

## THE RELATIONSHIP BETWEEN FAMILY SUPPORT AND HOPELESSNESS IN STROKE PATIENTS IN THE HARAPAN RAYA PEKANBARU HEALTH CENTER WORK AREA

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### Abstract

The stroke process requires a long period of time for healing, which makes stroke patients dependent on the people around them, namely their families. Stroke patients need family support in terms of physical, mental, and emotional changes. Hopelessness in stroke patients arises because physical incapacity or disability can cause feelings of uselessness. The purpose of this study was to determine the support in care as an action for stroke patients with hopelessness at the Harapan Raya Community Health Center in Pekanbaru. This was a quantitative study with a correlational design and a cross-sectional approach. There were 40 respondents, using non-probability sampling. Using a family support and despair questionnaire as a research instrument, the analysis used was frequency distribution and Spearman's rank correlation test. The results of the study showed that 26 people (65%) received good family support and 27 people (67.5%) had a normal level of despair. The results of the analysis using the Spearman's rank correlation test showed a very strong/perfect significant relationship ( $r=0.791$ ). The statistical test results showed a significant relationship between family support and hopelessness (0.001).

**Keywords** : Stroke, Family Support, Hopelessness

### INTRODUCTION

A stroke is a neurological disorder caused by a disruption in blood flow to the brain, which can occur suddenly in a matter of seconds, with symptoms or signs corresponding to the affected area. This is caused by a disruption in blood flow in the brain (Widiani & Yasa, 2023). The prevalence of stroke is 12.3 million new cases each year, and an estimated 59% of patients experience psychological disorders. According to the Indonesian Health Survey (SKI) in 2023, the prevalence of stroke in Riau reached 7.7% with a total of 14,599 people (Indonesian Ministry of Health, 2023). According to the Pekanbaru City Health Office in 2023, the prevalence of stroke in the working area of the Harapan Raya Pekanbaru Community Health Center reached 257 people, making it one of the highest numbers of stroke sufferers in Pekanbaru.

Stroke has several specific impacts that can disrupt the physical, psychological, social, and economic well-being of sufferers. One of the physical impacts on stroke sufferers can be symptoms such as spasticity (continuous muscle contraction), decreased or loss of visual field, hemiplegia (paralysis of one side of the body), hemiparesis (weakness on the other side of the body), movement and balance issues, swallowing difficulties, bladder and bowel control problems, excessive fatigue, and spiritual issues that affect stroke patients (Suyanto et al.,

2022). The psychological impact of stroke is mental changes. After a stroke, there may be disturbances in thinking, consciousness, concentration, learning ability, and other intellectual functions. All of these things naturally affect the psychological condition of the patient. The psychological conditions that occur are anger, sadness, despair, and helplessness (Asmila et al., 2019).

Hopelessness in stroke patients arises because physical inability or disability can cause feelings of uselessness and a lack of zest for life (Rahmi et al., 2023). Efforts that can be made to reduce despair in stroke patients include strong family support. Family support is a form of interpersonal relationship that includes attitudes, actions, and acceptance of a family member who is experiencing an illness, so that the family member feels cared for and experiences physical and psychological comfort (Kartika et al., 2023). Family support for stroke patients is very important because it can provide encouragement and motivation for patients to improve their life expectancy when facing and living with their condition and illness (Listyarini et al., 2024). There are four types of family support needed by stroke patients: instrumental support, appreciation support, emotional support, and informational support.

## RESEARCH METHODS

This study is a quantitative study with a correlational research design and uses a cross-sectional approach chosen by the researcher. A cross-sectional research design is a research design that measures variables at the same time in several different sample groups (Widodo et al., 2023). The population of this study included all stroke patients in the Harapan Raya Pekanbaru Community Health Center Working Area based on the average results per three months, which was 44 stroke patients.

The sample size in this study was calculated using the Slovin formula, which was 40 stroke patients. Sampling in this study used the non-probability sampling technique. The research instrument was a family support questionnaire adapted from the standard questionnaire in Nursalam's (2017) study, which included 20 questions. The validity test results of the family support questionnaire showed that the questionnaire was 100% valid with a range of  $r$  Counting the questions from 0.288 to 0.536.

**Measuring instruments** These measuring instruments measured four dimensions, including instrumental support, appreciation support, emotional support, and informational support. The hopelessness questionnaire was adapted from the standard questionnaire in Arfina's (2017) study, which included 20 questions that had undergone validity testing. The reliability test results are considered reliable if the Cronbach Alpha value is 0.740, meaning that this questionnaire is reliable for measuring hopelessness.

