Correlation Between Family Support And Self-Care Management In Post-Stroke Patients

Nurul Laili

1   Stikes Karya Husada Kediri; nurullaili230279@gmail.com
*   Corresponding Author : Nurul Laili

Abstract: Post-stroke condition is a neurological dysfunction condition that has an impact on changes and decline in body condition for a fairly long period of time. The need for support during recovery and rehabilitation by the family is very much needed by post-stroke patients in managing themselves to optimize their well-being and quality of life. The purpose of this study was to determine the relationship between family support and self-care management in post-stroke patients. The design of this study was correlational using a cross-sectional approach. A population of 23 respondents with purposive sampling obtained 21 samples. The measuring instrument used was a questionnaire and data analysis using the Spearman rank test. The results of the study showed that almost half of the respondents (47.8%) had good family support, and almost half of the respondents (47.8%) had good self-care management. The results of the statistical test from the Spearman's rho test showed a P value of $0.0001 < \alpha$ 0.05, so it can be concluded that there is a positive (unidirectional) and very strong relationship (r = 0.870) meaning that the better the family support provided by the family, the stronger the self-care management in post-stroke patients. Family support is a health component that influences a person to improve their health status and quality of life.

Keywords: Family Support; Self Care Management; Post Stroke

1. Introduction

Family support is needed during the recovery and rehabilitation period due to stroke. Generally, patients will lose some or all of the body's functions in certain parts due to the blood supply being cut off and not functioning properly (Videbeck, 2015). Seeing this condition, stroke patients are unable to carry out activities properly and can limit their scope. The results of the study (Wurtiningsih, 2013), families can provide various types of support to stroke sufferers, such as information or knowledge support, instrumental support, and emotional and appreciation support. Instrumental support can be in the form of rehabilitation therapy, while appreciation support can be in the form of gratitude and more attention.

Family support plays a role in the recovery process and is involved during the recovery and rehabilitation process. Self-care needs include air, water or fluids, food, normal excretion processes, balance of activity and rest, social interaction, avoidance of deadly dangers and human well-being are needed by post-stroke sufferers for their survival. Self-care aims to ensure that physical and mental recovery can be carried out optimally (Siregar et al., 2019)

Stroke requires comprehensive care that includes ongoing recovery efforts over a long period of time. Family as one of the support systems needed by post-stroke sufferers to care for a family member who is having a stroke. The support system provided by family members includes family support to meet and maintain their living needs during the treatment process. However, not all families understand how to care for family members who are post-stroke sufferers.

The World Stroke Organization shows that every year there are 13.7 million new cases of stroke, causing around 5.5 million deaths. Around 70% of deaths and disabilities due to stroke occur in low and middle-income countries. Over the past four decades, the incidence of stroke in these countries has more than doubled. A 42% decrease in the incidence of stroke in high-income countries (Pusdatin Kemenkes RI., 2019). In Indonesia itself, the incidence of stroke in 2020 according to the results of basic health research showed a tendency to increase stroke disease with the number of cases being 1.7 million people (J. Bayer, 2020).

The results of the 2018 Basic Health Research (Riskesdas), based on the diagnosis of doctors, the prevalence of stroke in Indonesia in the population aged 15 years and over reached 10.9% or around 2,120,363 people. This figure has increased from the previous research in 2013 by 7%. In the province of East Kalimantan 15.7% and Yogyakarta 14.6% are the provinces with the highest stroke prevalence rates in Indonesia. Meanwhile, the prevalence of stroke in East Java in 2021 was 12.4%, the prevalence is still above the national average. The number of stroke cases in 2019 reached 43,447, then decreased to 35,692 in 2020, and continued to decrease to 31,447 in 2021. However, in 2021 the number of new stroke cases was 31,915 cases, this figure has increased from the previous year. The incidence of stroke in Kediri Regency is 1,431 people and in the Kandangan Health Center area, stroke sufferers reached 128 cases and in the Kandangan village area there were 24 cases. 5 out of 24 post-stroke patients in Kandangan village said that family support plays a very important role for patients. In addition to reminding and accompanying them to check-ups, the family also reminds them to always take medication as recommended and carry out the therapy that has been taught by health workers to optimize patient self-care.

