



# The Relationship Of Family Support To The Level Of Ability To Perform Daily Activities In Stroke Patients In Imelda Pekerja Indonesia General Hospital

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### ABSTRACT

Stroke is one of the leading causes of death and third cause of disability in the world. Someone who has a stroke will have limitations in carrying out daily activities or Activity Of Daily Living (ADL) and support from family both in physical, psychological and emotional forms is needed by stroke patients. The purpose of this study was to determine family support for the level of ability to carry out daily activities in stroke patients at Imelda Pekerja Indonesia General Hospital. This type of research is quantitative research with correlational methods and Cross Sectional approach design. This research was conducted in July-August 2023 at the Imelda Hemodialysis Room of Imelda Pekerja Indonesia General Hospital. This study used NonProbability sampling technique using purposive sampling method, so that the total research sample was 30 respondents. The instrument used in this study was a questionnaire. Data analysis using univariate and bivariate analysis with statistical tests (Chi Square Test) in the SPSS application. The results of the study showed the results of the Chi-Square statistical test with a significant value (p) value of 0.01 or  $p < 0.05$ . The conclusion in this study is that there is family support for the level of ability to carry out daily activities in stroke patients at Imelda Pekerja Indonesia General Hospital in 2023.

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## INTRODUCTION

Stroke is one of the leading causes of death and third cause of disability in the world. According to the *World Health Organization (WHO)*, stroke is a condition in which there is a focal and global neurological decline that can aggravate the physical condition of the sufferer and last for 24 hours or more, this condition can cause death. Unhealthy life habits such as smoking, lack of physical activity, consuming alcohol, stress and eating foods high in sugar and salt are contributors to the risk of stroke conditions to increase (Ministry of Health, 2022).

Hope is strongest when it involves the most precious thing in life, which is family. Family as the closest person has a very important role and is needed by patients (Theodoritsi et al., 2016). The results of research by Khairunnisak et al., (2018) found an interesting fact, namely expectations in all respondents are influenced by family support. Family support is an important factor that serves as a support system for patients to face their health problems. Support the family in question is in the form of emotional support, instrumental support, appraisal support, and information support (Ratih Sulistianingrum, 2023).

Based on data from the *World Stroke Organization (2022)*, states that more than 101 million people have a stroke in the world and there are more than 12.2 million new stroke sufferers every year. Globally, one in four people over the age of 25 will have a stroke in their lifetime. In general, countries with lower middle income have a high potential for stroke more often than countries with high income. The incidence of stroke in America is estimated at around 3.0% or 7 million cases per year, while China has a prevalence of stroke incidence of around 1.8% in rural areas and 9.4% in urban areas. From all over the world, China is a country with a fairly high death rate due to stroke, which is around 19.9% of all deaths in China and followed by African and North American countries (Mutiarasari, 2019).

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Indonesia has a prevalence of stroke in the population aged  $\geq 15$  years as much as 7% per 1000 population in 2013 and increased to 10.9% per 1000 population in 2018 or estimated at 2,120,362 people. East Kalimantan Province is in first place with a stroke prevalence (per mile) of 14.7% and Papua Province is last with a stroke prevalence (per mile) of 4.1%, while North Sumatra Province has a stroke prevalence (per mile) of 0.9% or around 45,972 cases (Ministry of Health RI, 2018). Based on the results of an initial survey conducted at Imelda Pekerja Indonesia General Hospital, data on the number of patients from January to June 2023 were obtained as many as 245 stroke patients seeking treatment, this can certainly be of special concern for researchers to analyze how family support is related to the fulfillment of clients' daily activities in the hospital during treatment.

Someone who has a stroke will have limitations in carrying out daily activities or *Activity Of Daily Living* (ADL) which is done to meet the needs of life such as eating, dressing, bathing, toileting, decorating, controlling elimination, moving and mobilizing independently. Stroke patients usually experience obstacles in carrying out daily activities due to limited movement and cognitive impairment so that clients need help from others (Sandrawati, 2021). This makes sufferers experience *self-care deficit* or dependence on others and need continuous nursing assistance in order to carry out daily activities (Djamaludin & Dwi Oktaviana, 2020). In addition, some sufferers also feel useless and a burden on the family, so support is needed to increase self-confidence which has an impact on the success of post-stroke treatment and rehabilitation from family as the closest person (Yuniarti & Kariasa, 2020).

