

The Relationship of Stroke Incidents With Clients' Quality of Life

Untari Ardha Savira^{1*}

Wiwik Widiyawati¹

Diah Fauzia Zuhroh¹

Diah Jerita Eka Sari¹

Nursing Science Study Program; Muhammadiyah University of Gresik

E-mail : untariardha@gmail.com

*Author Correspondence : Untari Ardha Savira

ABSTRAK

Stroke adalah kondisi dimana pasokan darah ke otak mengalami gangguan atau berkurang akibat penyumbatan (stroke iskemik) atau pecahnya pembuluh darah (stroke hemoragik). Stroke bisa menimbulkan kecacatan fisik, hal ini dapat mempengaruhi kondisi psikologis, emosional, kognitif bahkan sosial. Sehingga para penderita pasca stoke akan mengalami perubahan kualitas hidup mereka. Tujuan penelitian ini adalah menganalisis hubungan antara kejadian stroke dengan kualitas hidup klien di RSUD Ibnu Sina Gresik. Penelitian ini menggunakan rancangan penelitian observasional dengan pendekatan Cross Sectional. Jumlah populasi 451 klien, diteliti sebanyak 82 sampel dengan menggunakan teknik sampling consecutive sampling. Instrumen yang digunakan dalam penelitian adalah kuisioner WHOQOL-BREF lalu data terkumpul dianalisis menggunakan SPSS Uji Chi-Square. Hampir seluruhnya klien stroke yang kontrol di klinik syaraf RSUD Ibnu Sina Gresik mengalami serangan stroke sekali sebanyak 62 (75,6 %) klien dan hampir seluruhnya kualitas hidup klien stroke yang kontrol di klinik syaraf RSUD Ibnu Sina Gresik mengalami kualitas hidup cukup baik sebanyak 66 (80,5%) klien. Hasil data yang terkumpul lalu dianalisis sehingga diperoleh $P = 0,624 > 0,05$, maka H_1 ditolak dan H_0 diterima. Kesimpulannya Tidak ada hubungan antara kejadian stroke dengan kualitas hidup klien di RSUD Ibnu Sina Gresik.

Kata kunci: Stroke, Kualitas Hidup, Klien

ABSTRACT

Stroke is a condition where the blood supply to the brain is disrupted or reduced due to blockage (ischemic stroke) or rupture of blood vessels (hemorrhagic stroke). Stroke can cause physical disability, this can affect psychological, emotional, cognitive and even social conditions. So post-stroke sufferers will experience changes in their quality of life. The aim of this research is to analyze the relationship between the incidence of stroke and the quality of life of clients at RSUD Ibnu Sina Gresik. This research uses an observational research design with a cross sectional approach. The total population was 451 clients, 82 samples were studied using consecutive sampling techniques. The instrument used in the research was the WHOQOL-BREF questionnaire and then the collected data was analyzed using the SPSS Chi-Square Test. Almost all of the stroke clients who were controlled at the neurological clinic at Ibnu Sina Gresik Regional Hospital experienced a stroke once, 62 (75.6%) of the clients and almost all of the quality of life of stroke clients who were controlled at the neurological clinic at Ibnu Sina Gresik Regional Hospital experienced a fairly good quality of life. 66 (80.5%) clients. The results of the collected data were then analyzed to obtain $P = 0.624 > 0.05$, so H_1 was rejected and H_0 was accepted. In conclusion, there is no relationship between the incidence of stroke and the quality of life of clients at Ibnu Sina Gresik Regional Hospital.

Keywords : Stroke, Quality of Life, Clients

INTRODUCTION

Stroke is a condition where the blood supply to the brain is disrupted or reduced due to blockage (ischemic stroke) or rupture of blood vessels (hemorrhagic stroke). Stroke is an emergency condition that requires immediate help because it can cause complications and can even cause brain cell death in a matter of minutes (Pittara, 2022b). Stroke can cause physical disability, this can affect psychological, emotional, cognitive and even social conditions. So post-stroke sufferers will experience changes in their quality of life.

According to WHO (World Health Organization), stroke is categorized as the highest cause of death in Indonesia with 131.8 deaths per 100 thousand population (Santika, 2023). According to the Social Security Administering Agency (BPJS) for Health, in 2016 stroke cost health services 1.43 trillion, in 2017 it rose to 2.18 trillion and in 2018 it reached 2.56 trillion rupiah (P2PTM Ministry of Health of the Republic of Indonesia, 2019). From this data, there is an increase in the number of stroke patients every year in Indonesia, this will of course increase the burden on the country as well. Riskesdas data in 2018 showed that the highest prevalence of stroke occurred at ages >75 years at 50.2%, then the lowest prevalence of stroke occurred at ages 15-24 years at 0.6%, this proves that strokes can attack those of productive age even though the number is still low. little (Ministry of Health of the Republic of Indonesia, 2018).

