



Family Support in Accompanying Post-Stroke Patients Undergoing Physiotherapy: Assessed from the Onset of the Stroke

Veronika Debi Purnomo¹, Mei Rianita Elfrieda Sinaga²

^{1,2} Sekolah Tinggi Ilmu Kesehatan Bethesda Yakkum, Yogyakarta, Indonesia

ARTICLE INFORMATION

Received: October 14, 2024

Revised: July 15, 2025

Available online: August 2025

KEYWORDS

Family Support; Physiotherapy; Post-Stroke Patients

CORRESPONDENCE

E-mail: mei@stikesbethesda.ac.id

A B S T R A C T

Stroke is a disease with a prevalence of 10.9% in 2018, which increased by 3.9% over the last five years, leading to complications such as weakness of physical limbs. Family support influences post-stroke patients' recovery through emotional, appreciation, instrumental, and information support. This study describes family support in accompanying post-stroke patients undergoing physiotherapy after 1-6 months of the stroke attack. The results showed that most respondents were aged 56-65 years (43.1%), male (52.9%), and retired/not working (31.4%). In addition, they had a senior high school education (39.2%), and the type of stroke was ischemic stroke or non-hemorrhagic stroke (62.8%). Family support in accompanying post-stroke patients undergoing physiotherapy after 1-6 months of the attack was mainly in the good category, namely 48 respondents (94.1%). The most significant type of family support was emotional support, as shown by the choice "always" in item 2, with 50 respondents. In conclusion, family support in accompanying post-stroke patients undergoing physiotherapy after 1-6 months of the stroke attack is good, especially in emotional support. Thus, families should maintain and increase family support so that post-stroke patients have the motivation to undergo routine checkups and physiotherapy.

INTRODUCTION

Stroke is a medical emergency. The sooner stroke treatment is implemented, the better its outcomes will be (Pinzon, 2016). According to the WHO, stroke is a neurological disease that causes very rapid clinical symptoms in the form of focal and global neurological deficits. It lasts more than 24 hours and can be fatal. One of the four most crucial non-communicable diseases is cardiovascular disease, namely, coronary heart disease and stroke.

According to 2018 World Stroke Organization data, 13.7 million new strokes occurred, and around 5.5 million people died from stroke every year. Its prevalence varies by region, with 7 million (3%) in the United States, while in China, it was around 1.8% in rural areas and 9.4% in urban areas. Globally, China, like Africa and North America, had a relatively high mortality from stroke, namely 19.9% (Kemenkes RI Infodatin, 2019). In Indonesia, stroke is the third leading cause of death after heart disease and cancer. Based on the 2018 Indonesian Basic Health Research, the prevalence of stroke increased from 7% to 10.9% compared to 2013. Nationally, the prevalence of stroke in Indonesia in 2018, based on a doctor's diagnosis at age ≥ 15 years, was 10.9% or 2,120,362 people. Its prevalence increased by 3.9% in the last five years (Ferawati *et al.*, 2020). Based on age, individuals with stroke were mainly aged 55-64 years (33%), while the least were aged 15-24 years. Men and women had almost the same proportion of stroke events. In addition, 29.5% of individuals with stroke had education levels of elementary school. Its

prevalence in urban areas was also greater (63.9%) compared to those living in rural areas (36.1%) (Kementerian Kesehatan RI, 2018). Furthermore, three provinces in Indonesia with the highest prevalence were East Kalimantan (14.7%), Yogyakarta (14.6%), and North Sulawesi (14.2%) (Kemenkes RI Infodatin, 2019). Its prevalence in Yogyakarta was high because of the many older people (Kementerian Kesehatan RI, 2018).

Stroke can cause various complications, including physical weakness, which generally occurs in the arms and legs. This weakness disrupts daily activities, so physiotherapy is crucial to train stroke survivors' muscles and body movements (Sudarsini, 2017). About 30% of individuals with stroke die within three months, and less than 20% experience severe disabilities. However, over 50% of them survive and can be independent in self-care. Factors affecting recovery depend on the severity of the brain injury (such as the type of stroke and part of the body affected), complications, and the patient's self-care abilities before the stroke. The patient's attitude, support from family/nurses, and appropriate rehabilitation can also significantly impact stroke recovery (Ferawati *et al.*, 2020). In one hospital in Yogyakarta, Post-stroke patients undergoing physiotherapy had the highest number of visits. The number was among the top three highest visits from 2018 to 2022. The post-stroke patients undergoing physiotherapy experienced complications such as motor disorders, and around 65% to 85% experienced sensory disorders (Bashori, 2023).

