

# **FAMILY SUPPORT WITH SELF-CONCEPT OF STROKE PATIENTS AT THE NEUROLOGY POLYCLINIC AT DR. R. KOESMA REGIONAL PUBLIC HOSPITAL TUBAN**

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**Abstract.** The main cause of disability and the second cause of death in the world is stroke. This disease is now a major global health problem. The results of interviews with 7 stroke patients who were treated at the neuro polyclinic at Dr. R. Koesma Regional Public Hospital Tuban all have a negative self-concept. This study aims to determine the relationship between family support and self-concept of stroke patients at the neurological clinic of Dr. R. Koesma Regional Public Hospital Tuban. The research design uses *correlation analysis* with a *cross sectional approach*. The sampling technique uses *purposive sampling* with a total population of 170 stroke patients undergoing outpatient treatment at the neurology clinic. A sample of 121 stroke patients. Family support is the independent variable, while self-concept is the dependent variable. Data collection was carried out using a questionnaire which was analyzed using the *Chi-Square test*. The results of the study show that almost all stroke patients with good family support have a positive self-concept. The results of the *chi-square* test obtained p value = 0.000 showing a significant correlation. It can be concluded that there is a relationship between family support and the self-concept of stroke patients at the neurology clinic at Dr. R Koesma Regional Public Hospital Tuban. This shows that family support is very important for stroke patients who have impaired self-concept. Stroke patients who lack family support are more likely to experience impaired self-concept when compared to patients who receive good support.

**Keywords:** Family Support, Self Concept, Stroke

## 1 INTRODUCTION

One of the factors that affect a person's standard of living is health. Therefore, humans must maintain general health, including preventing non-communicable diseases (PTM). Non-communicable diseases are a major issue for Indonesian society, they tend to spread internationally and currently rank among the top ten diseases at the national level. Heart and blood vessel disease and stroke are non-communicable diseases with the most cases (M. Anggraini, 2022).

Globally, there are more than 101 million people alive currently having stroke, and there are more than 12.2 million new stroke cases each year. In Indonesia, the number of stroke sufferers based on doctors' diagnoses the population aged 25-34 years is 1.4%, 45-54 years is 14.2%, 55-64 years is 32.4%, 65-74 years is 45, 3 %. There were more male sufferers than female sufferers, namely 11% and 10.9% (World Stroke Organization, 2022). Stroke the number one killer in government hospitals throughout Indonesia (Hendayani, 2018). The number of stroke sufferers in Indonesia in 2018 based on doctors' diagnoses was estimated at 713,783 (10.9%). West Java Province had the highest estimated number of stroke sufferers at 131,846 people (11.4%). Followed by East Java Province with a population of 113,045 stroke sufferers (12.4%), Central Java with 96,794 (11.8%) (Kemenkes RI, 2018)..

Based on the medical records of dr. R. Koesma Tuban obtained data on visits to the Neurology Polyclinic, from September to November 2022 there were 2,219 patient visits to the Neurology Polyclinic. With an average of around 740 patients per month, and 51.5% of the total visits were patients with a stroke diagnosis, totaling 340 patients.

The number of people affected by stroke is influenced by several risk factors, some of which can be treated or prevented, including smoking, heart disease, hypertension, obesity, and transient ischemic attack. Meanwhile, risk factors that cannot be changed include age, increased carotid pressure, diabetes mellitus, heredity, and having had a stroke (Padila, 2012). Stroke patients will experience impaired physical function, including weakness and distraction, which makes it difficult for stroke patients to adjust to their new circumstances and therefore affects their mood (Kosasih et al., 2020). Since most stroke patients have lost their independence and are now dependent on others due to their physical disabilities, they may feel alone and believe that they are useless as a result of their changing physique (S. N. Poniyah Simanullang, 2021).

Patients with long-term strokes have various experiences with their condition. Even if each patient has a unique defense system, having a stroke over a long period of time will make patients feel more hopeless about their condition and helpless about what they are going through. They will also have difficulty managing the stress of the disease. Daily activities and work of the patient will be reduced (S. Hayulota and D. R. Sari, 2014).

