AGE AND KNOWLEDGE OF STROKE PATIENT CARE FOR CARE PROVIDERS AT A HOME

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Info Article Abstract DOI: For families who are caring for post-stroke, it is important to https://doi.org/10.26751/ijp.v9i2. know the impacts that arise and the potential for complications in the patient. Recovery for stroke sufferers is difficult to achieve properly if no one in the family understands what needs to be Article history: done to improve the health status of post-stroke patients and that Received February 12, 2025 appropriate care is given to family members who have suffered a Revised February 21, 2025 stroke. There are many factors that can influence a person's Accepted February 26, 2025 knowledge, one of the factors is age. To analyze the relationship between age and family knowledge about post-stroke patient care. The research is correlational research with cross sectional approached. Independent variable (family knowledge) and Keywords: dependent (age). The respondents was 30 respondents total Age, caregiver, knowledge, sampling, Inclusion Criteria; Family of patients, Aged ≥ 18 years, stroke care Can communicate well, Has direct involvement in patient care, Exclusion criteria: Families who have cognitive communication disorders, have health conditions such as serious mental disorders or chronic diseases. The research instrument used a questionnaire on respondent characteristics and knowledge of stroke care. Data analysis used the Spearman rank test. The results of the study showed that there was a statistically significant relationship between age and knowledge about stroke care in caregivers with a value of p = 0.017 (p < 0.05). Caregiver age is related to knowledge about stroke care at home. Community health centers need to develop interventions and health education media to increase family knowledge in caring for stroke clients at home. This is an open access article under the <u>CC BY-SA</u> license.

I. Introduction

According (World to data Organization (WHO), 2023) The number of stroke sufferers in the world reaches 15 million people per year, as many as 5 million sufferers die and 5 million other sufferers suffer permanent disability. In Indonesia (Ministry of Health of the Republic of Indonesia, 2019) it was 10.9 percent, this figure has increased compared to the 2013 Riskesdas data which showed data of 7 percent. In 2017, there were 28,277 stroke sufferers in Central Java, consisting of 9,993 18,284 nonhemorrhagic strokes and

hemorrhagic strokes. (Pistanty & Mulya Susanti, 2020) Based on data from the Community Health Center in 2018 in the city of Semarang, stroke cases reached 3,422, this figure has increased compared to 2017 with 2,527 cases. (Handayani, 2020)

Frequent manifestations of stroke are loss of voluntary control over motor movements, loss of communication such as difficult to understand speech, impaired perception or the client's inability to interpret sensations (Darmawan, 2019). Post-stroke patients with these symptoms cannot be separated from their families, because the family is close to

the post-stroke patient, the family is responsible for providing follow-up care and providing self-care needs for post-stroke patients that cannot be met by the patient themselves (Bakri et al., 2020).

In society, the family is the smallest unit consisting of husband, wife and children or father and son or mother and child. The presence of family is very important in any treatment, many individuals definitely hope to be accepted and loved by those closest to them, including stroke sufferers. Families need to be prepared when caring for someone in the family who has had a stroke, which is very important in order to develop the role and function of the family when caring for a family member who has had a stroke at home. The family has a role when caring for a family member who has had a stroke, including the role of the family as a service unit. An important factor that influences the care of post-stroke patients is the level of knowledge. Without this level of knowledge, families are unable and lack understanding when providing necessary and adequate care to patients. (Fatmawati, 2020)

Age is the number of times a person has been born since birth and can then be measured in units of time and viewed from a chronological perspective, person's personality can generally be seen from the degree of anatomical and physiological development. As age increases, knowledge can influence a person's mindset and understanding ability. As people get older, developments be there can their understanding and thinking patterns, which will then result in the insights they gain becoming better. Then it is necessary to carry out a study or research on the relationship between age and family knowledge about post-stroke patient care. (Jovial Noli et al., 2021)

