SELF CONCEPT ANALYSIS ON DEPRESSION LEVEL OF STROKE PATIENTS USING THE CALLISTA ROY MODEL CONCEPT APPROACH

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A B S T R A C T

Stroke patients have many psychological changes such as depression and social limitations. Several factors that can affected to depression level were genetic factor, disability level, social engagement, stroke severity level and self concept. The purpose of this study was to analyze self concept on depression level of stroke patients using Callista Roy Concept Model Approach. The design used correlation analysis with cross sectional approach. Sample of this study were 67 respondents used purposive sampling method. The independent variable was self concept while the dependent variable was depression level. The instruments of this study were self concept questionnaire and depression level questionnaire (Hamilton Depression Rating Scale). The analyze used Spearman Rank test. The results showed that most of the respondents have low self concept of 37 respondents (55.5%) while the depression level showed severe depression of 37 respondents (55.2%). Based on the analyze, it was found that p-value (0.001) < α 0.05. So it can be concluded that there was relationship between self concept and depression level of stroke patients. Self concept changed the personal perspective to their own self. They felt more appreciated and accepted to their self. So it could increase their self motivation and decrease their depression level.

I. INTRODUCTION

Stroke is a health problem and needs special attention. Stroke is the main cause of death and disability for almost all hospitals in Indonesia. The Stroke case is increasing from every year. For every 7 die people in Indonesia, 1 of them is due to a stroke (Julianto laila, 2018) in (Pongsilurang et al., 2020). Stroke patients can experience psychological changes such as symptoms of depression, limitate activities and socialise, and financial burden for their families, which is proven in research (Pesantes, et all 2017). According to the American Heart Association (AHA) Stroke cases in the United States reaches 500,000 per year. 85.5% of the total deaths from stroke worldwide occur in

developing countries. (Setyowati and Hasanah, 2018).

Based on research in developed countries, post-stroke depression has a high prevalence, which is on average 20-50% (Zhang, et al 2013). Study in developed countries also found that depression appears between 3-6 months after a stroke. Study in China reported that patients were diagnosed with post-stroke depression two weeks after the patient had a stroke (Yuan, et al, 2012). The influence depression Factors of post-stroke patients include: genetic factors, disability level, social support, and stroke severity level. (Medina, et al, 2019). Meanwhile, the causes of depression according to (Wibowo, 2016) are divided into three groups including: biological organ factors, socio-environmental factors, and psychological factors.

The cause of negative self-concept in post-stroke patients are physical disabilities patient, they feel helpless and useless, if they are not able to cope critically with themselves will result in feeling more depressed, regretted, and getting angry at healthy people, also will not interact with their environment, self-confine, self-isolate, be suspicious of everyone because they feel they will be ridiculed and humiliated so they do not feel safe with themselves (Mangunsong (1998) in (Wati & Yanti, 2018). Post-stroke depression has a negative effect on the recovery of cognitive function and daily activities. Patients will also withdraw from social activities to become low self-esteem after a stroke and have an impact on rehabilitation therapy carried out by nurses or other therapists due to limited communication and lack of motivation to recover. This condition will have an impact on the recovery period and have a negative impact on the environment and social relationships (Ginkel et al 2010) in (Idris et al, 2018).

One of the non-pharmacological methods to reduce the depression level is reflexology. Massage is very useful for stroke patients because it can help reduce depression and anxiety level (Almuttaqin, 2017) in (Apriliasanty et al., 2020). Another effort to reduce depression level of stroke patients can be done by increasing self-concept. This is because a positive self-concept will bring positive vibes, like feels respected by others also enthusias and motivated (Suratun, 2017). the family support can help stroke patients through the though times. Ineffective individual coping accompanied by a lack of family support can trigger feelings of depression (mild, moderate, severe), so family support have an important role in the self-concept of stroke patients. (Hendayani & Sari, 2018). Based on this, researchers are interested on knowing the relationship between self-concept and depression level in post-stroke patients.