Stroke sufferers often experience physical disabilities that can affect their quality of life. Quality of life itself is the level of satisfaction or dissatisfaction that a person feels about various aspects of each individual's life (Ekasari et al., 2019). Post-stroke patients with poor quality of life were more likely to be at risk, namely ≥ 55 years compared to those not at risk. Likewise, there are more post-stroke patients with good quality of life at high risk ages compared to low risk ages (Hafdia et al., 2018). Elderly people often have a high risk of stroke. Loneliness and various physical changes and stress factors can cause depression in the elderly. The increased risk of depression in the elderly includes health problems, loneliness, unclear life goals, fear of being left behind by loved ones (Widiharti et al., 2021). This can lead to an increase in poor

quality of life in elderly people who have a history of stroke.

The prevalence of quality of life in stroke clients with the physical dimension is 64.2% of clients experiencing poor quality of life, because most respondents complained of pain and discomfort during activities so they were dependent on medical treatment. Judging from the psychological dimension, 69.8% of clients experience poor quality of life, because most of them have negative feelings such as hopelessness, sadness, disappointment regarding their current condition and most cannot accept a different body appearance after illness. Then, looking at the dimension of social relations, 52.8% of clients had good quality of life, because most of their social relations were good, even though their limitations such as paralysis of their limbs, facial features, speech disorders, decreased visual acuity, visual field problems were still able to socialize well. Furthermore, the quality of life from the environmental dimension is 58.5% of clients with a good quality of life, because the majority of respondents have physical security and comfort, a supportive physical environment, but there are also some respondents whose physical environment is less supportive (Rismawan et al., 2021).

Stroke is still a cause of high morbidity and mortality. In Indonesia alone, deaths from stroke are in first place and after that is heart disease. Stroke sufferers will also experience a decrease in body function making it difficult to carry out daily activities, which makes stroke sufferers prone to mental disorders. The loss of productive time for sufferers when they are sick and the families who care for sufferers, results in large economic losses (Rochmah et al., 2021). Stroke sufferers will experience many changes in themselves and their daily lives, both physically and psychologically. Some patients say they experience various kinds of emotional problems after a stroke. Depression and anxiety disorders are common problems that often occur in post-stroke clients (Savitri, 2021). These changes affect the quality of life of clients with a history of stroke. Several factors that influence an individual's quality of life are family support, peer support, living environment, physical health, psychological health, health services, marital status, economic, educational and

spiritual levels (Destriande et al., 2021).

Efforts to improve the quality of life, especially for the elderly, can be done by exercising. Elderly participation in regular physical activity or a structured physical exercise program is highly recommended and has many benefits, one of which is reducing stress (Widiharti et al., 2021). Not only that, providing classical music therapy is a method for implementing depression sufferers which is non-pharmacological and also economical and instinctive (Muin et al., 2022). This research will be carried out at RSUD Ibnu Sina Gresik which is a central referral hospital for the Pantura area with complete accreditation. Complete medical equipment, good service, and a large number of competent specialist doctors make people feel satisfied when carrying out treatment at Ibnu Sina Gresik Regional Hospital. This is proven in a community satisfaction survey in 2023 of 84.48% of people feeling satisfied with the services provided, so many people will certainly choose to undergo treatment at Ibnu Sina Gresik Regional Hospital. At the Neurological Clinic itself there were 451 visits to clients with a history of stroke in August 2023 (RSUD Ibnu Sina Gresik, 2023). Based on the description above, the researcher wants to conduct research on "The Relationship between Stroke Events and the Quality of Life of Clients at Ibnu Sina Gresik Regional Hospital".

LITERATURE REVIEW

Stroke or also known as Cerebrovascular Accident (CVA) is a blood circulation disorder in the brain that causes functional brain disorders. According to WHO, stroke is a condition in which clinical signs are found that develop rapidly in the form of focal and global neurological deficits, which can worsen and last for 24 hours or more and or can cause death, without any other clear cause other than vascular (P2PTM Kemenkes RI, 2018).

However, there are several researchers who say that one of the causes of the high prevalence of stroke is a lack of awareness to control blood pressure. The less routine blood pressure control, the greater the possibility of experiencing a recurrent stroke. Lack of physical activity is a major risk factor for stroke, characterized by the accumulation of fat, cholesterol, calcium, and other elements

that supply blood to the heart muscle and brain, resulting in decreased blood flow to the brain and to the heart. Smoking can cause several serious and dangerous diseases, such as stroke, because smoking can weaken blood vessels (I. Sari, 2022). According to WHO (2012), quality of life is an individual's perception of their position in everyday life in the context of the culture and value system they live and in relation to their goals, expectations, standards, and concerns. Therefore, each individual has a different quality of life, this is due to several factors that can affect their quality of life.

