

Family Support for Prevention of Recurrent Stroke Events for Stroke Patients

Rahmania Ambarika*, Novita Ana Anggraini

Nursing Faculty, Institut Ilmu Kesehatan STRADA Indonesia, Kediri, Indonesia

*Corresponding author: rahmania.ambar@gmail.com

ARTICLE INFO

Article history:

Received: 11nd May 2022

Revised: 25th May 2022

Accepted: 1st June 2022

Keywords:

Family support

Recurrent stroke

ABSTRACT

Someone with a history of stroke has a greater tendency to experience a repeat stroke, especially if risk factors are not addressed properly, which is one of the lack of vigilance behavior in the early detection of prevention of recurrent stroke prevention. The purpose of this study is to find out the relationship between family support and recurrence of stroke among stroke patients. This research design is correlation analytic. The population in this study were all stroke patients with accidental sampling techniques obtained 98 respondents. The independent variable is family support while the dependent variable is the incidence of recurrent stroke. The test used is rho spearment. The results showed that the majority of respondents were good family support as many as 54 respondents (55.1%). Most respondents of the first stroke were 71 respondents (72.4%). Based on the results of the analysis using the spearment rho test. The results obtained $p = 0.006$ There is a relationship of family support with the recurrent of strokes. The existence of family support is a support that is able to provide emotional strength, family affection and attention to increase the spirit of making efforts to prevent recurrent strokes.

I. Introduction

Stroke is a major health problem in the community because stroke is a disease that often occurs in the community with high mortality and disability rates, and high recurrent attacks, this is due to the lack of public awareness in recognizing risk factors and early symptoms of stroke. A person with a history of stroke has a greater tendency to have another stroke, especially if the risk factors are not handled properly, one of which is the lack of family support in the early detection of recurrent stroke prevention, lack of giving support for prevent stroke. In ASEAN countries, stroke is also a major health problem that causes death. From data from the South East Asian Medical Information Center (SEAMIC) it is known that the largest stroke mortality rate occurs in Indonesia, which is then followed sequentially by the Philippines, Singapore, Brunei, Malaysia, and Thailand.

The risk of re-stroke will be reduced by improving the quality of control and control of risk factors. The family is the main key to health and the concepts of illness and healthy behavior - illness. Therefore, the family is directly involved in making decisions and therapeutic at every stage of health-ill family members.

Family support is one of the factors that affect awareness of stroke because it helps patients in making decisions and solving problems related to stroke. Family support to help their sick family is not fully extended to all families for certain reasons. Families who care for sick family members themselves also often find it difficult to carry out care or care tasks. One of them is influenced by the lack of family knowledge in caring for sick family members



(Barbara et al., 2010). The impact of the lack of family support is the failure of one's therapeutic actions which will result in repeated strokes (Keliat, 2010).

The risk of re-stroke will be reduced by improving the quality of control and control of risk factors (Friday, 2002). The family is the main key to health and the concepts of illness and healthy behavior - illness. Therefore, families are directly involved in decision-making and therapeutic at every stage of health-ill family members (Friedman, M.M., Bowden, V.R., & Jones, E.G. (2010)).

With the increase in the number of recurrent stroke events, it shows that the family's knowledge about early detection of stroke is still low which can have an impact on increasing the incidence of stroke recurrence. Family members of patients with knowledge, cultural, socio-economic backgrounds can influence patient care such as patients with stroke (Junaidi, 2012). Family support is the main key because the family is directly involved in making decisions and is therapeutic at every stage of health - illness of family members (Muhlisin, 2012).that can be done through maternal, helper, and environmental factors. [6] In order for delivery to occur smoothly, the mother strives to reduce the level of anxiety. In addition, the role of health workers is also needed to reduce the level of anxiety in patients, one of which is by providing support and providing motivation to mothers. [8] Based on the above background, the researchers are interested in conducting a study entitled "The Relationship between Anxiety Levels with Process in Inpartu Mothers in First Stage of Primigravida Active Phase at Gemarang Health Center, Ngawi Regency".