From the results of interviews conducted by researchers from 7 stroke patients who were controlled at the neurology polyclinic at dr. R. Koesma Regional Public Hospital Tuban all have a negative self-concept. among them there were 3 patients who underwent early recovery after stroke for less than 6 months feeling frustrated, confused, and

depressed because of the sudden change in their physical and cognitive abilities. Another 4 patients who underwent recovery for more than 6 months mentioned their feelings that they felt useless, their current physical condition was not according to their wishes, and they did not like their body shape which existed for their family because their life now depended on the family. That is the forerunner to the emergence of impaired self-concept in patients who have suffered a stroke. So this shows that there are still many stroke patients in the Neurology Polyclinic at dr. R. Koesma Tuban Regional Public Hospital who has a negative self-concept.

The way people see themselves holistically, including physically, emotionally, intellectually, socially, and spiritually, is known as their self-concept. Good intellectual capacity and mastery of the environment are characteristics positive self-concept (Tacikowski et al., 2020). However, negative self-concept is shown by unpleasant interpersonal and social interactions or substandard answers (P. S. Simbolon, 2017).

The results of research conducted by Handayani at the Bukittinggi National Stroke Hospital Polyclinic in 2019 out of 68 surveyed respondents had a negative self-concept, found 55.9% of them, and less than half had a good self-concept, namely 44.1 % of respondents (Y. A. Siska and Arya Ramadia, 2021).

Many stroke patients can experience negative self-concept. Changes in self-concept can be influenced by parental factors, society, reactions from other people, comparisons with other people, one's role, and family support (Nott et al., 2021). A positive self-concept can be developed through interactions and experiences that originate from self-reflection and environmental exploration from important people in a person's life, one of which is the family which is the closest environment to stroke patients (P. S. Simbolon, 2017) (Shuqi et al., 2023). As long as the patient can still understand what social support means as a life support, family support is very necessary for stroke sufferers. Family support is crucial in determining how well a person recovers, especially stroke sufferers. Support from family members can help patients overcome their problems (M. Suriya, 2018).

Stroke patients can prevent impaired self-concept by taking initial treatment and undergoing post-stroke rehabilitation at the hospital which includes physical therapy, psychological therapy, occupational therapy, and speech therapy (Tarwoto, 2013) (Falk-Kessler, 2020). The management of stroke rehabilitation is divided into three phases, the first is the acute phase, which can last from several days to two weeks after stroke and is characterized by unstable hemodynamic and neurological abnormalities. After stroke, there are two phases: the subacute phase, which lasts between two weeks and six months and is characterized by medical and hemodynamic stability, and the chronic phase, which is characterized by reorganization of the nervous system, generally occurring 6 months after stroke (Patel et al., 2020) (E. Cornelis and L. S. Sengkey, 2021). The independent efforts that can be made to reduce negative self-concepts include *self-awareness* or self-awareness, increasing *self-compassion* or compassion for oneself, improving interpersonal and healthy social relationships, healthy social relationships can be achieved through a family that always gives support for stroke patients. This family support includes information support, emotional support, appreciation support, and instrumental support (P. S. Simbolon, 2017) (Christensen et al., 2019).

Based on the description above, the researcher is interested in conducting research on "Family Support with Self-Concept in Stroke Patients at the Neurology Polyclinic at Dr. R. Koesma Tuban Regency". The research objective was to find out whether there is a relationship between self-concept and the level of support given to the patient's family.

## 2 RESEARCH METHODS

The design of this research uses *correlation analytics* with a *cross sectional approach*. The sampling technique used was *purposive sampling* with a population of 170 stroke patients undergoing outpatient care at the polyclinic. A sample of 121 stroke patients. The independent variable in this study is family support and the dependent variable is self-concept. Data collection was carried out using a questionnaire which was analyzed using the *Chi-Square correlation test*.