The concept of health-related quality of life is defined as how well a person functions in their life and their perceived well-being in the domains of physical, mental, and social health. In other words, quality of life is a comprehensive concept that combines all factors that impact an individual's life. Health-related quality of life only includes factors that are part of an individual's health, but currently the concept of quality of life includes other aspects related to patient well-being (Cai et al., 2021) It can be seen that the assessment of quality of life has 4 indicators, namely good, fairly good, fairly bad, and poor quality of life. If a client is found to have a good quality of life, maintain it and prevent it from experiencing a decline in quality of life. If a client is found with a fairly good, fairly bad, or even bad quality of life, improve the client's quality of life. Improving the client's quality of life can be done using the PIP (Position, Instruction, Puzzle) method. The PIP method can be carried out by the client's family with a history of stroke or caregivers at home. The PIP method is: the first is the Position method, namely health workers teach families about physical exercises such as ROM (Range Of Motion). Next is Instruction, namely health workers teach families about verbal/speaking exercises for clients who experience communication disorders. Finally, the Puzzle method, namely clients are taught to train their physical and memory at the same time by playing puzzles (Paskahlin et al., 2022).

METHOD

This study is an Observational study with a Cross Sectional approach. This observational research design is carried out for research that will conduct research without any

treatment/experiment. This study uses a correlation design, namely research aimed at determining the relationship between two variables. The population taken from this study were post-stroke clients who were controlled at the Neurology Clinic of Ibnu Sina Hospital, Gresik with a total of 451 clients in August 2023. This study used a consecutive sampling technique, namely all research subjects who came and met the research criteria would be included in the study until the desired number of subjects was met. The sample taken was post-stroke patients who were controlled at the neurology clinic of Ibnu Sina Hospital, Gresik, using the Solvin formula so that a total of 82 samples were found. The instrument used to conduct the study was the WHOQOL-BREF standard questionnaire published by WHO as well as a measuring tool for calculating the level of quality of life. The questionnaire will be read by the researcher and respondents will directly answer the questions according to the questions in the questionnaire. This study has been declared ethically feasible by the Health Research Ethics Committee of Ibnu Sina Hospital, Gresik with No. 071/076/437.76/2023. The collected data will be analyzed in 2 stages, namely descriptive and inferential analysis. In descriptive analysis using SPSS descriptive test mean and mode. Furthermore, inferential analysis will use the Chi Square test to see if there is a relationship between the independent variable and the dependent variable.

RESULTS AND DISCUSSION

Stroke Incidents at Ibnu Sina Hospital Gresik

The results of the study showed that almost all (75.6%) of stroke clients who were checked at the neurology clinic of Ibnu Sina Hospital, Gresik experienced a stroke once, as many as 62 clients, and a small portion (24.4%) were clients who experienced recurrent strokes, as many as 20 clients. These recurrent strokes occurred in the past year, consisting of ischemic stroke, hemorrhagic stroke, transient ischemic stroke (TIA).

Table 1 Distribution of Stroke Incidents in Clients at Ibnu Sina Hospital, Gresik in 2023

| No | Stroke Attack | Frequency | Percentage % |
|----|---------------|-----------|--------------|
| 1 | Once | 62 | 75,6 % |
| 2 | Repeated | 20 | 24,4 % |

| Total | 82 | 100 % |
|-------|----|-------|
|-------|----|-------|

Stroke usually occurs due to a blockage in the blood vessels in the brain or a ruptured blood vessel. Those who have had a stroke will certainly be at risk of having another stroke. Some factors that can trigger recurrent strokes are hypertension, diabetes, high cholesterol, active smokers, etc. Not only that, age can also be another triggering factor that causes recurrent strokes (Parinding, 2018). This stroke incident also affects the physical health of sufferers where those who have had recurrent strokes will certainly cause a high risk of disability and increase the risk of high morbidity and mortality. Age can be a triggering factor for stroke. The results of the study showed that almost half (39%) of stroke clients who were treated at the neurology clinic of Ibnu Sina Gresik Hospital were aged 51-60 years as many as 32 clients and aged 61-70 years as many as 26 (31.7%) clients, and a small portion (4.9%) were aged >70 years as many as 4 clients. However, it is undeniable that young people can also have strokes, where those under 51 years of age are a small proportion (24.4%) of 20 clients experiencing strokes.