II. Method

This study uses analytical descriptive research with a cross sectional approach correlation design. The population are All stroke patients are in a stable condition with composmetis awareness and are not in an emergency condition and can communicate well in the working area Poncokusumo Community Health Center, Malang Regency based on data in July August 2021 with accidental sampling. Variabel independent is family support and Variabel dependent is recurrent stroke. Collect data using questionnaire and data analysis using Spearment rho.

III. Results and Discussion

Characteristic of Variable

Table 1.

Characteristic	Σ	%
Ages		
< 36 years	6	6,1
36 - 60 years	41	41,8
> 61 years	51	52,0
Education		
No school	10	10,2
Elementary School	39	39,8
Junior High School	19	19,4
Senior High School	24	24,5
Diploma	0	0
University	6	6,1
Working Status		
Does not work	40	40,8
Civil	2	2,0
Farmer	6	6,1
Trader	6	6,1
Enterpreuner	13	13,3
Other	31	31,6

Income		
< 1 million	50	51,0
1 - 2 million	26	26,5
> 2 million	22	22,4

Source: Result of analysis data

The table above shows that from 98 respondents almost all > 60 year old are 51 respondents (52 %), almost respondents educational background are elementary school, 39 respondents (39,8%), almost respondents with no job are 40 respondents (40,8 %) and almost respondents with < 1 million are 50 respondents (51 %).

Table 2.

Characteristic	N	%
Family Support		
Less	7	7,1
Enough	37	37,8
Good	54	55,1
Recurrent		
First	71	72,4
Repeat	27	27,6

Source: Result of analysis data

Data Analysis

Table 3. Spearman rho

Correlations		Keluarga	Kepatuhan
Spearman's rho Dukungan keluarga	Correlation Coefficient	1.000	-,274
	Sig. (2-tailed)	.	.006
	N	98	98
Kejadian stroke berulang	Correlation Coefficient	-,274	1.000
	Sig. (2-tailed)	.006	.
	N	98	98

The results showed that p value = 0.006 with p value <0.05, so H1 was accepted and H0 was rejected, which means that there is a relationship between family support and the incidence of recurrent stroke. with the incidence of recurrent stroke and has a negative relationship which means it is not in the same direction, namely the better family support will reduce the incidence of recurrent stroke.

Family Support

Based on the results of the study, it is known that most of the respondents have good family support as many as 54 respondents (55.1%). Lack of family support as many as 7 respondents (7.1%). Adequate family support as many as 37 respondents (37.8%).

Wills in Friedman cited by Efendy (2015) said that family support can withstand the negative effects of stress on health and family support directly affects health effects. More specifically, the presence of adequate family support has been shown to be associated with reduced mortality and easier recovery from illness.

Family social support is a process that occurs throughout life, the nature and types of social support vary in various stages of the life cycle. However, in all stages of the life cycle, family social support enables the family to function by functioning intelligently and rationally. As a result, it improves the health and adaptation of the family. In essence, the family is expected to be able to function to realize the process of mutual development of love and affection between family members, between relatives, and between generations which is the basis of a harmonious family (Soetjiningsih, 2008). Family support is one factor in the formation of an ability. Someone who has good family support will have better abilities than someone who does not have the support of the family (Waspadji, 2007). Adequate family support will be able to increase enthusiasm in managing the dietary needs of people with Diabetes Mellitus. Family support in the form of instrumental, information, judgment and emotion will form a better desire to interpret health. Where with good family support will provide the ability to overcome health problems in preventing recurrent stroke.

This shows that those who have family support are less than those who have good family support. With good family support, it can provide energy in a person to better prevent recurrent strokes. Based on the results of the study, it was found that good family support was indicated by the percentage of correct answers on family support indicators, including good family support, marked by families providing good support on informational, reward, instrumental and family indicators also providing emotional support. Families with good support for family members who suffer from stroke are shown by family members also seeking information about stroke, about the right diet for stroke sufferers, so that families provide information to their family members to carry out all the recommendations of health workers about the importance of routine control, routine treatment, the importance of proper diet and activity. In addition to the family playing its role in providing informational support, the family also plays its role in terms of appreciation, including the family giving awards or praise to family members if family members who suffer from stroke routinely control and also carry out a good lifestyle. In addition, the family also provides instrumental support by accompanying for checkups and also providing emotional support by always providing support and motivation for the recovery of stroke sufferers.