The recovery of stroke survivors undergoing physiotherapy is influenced by family support because it is a need for patients. The support is needed in the form of comfort, attention, and appreciation from other people (Dewi, 2023). Stroke survivors undergoing physiotherapy need family support to help them, particularly with activities in their daily lives. The preliminary study of six patients at one of the large hospitals in Yogyakarta interviewed six patients who regularly came for physiotherapy for their physical recovery and a medical rehabilitation doctor who routinely checked these six patients. Three of the six patients said their family accompanied them during physiotherapy. In contrast, two said that they came alone during physiotherapy because they felt able to go alone, and one said they came alone because their family had moved away since the stroke attack. This study describes family support in accompanying post-stroke patients undergoing physiotherapy after 1-6 months of the stroke attack. The results of this research can become a reference for future research to develop research relating to family support in accompanying patients.

METHOD

This research design was descriptive quantitative with a cross-sectional approach. The population was 59 post-stroke patients undergoing physiotherapy after 1-6 months of the stroke attack. The researcher used purposive sampling, with a total sample of 51 respondents who met the inclusion criteria. Data collection

was carried out for 1 month using a closed questionnaire. The family support questionnaire was adopted from Yunita's research questionnaire (Yunita, 2022). The validity test obtained $r = 0.331-0.684$, and a reliability test with a Cronbach's Alpha value of 0.628. Thus, the family support questionnaire was valid and reliable. It consisted of 12 statements with four components of family support: emotional support in items 1 and 2, appreciation support in items 3 and 4, instrumental support in items 5 to 8, and information support in items 9 to 12. It used a Likert scale with four answer choices: always, often, sometimes, and never. The scoring was: always (4), often (3), sometimes (2), and never (1). The categorization of family support was: good with a score range of 37-48, moderate with 25-36, and poor with a range of 12-24. The test used a univariate test with frequency distribution. This research obtained ethical approval from the Health Research Ethics Committee, Bethesda Hospital, Yogyakarta, Indonesia, with certificate number 10/KEPK-RSB/III/24.

RESULT

Table 1. The Characteristics of Post-Stroke Patients Undergoing Physiotherapy after 1-6 months of the stroke attack

Characteristics of Respondents	Frequency (n)	Percentage (%)
Age		
17 – 25 years	0	0
26 – 35 years	1	2
36 – 45 years	3	5.9
46 – 55 years	14	27.4
56 – 65 years	22	43.1
> 65 years	11	21.6
Sex		
Female	24	47.1
Male	27	52.9
Education		
No School	0	0
Elementary School	5	9.8
Junior High School	3	5.9
Senior High School	20	39.2
Diploma	7	13.7
Bachelor	12	23.5
Postgraduate	4	7.9
Occupation		
Civil servant/Soldier/Police	7	13.7
Self-employed/Entrepreneur/Trader	5	9.8
Private-Employee/Laborer/Farmer/Fisherman	13	25.5
Retirement/Not working	16	31.4
Other	10	19.6
Type of stroke		
Hemorrhagic	5	9.8
Non-Hemorrhagic	46	90.2
Total	51	100

Table 1 demonstrates that most respondents are aged 56-65 years (43.1%), male (52.9%), and retired/not working (31.4%). In addition, they have a senior high school education (39.2%), and the type of stroke is ischemic stroke or non-hemorrhagic stroke (62.8%).

Table 2. The Type of Family Support in Accompanying Post-Stroke Patients Undergoing Physiotherapy after 1-6 months of the stroke attack

The Type of Family Support	Answer Choices				Total
	Always	Often	Sometimes	Never	
Emotional Support					
Item 1	40	4	5	2	51
Item 2	50	0	1	0	51
Appreciation Support					
Item 3	35	10	6	0	51
Item 4	43	4	4	0	51
Instrumental Support					
Item 5	43	4	2	2	51
Item 6	45	4	1	1	51
Item 7	46	2	1	2	51
Item 8	44	5	1	1	51
Information Support					
Item 9	42	5	3	1	51
Item 10	47	2	1	1	51
Item 11	41	7	2	1	51
Item 12	37	8	2	4	51
Total	513	55	29	15	612

Table 2 indicates that the most significant type of family support in accompanying stroke survivors after 1-6 months of the stroke attack who are undergoing physiotherapy is emotional support, as shown by the answer choice "always" in item 2, with 50 respondents.

Table 3. Family Support in Accompanying Post-Stroke Patients Undergoing Physiotherapy after 1-6 months of the attack

Family Support	Frequency (n)	Percentage (%)
Good	48	94.1
Moderate	2	3.9
Poor	1	2
Total	51	100

Table 3 shows that family support in accompanying post-stroke patients undergoing physiotherapy after 1-6 months of the stroke attack is mainly in the good category, namely 48 respondents (94.1%).