Support from family both in physical, psychological and emotional forms is needed by stroke patients. Family support is an interpersonal relationship consisting of attitudes, actions, and acceptance of family members by caring for and supporting clients. One form of good family support for stroke patients is always trying in terms of healing and recovery, physical and psychological comfort is fulfilled. (Setyoadi et al., 2017). Family support is very important for stroke patients, where the better the family support provided, the level of the patient's ability to fulfill daily activities or *daily living activities* will increase (Tatali et al., 2018).

Research conducted by Pranata et al., (2022), states that family support with the independence of stroke patients in carrying out daily activities or *daily living activities* has a significant relationship, where from the results of statistical tests using Chi-Square obtained p results value = 0.779 with a correlation coefficient value of 0.941 which means that the increasing family support for stroke patients, the independence of stroke patients in carrying out daily activities also increases.

Research conducted by Mayasari et al., (2019), stated that there is a relationship between family support and the level of independence in *Daily Living Activity* in post-stroke patients with a p-value of 0.023 ( $p < 0.05$ ), where respondents who have good family support are mostly independent in carrying out daily activities, while respondents who have poor family support the majority experience dependence in carry out daily activities.

Solutions or actions that can be taken to improve the patient's ability to perform daily activities are functional activity exercises, strength training, balance exercises and proper positioning. In addition, occupational therapy can also be done gradually to train in carrying out daily activities consisting of Selfcare or self-care (eating, bathing, dressing, toileting, mobility), *Productivity* (work, education) and *Leisure* or pleasure (recreation, hobbies) (Ministry of Health, 2023).

### METHOD

This type of research is quantitative research with correlational methods and Cross sectional approach design. This research was conducted in July - August 2023 in the Hemodialysis Room of Imelda Pekerja Indonesia General Hospital. This study used *NonProbability sampling* technique using *purposive sampling method*, so that the total research sample was 30 respondents. Data collection instruments for family support used the *Perceived Social Support-Family Scale* (PSS-Fa) questionnaire while data collection for daily activities was collected using *the Barthel Index questionnaire*. Data

analysis using univariate and bivariate analysis with statistical tests (*Chi Square Test*) in the SPSS application.

### RESULTS AND DISCUSSION

#### Research Results

##### Univariate Results

Table 1. Characteristics of Stroke Respondents Based on Age, Gender, Education, Income Status and Marital Status at Imelda Pekerja Indonesia General Hospitalin 2023 (N=30)

Characteristic	F	Percentage (%)
<b>Age</b>		
46-55 Years	9	30.0
56-65 Years	18	60.0
>65 Years	3	10.0
<b>Jenis Kelamin</b>		
Men	21	70.0
Women	9	30.0
<b>Pendidikan</b>		
Elementary School	3	10.0
Junior High School	21	70.0
Senior High School	6	20.0
<b>Income Status</b>		
Fixed Income	27	90.0
Irregular Income	3	10.0
<b>Marital Status</b>		
Married	30	100.0
<b>Total</b>	<b>30</b>	<b>100</b>

Based on table 1 shows that the majority of respondents aged 56-65 years as many as 18 people (60%), followed by respondents aged 46-55 years as many as 9 people (30%), and the minority of respondents aged >65 years as many as 3 people (10%). Based on gender, the majority of respondents were men as many as 21 people (70%) while women as many as 9 people (30%).

Based on education level, the majority of respondents have a junior high school education level of 21 people (70%), followed by respondents with a high school education level of 6 people (20%) and a minority of respondents with an elementary education level of 3 people (10%). Based on income status, the majority of respondents have a fixed income of 27 people (90%), while the minority of respondents who have a Irregular income of 3 people (10%). Based on marital status, the majority of respondents have been married as many as 30 people (100%).

Table 2. Distribution of Family Support Frequency for Stroke Patients at Imelda Pekerja Indonesia General Hospital in 2023 (N=30)

	Family Support	
	F	Percentage (%)
Good (Score ≥30)	15	50.0%
Enough (Score 21-29)	9	30.0%
Less (score ≤20)	6	20.0%
<b>Total</b>	<b>30</b>	<b>100.0%</b>

Based on table 2 shows that the majority of respondents have good family support as many as 15 people (50%), followed by respondents who have sufficient family support as many as 9 people (30%) and the minority of respondents who have less family support as many as 6 people (20%).