## 3 RESULT

**Table 1.** Distribution of Characteristics of Age, Gender, Education, Occupation, Length of Suffering, and Level of Dependence in the Neurology Polyclinic at Dr. R Koesma Tuban in June 2023

Characteristics	Frequency (f)	Presentase (%)
<b>Age</b>		
20 – 40 years (Young Adults)	6	5%
41 – 60 years (Middle Adults)	50	41%
> 60 years (Elderly)	65	54%
<b>Total</b>	<b>121</b>	<b>100%</b>
<b>Gender</b>		
Man	77	64%
Woman	44	36%
<b>Total</b>	<b>121</b>	<b>100%</b>
<b>Pendidikan</b>		
No School	11	9%

Elementary School	26	22%
Junior High School	40	33%
Senior High School	44	36%
College	0	0%
<b>Total</b>	<b>121</b>	<b>100%</b>
<b>Work</b>		
Work	45	37%
Doesn't Work	76	63%
<b>Total</b>	<b>121</b>	<b>100%</b>
<b>Long Suffered</b>		
< 6 Months	50	41%
> 6 Months	71	59%
<b>Total</b>	<b>121</b>	<b>100%</b>
<b>Dependency Level</b>		
Independent	8	6%
Mild Addiction	31	26%
Moderate Dependence	46	38%
Heavy Addiction	29	24%
Dependency	7	6%
<b>Total</b>	<b>121</b>	<b>100%</b>

Table 1 shows that most stroke patients (54%) are > 60 years old, most (64%) are male, almost half (36%) have a high school education, and most (63%) do not work, the majority (59%) suffered a stroke for more than 6 months, almost half (38%) experienced moderate dependence.

**Table 2.** Distribution of Family Support for Stroke Patients at the Neurology Polyclinic at Dr. R Koesma Tuban in June 2023

<b>Family Support</b>	<b>Frequency (f)</b>	<b>Presentase (%)</b>
Good Support	91	75%
Poor Support	30	25%
<b>Total</b>	<b>121</b>	<b>100%</b>

Table 2 shows that the majority (75%) of stroke patients have good support, and a small percentage (25%) have poor support.

**Table 3.** Distribution of Self Concept for Stroke Patients at the Neurology Polyclinic at dr. R Koesma Tuban in June 2023

<b>Self Concept</b>	<b>Frequency (f)</b>	<b>Presentase (%)</b>
Positive Self Concept	77	64%
Negative Self Concept	44	36%
<b>Total</b>	<b>121</b>	<b>100%</b>

Table 3 shows that the majority (64%) of stroke patients have a positive self-concept, and almost half (36%) had a negative self-concept.

**Table 4.** Distribution of Analysis of the Relationship Between Family Support and Self-Concept of Stroke Patients in the Polyclinic dr. R Koesma Regional Public Hospital Tuban in June 2023

<b>Family Support</b>	<b>Self Concept</b>				<b>Total</b>	
	<b>Positive</b>		<b>Negative</b>		<b>f</b>	<b>%</b>
	<b>f</b>	<b>%</b>	<b>f</b>	<b>%</b>		
<b>Good</b>	77	85%	14	15%	91	100%
<b>Less Good</b>	0	0%	30	100%	30	100%
<b>Total</b>	77	64%	44	36%	121	100%

The results of the *chi-square* test significance p value <0.05, p = 0.000 with a strong relationship

Table 4 It was found that almost all (85%) stroke patients with good family support had a positive self-concept, all (100%) stroke patients with poor support had a negative self-concept. From the results of the *chi-square* test obtained p value = 0.000 which means  $p = 0.000 < 0.05$  indicating a strong relationship (0.760) So it can be concluded that there is a relationship between family support and the self-concept of stroke patients towards themselves at the neurology clinic at dr. R Koesma Regional Public Hospital Tuban.

#### 4 DISCUSSION

##### **Characteristics of stroke patients (age, gender, education, occupation, length of suffering, and level of dependency) in the neurology clinic at dr. R. Koesma Regional Public Hospital Tuban**

From the research results, it was found that most stroke patients were > 60 years old, most were male, almost half had a high school education, and most did not work, most had suffered a stroke for more than 6 months, and almost half had moderate dependency.

