressed in actions and behavior that can be assessed (Pratama, 2019). The assessment of the level of patient independence is carried out using the Barthel index questionnaire, namely how the elderly control defecation and BAK, self-cleaning (showering, brushing teeth and shaving the mustache for men), using the toilet, eating and drinking, walking, dressing and going up and down stairs (Kemenkes RI, 2017).

Based on the results of the study, it was found that The level of independence in Activity Daily Living (ADL) in the Elderly Post-Stroke at the Neurology Polyclinic of Sufina Aziz General Hospital Medan is mild dependence. and find it difficult to wash. In addition, some elderly people can do it themselves slowly, such as wearing clothes.

The patient's level of independence *inactivities daily living (ADL)* influenced by such as age and education. Where the majority of the elderly are aged 61-70 years. According to Untari (2018), it is stated that increasing age will cause changes in both physical, emotional and psychosocial. Physical changes that play an important role are disorders of the musculoskeletal system which can cause disturbances in walking and movement. So it affects the level of independence in carrying out daily activities. While the education factor that the majority of respondents is high school is only as a medium for how the elderly can receive information provided by health workers for the health of the elderly.

According to the researcher's assumption that the level of independence of the elderly *inactivities daily living (ADL)* depending on the severity of stroke suffered by the elderly. This means that the more severe the condition of the elderly after stroke, the higher the level of dependence of the elderly in fulfilling the daily life of the elderly. The elderly must be bathed, assisted in cleaning, use of the toilet, assisted in eating, dressing and must be lifted into a wheelchair.

3. Relationship between Family Support and Activity Daily Living (ADL) Independence in Elderly Post-Stroke at Neurology Polyclinic, Sufina Aziz General Hospital Medan

Based on the results of the study, it was found that the majority of family support is quite good with a degree of independence *daily living (adl)* in the elderly after stroke at the Neurology Polyclinic of Sufina Aziz General Hospital Medan is a mild dependence of 66.7%. Then based on the results of the chi square test, the value of $p = 0.012 < = 0.05$ then H_0 is rejected, meaning that there is a relationship between family support and the level of independence of daily living (ADL) in the elderly after stroke at the Neurology Polyclinic of Sufina Aziz General Hospital Medan.

In line with research Sumiyati (2021) states that There is a relationship between family support and the level of independence of daily living (ADL) in post-stroke patients at the Neurology Polyclinic of RSUI Kustati Surakarta. Supported by Pratama research (2019) which states that there is a relationship between family support and ADL (Activities Daily Living) independence in the elderly in the Klagen hamlet, Kepuh Kembang Village, Jombang.

Supported by research by Tatali et al (2018) which states that there is a significant relationship between family support and the level of independence of Activity Daily Living in post-stroke patients at the Neurology Polyclinic of RSU GMIM Pancaran Kasih Manado. Supported by Karunia (2016) research which states that there is a relationship between family support and independence in doing ADL after stroke.

However, this is contrary to Mare's research (2015) which states that there is no significant relationship between There is a significant relationship between family support and self-care ability in post-stroke patients at the Gundi Health Center Surabaya. In this study, it was explained that with excellent family support there would be dependence on post-stroke patients, while in patients who did not have good family support, it would lead to independence because they had to be able to meet their needs in daily activities.

According to the researcher's assumption, that between family support and the level of independence of daily living activities in post-stroke patients is very important because the role of the family is very helpful in the recovery process of family members. So that the family is a unit that is very close to the patient and is the main nurse for the patient, so the higher or better the family support given to post-stroke patients, the level of independence in daily living activities in post-stroke patients is increasing.

4. Conclusion

Based on research conducted at the Neurology Polyclinic of Sufina Aziz General Hospital Medan concluded, The support given by the family to the post-stroke elderly who seek treatment at the Neurology Polyclinic of Sufina Aziz General Hospital Medan is quite good. The level of independence in Activity Daily Living (ADL) in the Elderly Post-Stroke at the Neurology Polyclinic of Sufina Aziz General Hospital Medan is mild dependence. There is The relationship between family support and the level of independence of the activity daily log (ADL) in the elderly after stroke at the Neurology Polyclinic of Sufina Aziz General Hospital Medan with p value = 0.012 $a < 0.05$.

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