Table 3. Frequency Distribution of the Level of Ability to Perform Daily Activities in Stroke Patients at Imelda Pekerja Indonesia General Hospitalin 2023 (N=30)

	Daily Activities	
	F	Percentage (%)
Independent (Score 20)	3	10.0%
Mild Dependence (Score 12-19)	6	20.0%
Moderate Dependency (Score 9-11)	9	30.0%
Heavy Dependence (Score 5-8)	9	30.0%
Total Dependency (Score 0-4)	3	10.0%
<b>Total</b>	<b>30</b>	<b>100.0%</b>

Based on table 3 shows that the majority of respondents have the level of ability to carry out daily activities in the category of moderate dependence and heavy dependence as many as 9 people (30%), followed by respondents who have the level of ability to carry out daily activities in the light category as many as 6 people (20%), and the minority of respondents have the level of ability to carry out daily activities in the category of independent and total dependence which is 3 each people (10%).

### Bivariate Results

Table 4. Cross-tabulation of Family Support with the Level of Ability to Perform Daily Activities in Stroke Patients at Imelda Pekerja Indonesia General Hospital in 2023 (N=30)

Family Support		Daily Activities					Total
		Independent (Score 20)	Dependency			Total (Score 0-4)	
			Mild (Score 12-19)	Moderate (Score 9-11)	Heavy (Score 5-8)		
Good (Score ≥30)	F	3	6	3	3	0	15
	%	20.0%	40.0%	20.0%	20.0%	0.0%	100.0%
Enough (Score 21-29)	F	0	0	6	3	0	9
	%	0.0%	0.0%	66.7%	33.3%	0.0%	100.0%
Less (Score ≤20)	F	0	0	0	3	3	6
	%	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
Total	F	3	6	9	9	3	30
	%	10.0%	20.0%	30.0%	30.0%	10.0%	100.0%

Based on table 4, it shows that respondents in the category of good family support have the majority of the ability to carry out daily activities with light dependence as many as 6 people (40%), and the minority of respondents have the level of ability to carry out daily activities independently, moderate dependence and heavy dependence as many as 3 people each (20%). Respondents in the family support category who are quite the majority have the level of ability to carry out daily activities with moderate dependence as many as 6 people (66.7%) and the minority of respondents have the level of ability to carry out daily activities with heavy dependence as many as 3 people (33.3%). Respondents in the family support category who are less likely have the level of ability to carry out daily activities with heavy dependence and total dependence of 3 people each (50%).

Table 5. *Chi Square* statistical test to determine family support for the level of ability to carry out daily activities in stroke patients at Imelda Pekerja Indonesia General Hospital in 2023 (n = 30)

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	28.667 <sup>a</sup>	8	,001
Likelihood Ratio	30.547	8	,001
Linear-by-Linear Association	14.627	1	,001
N of Valid Cases	30		

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .60.

Based on table 5, the results of the *Chi-Square statistical test* obtained a significant value (*p*) value of 0.01 or  $p < 0.05$ , meaning that there is family support for the level of ability to carry out daily activities in stroke patients at Imelda Pekerja Indonesia General Hospital in 2023.

### Discussion

#### Distribution of Family Support Frequency for Stroke Patients at Imelda Pekerja Indonesia General Hospital in 2023 (N=30)

Based on the results of the study, it shows that the majority of respondents have good family support as many as 15 people (50%), followed by respondents who have sufficient family support as many as 9 people (30%) and the minority of respondents who have less family support as many as 6 people (20%). Researchers assume that stroke can affect a person's physical, psychological or emotional problems and sufferers need help from others to help their limitations. From that day, the family has a major role in providing support to sufferers, especially in the process of accepting the conditions experienced and the treatment process of stroke patients.

The results of this study are in line with research by Alisa et al. (2018) which states that the majority of stroke respondents have good family support, which is 34 people (75.6%), while the minority of stroke respondents who have poor family support are 11 people (24.4%). The results of the study by Tatali et al. (2018) also stated that most of the stroke respondents had high family support, which was 45 respondents (69.2%), while with low family support there were 20 respondents (30.8%).