Stroke can be caused by a person's age. The chance of suffering a stroke increases with age, making it a degenerative condition. However, strokes have begun to attack many young people who are still productive along with advances in technology. In general, stroke can occur at any age, although three-quarters of strokes that cause disability occur in older people (65 years or older) (I. O. Wardhani and S. Martini, 2015) (Yahya et al., 2020). This is related to the fact that interruption of the flow of arterial blood is a major cause of the condition known as stroke. Older adults often experience degenerative changes in their blood arteries, which lead to the development of atherosclerosis. Depending on a person's lifestyle and diet, atherosclerosis can progress quickly or slowly (Farhan Syahti, 2020).

Gender can affect a person having a stroke. This is believed to be related to the hormone estrogen. All blood vessels, including cerebral vessels, are at risk of developing atherosclerotic plaques, but the hormone estrogen plays a role in preventing this. As a result, women of reproductive age are less likely than men to develop vascular disease and atherosclerosis, which increase the risk of stroke. However, a decrease in estrogen production in perimenopause and menopause which occurs in old age, reduces its protective impact. According to a study conducted in 8 different European countries, the risk of stroke increases by 9% per year for men and 10% per year for women (Farhan Syahti, 2020). This is related to other trigger elements that are more common in men than women, such as smoking, drinking alcohol, and other behaviors (L. Asmila et al., 2021).

Through teaching and training, education aims to help individuals or groups change their attitudes and behavior and help realize human maturity. Education impacts learning; the more educated a person is, the easier it is for them to absorb knowledge.

With higher education, a person is more likely to gain knowledge both from other individuals and the media (Budiman and R. Agus, 2013).

In many civilizations, labor plays an important role in everyday life, but it cannot be denied that each culture has its own values and views on what work is. Work is a means to achieve some needs. Work makes humans have the opportunity to contribute to improving their living conditions and the environment around them (N. Siti Anshori, 2013). Some stroke survivors are unable to carry out their regular jobs, and many who have held key positions are forced to resign as a result of the effects of stroke (L. Asmila et al., 2021).

The duration of suffering a stroke affects stroke patients. This is due to the fact that individuals who have had a stroke for a long time, in contrast to those who have just been diagnosed, view their condition differently. According to the Mechanics theory of sick behavior, people who frequently suffer from illness or experience its symptoms have a tendency to act by focusing on their own illness before seeking help. Long-term stroke survivors will feel more hopeless and worthless as a result of their condition; Such pressure can cause the patient to experience depression. Different defense systems will be used by each patient, and the worse the defense mechanism, the more emotional disturbances due to stroke. According to the findings of this study, depression affects the majority of people who have had a stroke for a long time (L. Asmila et al., 2021).

The majority of stroke survivors struggle to perform everyday tasks. This can occur as a result of a stroke, an upper motor neuron disease that can cause voluntary loss of muscle control. Anterior or medial cerebral artery stroke may be a major cause of this, infarcting the motor nerves originating in the frontal cortex, which control movement. Because nerve tissue traverses a pyramidal pattern from the brain to the spinal cord, infarction on the right side of the brain will result in hemiplegia on the left side of the body and vice versa. The cortex, rather than the motor nerves, is often involved in strokes resulting in hemiparesis or hemiplegia. The emergence of these various issues has an impact on reducing the ability of post-stroke patients to carry out daily tasks (D. Djamaludin and I. Dwi, 2020) (Murphy & Werring, 2020).