As many as 13.15% of post-stroke patients have a good level of self-management, 39.47% have a moderate level of self-management, and 47.36% have a poor level of self-management. Research at Encik Mariyam Hospital found a significant relationship between self-management and quality of life of post-stroke patients, with a significance level of $\alpha = 0.00$ and $p = 0.000$ ($p \leq 0.05$). The correlation between the two is very strong ($r=0.967$) and positive, indicating that there is a significant relationship between self-management and quality of life of post-stroke patients at Encik Mariyam Hospital (Marlina, 2020). The results of the study stated that 366 patients who were the subjects of the study, 60% of them were dependent on activities of daily living (ADL) for 36-48 hours after suffering a stroke. One year later, 21% of these patients were independent without assistance in carrying out daily activities, while 36% needed help from others to carry out daily activities (E Wurzinger H et al,. 2021).

According to the research results by (İnci & Temel, 2016) patients who experience stroke especially after being discharged from the Hospital require long-term care at home or institutions. Therefore, emotional support, information, and practical assistance from family members are very important for patients suffering from post-stroke illness to carry out daily activities. Stroke can cause physical and mental disorders such as paralysis of one limb, visual impairment, and difficulty speaking that interfere with daily activities such as self-care (Bierhals et al., 2019), (Indrawati, 2020) which has the potential to affect their quality of life and increase dependence on others including family (Ramanathan et al., 2020). According to research (Biner Ambarita, 2014) regarding the relationship between family support and duration of self-care in stroke patients at Santa Elisabeth Hospital Medan, it was concluded that out of 60% of respondents, 34 people (58.7%) received good family support, 8 people (13.3%) received sufficient family support, and 18 people (30%) experienced a lack of family support.

Success in managing oneself well shows strong self-care management skills in each individual. Effective self-care management can improve a person's functional ability in carrying out daily activities. Functional status includes the ability to perform physical activities and carry out social and cognitive functions needed in living everyday life (Sunarti et al., 2024). Doing physical activities regularly, especially after someone has had a stroke, has a significant positive impact. Healthy physical activity can reduce the risk of cardiovascular disease and can prevent stroke recurrence by maximizing the ability to perform daily activities at home (Agustiyaningsih et al., 2020). Self-care aims to ensure that physical and mental recovery can be carried out optimally (Siregar et al., 2019). Seeing these conditions, post-stroke patients who are unable to carry out activities properly can limit their scope. Lack of family support

can cause patients to experience mental and emotional disorders, as well as decreased productivity which has an impact on the patient's quality of life (Haghgoo et al., 2016).

The positive impact of good family support is that stroke sufferers can return to their activities even though they have not fully recovered from the illness they suffered. The existence of optimal family support can encourage stroke patients to be independent in carrying out their daily activities and can prevent recurrence of stroke. Thus, the function of family support is very important for survival and optimizing the patient's recovery and rehabilitation process. The family acts as an educator through psychological touch that will change the patient's cognitive into adaptive behavior. Family support will also increase support and provide a comfortable environment and provide optimal results in the management of post-stroke patients. Based on the explanation presented above, the author is very interested in conducting research on "The Relationship between Family Support and Self-Care Management in Post-Stroke Patients ".

2. Proposed Method

This study uses quantitative research. The research design used correlational design research, with a cross-sectional approach. The population in this study were patients aged 21-45 years, had good cognitive function and were able to read and write, totaling 25 patients. The sample in this study were post-stroke patients who met the inclusion criteria, totaling 23 people. This study used a non-probability sampling technique (purposive sampling). The independent variable in this study was family support. The dependent variable in this study was self-care management. The instrument used to explain the ability was the Shouthamphon Stroke Self Management Questionnaire questionnaire sheet. To determine the relationship between family support and self-care management in post-stroke patients, statistical analysis was used using the Spearman's rho test with an error rate of $\alpha = 0.05$.