Table 2 Distribution of Clients by Age at Ibnu Sina Hospital, Gresik in 2023

| No | Age | Frequency | Percentage % |
|--------------|-------------|-----------|--------------|
| 1 | 40-50 years | 20 | 24,4 % |
| 2 | 51-60 years | 32 | 39,0% |
| 3 | 61-70 years | 26 | 31,7 % |
| 4 | >70 years | 4 | 4,9% |
| Total | | 82 | 100 % |

Stroke often attacks the elderly because the elderly experience decreased organ function in the body or what is often called degenerative disease. This degenerative disease can cause blood vessels in the elderly to become vasoconstricted so that the blood vessels will narrow and plaque will appear which can block blood flow to the brain, this will trigger stroke in the elderly (Rachmawati et al., 2022). Changes in the cardiovascular system in the elderly cause the capacity of the arteries to decrease by 50%, the elasticity and permeability of blood vessels decrease. Functional changes occur in the form of increased vascular pressure, causing increased systolic pressure and decreased tissue perfusion (Widiharti et al., 2019).

Therefore, prevention is needed so that

recurrent strokes do not occur, especially for those who are entering old age, such as maintaining a healthy lifestyle, routinely carrying out health checks, especially those who have a history of hypertension, not smoking, etc. In this study, the number of stroke clients who were checked at the neurology clinic at the Ibnu Sina Gresik Hospital was not much different between men and women. The number of male clients is greater than the number of female clients, with the majority (45 (54.9%) of clients being male and almost half (37 (45.1%) of clients being female.

Table 3 Distribution of Clients by Gender at Ibnu Sina Hospital, Gresik 2023

| No | Gender | Frequency | Percentage % |
|--------------|--------|-----------|--------------|
| 1 | Male | 45 | 54,9 % |
| 2 | Female | 37 | 45,1 % |
| Total | | 82 | 100 % |

Men are more likely to have a stroke than women because women have a much healthier heart and blood vessels than men, especially during their fertile age (Sulaeman, 2018). Unhealthy lifestyles such as not routinely checking blood pressure, smoking, drinking alcohol are often found in men (Salsabila, 2023). However, these are modifiable factors as long as we are able to implement a healthy lifestyle that will reduce the risk of having a stroke.

Quality of Life of Stroke Clients at Ibnu Sina Hospital, Gresik

The results of the study showed that almost all of the quality of life of stroke clients who were controlled at the neurological clinic of Ibnu Sina Hospital, Gresik experienced a fairly good quality of life (80.5%) of 66 clients, a small portion (17.1%) of which were 14 clients with a fairly poor quality of life and 2 (2.4%) clients with a good quality of life, consisting of 4 domains, physical health, psychological, social relationships, environmental health.

Table 4 Distribution of Quality of Life in Stroke Clients at Ibnu Sina Hospital, Gresik 2023

| No | Quality of Life | Frequency | Percentage % |
|----|-----------------|-----------|--------------|
| 1 | Good | 2 | 2,4% |
| 2 | Quite Good | 66 | 80,5 % |
| 3 | Quite Bad | 14 | 17,1 % |

| Total | 82 | 100 % |
|-------|----|-------|
|-------|----|-------|

There are several factors that affect the quality of life, one of which is education. It can be seen that the results of the study almost half (40.2%) were high school educated as many as 33 clients and elementary school educated as many as 21 (25.6%) clients, a small portion (13.4%) had junior high school education as many as 11 clients, Diploma/Bachelor as many as 5 (6.1%) clients, Masters as many as 2 (2.4%) clients, No school 10 (12.2%) clients.

Table 5 Distribution of Clients Based on Last Education at Ibnu Sina Hospital Gresik 2023

| No | Last education | Frequency | Percentage % |
|--------------|--------------------|-----------|--------------|
| 1 | Elementary School | 21 | 25,6 % |
| 2 | Junior High School | 11 | 13,4 % |
| 3 | High School | 33 | 40,2 % |
| 4 | Diploma/ Bachelor | 5 | 6,1 % |
| 5 | Not in School | 10 | 12,2 % |
| 6 | Masters | 2 | 2,4 % |
| Total | | 82 | 100 % |

Quality of life itself is the level of satisfaction or dissatisfaction felt by a person about various aspects of each individual's life (Ekasari et al., 2019). Several factors that influence an individual's quality of life are family support, peer support, residential environment, physical health, psychological health, health services, marital status, economic level, education, and spirituality (Destriande et al., 2021). Education is very important in improving quality of life. Not having or a low educational background may affect the mentality they feel about health well-being (Destriande et al., 2021). It is necessary to improve the quality of life with the PIP (Position, Instruction, Puzzle) method, because stroke sufferers will experience many changes in themselves and their daily lives, both physical and psychological conditions. It is not surprising that stroke sufferers often suffer from depression. These changes will affect their quality of life. Need to improve quality of life with

In the physical health domain, the results of the study showed that almost half (40.2%) of stroke clients who were checked at the neurology clinic at Ibnu Sina Hospital, Gresik experienced a fairly poor quality of life, namely 33 clients and 31 (37.8%) clients experienced a fairly good quality of life, then a

small portion (17.1%) experienced a poor quality of life, as many as 14 clients and as many as 4 (4.9%) clients experienced a good quality of life.

