

Factors Related to Anxiety Level in Family Members of Patients With Cerebrovascular Disease at Siloam General Hospital, Karawaci 2020

Felani Dio Fadron¹, Stefanus Andang Ides^{2*}, Fitriana Suprapti³

¹Student of Sint Carolus School of Health Sciences Jakarta

²Lectures of Sint Carolus School of Health Sciences Jakarta & Student Doctoral of Jakarta State University

³Lectures of Sint Carolus School of Health Sciences Jakarta

* Corresponding Author. Email: stefanus@stik-sintcarolus.ac.id

ABSTRACT

Background: Anxiety experienced by the family is one form of psychological disorders in family members who suffer a stroke. The study aims to determine the factors related anxiety level in family members of patients with cerebrovascular disease at Siloam General Hospital Karawaci. **Method:** Method research is a quantitative study using cross sectional design and correlational description approach. The sample was the family of patients as many as 86 respondents, taken in purposive sampling. **Results:** The univariate analysis of majority of age 31-60 years 84,9%, sex female 67,4%, level of education in high school 58,1%, income \geq 1.000.000 – 2.000.000 50%, type of stroke is stroke ischemic 82,6%. The level of the family anxiety is moderate anxiety as much as 62.8%. Statistical analysis of bivariate chi square and Kendall's Tau-C showed a significant type of stroke ($p=0,000$), level education ($p=0,001$), and there is not relationship between sex with anxiety level ($p=0,756$), age ($p=0,603$), and income ($p=0,312$). **Conclusion:** type of stroke and level education are related to the level of family anxiety. Suggestion: nursing care not only to patients but to family who accompany because the family plays a role in caring for patients when they go home, periodic evaluation of the use of discharge planning form in each ward.

Keywords: Anxiety, Family, Stroke

1. INTRODUCTION

Stroke is damage to brain tissue caused by disruption of blood flow to the brain due to a ruptured blood vessel or a blockage that is characterized by symptoms of weakness in the face and ecstacity [1]. [2] revealed that the majority of stroke cases occurred in ischemic stroke by 58% and hemorrhagic stroke by 42%. Stroke is still the number five cause of death in the world with a prevalence

of 100,000 per year [3]. The prevalence of stroke in Indonesia is one of the top 10 non-communicable diseases with a prevalence of 10.9% while in Banten Province 4.1% [4]. Stroke patients at the Siloam Karawaci General Hospital in January 2017 - December 2017 were 969 people, January 2018 - December 2018 as many as 1102 people, and January 2019 - March 2019 as many as 102 people [5].

Patients who experience a stroke generally experience signs and symptoms such as weakness in limbs, difficulty speaking and headaches [6]. These signs and symptoms directly or indirectly affect the quality of life of patients and their families. Stroke patients experience a decrease in quality of life where they experience helplessness, limited activity, decreased social contact which makes patients uncomfortable for fear of upsetting the family [7]. [8] mentioned that stroke patients who have positive support will feel cared for, loved in every condition, and the family becomes a source of strength for patients. Declining quality of life in stroke patients has an impact on patients and caregivers, namely anxiety. The level of anxiety of stroke patients is moderate anxiety (39.1%) [9].

Empirical experience in the field shows the same thing in the form of anxiety and concern about losing members of stroke patients treated at Siloam Karawaci Hospital. In interviews conducted with the head of the room in the inpatient room of Siloam Karawaci General

Hospital showed that families accompanying stroke patients showed anxiety in the form of frequent family inquiring about the condition of stroke patients repeatedly so that researchers were interested in conducting research on factors related to anxiety levels family in caring for family members who have a stroke.

2. METHODS

This research uses quantitative methods with correlational descriptive research design with cross sectional approach. The study population was the families of stroke patients who accompanied patients in Siloam Karawaci General Hospital using purposive sampling as many as 82 respondents. The study population was the families of stroke patients who accompanied patients in Siloam Karawaci General Hospital using purposive sampling as many as 82 respondents. The data collection instrument used was the HARS questionnaire. The analysis used in this study is univariate and bivariate analysis, as well as statistical tests using chi square and Kendall's Tau-C.