3. Result

General data

No.	Kategori	Frekuensi (F)	Presentasi (%)
1.	Usia		
	46-51 tahun	6	26,1
	52-57 tahun	11	47,8
	>60 tahun	6	26,1
2.	Jenis Kelamin		
	Laki-laki	8	34,8
	Perempuan	15	65.2
3.	Agama		
	Islam	23	100
4.	Data Pendidikan		
	Tidak bersekolah	1	4,3
	SD	7	30,4
	SMP	4	17,4
	SMA	9	39,1
	Sarjana	2	8,7
5.	Status Perkawinan		
	Kawin	18	78,3
	Cerai hidup	0	0
	Cerai mati	5	21,7
6.	Data Pekerjaan		

	PNS	4	17,4
	Pegawai swasta	2	8,7
	Wirausaha	4	17,4
	Petani	3	13,0
	Tidak Bekerja	10	43,5
7.	Telah Stroke selama		
	< 1 bulan	1	4,3
	6- 1 tahun	2	8,7
	1-5 Tahun	15	65,2
	>5 Tahun	5	21,7
8.	Dampak Stroke		
	Pelo	11	47,8
	Lumpuh sebagian	5	21,7
	Lemah sebagian	7	30,4
9.	Usia (Keluarga pasien)		
	25-35 tahun	9	39,1
	36-46 tahun	8	34,8
	47-57 tahun	4	17,4
	> 60 tahun	2	8,7
10.	Jenis Kelamin		
	Laki-laki	8	34,8
	Perempuan	15	65,2
11.	Data Pendidikan (Keluarga pasien)		
	SD	1	4,3
	SMA	16	69,6
	Sarjana	6	26,1
12.	Data Pekerjaan (Keluarga pasien)		
	PNS	5	21,7
	Pegawai swasta	10	43,5
	Wirausaha	1	4,3
	Petani	5	21,7
	Tidak Bekerja	1	4,3
13.	Telah merawat selama		
	< 1 bulan	1	4,3
	6- 1 tahun	2	8,7
	1-6 tahun	15	65,2
	> 5 tahun	5	21,7
14.	Hubungan dengan pasien		
	Suami	4	17,4
	Istri	2	8,7
	Anak	17	73,9
15.	Penghasilan keluaga		
	Rp. 2.000.000,00	7	30,4

	Rp. 2.000.000,00-Rp. 5.000.000,00	13	56,5
	Rp. > 5.000.000,00	3	13,0
	Total	23	100,0

Custom Data

Identification of family support in post-stroke patients

Category	Frequency	%
Good	11	47,8
Enough	10	43,5
Minus	2	8,7
Total	23	100

Identification of self-care management in post-stroke patients

Category	Frequency	%
Good	9	39,1
Enough	13	56,5
Minus	1	4,3
Total	23	100

Analysis of the Relationship between Family Support and Self-Care Management in Post-Stroke Patients

Family Support	Self-Care Management						Total
	Good		**Enough**		**Minus**		
	f	**%**	**f**	**%**	**f**	**%**	
Good	4	44,4	7	53,8	0	0	11
Enough	4	44,4	6	46,2	0	0	10
Minus	1	11,1	0	0	1	100	2
Total	9	100	13	100	1	100	23
P value 0,001 < α 0,05				r = 0,870			

Based on the data shows that there is a relationship between family support and self-care management in post-stroke patients as seen from the Spearman's rho test showing a P value of 0.0001 < α 0.05 then H1 is accepted. The correlation coefficient of 0.870 shows that there is a positive (unidirectional) and very strong relationship. This means that the better the family support provided by the family, the stronger the self-care management in post-stroke patients.

4. Discussion

The results of the analysis show that there is a relationship between family support and self-care management in post-stroke patients as seen from the Spearman's rho test showing a P value of 0.0001 < α 0.05, so H1 is accepted. The correlation coefficient of 0.870 shows that there is a positive (unidirectional) and very strong relationship. This means that the better the family support provided by the family, the stronger the self-care management in post-stroke patients. Family support is included in the supporting factors that influence a person's behavior and lifestyle so that it has an impact on their health status and quality of life. Someone who gets good support from their family will feel accepted and cared for. This feeling will improve a person's quality of life which will later create a drive in a person to recover in this case self-care management as a form of reciprocity

for the support that has been given. This drive is the patient's motivation to carry out self-care management in stroke recovery.