Based on the results of the study, it is known that the respondents who have good family support are 35 respondents (46.1%) and the majority are aged > 60 years with 27 respondents (27.6%). According to Sastrohadiwiryono (2007), the age factor greatly influences a person's motivation, the motivation of elderly people in learning experiences may be more difficult than young people. Based on the results of the study, respondents with the elderly age received the most family support because with advanced age, they really needed more assistance or support from their families so that many of them were always accompanied by their families when controlling. has occurred in the elderly.

Good family support is characterized by good support in terms of informational, instrument, appreciation and emotional. But there are still some who get less support due to a lack of family knowledge about stroke so they don't feel the need to give full support to their family members who are affected by stroke and some support is not obtained at the age of less than 36 years and age less than 60 years so that the family considers their family members to be members of the family. Families who suffer from stroke can still do their own treatment so they don't provide support in terms of assistance, instruments, and emotional support.

Recurrent Stroke

Based on the results of the study, it was found that most of the respondents had a first stroke as many as 71 respondents (72.4%) and repeated attacks in a small number of respondents were 27 (27.6%) respondents.

Stroke is a major health problem in the community because stroke is a disease that often occurs in the community with high mortality and disability rates, and high recurrent attacks, this is due to the lack of public awareness in recognizing risk factors and early symptoms of stroke (Young T et al. al., 2009). A person with a history of stroke has a greater tendency to have a repeat stroke, especially if the risk factors are not handled properly, one of which is the lack of vigilance behavior in the early detection of recurrent stroke prevention (Junaidi, 2012).

The American Heart Association (AHA) revealed that strokes occur more in men than women, as evidenced by research results showing that the prevalence of stroke is more in men. Based on AM Sofyan, 2015 regarding the proportion between men and women who suffer from stroke, that there is no relationship between gender and the incidence of stroke, with p value = 0.308.

Based on the results of the study, the range of stroke incidence was not much different between men and women, it was found that women suffered the most strokes with 52 (53.1%) and 46 (46.9%). and the incidence of recurrent stroke is also almost the same between men and women, it is found that women have 15 more recurrent attacks and 12 respondents who have repeated attacks. But most of the respondents did not have repeated attacks but still had a history of the first stroke.

Stroke has become a major cause of disability and death in most developed and developing countries. In developing countries, the number of deaths caused by stroke is very high and reaches two-thirds of the total stroke patients worldwide (Stroke Association, 2013).

Data from WHO (2014), found that 15 million people suffer from stroke worldwide, with 5 million people dying and 5 million others experiencing permanent disability. Physical well-being or health is the ability of the body's organs to function optimally so that they can carry out daily activities independently to meet their daily needs.

Physical health is health related to the state of the human body. This is because stroke always leaves physical symptoms that persist after the attack phase, including physical weakness, aphasia, dysphagia and others. Stroke can cause motor paralysis, because the control of the right brain is in charge of moving the left limb and vice versa. This makes it very difficult for stroke patients to move their hands and feet in the affected area, so they need the help of others to carry out daily activities.

This is supported by the majority of respondents aged over 61 years and over, namely 52% (51 respondents). The grouping of respondents into 3 groups refers to the elderly category which is limited by the age of 60 years (WHO in Mursalin, 2011). In addition, to see that stroke began to attack patients under the age of 30 years.

The results of basic health research (Riskesdas) by the Ministry of Health in 2013 showed an increase in the prevalence of stroke from 8.3 per 1000 in 2007 to 12.1 per 1000 in 2013, specifically for stroke respondents 15 years and over (Lia Wanadriani, 2015). Stroke sufferers who are more than 60 years old are more than patients under 60 years old with a ratio of 23:21 (Upik Rahmi, 2011).

Stroke is more common in the elderly because physiologically the cardiovascular system of the elderly has undergone many changes, namely increased heart mass, hypertrophy of the left ventricle, and decreased ability to stretch the heart due to changes in connective tissue and lipofusin. In addition, the ability of arteries also experienced a decline in function by up to 50% and capillaries experienced a decrease in elasticity and permeability (Pujiastuti and Surini in Zulfa, 2011). This situation is exacerbated by the accumulation of thrombus and/or embolus that trigger inadequate cerebral bleeding (Ginsberg in Sasmika, 2016).