This study shows that age has an effect on the number of stroke patients because the older a person is, the more susceptible they are to having a stroke. In stroke patients, the male sex is more susceptible to stroke due to risk factors that are more commonly found in men, such as smoking and drinking alcoholic beverages. The higher the education, the better the knowledge so that the knowledge he gets about the disease he suffers from is getting better. Employment status can affect a person's economy, this can lead to a habit of buying fast food and unhealthy lifestyles that have an impact on health. The length of time a stroke suffers affects the condition experienced by a stroke patient, the longer a patient experiences a stroke that does not heal, the more hopeless he or she will be in undergoing treatment, however there are other factors that influence the condition experienced by a stroke patient related to the length of suffering, for example the experience and coping that each person has. patients, the majority of stroke patients have lost their independence, which affects the level of dependency experienced by stroke patients and impacts the patient's need for assistance.



## **Family Support for Stroke Patients at the Neurology Polyclinic at dr. R Koesma Regional Public Hospital Tuban**

The results showed that the majority of stroke patients had good support, and a small proportion had poor support.

In order for a person to know that there are other people who show him, admire and adore him, support from the family is an important condition for people to obtain a reliable source. Family support is the support that family members believe can be given to the family, whether this support actually used or not. Family members believe that helpful individuals always offer help and assistance when needed (P. S. Simbolon, 2017) (Tseung et al., 2019).

Support from other family members is another definition of family, which includes help with household chores. A person's personal support can stop the difficulties arising as a result of the stress they are experiencing. Patients who have strong family support are better able to manage and get through their problems than those who don't. The ideal family should work together to find solutions to the difficulties faced by family members, and they should also take turns caring for sick family members (Fahrizal and D. Darliana, 2016) (Wray et al., 2019).

This study shows that stroke patients have poor support for stroke patients because their families do not understand the importance of family support for healing and the enthusiasm of stroke patients in undergoing treatment. This lack of family attention to stroke patients can be due to families being busy with their own activities. So that the family pays less attention to the patient's needs such as comforting, advising and giving praise to the patient.

## **Self-concept in Stroke Patients at the Neurology Polyclinic at dr. R Koesma Regional Public Hospital Tuban**

The results showed that the majority of stroke patients had a positive self-concept, and almost half had a negative self-concept.

Concepts are defined as "pictures, processes, or things that reason uses to understand something" in the Big Indonesian Dictionary. Those elements of a person that are unique from others are referred to as their "self". Self-concept has a significant impact on behavior and can be seen as an individual's perception or evaluation of himself. Positivity in one's self-perception leads to positivity in one's self-evaluation, which leads to positivity in one's behavior. Positive action will reduce negative emotions such as poor self-esteem, fear, and excessive worry (S. Lenahatu, 2015).

Every change in health problems can become a stressor that has an impact on a person's self-concept, such as physical changes in the body that change a person's body image. Stroke patients can also experience changes in identity, ideal self, roles and self-esteem. Each self-concept reacts differently to disruption of their self-concept. Patients who have had a stroke show a range of self-concept reactions, ranging from self-actualized states (the most adaptable) to identity confusion/depersonalization (maladapt-

tive), which require sensations of irrationality and alienation from the world (P. S. Simbolon, 2017) (Hajalimohammadi et al., 2020).

This study found that stroke patients' poor self-concept had a significant impact. They believe that because of their condition, their family and friends in particular will be a burden to them. This scenario has a significant impact on the patient's psychological functioning because the patient perceives himself as paralyzed, and this disorder causes disturbed feelings of self, including feelings of inadequacy, ugly, shame, and other negative emotions.

### **The Relationship between Family Support and Self-Concept in Stroke Patients at the Neurology Polyclinic at dr. R Koesma Regional Public Hospital Tuban**

From the results of the *chi-square* test, it was found that  $p$  value = 0.000 indicating a strong relationship so that it can be concluded that there is a relationship between family support and the self-concept of stroke patients at the neurological polyclinic of Dr. R Koesma Tuban.