DISCUSSION

The Characteristics of Respondents

In this investigation, almost half of post-stroke patients undergoing physiotherapy after 1-6 months of stroke attack were in the 56-65 year age group (Table 1). Older age will increase the stroke risk factors (Ferawati *et al.*, 2020). It is also supported by the result of Indonesian Basic Health Research in 2018,

which found that the most individuals with stroke were aged 55-64 years (33%), while the least were aged 15-24 years.

In addition, half of the male respondents experienced a stroke compared to females, namely 27 respondents (52.9%). Men are more susceptible to stroke than women because women tend to have healthier heart conditions and blood vessels, especially those of childbearing age (Ferawati *et al.*, 2020). The authors also noticed that during visits to the medical rehabilitation clinic, more men visited to undergo physiotherapy.

Furthermore, 39.2% of the respondents' education was senior high school education (Table 1). Individuals with a low level of education potentially had more strokes than individuals with a higher level of education. It is also following the results of the 2018 Indonesian Basic Health Research, which stated that the prevalence of stroke tended to be higher in people with low education. Low education may also indicate that a person's knowledge of maintaining a lifestyle and preventing stroke is low.

Moreover, most of the respondents' occupations in this paper were retired or not working (31.4%). Someone with low education had low knowledge about stroke prevention and tended to have a low income, making it challenging to prevent and treat stroke (Kementerian Kesehatan RI, 2018). Thus, low income is an obstacle to someone getting stroke treatment.

The type of stroke that was most experienced in this paper was a non-hemorrhagic stroke, with as many as 46 respondents (90.2%). Initial study in the hospital's Medical Records Department revealed that the most common type of stroke was a non-hemorrhagic stroke. Patients with hemorrhagic stroke potentially can increase mortality compared to non-hemorrhagic stroke, so that the life expectancy is greater in patients with ischemic stroke.

The Type of Family Support

Optimal family support manifests in attitudes, actions, and acceptance of family members in the form of informational support, appreciation or assessment support, instrumental support, and emotional support. Therefore, family support is an interpersonal relationship that involves the attitudes, actions, and acceptance of family members so that someone can feel cared for (Friedman, 2014).

Regarding emotional support, 50 respondents in this research chose the answer option "always" in item 2. They felt their family still loves and pays attention to them during illness. Emotional support is where the family acts as a safe and peaceful place to rest and for recovery, and helps mastery of emotions (Safira Nahar Fitriana and Padoli, 2021). This research aligns with a study that revealed that emotional support was the most dominant family support component (Sudrajad, 2021). Similar results were also found in Mamonto's (2019) research, showing that the most predominant type of family support was emotional support, namely 20 respondents (90%) (Mamonto, 2019). Emotional support is crucial for patients, as the

family should provide more attention to the patient during the illness. The family is a safe and comfortable place for patients who can support recovery and help patients control their emotions.

In addition, 43 respondents chose the answer option "always" in item 4. They believed that their family understood the illness they were experiencing. Appreciation support is appreciation given by family members according to the conditions they are experiencing, where this support is in the form of a positive response from the people around them (Safira Nahar Fitriana and Padoli, 2021). Mamonto's (2019) research also showed that 16 respondents (72.7%) received appreciation support. The appreciation support potentially increases the patient's motivation and ability to undergo physiotherapy. With motivation, stroke survivors will be more enthusiastic about and will have a desire to recover.

Regarding instrumental support, 46 respondents in this paper chose the answer option "always" in item 7. They said that the family helped with all financial costs. Instrumental support is assistance given directly, for example, by giving or lending money and providing direct assistance to carry out specific tasks (Safira Nahar Fitriana and Padoli, 2021). A previous Mamonto (2019) study showed that 16 respondents (72.7%) received instrumental support. Thus, the family in this investigation could provide time and facilities for the patient's stroke treatment. The family was an intermediary between the patient and health services by dropping off and picking up for checkups and then doing physiotherapy. The family was also a financial source in stroke treatment because the stroke survivors could not work.

Furthermore, 47 respondents chose the answer option "always" in item 10. They mentioned that the family reminded them to check up, take medicine, exercise, and eat. Information support assists in providing information and ideas through the communication process. It provides advice, direction, and feedback (Safira Nahar Fitriana and Padoli, 2021). The research results of Mamonto (2019) showed that 13 respondents (59.1%) received information support. The informative support in this research mainly was that the family always informed stroke survivors about the results of examinations and treatment from doctors. The family explained things that stroke survivors did not understand related to their illness and physiotherapy. Thus, the information support can increase patients' knowledge about their health and the recovery process.