3. RESULT

3.1 Univariate data

Table 1. Result of Frequency distribution of Characteristic

Charac-teristics	Parameter	Freq	%
Age	21 -30 years	13	15.1
	31- 60 years	73	84.9
Gender	Male	58	67.4
	Female	28	32.6
Level of Education	Elementary school	11	12.8
	Middle School	22	25.6
	High school	50	58.1
	Bachelor	3	3.5
Earning	< 1.000.000	3	3.5
	≥ 1.000.000-2.000.000	43	50
	> 2.000.000- 3.000.000	40	46.5
Types of Stroke	Ischemic Stroke	71	82.6
	Hemorrhagic Stroke	15	17.4
Level of Anxiety	Mild	13	15.1
	Moderate	54	62.8
	Severe	19	22.1

Table 1 shows the majority of respondents aged 31-60 years as much as 84.9% women as much as 67.4%, high school education level as much as 58.1%, income $\geq 1,000,000 - 2,000,000$ by 50%,

type of stroke is ischemic stroke as much as 82.6%. The level of anxiety experienced by the family is moderate anxiety as much as 62.8%.

3.2 Bivariate Analysis

Table 2.1 Relationship between education and family anxiety level

Education	Anxiety Level							P - Value
	Mild		Moderate		Severe		%	
	n	%	N	%	n	%		
El.School	0	0.0	4	36.4	7	63.6	100	0.001
Mid. School	0	0.0	20	90.9	2	9.1	100	
High school	11	22.0	29	58.0	10	20.0	100	
Bachelor	2	66.7	1	33.3	0	0.0	100	
Total	13	15.1	54	62.8	19	22.1	100	

Table 2.1 shows that respondents in high school education experienced 58% moderate anxiety. Kendall's Tau-C statistical test with a 95% confidence level produces a p-value of 0.001 (<0.05) which means that H_{a1} is accepted, that is, there is a relationship between education and the level of family anxiety at Siloam Karawaci General Hospital.

anxiety of patients being treated in critical nursing units, with 40 respondents. The results of these studies indicate that a person's education level will affect the ability to think and to seek and receive information.

This result is in line with [10] research regarding the factors that influence the level of family

According to researchers, respondents who accompany stroke patients with low education have an increased level of anxiety because the information obtained is minimal, supported by limited knowledge of social media.

Table 2.2 Relationship between age and family anxiety level

Age	Anxiety Level							P - Value
	Mild		Moderate		severe		%	
	n	%	n	%	n	%		
21-30 years	2	15.4	7	53.8	4	30.8	100	0.603
31-60 years	11	15.1	47	64.4	15	20.5	100	
Total	13	15.1	54	62.8	19	22.1	100	

Table 2.2 shows that respondents aged 31-60 years experienced moderate anxiety as much as 64.4%. Kendall's Tau-C statistical test with a 95% confidence level produces a p-value of 0.603 (> 0.05) which means that H_{a2} is rejected,

ie there is no relationship between age and the level of family anxiety at Siloam Karawaci General Hospital.

In line with [11] regarding the factors that influence family anxiety in caring for family members who suffer a stroke in Bekasi City

This result is not in line with Riandini's research (2018) regarding factors related to family anxiety levels of stroke patients at Mitra Husada Pringsewu Hospital, with 95 respondents saying that age is a condition that is the basis of a person's maturity and development so that it can affect the level anxiety with p-value of 0.010.

Hospital, with 20 respondents respondents stated that age does not affect anxiety with a p-value of 0.167.

According to the researchers, the age range of the accompanying respondent did not affect anxiety because each age stage had different coping mechanisms.