Table 6 Distribution of Quality of Life in the Physical Health Domain in Stroke Clients at Ibnu Sina Hospital, Gresik 2023

| No | Quality of Life Physical Health Domain | Frequency | Percentage % |
|-------|--|-----------|--------------|
| 1 | Good | 4 | 4,9 % |
| 2 | Quite Good | 31 | 37,8 % |
| 3 | Quite Bad | 33 | 40,2 % |
| 4 | Bad | 14 | 17,1 % |
| Total | | 82 | 100 % |

In the physical domain, it consists of pain and discomfort, energy and fatigue, sleep and rest (WHO, 2012). Most clients complain of difficulty walking or moving limbs, this is because when a stroke occurs, brain cells die within minutes so that the brain begins to lose some functions, especially the function of controlling limbs (Putri, 2022). To improve the quality of life in physical health, you can train your limbs using the ROM (Range Of Motion) method, take regular medication, and also maintain a healthy lifestyle.

In the psychological domain, it can be seen that most (62.2%) of stroke clients who were checked at the neurology polyclinic of Ibnu Sina Hospital Gresik experienced a fairly good quality of life, namely 51 clients, almost half (30.5%) experienced a fairly poor quality of life, as many as 25 clients, then a small portion (4.9%) experienced a good quality of life, as many as 4 clients and 2 (2.4%) clients experienced a poor quality of life.

Table 7 Distribution of Psychological Domain Quality of Life in Stroke Clients at Ibnu Sina Hospital, Gresik 2023

| No | Quality of Life Psychological Domain | Frequency | Percentage % |
|-------|--------------------------------------|-----------|--------------|
| 1 | Good | 4 | 4,9 % |
| 2 | Quite Good | 51 | 62,2 % |
| 3 | Quite Bad | 25 | 30,5 % |
| 4 | Bad | 2 | 2,4 % |
| Total | | 82 | 100 % |

In the psychological domain, it consists of positive feelings, thinking, learning, memory, concentration, self-esteem, body image and appearance, negative feelings. Stroke sufferers rarely feel sad or anxious because they have family support, this is

proven in research (Vihandayani et al., 2019) which states that the majority of clients who have good family support are in the good quality of life category (90.9%) while clients who lack family support get poor quality of life (100%).

In the social relationship domain, the results of the study showed that the majority (68.3%) of stroke clients who were controlled at the neurology clinic at Ibnu Sina Hospital Gresik experienced a fairly good quality of life, namely 56 clients, almost (26.8%) half of them experienced a fairly poor quality of life, as many as 22 clients, then a small portion (3.7%) experienced a good quality of life, as many as 3 clients and 1 (1.2%) client experienced a poor quality of life.

Table 8 Distribution of Quality of Life in the Social Relationship Domain in Stroke Clients at Ibnu Sina Hospital Gresik 2023

| No | Quality of Life Domain Social Relationships | Frequency | Percentage % |
|-------|---|-----------|--------------|
| 1 | Good | 3 | 3,7 % |
| 2 | Quite Good | 56 | 68,3 % |
| 3 | Quite Bad | 22 | 26,8 % |
| 4 | Bad | 1 | 1,2 % |
| Total | | 82 | 100 % |

The domain of social relationships consists of personal relationships, social support, sexual activity (WHO, 2012). They get positive support from peers and from neighbors around the house. According to research by Kwon et al., (2020), quality of life and social support have a positive correlation.

Thus, the greater the social support, the better the quality of life. In the environmental health domain, the results of the study showed that most (54.9%) of stroke clients who were controlled at the neurology clinic at Ibnu Sina Hospital, Gresik experienced a fairly good quality of life, namely 45 clients, then almost half (43.9%) experienced a fairly poor quality of life, as many as 36 clients, and a small portion (1.2%) experienced a good quality of life, as many as 1 client. They have a clean and healthy living environment. Economic level also affects quality of life in the environmental health domain. The results of the study showed that most (73%) of current jobs are unemployed as many as 60 clients, but a small portion (15.9%) have jobs as self-employed as many as 13 clients, retired as many as 6 (7.3%) clients,

farmers as many as 2 (2.4%) clients, civil servants as many as 1 (1.2%) clients.