Family Support

Family support for post-stroke patients undergoing physiotherapy after 1-6 months of the stroke attack was mainly good, namely 94.1% (Table 3). Family support plays an essential role in a patient's recovery. It is a form of providing support to family members who are experiencing problems. Family provides maintenance and emotional support to achieve the welfare of family members and meet psychosocial needs (Potter and Perry, 2015). This study's result aligns with research by Fitriana et al. (2021), showing that individuals with hypertension had good family support. An investigation also revealed that the most stroke survivors undergoing physiotherapy received good family support, namely 40 respondents (80%)

(Purba, 2018). In addition, similar results from Unak's research (2021) showed good family support in post-stroke patients in the Outpatient Installation, namely 41 respondents (56.2%) (Unak, 2021). Good family support by families to stroke survivors indicates paying attention to feeding them, accompanying them to see a doctor and undergo physiotherapy, and reminding them to check up and take medication. Family support can be an influential factor in determining an individual's health beliefs and values and finding good treatment. Family support is crucial for post-stroke patients undergoing physiotherapy because it will motivate the patient with the family's attention.

CONCLUSION

Family support in accompanying post-stroke patients undergoing physiotherapy after 1-6 months of the stroke attack is good, especially in emotional support. Thus, families should maintain and increase family support so that post-stroke patients have the motivation to undergo routine checkups and physiotherapy.

REFERENCES

- Bashori. (2023). *“SENTIL PETROK”: Sensasi taktil pada penderita stroke*. Dinas Kesehatan Daerah Istimewa Yogyakarta. <https://dinkes.jogjaprovo.go.id/berita/detail/sentil-petrok-sensasi-taktil-pada-penderita-stroke>
- Dewi. (2023). *Perawatan paliatif [Palliative care]*. Yayasan Hamjah Diha.
- Ferawati, I. R., Salma, A. A., & Yayuk, I. R. (2020). *Stroke “bukan akhir dari segalanya”: Cegah dan atasi sejak dini [Stroke “isn’t the end of it”: Prevent and treat it early]*. Guepedia.
- Friedman, M. M. (2014). *Buku ajar keperawatan keluarga (Riset, teori, dan praktik) [Textbook of family nursing: Research, theory, and practice]*. EGC.
- Kementerian Kesehatan Republik Indonesia. (2019). *Infodatin: Stroke don’t be the one*. Pusat Data dan Informasi Kementerian Kesehatan RI.
- Kementerian Kesehatan Republik Indonesia. (2018). *Riset kesehatan dasar (Riskesdas)*. https://kesmas.kemkes.go.id/assets/upload/dir_519d41d8cd98f00/files/Hasil-riskesdas-2018_1274.pdf
- Mamonto, P. S. (2019). *Identifikasi dukungan keluarga dalam merawat anak autis di SDLB/C Alpha Kumara Wardhana II Surabaya [Identification of family support in caring for autistic children at SDLB/C Alpha Kumara Wardhana II Surabaya]* (Skripsi, Universitas Muhammadiyah Surabaya).
- Potter, P. A., & Perry, A. G. (2015). *Buku ajar fundamental keperawatan (Edisi 7) [Nursing fundamentals textbook] (7th ed.)*. EGC.
- Purba, N. (2018). *Hubungan dukungan keluarga terhadap motivasi pasien stroke melakukan fisioterapi di RSUP H. Adam Malik Medan [The relationship between family support and the motivation of stroke patients undergoing physiotherapy at H. Adam Malik General Hospital, Medan]* (Skripsi, Universitas Sumatera Utara).
- Safira, N. F., & Padoli. (2021). *Hubungan dukungan keluarga dengan kepatuhan diet pada klien hipertensi di wilayah kerja Puskesmas Pacitan [The relationship between family support and diet compliance*

in *hypertension* clients in the Pacitan Community Health Center work area]. *Jurnal Keperawatan*, 15(3).

Sudarsini. (2017). *Fisioterapi [Physiotherapy]*. Penerbit Gunung Samudera.

Sudrajad, T. A. (2021). *Hubungan dukungan keluarga terhadap motivasi pasien pasca stroke selama menjalani latihan fisioterapi di RS Cibitung Medika [The relationship between family support and post-stroke patient motivation while undergoing physiotherapy exercises at Cibitung Medika Hospital]* (Skripsi, Universitas Prima Indonesia).

Unak, U. (2021). *Hubungan dukungan keluarga dengan kualitas hidup pasien pasca stroke di instalasi rawat jalan Rumah Sakit Royal Progress Jakarta Utara [The relationship between family support and the quality of life of post-stroke patients in the outpatient installation of Royal Progress Hospital, North Jakarta]* (Skripsi, Universitas Binawan).

Yunita. (2022). *Hubungan dukungan keluarga dengan gambaran onset pasien stroke di masa pandemi Covid-19 di Ruang Galilea 2 Saraf Rumah Sakit Bethesda Yogyakarta tahun 2022 [The relationship between family support and description of the onset of stroke patients during the Covid-19 pandemic in the Galilea 2 nerve room at Bethesda Hospital Yogyakarta in 2022]* (Skripsi, STIKES Bethesda Yakkum).