To help stroke victims feel better about themselves, their families must support them. When receiving medical treatment after a stroke, changes in one's body image, such as limb paralysis, slurred speech, crooked mouth, etc., can have an impact on one's self-concept. Families can provide instrumental support to stroke survivors in the form of items that can provide direct assistance, such as money, commodities, food and services. This type of support can help stroke survivors change their altered self-concept. Another type of support the family can offer is informational support, in which the family shares details about the patient's health and life circumstances, makes recommendations about what the patient should do, or offers feedback about the patient's situation and condition. Informational support can make it easier for people to identify and deal with problems. Stroke patients benefit greatly from emotional support in the form of attention, inspiration, guidance throughout the healing process, and changes in the patient's self-concept (P. S. Simbolon, 2017) (Wijekoon et al., 2020).

Because many families still believe that the suffering of post-stroke patients can be overcome even without the help of relatives or close friends, there are still families who do not support the self-concept of stroke patients. The support of the closest person or family is an evaluation of the assistance provided to post-stroke patients by family, other individuals, and the community. Stroke sufferers will face negative changes in their lives if family and community support is insufficient, and vice versa if family and community support is sufficient (Ambarika & Anggraini, 2022). Lack of concern for family, friends, neighbors, or the environment will have a negative impact on the self-concept of post-stroke patients (M. Suriya, 2018).

This research shows that the self-concept of stroke patients can be disturbed by a lack of family support. Patients who have had a stroke have a higher self-concept along with the greater support they receive from their family. The existence of family support can provide benefits for stroke patients to overcome self-concept challenges. Feelings of depression (mild, moderate, or severe) can be triggered by ineffective coping by the individual and inadequate family support. These feelings can develop into self-concept

problems. Therefore, family support is very important for stroke survivors' feelings of self. The term self-concept itself refers to how a person sees or perceives himself in relation to other people.

## 5 CONCLUSION

Based on the results of the research that has been carried out, the following conclusions can be drawn:

1. Most stroke patients are > 60 years old, most are male, almost half have a high school education, most are unemployed, most have suffered a stroke for more than 6 months, and almost half are moderately dependent.
2. Most stroke patients have good support.
3. Most stroke patients have a positive self-concept.
4. There is a relationship between family support and the self-concept of stroke patients at the neurosurgery clinic at dr. R. Koesma Regional Public Hospital Tuban

## 6 SUGGESTIONS

From the research results obtained, suggestions that can be conveyed are as follows:

1. The family maintains the support given to stroke patients and always motivates the patient currently undergoing treatment.
2. Families are always looking for newer information and knowledge about stroke treatment given to families who have suffered a stroke.
3. Patients improve their self-concept, by always having compassion for themselves, increasing awareness about himself, and promote healthy social relationships.

## 7 REFERENCES

Ambarika, R., & Anggraini, N. A. (2022). Family Support for Prevention of Recurrent Stroke Events for Stroke Patients. *Journal of Global Research in Public Health*, 7(1), 8–16.

Budiman and R. Agus, *Pengetahuan dan Sikap Dalam Penelitian Kesehatan.*, vol. 5, no. ISSN. 2013.

Christensen, E. R., Golden, S. L., & Gesell, S. B. (2019). Perceived Benefits of Peer Support Groups for Stroke Survivors and Caregivers in Rural North Carolina. *North Carolina medical journal*, 80(3), 143–148. <https://doi.org/10.18043/ncm.80.3.143>

D. Djamaludin and I. Dwi Oktaviana, “Hubungan Tingkat Ketergantungan Dalam Pemenuhan Aktivitas Kehidupan Sehari-Hari Terhadap Kualitas Hidup Pasien Pascca Stroke Di Wilayah Kerja Puskesmas Metro Pusat,” *Malahayati Nurs. J.*, vol. 2, no. 2, pp. 268–278, 2020.

E. Cornelis and L. S. Sengkey, “Rehabilitasi Medik pada Pasien Stroke Non Hemoragik Dengan Disartria,” *J. Med. dan Rehabil.*, vol. 3, no. 3, pp. 1–9, 2021.