The effects of aging on blood vessels cause the tunica intima of the arteries to thicken, giving rise to early signs of atherosclerosis. The ability to dilate arteries decreases, blood

pressure is higher, because the diameter decreases and becomes stiffer. Then arises the process of atherosclerosis which begins with the formation of atheroma plaques, which narrow the vessel lumen. Most common in the aorta, iliac, coronary, carotid, renal, and femoral arteries. Pathologically, thrombosis and obstruction of the lumen of the artery may occur, damaging the tunica media of the aneurysm (most commonly in the abdominal or thoracic aorta). This results in reduced blood flow to the brain and kidneys (Tambayong in Jayanti 2015).

According to Nanang Kosim et al based on the results of the analysis of family income variables have a significant effect on the incidence of stroke. If family income increases, it will affect the fulfillment of the health needs of families with healthy families, so that educational activities and productivity activities will run well so that they become a quality family of life (Nanang Kosim et al, 2015).

Based on the results of the study, it was found that patients who had repeated attacks with income of less than 1 million were 12 respondents (12.2%) and the first attack was 38 (38.8%) respondents so that many stroke sufferers occurred on income less than 1 million. Families with low incomes will think again when doing a healthy lifestyle that requires large financing. So that the decrease in the fulfillment of health status.

From the average status of respondents, most of them do not work as many as 40 people or 40.8% and respondents. According to the researcher's assumption, because work also has a close relationship with socioeconomic status, various types of diseases that arise in the family are often related to the type of work that affects family income. The stroke mortality rate, for example, is closely related to the occupation and income of the family head.

Based on the results of the study, it was found that the majority of respondents with elementary school education were 39 (39.8%) who had a stroke. The level of education affects a person's behavior in seeking care and treatment of the disease he suffers, as well as choosing and deciding the action or therapy that will be undertaken to overcome his health problems. The level of education is an indicator that a person has taken formal education in a particular field, but is not an indicator that a person has mastered several fields of knowledge. A person with a good education, is more mature towards the process of change in himself, so it is easier to accept positive external influences, be objective and open to various information including information about health.

In addition, patients with higher education will be able to develop constructive coping mechanisms in dealing with stressors. This is due to a good understanding of the information, so that the individual will respond positively and will take appropriate and beneficial action for himself.

Effect Family support with recurrent stroke

Based on the results of the study, it was found that p value = 0.006 with p value <0.05 , so that H_1 was accepted and H_0 was rejected, which means that there is a relationship between family support and the incidence of recurrent stroke. Families with recurrent stroke incidence and have a negative relationship which means it is not in the same direction, namely the better family support will reduce the incidence of recurrent stroke.

Stroke is a chronic disease and a long recovery process. This situation makes stroke clients need support from their environment, especially the family. The success of the family in providing support to family members with stroke can accelerate the recovery process of mobility, achievement in daily activities and the quality of life of clients (Lewis et.al, in YV Puspaningrum, 2013). (Bhagal et.al, in Patrick Coppens et.al, 2017) stated that the impact of different social support depends on the severity of the stroke and the amount of support received by the client).

According to Bhogal et.al, in Patrick Coppens et.al, 2017) also emphasized the importance of family social support by stating that social support can help ease the transition from the stroke experience and improve recovery. In research (Nurdiana et al in S Birawati, 2013) which states that the family plays an important role in determining the nursing care or treatment needed by the client at home so that it will reduce the recurrence rate. The results of the study (Duncan et al in R Meyvard Pattihahuan, 2012) show that family support is an important source of support for children and adults. The same statement about the importance of family support in the recovery process is also emphasized by (Friedman et.al, 2017) that the family plays an important supporting role during the recovery and rehabilitation period. If this support is not available, the recovery success decreases significantly.

Based on the results of research on good family support in caring for stroke patients as evidenced by the provision of family informational support in treating stroke patients, it is shown that families seek information about physical disorders associated with stroke, the causes of stroke and the potential for recovery. Information assistance provided so that someone can use it in overcoming the problems they face, including providing advice, direction, ideas or other information needed and information that can be conveyed to family members who have suffered a stroke. So that the information provided from the family to stroke sufferers has a positive effect where the patient will try to do according to family recommendations in preventing recurrent strokes.