**RESEARCH RESULTS**
**Table 1. Characteristics of Respondents Based on Age, Gender, Educational Level, Duration of Stroke, and Recurrent Stroke Episodes among Stroke Patients at Harapan Raya Public Health Center, Pekanbaru**

Characteristics	Frequency	Presentase (%)
<b>Age</b>		
Early elderly (45–55 years)	17	42,5
Late elderly (56–65 years)	23	57,5
<b>Total</b>	<b>40</b>	<b>100</b>
<b>Gender</b>		
Male	22	55
Female	18	45
<b>Total</b>	<b>40</b>	<b>100</b>
<b>Educational Level</b>		
Primary School	1	2,5
Junior High School	1	2,5
Senior High School	14	35,0
Bachelor's degree	24	60
<b>Total</b>	<b>40</b>	<b>100</b>
<b>Duration of Stroke</b>		
< 1 Year	18	45
1-5 Years	14	35
> 5 Years	8	20
<b>Total</b>	<b>40</b>	<b>100</b>
<b>Stroke Episode</b>		
First Episode	40	100
<b>Total</b>	<b>40</b>	<b>100</b>

Source: Primary Data

Based on the table above, it can be seen that more than half of the respondents were elderly people aged 56-65 years, totaling 23 people (57.5%). half of the respondents who suffered from stroke were male, totaling 22 people (55%), and more than half of the respondents were in undergraduate college, totaling 24 people or 60% of the total respondents. It can be seen that most respondents (95%) were at the bachelor's degree and high school levels, with only a small portion of respondents (5%) at the junior high school and elementary school levels. Less than half of the respondents had suffered from stroke for less than 1 year, totaling 18 people (45%), and the majority of respondents had suffered their first stroke attack, totaling 40 people (100%).

**Table 2. Family Support for Stroke Patients in the Working Area of Harapan Raya Public Health Center, Pekanbaru**

N	Family Support
Mean	82,71
Median	93,75
Sig.	<,001

Source: Primary Data

Based on the table above, it can be seen that the family support questionnaire had a mean value of 82.71, a median of 93.75, and a significance level of <0.01.

**Table 3. Hopelessness for Stroke Patients in the Working Area of Harapan Raya Public Health Center, Pekanbaru**

N	Hopelessness
Mean	4,13
Median	1,00
Sig.	<,001

Source: Primary Data

Based on above, it can be seen that the family support questionnaire had a mean value of 4.13, a median of 1.00, and a significance level of <.001.

**Table 4. The Relationship Between Family Support and Hopelessness Among Stroke Patients in the Working Area of Harapan Raya Public Health Center, Pekanbaru**

Variabel	r	R2	Regression Equation	P Value
Family Support	0,791	0,625	Keputusasaan = 20,78+0,201 (Family Support)	0,001

Source: Primary Data

Based on Table 4, data analysis using Spearman's rank correlation with the variables of Family Support and Hopelessness in Stroke Patients in the Harapan Raya Community Health Center Area, Pekanbaru, a very strong/perfect significant relationship ( $r=0.791$ ) and a positive pattern were obtained, meaning that the higher the family support, the lower the Hopelessness. The coefficient value with a determination of 0.625 means that the regression equation obtained can explain that the family support obtained is sufficient to explain the variable of despair. The statistical test results show that there is a significant relationship between family support and Hopelessness (0.001).

## DISCUSSION

### 1. Respondent Characteristics

The results show that more than half of the respondents who suffered from stroke were aged 56-65, which can be categorized as late elderly, totaling 23 people (57.5%). These findings are in line with the research by Geneva & Usman (2023), based on data showing that the majority of respondents were aged 55-64 years, totaling 30 people (55.5%). Age

affects patients because the older they are, the greater the risk of stroke. Physiologically, age-related physical changes occur, including changes in blood vessels in general, including cerebral blood vessels, which become less elastic, and the accumulation of plaque in the branches of cerebral blood vessels over many years.

Based on the results of research conducted in the working area of the Harapan Raya Community Health Center, data shows that males experience stroke the most, totaling 22 people (55%). These research results are in line with the research by Anggraini et al. (2022), which found that more than half of the respondents were male (61 or 56.0%) with Post-Stroke Patient Behavior in Repeat Visits. Gender affects the increased risk of stroke in men due to bad habits such as smoking and drinking alcohol, which cause blood vessels in the brain to rupture or become blocked, thereby reducing the blood supply to the brain.

The results of the study show that more than half of the respondents who suffered from stroke had a bachelor's degree as their highest level of education, totaling 24 people (60%). These results are in line with the research by Tering & Putri (2023), which found that the highest level of education was a bachelor's degree or Strata 1, totaling 26 (35.6%). This may be related to the respondents' occupations, where respondents who were bachelor's degree graduates had decent jobs but, due to their illness, had to stop working and felt like a burden to their families. This means that a higher level of education does not guarantee better health knowledge about a disease such as stroke and low awareness of health management.