- Fahrizal and D. Darliana, "Dukungan keluarga dalam merawat pasien stroke di poliklinik saraf RSUD Meuraxa Banda Aceh," *J. Ilm. Mhs. Fak. keperawatan*, vol. 1, no. 1, pp. 1–8, 2016.
- Falk-Kessler, J. (2020). 15 Psychological Aspects of Stroke Rehabilitation. *Stroke Rehabilitation E-Book: A Function-Based Approach*, 46(84), 314.
- Farhan Syahti, "KARAKTERISTIK PASIEN STROKE ISKEMIK DI RUMAH SAKIT UMUM DAERAH Dr. H. CHASAN BOESOIRIE TERNATE," *KIERAHA Med. J.*, vol. 2, no. 2, pp. 125–130, 2020.
- Hajalimohammadi, M., Esmaeili, R., Zandi, M., & Zadeh, B. P. (2020). Evaluation of the Effect of Caring Program Based on Roy Adaptation Model in Physiology and Self-Concept Dimensions on Fatigue of Elderly Cancer Patients Undergoing Chemotherapy. *Medico-Legal Update*, 20(2).
- Hendayani, "Pengaruh Dukungan Keluarga Terhadap Konsep Diri Pasien Stroke Yang Mengalami Kelumpuhan Di Poli Klinik Saraf Rumah Sakit Stroke Nasional Bukittinggi Tahun 2018," *J. Kesehat. Med. Sainatika*, vol. 10, no. 2, pp. 11–24, 2018.
- I. O. Wardhani and S. Martini, "The Relationship between Stroke Patients Characteristics and Family Support with Compliance Rehabilitation," *J. Berk. Epidemiol.*, vol. 3, no. 1, p. 24, 2015, doi: 10.20473/jbe.v3i12015.24-34.
- Kemendes RI, "Hasil Riset Kesehatan Dasar Tahun 2018," *Kementrian Kesehatan RI*, vol. 53, no. 9, pp. 1689–1699, 2018.
- Kosasih, C. E., Punthmatharith, B., & Boonyasopun, U. (2020). Family support for patients with stroke: a systematic review. *J Adv Pharm Educ Res Jul-Sep*, 10(3).
- L. Asmila, R. Septiwantary, and Nuraenah, "Depresi Pada Pasien Paska Stroke," *Indones. J. Nurs. Sci. Pract.*, no. 1, pp. 27–32, 2021.
- M. Anggraini, "FAKTOR DUKUNGAN KELUARGA DAN JENIS KELAMIN YANG BERHUBUNGAN DENGAN PERILAKU PASIEN PASCA STROKE DALAM KUNJUNGAN ULANG DI PUSKESMAS MANDIANGIN," vol. 3, pp. 260–266, 2022.
- M. Suriya, "Hubungan Dukungan Keluarga Dengan Perubahan Konsep Diri Pada Pasien Pasca Stroke Di Poliklinik Syaraf Rumah Sakit Stroke Nasional Bukittinggi Tahun 2016," *Jik- J. Ilmu Kesehat.*, vol. 2, no. 1, pp. 86–92, 2018, doi: 10.33757/jik.v2i1.63.
- Murphy, S. J. X., & Werring, D. J. (2020). Stroke: causes and clinical features. *Medicine*, 48(9), 561–566.
- N. Siti Anshori, "MAKNA KERJA (Meaning of Work) Suatu Studi Etnografi Abdi Dalem Keraton Ngayogyakarta Hadiningrat Daerah Istimewa Yogyakarta Dosen Pembimbing: Drs. CD. Ino Yuwono, MA," *J. Psikol. Ind. dan Organ.*, vol. 02, no. 1, 2013.
- Nott, M., Wiseman, L., Seymour, T., Pike, S., Cuming, T., & Wall, G. (2021). Stroke self-management and the role of self-efficacy. *Disability and rehabilitation*, 43(10), 1410-1419.
- P. S. Simbolon, "Hubungan Dukungan Keluarga Dengan Konsep Diri Pasien Stroke Di Rumah

Sakit Santa Elisabeth Medan,” *J. Ilmu dan Teknol. Kesehat.*, vol. 4, no. 2, pp. 167–178, 2017, doi: 10.32668/jitek.v4i2.66.