Based on research (Masyhurah, 2024) showing that the majority of respondents were in the poor category, 31 respondents or 52.5%, so families are expected to increase their level of knowledge and seek information about appropriate care given to post-stroke patients. Meanwhile in research. (Fatmawati, 2020) showed that 31.5% of

family knowledge of stroke patients was in the sufficient category. and in the less category it is 68.5% so it is hoped that the existing discharge planning program will be optimized through studying the needs of patients and families and a more intensive education process not only for patients but also for their families. (Maya Indra Putri Djara, 2023) As age increases, a person's cognitive abilities and comprehension can develop, ultimately enhancing their knowledge. The aim of the research is to analyze the relationship between caregiver age and knowledge about stroke care at home.

II. RESEARCH METHODS

The type of research method used in this research is quantitative research, namely descriptive correlation to determine the relationship between the respondent's age perception and family knowledge about post-stroke patient care through the approach used in this research, namely cross sectional, to determine the relationship between variables, where the independent variable (family knowledge about post-stroke patient care) and the dependent (respondent's age) are identified at one unit of time.

The research was conducted in September 2024 at Pelita Anugrah Hospital. This is a hospital that has members who have had strokes with a total of 30 respondents. using techniques total sampling as many as 30 respondents. Inclusion Criteria; Families of patients who care for or accompany poststroke patients in hospitals in Demak district, Willing to be respondents, indicated by providing informed consent, Aged ≥18 years, because this age is considered sufficient to provide information related to knowledge of patient care, Can communicate well in the language used in research, Has direct involvement in patient care, such as helping administering with daily activities, medication, or assisting in therapy. Exclusion Criteria; Families who are unwilling to participate in research, have cognitive or communication disorders that can hinder understanding and conveying information in interviews. or filling out a questionnaire, Not being present during the data collection period, so unable to provide the required information, Having certain health conditions that prevent participation, such as serious mental disorders or chronic illnesses that affect memory and comprehension.

The research instrument uses a questionnaire. The Family Knowledge Questionnaire about Post-Stroke Patient Care contains 20 questions on variables regarding family knowledge about post-stroke care with answers a, b and c. With the results of the validity test carried out by Sirait on 20 respondents at home in the Pematangsiantar city area, it was found that the calculated r had a minimum value of 0.455-0.871 > rtable (0.444), meaning that the results of this validity test were said to be valid. Meanwhile, the results of the reliability test in research conducted by Sirait at home in Pematangsiantar city area showed that the Cronbach's Alpha value obtained was 0.712 which was greater than the r table (0.444), which means the instrument is reliable. (Yanuar, 2021).

Data analysis of characteristics consists of gender, education, occupation, relationship with the family, age, and knowledge of stroke patient care, and is interpreted in terms of frequency and percentage. The normality test was conducted using the Shapiro-Wilk test, which showed that the data were not normally distributed (p = 0.015). Due to this, the Spearman rank correlation technique was applied to analyze the relationship between variables. correlation The strength categorized as follows: 0.00 - 0.25 indicates a very weak relationship, 0.26 - 0.50 represents a moderate relationship, 0.51 - 0.75 signifies a strong relationship, 0.76 - 0.99 denotes a very strong relationship, and 1.00 indicates a perfect correlation (Nursalam, 2016).

III. RESULTS AND DISCUSSION

A. Characteristics Of the Care Providers

Table 1. Frequency distribution characteristics of Respondent (n=30)

Characteristics	f	%
Age		
<25 years old	9	30.0

Characteristics	f	%
25-35 years old	15	50.0
36-45 years old	6	20.0
Knowledge		
Not enough	11	36.7
Enough	10	33.3
Good	9	30.0
Total	30	100

The research results showed that the majority of respondents were aged 25-35 years. The age factor, based on the data obtained, shows that the majority of respondents in the late adult age category were 17 people (56.7%). (Alvin, 2023). Most of the families of patients who live in the same house as stroke patients are in the adult category, this is because in general patients who experience strokes are elderly patients.