Support can be obtained from anywhere but the best support is given by family which in this case is given more in the form of emotional support. This was obtained from the results of the analysis of answers to the questionnaire where the highest average score refers to emotional support. Yaner et al. (2020) this emotional support has an affective function of the family in meeting psychosocial needs by caring for each other, love, warmth, mutual support and respect between family members, trust, attention, listening and being heard. Because when in recovery or doing self-care management a person will feel stress and this support is the most needed support to reduce depression about the new situation he is experiencing which is a fairly big problem in his life because the role that can usually be done is now hampered by the disease he suffers from. For this reason, this emotional support is very much needed by patients in recovery to fulfill daily activities in this case self-care management to be able to focus on their activities not on the problems they are experiencing.

Self-care management motivation is always possessed by post-stroke patients who are undergoing rehabilitation programs, especially in carrying out daily activities, without good self-care management, the patient will not want to undergo any rehabilitation program even though it is good for their recovery. This motivation arises because of the strong desire in the individual to recover and return to normal life before having a stroke. Stroke makes them desperate because they feel as if the dysfunction of their organs can no longer be overcome.

Self-confidence is an important factor in self-care management because without self-confidence, individuals tend to feel incapable or afraid of failing in carrying out self-care management. Self-confidence plays an important role in self-care management, especially for individuals with chronic diseases. Riegel et al. (2017) defines self-care as a naturalistic decision-making process to maintain health through health promotion and disease management practices. Self-confidence in this context relates to a person's belief in their ability to maintain health in this case carrying out daily activities and managing their health conditions effectively. Post-stroke patients who have self-confidence tend to be more motivated to take positive actions related to their self-care, such as following treatment, exercising as recommended, or regulating a healthy diet. Self-confidence also increases an individual's ability to overcome challenges or obstacles in carrying out self-care management. Self-confidence increases the perception of control over one's own health, which can encourage individuals to be more active in making choices that support health.

With self-care management, sufferers will be more active and the desire to recover will arise. This study is in accordance with the research of Widyastika et al. (2023) where family support that is not maximal in post-stroke sufferers is instrumental support. Instrumental support provided can be in the form of time, energy and costs. Instrumental support can be realized in actions such as helping with medical expenses, delivering check-ups, helping with daily activities such as eating and bathing and providing equipment that makes transportation easier for post-stroke patients. Family support for a sick family member is very important in the healing and recovery process. This family support is in the form of support in the form of materials, information, support in carrying out daily routine activities, support in treatment and care, psychological support, furthermore family support can have a positive impact on improving the quality of life.

The same study by Mayo et al. (2015) stated that stroke has a major impact on life and can increase dependence on others. So the role of the family is support or a very important source for the family in helping with self-care needs during the patient's recovery period. The family plays a very important role in providing support for patient recovery. The support provided by the family can be realized through providing support to post-stroke sufferers. Psychologically, if support from the family of stroke sufferers is able to optimize the emotional, appreciation, information and instrumental aspects in the form of attention, advice, suggestions, job provision and so on, then the family support will be able to improve coping strategies in post-stroke sufferers so that sufferers feel that they

are needed, cared for and feel that they are no different from other humans. The family is very important and the closest to the patient and is the main caregiver for the patient, the family plays a role in determining the method or care and also support, the family is very important when a family member has a stroke. The role itself is a series of behaviors that are expected according to the social position given (Wardhani & Martini, 2015). High family support causes independence in post-stroke patients because family support is interpersonal support that includes attitudes, actions and acceptance of other family members, so that family members feel that someone cares about them and supports them in their lives, so that physical, mental and emotional changes in stroke patients really need family support because family support can help these patients to rehabilitate in the recovery process so that patients can be independent in their activities as soon as possible. Good family support can affect the ability to manage self-care in someone who has limitations in meeting their needs, so with the presence of a family beside the patient, self-care can improve the patient's development process throughout the life cycle so that self-care is very effective (Andriani et al., 2022).

5. Conclusions

There is a relationship between family support and self-care management in post-stroke patients, as shown by very strong results, meaning that the better the family support provided, the stronger the self-care management. The family has a very important role in the rehabilitation process of patients who experience residual symptoms and the impact of chronic diseases, one of which is Stroke. Motivation and support provided by the family in the form of information, emotional, instrumental and appreciation can improve the quality of life of patients as shown by their self-management becoming better through activities and activities that can be done.