Table 9 Distribution of Quality of Life Environmental Health Domain in Stroke Clients at Ibnu Sina Hospital Gresik 2023

| No | Quality of Life Health Domain Environment | Frequency | Percentage % |
|-------|---|-----------|--------------|
| 1 | Good | 1 | 1,2 % |
| 2 | Quite Good | 45 | 54,9 % |
| 3 | Quite Bad | 36 | 43,9 % |
| Total | | 82 | 100 % |

Environmental health domain consists of physical safety and security, home environment, financial resources, health and social care: availability and quality, opportunities to acquire new information and skills, participation and opportunities for recreation and leisure, Physical environment (population/noise/traffic/climate), transportation. A residence that can create a peaceful, peaceful, and pleasant atmosphere for its residents will certainly make residents feel at home and feel like they want to continue living in that place, so that it can improve their quality of life (Rohmah et al., 2012). This residence is also influenced by economic level. Low wealth and low household income are factors related to poverty and quality of life. The majority of stroke clients who are controlled do not have

jobs because they experience limited mobility, this will certainly affect their economic level. If the economic level continues to decline, of course the quality of life will also be affected. Therefore, family cooperation is needed to continue to accompany clients to recover, so that they can improve their quality of life.

Stroke Incidents with Clients' Quality of Life at Ibnu Sina Hospital, Gresik

The results showed that the proportion of fairly good quality of life in clients with a single stroke incident, almost all 51 (8.3%) clients, was greater than clients with recurrent stroke incidents, 15 (75%). The proportion of fairly poor quality of life in clients with a small number of recurrent stroke incidents, 4 (20%) clients, was greater than clients with a single stroke incident, 10 (16.1%). Good quality of life in clients with a small number of recurrent stroke incidents, 1 (5%) clients, was greater than clients with a single stroke incident, 1 (1.6%). The collected data were analyzed using the Chi-Square test where $P = 0.624$ was greater than $\alpha = 0.05$, so H_1 was rejected and H_0 was accepted, which means there is no relationship between stroke incidents and the quality of life of clients at Ibnu Sina Hospital, Gresik.

Table 10 Results of Cross Tabulation Between Stroke Incidents and Quality of Life in Clients at Ibnu Sina Hospital, Gresik 2023

| | | Quality of Life | | | | | | Total | |
|------------------|------------|-----------------|-------|-------------|--------|------------|--------|-------|-------|
| | | Good | | Enough Good | | Enough Bad | | | |
| | | N | % | N | % | N | % | N | % |
| Stroke Incident | Once | 1 | 1,6 % | 51 | 82,3 % | 10 | 16,1 % | 62 | 100 % |
| | Repeatedly | 1 | 5 % | 15 | 75 % | 4 | 20 % | 20 | 100 % |
| Total | | 2 | 2,4 % | 66 | 80,5 % | 14 | 17,1 % | 82 | 100 % |
| P = 0,624 > 0,05 | | | | | | | | | |

Quality of life is a person's perception/assessment of their quality of life, which is influenced by several factors such as family support, peer support, residential environment, physical health, psychological health, health services, marital status, economic level, education, and spirituality (Destriande et al., 2021). According to research by Rahayu et al (2014), there is a relationship between stroke frequency and cognitive function in the form of dementia. Dementia is a disease that causes a decrease in a person's memory and way of thinking (Pittara, 2022). This condition will cause dementia sufferers to experience changes in lifestyle, socialization skills, and daily activities will also be disrupted. Of course, this will affect the quality of life of stroke sufferers, especially in the psychological domain and social relationship domain.

However, in reality, this study shows that most clients have a good quality of life in the psychological domain as many as 51 (62.2%) clients, and in the social relationship domain most have a fairly good quality of life as many as 56 (68.3%) clients. So there is no relationship between the incidence of stroke and quality of life in the psychological domain and the social relationship domain. A single stroke usually only causes minor damage to brain cells, but if strokes occur repeatedly, they will cause major damage to brain cells, affecting the health of the body (Amalia, 2023). In a case study by Choriqoh et al (2022), a patient who had recurrent strokes up to 3 times had normal MRI results, although clinically there were symptoms of persistent weakness of half of the body on the left side. The team of doctors finally decided to perform an angiography examination so that the results showed severe stenosis of the right middle cerebral artery. The severity of the cerebral artery should cause the patient to experience more severe clinical disorders such as total paralysis of the limbs, but in fact the patient only experienced weakness of the limbs on the left side and even gradually improved. Although in this study almost half of the stroke clients experienced a fairly poor quality of life, as many as 33 (40.2%) clients in the health domain, this was not related to the frequency of strokes that occurred.