As we get older, the tissue in the human body also reduces its flexibility and becomes stiffer, including blood vessels. Individuals in middle age experience physical and mental changes more often, in this case individuals are more susceptible to experiencing physical illness or experiencing psychological stress. (Teting, 2022). Because in late adulthood, people experience stress physically and psychologically due to work or family problems, so the knowledge/ information they receive about stroke and how to care for stroke patients at home will be hampered. Therefore, in late adulthood, a mindset that develops in capturing information does not guarantee that someone will carry out treatment on patients.

This is in line with the research results (Fatmawati, 2020) that the age of families caring for stroke patients is mostly in late adulthood (36-45 years old), as much as 35%. This is also in line with research (Dewi & Wati, 2022) shows the characteristics based on age of families who care at home with the most stroke patients in the late adulthood category (36-45 years). Research result (Ardiati et al., 2022) Based on the table above, age, the majority of respondents were in the 56-65 year age range, namely 18 people (42.9%).

The research results showed that some clients' knowledge of post-stroke care was in

the poor category. Knowledge comes from information obtained from various sources, not just a person's subjective thoughts, and is used as a benchmark for a person's understanding of information (Bolisani dkk., 2018).

Knowledge about stroke is an important factor for families in providing care for stroke sufferers. Stroke sufferers will be very dependent on their family at home, where if the family's knowledge about stroke is lacking it will cause the family to be passive in their behavior and can cause seriousness for stroke sufferers. One of the functions of the family is to be able to provide support and care for family members who are sick. This function is carried out by the family of stroke sufferers by paying attention to mouth and eye care, feeding, controlling urination and defecation, and preventing falls. Good knowledge will be reflected in the attitude shown in caring for stroke sufferers (Wagachchige Muthucumarana et al., 2018).

According to research (Yaslina et al., 2019) The low average value of post-stroke care ability can be caused by the respondent's knowledge still being low or the respondent not knowing what a stroke is and the signs and symptoms and other things that they know. Other factors also show that when a family member experiences a stroke, this can

certainly influence the experience of poststroke care at home, there is a respondent who is the first. Knowledge of family members about caring for stroke patients at home can reduce disability and speed up recovery (Djailani, 2021). When a stroke patient is sent home, most of the patient's care is carried out by the family, so the involvement of the family as a caregiver in planning activities and assessing needs in the rehabilitation setting must be carried out.

Research result (Ardiati et al., 2022) Family knowledge was in the good category as many as 20 respondents (47.6%) and in the not good category as many as 22 Ardiati et al/ Health Journal 15 (1) 2022, 36-44 40 respondents (52.4%). Research result (Djailani, 2021) shows that the level of knowledge of family members regarding the care of post-hospitalization stroke patients at RSKD Dadi, South Sulawesi is still lacking. 5 Gombong Muhammadiyah University.

According to the researchers' analysis, the questionnaire contained 20 questions regarding matters related to stroke and how to treat it. The majority of respondents' own level of knowledge is classified as not good, which could be due to several factors, including the age of the respondent.

B. The Relationship Between Age and Knowledge about Stroke Patient Care

Table 2. results of analysis of the relationship between respondent age and knowledge about stroke patient care.

Respondent's age	Family knowledge								
	Not enough		Enough		G	Good		'otal	D Wales
	f	%	f	%	f	%	f	%	- P Value
<25	5	55.6	4	44.4	0	0	9	100	<u></u>
25-35	5	33.3	5	33.3	5	33.3	15	100	0.017
36-45	1	16.7	1	16.7	4	66.7	6	100	
Total	11	36.7	10	33.3	9	30	30	100	

The results of the study showed that there was a statistically significant relationship between age and family knowledge about post-stroke care. The above results are in line with research (Yanuar 2021). Based on the results using Rank Sperm correlation, the correlation coefficient value was 0.545 with a p value of 0.002 (p value <0.05), so it can be stated that there is a significant relationship between age characteristics and family

knowledge about caring for post-stroke patients. Based on the correlation value of 0.545, it shows a strong level of relationship.