II. METHODS

This study conducted in ANNA Medika Madura Hospital in Bangkalan East Java for two months. The design used correlation analysis with cross sectional approach which is a type of research that emphasizes the measurement or observation time of independent variables and data on the dependent variable only once. In this type, the independent variable and the dependent variable are evaluated simultaneously.

The population of this study was stroke patients in stroke outpatient unit of ANNA Medika Madura Hospital as many as 81. The inclution criterias was stroke patients in stroke outpatient unit of ANNA Medika Madura Hospital on June and July 2022, while the exclution criterias was stroke patient with mental disorder before. The sample size as many as 67 respondents used probably sampling, simple random sampling.

The Independent variable of this study was Self concept while the Dependent variable was Depression level. This study used questionnaire as instrument. There were two questionnaire, Self concept

questionnaire and Depression level questionnaire. Self concept questionnaire consisted of 25 points and has been carried out the validity test dan reability test. The result of validity test showed that the lowest r-count on first question was 0.609 while the highest r-count was 0.890. The reliability test used alpha cronbach, the result was 0.971. Depression level questionnaire used HDRS (Hamilton Depression Rating Scale). This questionnaire consist of 17 questions. This questionnaire was not tested by validity and realibility because it was already valid or standart. The data collection process was carried out by the researcher asked respondents (stroke patients in stroke outpatients unit) to fill out the questionnaire. Before filling the questionnairre, they should fill inform concent first.

This test used SPSS 21 version. This studi used descriptive analysis and inferensial analysis. The descriptive analysis include the general data and spesific data used frequency distribution. While the spesific data used Spearman Rank test with alpha 0.05. This test to analyze the correlation between self concept and Depression level.

III. RESULT

Table 1. Characteristics of respondents by age

Age	f	Percentage (%)
46-55 Years (Early Elderly)	12	17.9
56-65 Years (Late Elderly)	45	67.2
>66 Years (Seniors)	10	14.9
Total	**67**	**100.0**

Distribution Frequency based on age shows that most of the respondents aged 56-65 years old are 45 (67.2%)

Table 2. Characteristics of respondents based on education

Education	f	Percentage (%)
Elementary-SMP (Basic)	50	74.6
Senior High School (Equivalent to Middle School)	9	13.4
D3- S1 (Above)	8	12.0
Total	**67**	**100.0**

Distribution based on education shows that the last type of education of the respondents is the majority of respondents with elementary school education as many as 50 (74.6%).

Table 3. Self Concept of Stroke patient

Self-concept	f	Percentage (%)
High	6	9.0
Medium	24	35.8
Low	37	55.2
Total	**67**	**100.0**

Based on self-concept Frequency distribution based on self-concept shows that most of the respondents' self-concepts show low self-concepts as many as 37 respondents (55.5 %).

Table 4. Depression Level of Stroke Patient

Depression Level	f	Percentage (%)
No depression	7	10.4
Mild depression	10	14.9
Moderate depression	13	19.4
Severe depression	37	55.2
Total	**67**	**100.0**

Frequency distribution based on the level of depression shows that the majority of respondents showed major depression as many as 37 (55.2%).

Table 5. Cross Tabulation of the Relationship between Self-Concept and Depression Level

		Depression Level				Total
		No Depression	Mild Depression	Moderate Depression	Severe Depression	
Self concept	High Concept Self	3	3	0	0	6
		4.5 %	4.5 %	0.0 %	0.0 %	9.6%
	Moderate Self-Concept	4	7	9	4	24
		6.0 %	10.4 %	13.4 %	6.6 %	35.8 %
	Low Self-Concept	0	0	4	33	37
		0.0 %	0.0 %	6.6 %	49.3 %	55.2 %
Total		7	10	13	37	67
		10.4 %	14.9 %	19.4 %	55.2 %	100 %