#### Frequency Distribution of the Level of Ability to Perform Daily Activities in Stroke Patients at Imelda Pekerja Indonesia General Hospital in 2023 (N=30)

Based on the results of the study, it showed that the majority of respondents had the level of ability to carry out daily activities in the category of moderate dependence and heavy dependence as many as 9 people (30%), followed by respondents in the light category as many as 6 people (20%), and the minority of respondents in the independent and total dependence categories of 3 people each (10%). According to the researchers' assumption that someone with stroke will experience physical problems, one of which is a disorder of the extremity. These limb disorders will affect a person's ability to carry out their daily activities, thus making a person dependent on help from others.

The results of this study are in line with research by Pranata et al. (2022) which states that the majority of stroke respondents have the level of ability to carry out daily activities in the partial or moderate category, namely as many as 25 respondents (55.6%), while with the independent category as many as 18 respondents (40%). However, the results of this study are different from the research of Mayasari et al. (2019) which states that the majority of stroke respondents have the level of ability to carry out daily activities independently as many as 20 people (47%), while with mild dependence as many as 15 people (35%) and no respondents have total dependence.

### **Family Support for the Level of Ability to Perform Daily Activities in Stroke Patients at Imelda Pekerja Indonesia General Hospital in 2023 (N=30)**

Based on the results of the study, it showed that respondents in the category of good family support the majority had the level of ability to carry out daily activities with mild dependence as many as 6 people (40%), respondents in the family support category who were quite the majority had the level of ability to carry out daily activities with moderate dependence as many as 6 people (66.7%), and respondents in the category of family support who were less the majority had the level of ability to perform daily activities with heavy dependence and total dependence of 3 people each (50%). In the results of the *Chi-Square* statistical test, a significant value ( $p$ ) value of 0.01 or  $p < 0.05$  was obtained, meaning that there is family support for the level of ability to carry out daily activities in stroke patients at Imelda Pekerja Indonesia General Hospital in 2023.

Researchers assume that someone with stroke needs family support in carrying out daily activities because sufferers certainly have limitations, especially in limb function because stroke can cause weakness in the muscles. The family plays an important role in providing support to stroke sufferers, namely to care for them during the treatment process and to meet the needs of patients such as eating, drinking, bathing and other daily activities. From the results of this study it can also be seen that the better the family support, the better the level of a person's ability to carry out his daily activities. Conversely, the less family support to eat, the lower the level of a person's ability to carry out daily activities.

The results of this study are also in line with the research of Meo et al. (2021) which states that there is a relationship between family support and the level of independence of stroke patients in carrying out daily activities, where the *Chi Square test* obtained significant results of 0.038 or  $p$  value  $< 0.05$ . The results of research conducted by Rosiana Eva Rayanti et al. (2018) also showed that there was a strong relationship between family support and the level of ability of stroke patients to carry out daily activities, where with the *Spearman* correlation test obtained a significant value of  $0.000 < 0.05$ . So it shows that the better the family support, the level of ability of stroke patients in carrying out daily activities will also be better.

### **CONCLUSION**

Of the 30 stroke respondents, the majority of respondents aged 56-65 years were 18 people (60%), the majority of respondents were men as many as 21 people (70%), the majority of respondents had a junior high school education level of 21 people (70%), the majority of respondents had a fixed income of 27 people (90%) and the majority of respondents were married as many as 30 people (100%). The majority of respondents have good family support as many as 15 people (50%) and the minority of respondents who have family support less than 6 people (20%). The majority of respondents have the level of ability to carry out daily activities in the category of moderate dependence and heavy dependence as many as 9 people (30%) and minorities in the category of independent and total dependence which is 3 people each (10%). Respondents in the category of good family support the majority have the level of ability to carry out daily activities with mild dependence as many as 6 people (40%), respondents in the family support category who are quite the majority have the level of ability to carry out daily activities with moderate dependence as many as 6 people (66.7%), and respondents in the family support category who are less the majority have the level of ability to carry out daily activities with dependence Total weight and dependence were 3 people each (50%). In the results of the *Chi-Square* statistical test, a significant value ( $p$ ) value of 0.01 or  $p < 0.05$  was obtained, meaning that there is family support for the level of ability to carry out daily activities in stroke patients at Imelda Pekerja Indonesia General Hospital in 2023.

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