The results of the research (Azali, Sulistyawati, and Adi 2021) showed that the variable that met the requirements to continue carrying out the multivariate analysis of the linear regression test was the age variable with a p value of 0.19. The conclusion in this study is that the age variable can influence family knowledge in

providing care to stroke patients after hospitalization.

The results of research (Bakri, Irwandy, and Linggi 2020) with results Based on the statistical test, it is known that the p value $< \alpha$ (0.05), it can be concluded that the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted, meaning that there is an influence of health education about caring for stroke patients at home on the level of family knowledge. Therefore, it is important for nurses to provide health education about caring for stroke patients at home to families so that family knowledge increases.

The family has a role when caring for a family member who has had a stroke, including the role of the family as a service unit. An important factor that influences the care of post-stroke patients is the level of knowledge. Without this level of knowledge, families are unable and lack understanding when providing necessary and adequate care to patients. For families who are caring for post-stroke, it is important to know the impacts that arise and the potential for complications in the patient. Recovery for stroke sufferers is difficult to achieve properly if no one in the family understands what needs to be done to improve the health status of post-stroke patients and that appropriate care is given to family members who have suffered a stroke. There are many factors that can influence a person's knowledge, one of which is age. Age is a person's age from birth and can then be measured in units of time and viewed from a chronological perspective, person's personality can generally be seen from the degree of anatomical and physiological development. (Jovial Noli et al., 2021)

increases, knowledge As age can person's mindset influence a and understanding ability. As people get older, be developments in their can understanding and thinking patterns, which will then result in the insights they gain becoming better. Then it is necessary to carry out a study or research on the relationship between age and family knowledge about post-stroke patient care.

According to researchers' analysis, age will influence a person's mindset and will determine the direction of a person's life, including health. It is not necessarily true that adults have a better mindset than young people. Usually children have a higher level of obedience than teenagers, even though children have less information. Several studies say that the reason someone has less knowledge is because they lack information or experience appropriate to the situation they are experiencing, so they have difficulty receiving and being given treatment appropriate to the situation. It can be concluded that there is a relationship between the respondent's age and family knowledge post-stroke patient about care. limitations of this study are Data collection was conducted at the hospital, with the research respondents being family members accompanied the patients. researcher was unable to identify the specific roles of the caregivers in detail, as caregiving at home was provided by more than one family member.

IV. CONCLUSION

The results of the research show that there is a relationship between age and family knowledge about post-stroke patient care. This study offers several benefits to different parties. For the researcher, it enhances knowledge and provides new insights, particularly in understanding that the age of respondents can affect the family's knowledge about post-stroke patient care. For Muhammadiyah University of Kudus, the findings serve as a valuable reference, contributing to academic literature demonstrating that respondent age can influence family awareness regarding poststroke care. For society, the results offer important information, raising awareness that family members' age may play a role in their understanding of the care required for poststroke patients. Lastly, for future researchers, this study provides a reference point, offering valuable information and a foundation for further exploration of family knowledge in post-stroke care, paving the way for more indepth studies on this topic in the future.

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REFERENCES

- Alvin, Z. (2023). Overview of family knowledge in treatment of stroke patients (study in the working area of rsu anna Medika Madura). NGUDIA HUSADA MADURA STICKES.
- Ardiati, E. A., Anggraini, M. T., & Fuad, W. (2022). The relationship between knowledge and length of care with family attitudes in caring for stroke sufferers.
- Azali, L. M. P., Sulistyawati, R. A., & Adi, G. S. (2021).Faktor-Faktor Yang Dengan Berhubungan Pengetahuan Keluarga Dalam Memberikan Perawatan Kepada Pasien Stroke Pasca Hospitalisasi. Journal of Advanced Nursing and Health Sciences, 75-82.
- Bakri, A., Irwandy, F., & Bongga Linggi, E. (2020). The Effects of Health Education about the Care of Stroke Patients at Home Against the Level of Family Knowledge. Sandi Husada Health Scientific Journal, 11(1), 372–378. https://doi.org/10.35816/jiskh.v10i2.299
- Bolisani, E., Bratianu, C., Bolisani, E., & Bratianu, C. (2018). The elusive definition of knowledge. Emergent knowledge strategies: Strategic thinking in knowledge management, 1–22.
- Darmawan, D. (2019). Struk. Journal of Chemical Information and Modeling, 53(9), 1689–1699.
- Dewi, N. L. P. T., & Wati, N. M. N. (2022). The Relationship between Family Knowledge Level and Post-Stroke