Families also provide assessment/award support in caring for stroke patients. The researcher believes that the support given by the family in caring for stroke patients can be seen from the family congratulating the progress that has been achieved and the family still respecting it even though they can no longer work or experience limitations. The existence of support from the family can increase the motivation of patients in making health behavior efforts in preventing stroke.

From the results of research on instrumental family support in caring for stroke patients, this is also in accordance with the theory that caregivers are expected to make decisions about the patient's well-being, prepare for, carry out their newly learned tasks and skills, where caregivers are completely overwhelmed and realize they are not ready to assume the duties and responsibilities of caring for and managing the daily physical, instrumental, and emotional needs of stroke patients. They do not have the time or resources to address their own need for instrumental support.

Instrumental support provided in the form of time, effort and cost. Instrumental support is manifested in actions such as helping with medical expenses, delivering treatment to health facilities, etc.

Family support in the form of financial support, information, support in carrying out daily routine activities, support in treatment and care, psychological support, further family support can have a positive impact on improving the quality of life in an effort to improve health status (Friedman, 2010).

According to (Friedman, 2010) family emotional support serves as a safe and peaceful place for rest and helps the patient's emotional mastery. Emotional support is considered to prevent or reduce the effects of stress and directly improve the mental health of individuals or families (Roth in Fuady, 2016).

Good emotional support given by the family can be seen from the family who listens to all the complaints experienced by the patient and family members pay attention to the need for food and drink. The results of this study obtained that all components of family support which include emotional, informational, instrumental and reward support indicate that the support obtained is good. So that it will affect the motivation and behavior of stroke patients to prevent recurrent strokes. The behavior or lifestyle of stroke sufferers can be influenced by the family. This situation makes stroke clients need support from their environment,

especially the family. The success of the family in providing support to family members with stroke can accelerate the recovery process of mobility, achievement in daily activities and the quality of life of the client.

Based on the results of the study, there is a lack of family support that will reduce the quality of life, increase the risk of recurrence of illness and also hinder healing both physically and psychologically so that patients have recurrent strokes.

If the support from the family environment of stroke survivors is able to optimize the emotional, reward, information, and instrumental aspects in the form of attention, advice, suggestions, the family support will be able to improve coping strategies for stroke sufferers. So that the sufferer feels that he is still needed, cared for, and feels that he is no different from other humans. This shows that family support with aspects that are in it can be used as predictors to predict coping strategies in stroke sufferers.

Support from the family environment can relieve pain in stroke sufferers as a form of psychological treatment for sufferers. This support is very important to establish peace, comfort, and as a proof of their existence as humans who live together in the family sphere. Therefore, support from the closest people, especially family, will really need and influence their care and recovery process. The higher the support from the family provided, the better the quality of life of post-stroke patients in an effort to prevent recurrent strokes. Post-stroke patients who are in a family environment that has good support will be able to create a feeling of comfort and security so that a sense of concern for themselves will grow. and increase motivation to carry out good health behavior. Family support is very important and very much needed by patients with chronic diseases, one of which is stroke patients.

IV. Conclusion

Most of the respondents have good family support as many as 54 respondents (55.1%). Most of the respondents the first occurrence of stroke at the Hospital Level II dr Soepraoen Malang as many as 71 respondents (72.4%). There is a relationship between family support and the incidence of recurrent stroke

V. References

- American Heart Association, (2015). Heart Disease and Stroke Statistics_2015 Update: A Report From the American Heart Association. Available from: <http://circ.ahajournals.org/cgi/content/full/121/7/e46>. [Accessed 15 Juni 2019].
- Asmedi, A., Lamsudin, R., (2012). Prognosis Stroke, Manajemen Stroke. Mutakhir, BLM XIV.
- Auryn. (2010). Mengenal Dan Memahami Stroke. Yogyakarta: Ar Ruzz Media
- Elizabeth J. Corwin. (2011) Asuhan Keperawatan Kardiovaskuler. Edisi V. Jakarta : Penerbit buku kedokteran EGC.
- Bailon dan Maglaya. (2015). “ Konsep Keluarga”. (<http://id.shvoong.com/books/1896185-konsep-keluarga>.) Diakses 15 Juni 2019.
- Barbara, Robert G, Philip A. (2010). Rethinking Intervention Strategise in Stroke Family Caregiving. Rehabilitation Nursing. 35 (4): 152-160.
- Batticaca, F. B. (2008). Asuhan Keperawatan pada Klien dengan Gangguan Sistem Persarafan. Jakarta: Salemba Medika.
- Black & Hawks. (2009). Medical Surgical Nursing, 7thed, St.Louis, Elsevier Saunders.
- Friedman, M.M., Bowden, V.R., & Jones, E.G. (2010). Buku ajar keperawatan keluarga: Riset, teori, dan praktik, alih bahasa, Akhir Yani S. Hamid dkk ; Ed 5. Jakarta : EGC.
- Junaidi. (2012). Panduan praktis pencegahan dan pengobatan stroke. Jakarta: PT. Bhuana Ilmu Populers.