Table 2.3 Relationship between sex and family anxiety level

Sex	Anxiety Level						P - Value	
	Mild anxiety		Moderate anxiety		severe anxiety			Total
	n	%	N	%	n	%		%
Female	8	13.8	36	62.1	14	24.1	100	0.756
Male	5	17.9	18	64.3	5	17.9	100	
Total	13	15.1	54	62.8	19	22.1	100	

Table 2.3 shows respondents with female gender experiencing moderate anxiety as much as 62.1%. Chi square statistical test with a 95% confidence level produces a p-value of 0.756 (> 0.05) which means that Ha3 is rejected, ie there is no relationship between gender and family anxiety level at Siloam Karawaci General Hospital. In line with Triyaningsih's research (2015) regarding factors that influence family anxiety in caring for family members who suffer strokes in Bekasi City Hospital, with 20 respondents stated that age does not affect anxiety with a p-value of 0.312.

This result is not in line with Harlina's research (2018) regarding the factors that affect the family anxiety level of patients treated in critical care

units, with 40 respondents saying that female respondents showed higher anxiety than men with a p-value of 0.011 because a man has a strong mental attitude toward something that is considered threatening to him compared to women. Analysis of the researchers, the sex of men and women accompanying patients did not affect the level of anxiety due to information obtained by respondents about stroke. There are some respondents who say that stroke is a deadly disease so that it can adapt to the conditions being experience.

Table 2.4 Relationship between income and level of family anxiety

Income	Anxiety Level							P - Value
	Mild anxiety		Moderate anxiety		severe anxiety		Total	
	n	%	n	%	n	%	%	
< 1.000.000	1	33.3	2	66.7	0	0.0	100	0.312
≥ 1.000.000 – 2.000.000	3	7.0	35	81.4	5	11.6	100	
> 2.000.000 – 3.000.000	9	22.5	17	42.5	14	35.0	100	
Total	13	15.1	54	62.8	19	22.1	100	

Table 2.4 shows that respondents with an income of < 1,000,000-2,000,000 experienced moderate anxiety as much as 81.4%. Kendall's Tau-C statistical test with a 95% confidence level produces a p-value of 0.312 (> 0.05) which means that Ha4 is rejected, there is no relationship between income and the level of family anxiety at Siloam Karawaci General Hospital.

This is not in line with [12] regarding factors related to family anxiety levels of stroke patients at Mitra Husada Pringsewu Hospital, with 95 respondents with p-values of 0.015 stating that someone who is a family member is sick and

must wait at the hospital then interrupted his work activities so that the income earned will affect anxiety due to insufficient income for the cost of care.

Researcher's analysis, the income earned by respondents for the cost of a family who has had a stroke does not affect the level of anxiety because the study land is a hospital that fully uses BPJS (Social Security Organizing Agency) guarantees so that all costs for the actions and care of patients are not burdened to the family at admission until the patient goes home.

Table 2.5 Relationship between type of stroke and the level of family anxiety

Type of stroke	Anxiety Level							P - Value
	Mild anxiety		Medium anxiety		severe anxiety		Total %	
	n	%	n	%	n	%		
Ischemic stroke	13	18.3	51	71.8	7	9.9	100	0.000
Hemorrhagic stroke	0	0.0	3	20.0	12	80.0	100	
Total	13	15.1	54	62.8	19	22.1	100	

Table 2.5 shows that respondents with families with ischemic stroke experienced moderate anxiety as much as 71.8%. Chi square statistical

test with a 95% confidence level produces a p-value of 0,000 (<0.05) which means that Ha5 is accepted, that is, there is a relationship between

the type of stroke and the level of family anxiety at Siloam Karawaci General Hospital.

This result is not in line with [13] research regarding the relationship between stroke type and anxiety in the caregiver of stroke patients at RS Moerwadi Hospital Surakarta, with 45 respondents stating that the type of hemorrhagic stroke has greater anxiety compared to ischemic stroke with p- value 0.022 because hemorrhagic stroke patients experience more severe clinical symptoms and undergo a longer treatment time than ischemic stroke patients.