- Patient Self-Efficacy in Preventing Recurrent Attacks. Baiturrahim Jambi Academic Journal, 11(2), 203–213.
- Djailani, R. (2021). Description of the Level of Knowledge of Family Members Regarding Post-Hospitalization Stroke Patient Care at RSKD Dadi, South Sulawesi.
- Fatmawati, A. (2020). Description of Family Knowledge about Stroke Patient Care. Journal of Holistic Health, 4(1), 52–60. https://doi.org/10.33377/jkh.v4i1.73
- Handayani, S., I. M., B. A., N. N., & R. E. (2020). The Influence of Smoking Behavior and Alcohol Consumption on Health Literacy Levels: Survey in Semarang City. JKM (Public Health Journal) Primary Scholar, 8(1), 62-72.
- Jovial Noli, F., Jufri Sumampouw, O., & Tamardy Ratag, B. (2021). Age, Period Of Work And Complaints Of Lower Back Pain In Known Factory Workers. Journal of Public Health and Community Medicine, 2(1).
- Masyhurah, J. ., Utomo, W. ., & Tampubolon, M. M. . (2024). Gambaran Pengetahuan dan Sikap Keluarga tentang Terapi Komplementer sebagai Perawatan Pasien Pasca Stroke. Jurnal Ners, 8(1), 681–689.https://doi.org/10.31004/jn.v8i1.210 65
- Ministry of Health of the Republic of Indonesia. (2019). Indonesian-Health-Profile-2019. Indonesian Health Profile.
- Maya Indra Putri Djara, P. (2023).

 Description Of The Level Of Family
 Knowledge About Stroke In The Oepoi
 Health Center, Kupang City. Kupang
 Ministry of Health Polytechnic.
- Nursalam, N. and others. (2016). Metodologi Penelitian Ilmu Keperawatan. Journal of Chemical Information and Modeling, 53, 1689–1699.
- Pistanty, M. A., & Mulya Susanti, M. (2020). Quality description of family life with stroke in purwodadi puskesmas area i grobogan district. The Shine Light of the

- World D-III Nursing, 5(1). http://ejournal.annurpurwodadi.ac.id/index.php/TSCD3Kep
- Teting, B., Yani, Y. And Jho, Y. L. (2022) .Dukungan Keluarga Dan Tingkat Depresi Pada Lansia Di Kelompok Lansia ST. ANGELA SAMARINDA, Sebatik, 26(1), Pp. 81–86. Doi: 10.46984/Sebatik.V26i1.1679.
- Wagachchige Muthucumarana, M., Samarasinghe, K., & Elgán, C. (2018). Caring for stroke survivors: experiences of family caregivers in Sri Lanka—a qualitative study. Topics in stroke rehabilitation, 25(6), 397–402.
- World Health Organization (WHO). (2023). Hypertension. https://www.who.int/news-room/fact-sheets/detail/hypertension
- Yanuar, A. P. (2021). Relationship between age and family knowledge about post-stroke patient care.
- Yaslina, Y., Maidaliza, M., & Hayati, I. (2019). The Effect of Providing Discharge Planning on the Family's Ability to Care for Post-Stroke at Home in 2019. Perintis Health Journal (Perintis's Health Journal), 6(1), 54–59.