Sperman Rank Test
alpha 0, 05
$P = 0.001$
$r = 0.806$

Based on results of the cross tabulation between self-concept and depression level, it can be explained that 3 (4.5%) patients in the Neurology Department of ANNA Medika Hospital said that they had high self-concept with no depression.), while patients who have low self-concept with major depression are 33 (49.3%).statistical test *Spearman Rank* , the *p Value* (0.001) means that the *p Value* <α (0.05). With a correlation value of 0.806, which means that the coefficient between the two variables is very strong, so H1 is accepted, this indicates that there is a relationship between self-concept and depression levels in post-stroke patients using the *Callista Roy* at the Neurology Poly Hospital ANNA Medika Madura.

IV. DISCUSSION

This study is supported by research conducted by Suryawantie et al (2019) regarding the Relationship between Self-Concept and Coping Mechanisms in Post-Stroke Patients at the Neurology Poly Hospital of Dr. Slamet Garut in 2018 which says that the ideal self is the hope or ideals that a person hopes or wants in his life. His ideal self is negative, because he is fed up with the treatment he is taking, there is a rejection in himself with his illness so that it can affect his desires and ideals.

This study also corroborated by Simbolon's research (2017) on the Relationship between Family Support and Self-Concept of Stroke Patients at Santa Elisabeth Hospital Medan, which says that a patient's with negative self-concept views changes in himself negatively, the patient feels disliked by others. and can not accept the situation this will affect the patient's self-concept. This feeling makes the patient feel stressed and disturbed which can eventually aggravate the condition of the illness. Patients with stroke can cause responses, one of which is loss of self-concept or changes in self-concept where they feel themselves changing, including the shape and function of the patient's body so that they cannot think rationally.

Based on the data obtained, most of the respondents at the Neurology Clinic of RSU ANNA Medika Madura had a severe depression level of 37 (55.2%). This study is supported by research conducted by Purba & Utama (2019) regarding Post-Stroke Client Disability to Depression which states that post-stroke patients

experience emotional disturbances, find it difficult to control their feelings and cause depression. Because after having a stroke, the client's level of dependence on others is increasing, especially activities of daily life such as self-care.

Other study is also corroborated by research by Ramadia et al (2019) on the relationship between the ability to change negative thoughts with depression and helplessness in stroke clients who say that negative thoughts that arise cause individuals to experience depression. People in a state of depression are often unable to control their negative thoughts.

Statistical test, Spearman Rank it can be concluded that H1 is accepted which means there is a relationship between self-concept and depression level of post-stroke patients in Neurology Polyclinic at RSU ANNA Medika Madura. The results of this study are parallel with research (Sedubun et al., 2021) that there is a significant relationship between the relationship between self-concept and the incidence of depression in post-stroke patients at the Neuro Clinic of Labuang Baji Hospital Makassar.

Adaptation Callista Roy theory, reveals that humans are special creatures with ability to adapt and to change environmental conditions (Andrews and Roy, 1986). Humans must adapt to environmental changes in meeting the four modes of adaptation (physiological, self-concept, role function and interdependence) by using effective coping to achieve a balance. Stress is associated with depressive symptoms, and depression is associated with suicide risk (Low et al, 2012; You et al, 2014).

The limitations of this study were that some patients difficult to read the questionnaire and fill out the questionnaire because of blurry vision due to the decrease of vision. Also physical conditions that made difficult for writing. In addition, the language was difficult for the patient to understand, so the researcher read out the contents of the questionnaire one by one.

V. CONCLUSION

Based on the studies that has been carried out, the following conclusions can be drawn most of the post-stroke patients showed low self-concept in the Stroke Outpatient Unit of ANNA Medika Madura Hospital, most of the post-stroke patients showed Severe Depression Level in the Stroke Outpatient Unit of ANNA Medika Madura Hospital, and there is a relationship between self-concept and depression level in post-stroke patients using the Callista Roy concept model approach in the Stroke Outpatient Unit of ANNA Medika Madura Hospital

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