According to researchers, respondents who accompanied families who had had a stroke were diagnosed for the first time so the understanding was less about strokes, the patient's condition that many other medical devices installed and the environment that contained patients with the same condition.

4. CONCLUSION

1. Based on the demographic characteristics, it was found that the majority of respondents were in the age range of 31-60 years (84.9%), as many as female sex (67.4%), had a high school education level (58%), the highest income was range $\geq 1,000,000 - 2,000,000$ (50%) and the most types of stroke in patients are ischemic strokes (82.6%). The level of anxiety experienced by the family is moderate anxiety as much as 62.8%.

2. There is a relationship between the level of education, type of stroke with the level of family anxiety in Siloam Karawaci General Hospital with p-value (<0.05).

3. There is no relationship between age, sex, income and family anxiety level at Siloam Karawaci General Hospital with p-value (> 0.05).

5. SUGGESTION

The results of this study are input to the hospital to make regular health promotions regarding stroke to the families of new patients.

This research is a reference for conducting similar research and providing family nursing care.

This study is an input for further researchers to conduct similar studies with different variables, especially family knowledge and take a larger sample in patients and families.

REFERENCES

- [1] Amiman, R. T. (2016). Overview of LOS in Stroke Inpatients at Prof. Dr. R. D Kandou Manado. *Journal of e-Clinic*.
- [2] AHA (2019). Heart Disease and Stroke Statistics. *AHA Journals*, 2-5. Taken back from the AHA:
<https://www.ahajournals.org/doi/10.1161/CIR.0000000000000659>
- [3] Astuti, R. (2014). Hubungan Jenis Stroke dengan Kecemasan Pada Caregiver Pasien Stroke di RSUD DR Moerwadi Surakarta. *Perpustakaan UNS*.
- [4] Dewi, I., Trisyani, Y., & Belinda, V. (2018). Life Experience of Post-Stroke Patients in Bandung. *Nursing UNPAD*.
- [5] Harlina, & Aiyub. (2018). Faktor Faktor Yang Mempengaruhi Tingkat Kecemasan Keluarga Pasien Yang Dirawat di Unit Perawatan Kritis. *JIM FKep*.
- [6] Hickey, J. V. (2014). *The Clinical Practice of Neurological and Neurosurgical Nursing*. Philadelphia: Lippincott Williams & Wilkins.
- [7] Riandini, W. O. (2018). Faktor - Faktor Yang Berhubungan Dengan Tingkat Kecemasan Keluarga Pasien Stroke di RS Mitra Husada Pringsewu. *Jurnal Kesehatan Ilmiah*, 20-26.
- [8] Riskesdas, (2018). Department of Health. Retrieved from the Ministry of Health: http://www.depkes.go.id/resources/download/infoterkini/materi_rakorpop_2018/Hasil%20Riskesda%202018.pdf
- [9] SKGH, R. M. (2019). *Stroke Patient Data in SKGH*. Tangerang: SKGH Medical Record.
- [10] Sudarsih, S. &. (2018). Relationship of Family Support with ADL in Post-Stroke Patients at Sakinah Mojokerto Hospital and RSU Dr. Wahidin Sudiro Husodo Mojokerto. *Binasehat*

- [11] Sumbogo, A. S. (2015). Overview of Psychological Responses to Stroke Patients. *Permas Scientific Journal*, 29.
- [12] Triyasningsih. (2015). Faktor - Faktor Yang Mempengaruhi Kecemasan Keluarga Dalam Merawat Anggota Keluarga Yang Menderita Stroke di RSUD Kota Bekasi. *FIKUMJ*.
- [13] WHO. (2016). WHO. Retrieved from WHO: <http://www.emro.who.int/health-topics/stroke-cerebrovascular-accident/index.html>.