Padila, “Buku Ajar Keperawatan Medikal Bedah.” 2012.

Patel, R. S., Loganathan, M., Louis, E. K. S. T., & Chopra, A. (2020). Neurological Disorders. *Management of Sleep Disorders in Psychiatry*, 430.

S. Hayulita and D. R. Sari, “Pasien Paska Stroke Di Ruang Rawat Jalan Rumah Sakit Stroke Nasional ( Rssn ) Bukittinggi Tahun 2014,” *J. Ilmu Kesehat. 'Afiyah*, vol. 2, no. April, 2014.

S. Lenahatu, “HUBUNGAN DUKUNGAN KELUARGA DENGAN PERUBAHAN KONSEP DIRIPADA PASIEN PASCA STROKE DI POLIKLINIK SARAF RUMAH SAKIT UMUM DAERAH DR. M. HAULUSSY AMBON,” *J. Chem. Inf. Model.*, vol. 15, no. 2, pp. 9–25, 2015.

S. N. Poniayah Simanullang, “HUBUNGAN DUKUNGAN KELUARGA DENGAN PERUBAHAN KONSEP DIRI PASIEN PASCA STROKE DI RUMAH SAKIT HERNA MEDAN,” vol. 8, pp. 78–82, 2021.

Shuqi, H., Siqin, L., Xiaoyan, W., Rong, Y., & Lihong, Z. (2023). The Risk Factors of Self-Management Behavior among Chinese Stroke Patients. *International Journal of Clinical Practice*, 2023.

Tacikowski, P., Weijjs, M. L., & Ehrsson, H. H. (2020). Perception of our own body influences self-concept and self-incoherence impairs episodic memory. *Iscience*, 23(9).

Tarwoto, “Keperawatan Medikal Bedah Sistem Persarafan.” 2013.

Tseung, V., Jaglal, S. B., Salbach, N. M., & Cameron, J. I. (2019). Implementing caregiver support programs in a regional stroke system. *Stroke*, 50(12), 3585–3591.

Wijekoon, S., Wilson, W., Gowan, N., Ferreira, L., Phadke, C., Udler, E., & Bontempo, T. (2020). Experiences of occupational performance in survivors of stroke attending peer support groups. *Canadian Journal of Occupational Therapy*, 87(3), 173–181.

World Stroke Organization, “Global Stroke Fact Sheet 2022 Purpose : Data sources ;,” *World Stroke Organ.*, vol. 13, pp. 1–14, 2022.

Wray, F., Clarke, D., & Forster, A. (2019). How do stroke survivors with communication difficulties manage life after stroke in the first year? A qualitative study. *International Journal of Language & Communication Disorders*, 54(5), 814–827.

Y. A. Siska Dwi Handayani, Arya Ramadia, “HUBUNGAN DUKUNGAN SOSIAL KELUARGA DENGAN KONSEP DIRI PASIEN PASCA STROKE DI POLIKLINIK RUMAH SAKIT STROKE NASIONAL BUKITTINGGI,” *J. Menara Med.*, vol. 3, no. 2, pp. 66–73, 2021, [Online]. Available: [https://www.google.com/url?sa=t&source=web&rct=j&url=https://jurnal.umsb.ac.id/index.php/menaramedika/article/view/2199&ved=2ahUKEwja66i\\_paDtAhU263MBHdUiAsUQFjAAe\\_gQIAxAB&usq=AOvVaw0bUdEhasRIBe0InxidHJo](https://www.google.com/url?sa=t&source=web&rct=j&url=https://jurnal.umsb.ac.id/index.php/menaramedika/article/view/2199&ved=2ahUKEwja66i_paDtAhU263MBHdUiAsUQFjAAe_gQIAxAB&usq=AOvVaw0bUdEhasRIBe0InxidHJo)

Yahya, T., Jilani, M. H., Khan, S. U., Mszar, R., Hassan, S. Z., Blaha, M. J., Blankstein, R., Virani, S. S., Johansen, M. C., & Vahidy, F. (2020). Stroke in young adults: Current