6. References

[1] T. Agustiyaningsih, O. F. D. Marta, and E. W. Mashfufa, "Identification of Physical Activities in Post Stroke Patients," Jurnal Keperawatan, vol. 11, no. 1, pp. 91–96, 2020, doi: 10.22219/jk.v11i1.11098.

[2] S. N. Andriani, A. Hamzah, L. Erlina, and H. Rumahorbo, "Gambaran Kepatuhan Kontrol Pasien Paska Stroke Berdasarkan Faktor Demografi," Jurnal Keperawatan Indonesia Florence Nightingale, vol. 2, no. 1, pp. 9–20, 2022, doi: 10.34011/jkifn.v2i1.71.

[3] J. Bayer, "Social Media Elements, Ecologies, and Effects," Annu. Rev. Psychol., vol. 71, no. 1, 2020.

[4] J. B. Bayer, I. A. Anderson, and R. S. Tokunaga, "Building and breaking social media habits," Curr. Opin. Psychol., vol. 45, Jan. 2022, doi: 10.1016/j.copsyc.2022.101303.

[5] I. O. Bierhals et al., "Associations between body mass index, body composition and bone density in young adults: Findings from a southern Brazilian cohort," BMC Musculoskelet. Disord., vol. 20, no. 1, pp. 1–10, 2019, doi: 10.1186/s12891-019-2656-3.

[6] B. Ambarita, "Pembangunan Karakter Menuju Generasi Emas tahun 2045," Generasi Kampus, vol. 7, no. 1, pp. 1–17, 2014.

[7] H. E. Wurzinger, T. Abzhandadze, L. Rafsten, and K. S., "Dependency in Activities of Daily Living During the First Year After Stroke," Front. Neurol., vol. 8, no. 12, 2021, doi: 10.3389/fneur.2021.736684.

[8] M. Glowiak, "What is Self-Care and Why is it Important For You?," Southern New Hampshire University, 2024.

[9] R. Haghgoo, F. Hajifattahi, M. Azarshab, and S. passiLesan, "Evaluation of the Relationship between Passive Smoking and Oral Pigmentation in Children," J. Dent., vol. 7, no. 3, 2016.

[10] F. H. İnci and A. B. Temel, "The effect of the support program on the resilience of female family caregivers of stroke patients: Randomized controlled trial," Appl. Nurs. Res., vol. 32, pp. 233–240, 2016, doi: 10.1016/j.apnr.2016.08.002.

[11] Indrawati, "Dukungan Keluarga Dengan Self care Pasien Stroke," Jurnal Borneo Cendekia, vol. 3, no. 2, pp. 40–46, 2020.

[12] Marlina, "Sustainable Marine Ecotourism Management: A Case of Marine Resource Conservation Based On Local Wisdom of Bajo Mola Community In Wakatobi National Park," GeoJournal of Tourism and Geosites, vol. 32, no. 4, pp. 1317–1323, 2020.

[13] H. Maryati, S. Praningsih, and Siswati, "The Relationship Between Self-Care Behavior and Quality Of Life Of Hypertension Patients In Rejoagung Village," J. Ilm. Keperawatan Stikes Pemkab Jombang, vol. 9, no. 2, pp. 477–484, 2023.

[14] N. E. Mayo, S. Anderson, and R. Barclay, "Getting on With the Rest of your Life Following Stroke: A Randomized Trial of a Complex Intervention Aimed at Enhancing life Participation Post Stroke," Clin. Rehabil., vol. 29, no. 12, pp. 1198–1211, 2015, doi: 10.1177/0269215514565396.

[15] M. Muji, "Peran Ibu Pada Pola Pendidikan Anak Dalam Keluarga," J. Islamic Educ., vol. 2, no. 1, pp. 1–12, 2022, doi: 10.61456/tjie.v2i1.30.

[16] T. S. Naziyah and I. A. Pratiwi, "Hubungan Dukungan Keluarga Dengan Perawatan Diri (Self Care) Pasien dengan Stroke Non Hemoragik Di Ruang Rawat Inap RS Islam Jakarta Cempaka Putih Tahun 2018," J. Ilmu Keperawatan, vol. 1, no. 1, pp. 1–8, 2019.

[17] Notoatmodjo, Promosi Kesehatan dan Perilaku Kesehatan. Jakarta: Rineka Cipta, 2016.