- Jurkowski, et al. (2008). Awareness of Necessity to Call 911 for Stroke Symptoms. Center for Disease Control and Prevention. 5 (2).
- Keliat, BA. (2009). Model Keperawatan Profesional Jiwa. Jakarta: EGC.
- Kementrian Kesehatan, R.I. (2013). Riset Kesehatan Dasar : Riskesdas 2013. Jakarta : Badan Penelitian Dan Pengembangan Kesehatan.
- Setiadi, Nugroho. (2008). Perilaku Konsumen. Jakarta : Kencana
- Mansjoer, A. (2008). Kapita Selekta Kedokteran, Edisi 3, Jilid 2. Jakarta: Media. Aesculapius.
- Muttaqin, Arif. (2008). Buku Ajar Asuhan Keperawatan Klien Dengan Gangguan Sistem Persarafan. Jakarta : Salemba Medika
- Notoatmodjo. (2010). Promosi Kesehatan Teori dan Aplikasi. Jakarta : Rineka Cipta.
- Nursalam. (2014). Konsep dan Penerapan Metodologi Penelitian Ilmu Keperawatan: Pedoman Skripsi, Tesis, dan Instrumen Penelitian Keperawatan Edisi 2. Jakarta : Salemba Medika.
- Price & Wilson. (2006). Patofisiologi : Konsep klinis proses-proses penyakit, ed. 6. Alih Bahasa Brahm U. Pendit. Jakarta : EGC.
- Purwanti, Okti S. dan Maliya, A. (2008). Rehabilitasi Pasca Stroke, Jurnal berita Ilmu Keperawatan. Vol. 1, No. 1, Maret 2008: 43.
- Setyowati. (2008). Asuhan Keperawatan Keluarga. Yogyakarta : Mitra Cendikia Press.
- Smeltzer and Bare. (2008). Textbook of Medical Surgical Nursing Vol.2. Philadelphia : Lippincott William & Wilkins.
- S, Wiwit. (2010). Stroke dan penanganannya, Yogyakarta : Katahari.
- Truslen, T., Bonita R. (2008). Advance in ischaemic stroke epidemiology.
- Wawan, A dan Dewi, M. (2010). Teori dan Pengukuran Pengetahuan, Sikap dan Perilaku Manusia. Yogyakarta : Nuha Medika.
- WHO. (2010,). Stroke, Cerebrovascular Accident, http://www.who.int/topics/cerebrovascular_accident/en/, online accessed on 15 June 2019.
- Yani, Fitri Eka. (2010). Perbedaan Skor Kualitas Hidup Terkait Kesehatan Antara Pasien Stroke Iskemik Serangan Pertama dan berulang. Skripsi. Surakarta : Fakultas Kedokteran Universitas Sebelas Maret.
- Yastroki, (2012). Stroke Penyebab Kematian Urutan Pertama di Rumah Sakit Indonesia. (<http://www.yastroki.or.id>). Diakses tanggal 15 Juni 2019.
- Young, T Kue & Vladmir. (2009). The Population Approach to stroke Prevention : a Canadian Perspective. Clinical and Investigati Medicine. 26 (2): 78-86.
- Yuniarsih, Winda. (2010). Pengalaman Caregiver Keluarga Dalam Konteks Asuhan Keperawatan Pasien Stroke Tahap Pasca Akut Di RSUP Fatmawati. Tesis. Jakarta: FIK Universitas Indonesia.