Compliance in carrying out rehabilitation also affects the health condition

of stroke clients, especially in the limb system. According to research by Kasma et al (2022), there was a significant increase after patients underwent rehabilitation in the form of range of motion (ROM) routinely and regularly where muscle strength in stroke clients experienced an increase in muscle strength so that it could optimize impaired body functions and avoid disability in post-stroke patients. However, unfortunately this study did not explain whether clients carried out rehabilitation activities routinely or not.

The level of depression also affects quality of life, especially in stroke clients who often experience disorders in body function. Stroke patients who have been going on for a long time have different experiences with their illness, compared to patients who have just been diagnosed. This is in line with research by Towfigi (2017) which states that there is a relationship between depression and the length of stroke (Asmila et al., 2021). To improve the quality of life of clients who have had a stroke, they can carry out activities using the PIP (Position, Instruction, Puzzle) method, namely: first, the Position method where the family helps the client to do physical exercises such as ROM (Range Of Motion), second, Instruction where the family helps the client to do verbal/speech exercises if they have communication disorders, finally the Puzzle method where clients are taught to train their physical and memory at the same time by playing puzzles (Paskahlin et al., 2022).

CONCLUSION

In this study, it can be concluded that stroke clients at the neurology clinic of Ibnu Sina Hospital, Gresik, mostly experienced a stroke attack once, namely 62 (75.6%) clients, and almost all of them experienced a good quality of life, as many as 66 (80.5%) clients. The results of the analysis showed that there was no relationship between stroke incidence and quality of life of clients at Ibnu Sina Hospital, Gresik. Suggestions for further researchers are suggested to be able to explore more relevant theories, especially those discussing the relationship between stroke incidence and client quality of life. The results of the study can be used as a reference to analyze other factors that trigger the absence of a relationship between stroke incidence and client quality of life.

REFERENCES

- Amalia, R. M. (2023). *Waspada Terjadi Stroke Berulang pada Penderita Pascastroke*. Ners News. [https://ners.unair.ac.id/site/index.php/news-fkp-unair/3065-waspada-terjadi-stroke-berulang-pada-penderita-pascastroke#:~:text=Serangan stroke pertama umumnya hanya,menyebabkan kelumpuhan total bahkan kematian.](https://ners.unair.ac.id/site/index.php/news-fkp-unair/3065-waspada-terjadi-stroke-berulang-pada-penderita-pascastroke#:~:text=Serangan%20stroke%20pertama%20umumnya%20hanya,menyebabkan%20kelumpuhan%20total%20bahkan%20kematian.)
- Asmila, L., Septiawantary, R., & Nuraenah. (2021). Depresi Pada Pasien Paska Stroke. *Indonesian Journal of Nursing Sciences and Practices, 1*, 27–32.
- Choriqoh, A., Sani, A. F., & Kurniawan, D. (2022). Recurrent stroke syndrome without abnormality on magnetic resonance imaging caused by stenosis of middle cerebral artery: A case report. *Radiology Case Reports, 17*(8), 2771–2774. <https://doi.org/10.1016/j.radcr.2022.05.008>
- Destriande, I. M., Faridah, I., Oktania, K., & Rahman, S. (2021). Faktor Yang Mempengaruhi Kualitas Hidup Pada Lanjut Usia. *Jurnal Psikologi Wijaya Putra, 2*, 1–9.
- Ekasari, M. F., Riasmini, N. M., & Hartini, T. (2019). *Meningkatkan Kualitas Hidup Lansia Konsep dan Berbagai Strategi Intervensi* (1st ed.). Wineka Media.
- Hafdia, A. N. A., Arman, Alwi, M. K., & Asrina, A. (2018). Analisis Kualitas Hidup Pasien Paska Stroke Di RSUD Kabupaten Polewali Mandar. *Sinergitas Multidisiplin Ilmu Pengetahuan Dan Teknologi, 1*, 111–118.
- Kasma, Safei, Ki., Zulfahmidah, Rachman, M. E., & Mappaware, N. A. (2022). Pengaruh Kepatuhan Menjalani Rehabilitasi Terhadap Peningkatan Kekuatan Otot Pada Pasien Pasca Stroke. *Jurnal Mahasiswa Kedokteran, 2*(5), 359–367.
- Kemendes RI. (2018). *Hasil Utama Riskesdas 2018*. Kementerian Kesehatan Republik Indonesia. https://kesmas.kemkes.go.id/assets/upload/dir_519d41d8cd98f00/files/Hasil-riskesdas-2018_1274.pdf
- Muin, F. F., Sari, D. J. E., & Has, D. F. S. (2022). Pengaruh Terapi Musik Klasik Terhadap Tingkat Depresi Pada Lansia Di Langkap Burneh Bangkalan. *Indonesian Journal Of Professional Nursing, vol 3*, 64–71.
- P2PTM Kemendes RI. (2019). *Hari Stroke Sedunia 2019: Otak Sehat, SDM Unggul*. Kementerian Kesehatan Republik Indonesia. <https://p2ptm.kemkes.go.id/tag/hari-stroke-sedunia-2019-otak-sehat-sdm-unggul>
- Parinding, D. (2018). *Penyebab terjadinya stroke berulang*. Alodokter.Com. <https://www.alodokter.com/komunitas/topic/stroke-batang-otak>
- Paskahlin, A. P., Febriana, P., Suprpti, B. J. D., & Kase, G. B. (2022). *Stroke: Kualitas Hidup Pasien Stroke dan Bagaimana Meningkatkan*. Buletin KPIN. <https://buletin.kpin.org/index.php/arsip-artikel/1178-stroke-kualitas-hidup-pasien-stroke-dan-bagaimana-meningkatkannya>
- Pittara. (2022a). *Demensia*. Alodokter.Com. <https://www.alodokter.com/demensia>
- Pittara. (2022b). *Pengertian Stroke*. Alodokter.Com. <https://www.alodokter.com/stroke>
- Putri, A. E. R. (2022). *Penyakit Stroke: Gejala, Penyebab, dan Cara Mengobatinya*. Mitrakeluarga.Com. <https://www.mitrakeluarga.com/artikel/penyakit-stroke>
- Rachmawati, D., Marshela, C., & Sunarno, I. (2022). Perbedaan faktor resiko penyebab stroke pada lansidan remaja. *Bali Medika Jurnal, 9*, 207–221. <https://doi.org/https://doi.org/10.36376/bmj.v9i3>
- Rahayu, S., Utomo, W., & Utami, S. (2014). Hubungan Frekuensi Stroke Dengan Fungsi Kognitif. *Jom Psik, 1*, 1–10.
- Rismawan, W., Lestari, A. M., & Irmayanti, E. (2021). Gambaran Kualitas Hidup Dan Karakteristik Pasien Pasca Stroke Di Poli Syaraf RSUD Dr. Soerkardjo Kota Tasikmalaya. *Jurnal Kesehatan Bakti Tunas Husada, 21*.
- Rochmah, T. N., Rachmawati, I. T., Dahlui, M., & Dll. (2021). Economic Burden of Stroke Disease: A Systematic Review. *Int. J. Environ. Res. Public Health, 18*. <https://doi.org/https://doi.org/10.3390/ije-rph18147552>