[18] Pusdatin Kemenkes RI, "InfoDatin Glaukoma 2019," Kementerian Kesehatan RI, pp. 1–9, 2019.

[19] K. Ramanathan et al., "COVID-19 resource centre," Elsevier, pp. 19–21, Jan. 2020.

[20] D. Ramawati, A. Allenidekania, and B. Besral, "Kemampuan Perawatan Diri Anak Tuna Grahita Berdasarkan Faktor Eksternal dan Internal Anak," J. Keperawatan Indones., vol. 15, no. 2, pp. 89–96, 2012, doi: 10.7454/jki.v15i2.32.

[21] B. Riegel, D. K. Moser, and H. G. Buck, "American Heart Association Council on Cardiovascular and Stroke Nursing; Council on Peripheral Vascular Disease; and Council on Quality of Care and Outcomes Research," J. Am. Heart Assoc., vol. 6, no. 9, pp. 1–10, 2017, doi: 10.1161/JAHA.117.006997.

[22] E. Rusminingsih and M. Dian, "Hubungan Kepatuhan Minum Obat Pasien Hipertensi dengan Kejadian Stroke Iskemik di RSJD Dr. RM. Soedjarwadi Provinsi Jawa Tengah," J. Ilmu Kesehatan, vol. 13, no. 27, pp. 1–10, 2018.

[23] S. L. Videbeck, Psychiatric Mental Health Nursing. Philadelphia: Lippincott Williams & Wilkins, 2015.

[24] P. S. Siregar, E. Anggeria, and L. Laoli, "Hubungan Antara Dukungan Keluarga Dengan Kemampuan Perawatan Diri (Self-Care) Pada Pasien Pasca Stroke di RSUD Pirngadi Kota Medan," J. Keperawatan Priority, vol. 2, no. 2, pp. 70–79, 2019.

[25] N. A. Sitohang and C. A. Adella, "Pengaruh Pendidikan Kesehatan Terhadap Pengetahuan dan Sikap Siswa SMP Dharma Pancasila Tentang Manajemen Kesehatan Menstruasi," J. Riset Hesti Medan Akper Kesdam, vol. 4, no. 2, pp. 126–135, 2020, doi: 10.34008/jurhesti.v4i2.146.

[26] C. Stevenson, J. R. H. Wakefield, B. Kellezi, R. J. Stack, and S. Dogra, "Families as Support and Burden: A Mixed Methods Exploration of the Extent to Which Family Identification and Support Predicts Reductions in Stress Among Disadvantaged Neighbourhood Residents," J. Soc. Pers. Relatsh., vol. 39, no. 4, pp. 886–907, 2022, doi: 10.1177/02654075211050071.

[27] S. Sunarti, W. P. Tyas, M. Helmi, L. A. Dewi, and N. C. Medina, "Impact of Industrial Estate Development on Infrastructure Sustainability in the Wijayakusuma Industrial Area, Semarang," IOP Conf. Ser.: Earth Environ. Sci., vol. 1353, no. 1, 2024, doi: 10.1088/1755-1315/1353/1/012003.

[28] 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.

[29] T. P. Widyastika, R. Zulfitri, and M. Rustam, "Hubungan Dukungan Keluarga dengan Kualitas Tidur Lansia Pasca Stroke di Masa Pandemi Covid-19," J. Vokasi Keperawatan, vol. 6, no. 1, pp. 118–130, 2023, doi: 10.33369/jvk.v6i1.24915.

[30] W. Wulan, Kesehatan Modern dan Tradisional: Hemoragik (di Ruang Flamboyan Rumah Sakit Umum Jombang). Jombang: Stikes Icme, 2016.

[31] B. Wurtiningsih, "Dukungan Keluarga Pada Pasien Stroke di Ruang Saraf RSUP DR. Kariadi Semarang," Medica Hospitalia: J. Clin. Med., vol. 1, 2013, doi: 10.36408/mhjcm.v1i1.42.

[32] N. R. Yaner, T. Sukartini, K. Kristiawati, and M. R. Maulana, "Family Support Required to Increase Compliance of Medical Control of Patients with Cancers," J. Ners, vol. 14, no. 3, pp. 331–335, 2020, doi: 10.20473/jn.v14i3.17177.