The results show that more than half of the respondents had suffered from stroke for less than 1 year, namely 18 people (45%). These results are in line with the research by Rismawan et al. (2021) based on the time of onset of stroke in outpatients who became respondents at the neurology clinic of Dr. Soekardjo Regional General Hospital in Tasikmalaya City, with the highest number being < 1 year, totaling 28 people (52.8%). Stroke recovery takes a long time and is a difficult process. The length of time after a stroke affects their ability to perform daily tasks independently. The rehabilitation program followed by stroke patients is sometimes perceived as having no effect on them, and the lack of guidance from the rehabilitation program before they leave the hospital causes them to focus on their deficits. As a result, they feel useless and helpless.

The results showed that more than half of the respondents who suffered from stroke had experienced their first stroke, namely 40 people (100%). These results are in line with the research by Permadi et al. (2024), which found that the number of first strokes was dominant at 83.33%. According to the researchers' assumptions, stroke cases can experience recurrent strokes, which have more serious consequences than the first stroke and can even lead to death..

## 2. Family Support and Hopelessness Among Stroke Patients

Based on the results of research conducted in the working area of the Harapan Raya Community Health Center, the highest level of family support for stroke patients was found in the good category, namely

The Relationship between Family Support and Hopelessness in Stroke Patients in the Working Area of the Harapan Raya Community Health Center, Pekanbaru 200 26 people (65%). These research results are in line with the research by Dedi & Barkah, (2022) from the research results it was found that respondents who had high support were 38 people (92.7%).

Family support is crucial in providing healthcare support, such as instrumental support, informational support, evaluative support, and emotional support. Family support can be obtained from family members (husband, wife, children, and relatives), close friends, or acquaintances (Nursyahfitri et al., 2022). The role of the family in caring for patients will greatly influence how a person with stroke views their own self-worth. The role of the family is the specific behavior expected by a person in the family context (Arfina et al., 2023). The continuous involvement of family members is very helpful and encouraging for patients undergoing treatment.

Based on the results of a study conducted in the Harapan Raya Community Health Center working area, the highest level of hopelessness among stroke patients was found in the normal category, with 27 people (67.5%). These research results are in line with the research by Rahmi et al. (2023). Based on Table 2, it can be seen that of the 62 respondents, almost half of the respondents experienced severe hopelessness, namely 27 people (43.5%).

Despair is a state of mind in which a person feels inferior or unable to commit to what they want. The clinical consequences of stroke are weakness in the client's limbs, which can affect their psychology (Sawab & Endang, 2021). The level of hopelessness experienced by stroke patients is caused by the high level of family support given to patients who have suffered a stroke. The better the family support for stroke patients, the more hopelessness can be reduced (Pratami et al., 2016). The clinical condition of the patient is one of the factors that cause hopelessness. If the patient experiences activity disorders or movement disorders in the body, it causes stroke patients to feel that they no longer have self-esteem because they cannot perform activities as usual.

### 3. The Relationship Between Family Support and Hopelessness Among Stroke Patients in the Working Area of Harapan Raya Public Health Center Pekanbaru

Data analysis using Spearman's rank test with the variables of Family Support and Hopelessness in Stroke Patients in the Harapan Raya Community Health Center area of Pekanbaru found a very strong/perfect significant relationship ( $r=0.791$ ) and a positive pattern, meaning that the higher the family support, the lower the hopelessness. The coefficient value with a determination of 0.625 means that the regression equation obtained can explain that the family support obtained is sufficient to explain the variable of hopelessness. The statistical test results showed a significant relationship between family support and hopelessness (0.001). The results of this study are in line with the research by Budianto et al. (2022). Based on the Spearman's rank test, the results show that

there is a significant relationship between family support and the incidence of depression in patients after hemorrhagic stroke in the Wates Inpatient Health Center Working Area in 2021 with a p-value (0.034) which means  $< 5\%$  (0.05) and shows that  $H_0$  is successfully rejected.

Individuals suffering from acute or chronic illnesses and physical disabilities may experience various psychological responses such as fear, sadness, anger, depression, loss of control, and hopelessness. Individuals experiencing despair may feel hopeless about achieving their desires or believe that their actions will not resolve their problems, which may increase the risk of violent behavior and depression (Sarfika, 2019). Efforts that can be made to reduce hopelessness in stroke patients include strong family support. Family support is a form of interpersonal relationship that includes attitudes, actions, and

acceptance of a family member who is experiencing an illness, so that the family member feels cared for and experiences physical and psychological comfort (Kartika et al., 2023).

## CONCLUSION

The results of this study indicate a strong relationship between family support and hopelessness in stroke patients in the working area of the Harapan Raya Community Health Center in Pekanbaru.

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