- Rohmah, A. I. N. R., Purwaningsih, & Bariyah, K. (2012). Kualitas hidup lanjut usia. *Jurnal Keperawatan*, 3(2), 120–132.
- Salsabila, R. (2023). *Laki-laki Lebih Berisiko Terserang Stroke? Ini Faktanya*. CNBC Indonesia.
<https://www.cnbcindonesia.com/lifestyle/20230313193416-33-421333/laki-laki-lebih-berisiko-terserang-stroke-ini-faktanya>
- Santika, E. F. (2023). *Stroke dan TBC Masuk dalam 10 Penyakit Penyebab Kematian Tertinggi di Indonesia*. Databoks.Katadata.Co.Id.
<https://databoks.katadata.co.id/datapublish/2023/02/07/stroke-dan-tbc-masuk-dalam-10-penyakit-penyebab-kematian-tertinggi-di-indonesia>
- Savitri, T. (2021). *Apa yang Terjadi pada Pasien Setelah Stroke Berlalu?* Hellosehat.Com.
<https://hellosehat.com/saraf/stroke/pasca-stroke/>
- Sulaeman, S. (2018). *Benarkah Stroke Lebih Banyak Menyerang Laki-laki? Ini Kata Dokter*. Detikhealth.Com.
<https://health.detik.com/berita-detikhealth/d-3880375/benarkah-stroke-lebih-banyak-menyerang-laki-laki-ini-kata-dokter>
- Vihandayani, M., Wiratmo, P. A., Hijriati, Y., Studi, P., Keperawatan, I., & Binawan, U. (2019). *Hubungan Dukungan Keluarga Sebagai Support Sistem Dan Kualitas Hidup Relations Between Family Support As a System Support and Life Quality in. 1*, 74–79.
- WHO. (2012). *WHOQOL: Measuring Quality of Life*. Who.Int.
<https://www.who.int/tools/whoqol>
- Widiharti, Widiyawati, W., Zahroh, & Janah, N. H. (2021). Peningkatan Kebiasaan Berperilaku Sehat Lansia Menuju Lansia Sehat Dan Bahagia. *Jurnal ADIMAS*, 121–126.
- Widiharti, Widiyawati W, Sari DJE, & Zuhroh DF. (2019). Peer group peningkatan kesehatan lansia menuju lansia yang sehat dan bahagia. *Prosiding Seminar Nasional*, 296–301.