



The Incident of Depression In Post Stroke Patients In the Nervous Polyclinic Room of Daya General Hospital Makassar City, South Sulawesi

Wahidyanti Rahayu Hastutiningtyas^{1*}, Abu Bakar Betan², Abdullah³, Siti Aisyah⁴, Nur Meity Sulistia Ayu⁵, Rizki Andita Noviar⁶, Madepan Mulia⁷, Sarifudin Andi Latif⁸

¹ Program Studies Nursing, Tribhuwana Tungadewi University, Indonesia

² Programs Nursing Studies, STIKES Gunung Sari Makassar, Indonesia

³ Nursing Study Programs, Stikper Gunung Sari Makassar, Indonesia

⁴ Nursing Study Programs, Universitas Nahdlatul Wathan Mataram, Indonesia

⁵ Nursing Profession Study Program, STIKes Hang Tuah Tanjungpinang, Indonesia

⁶ Nursing Study Programs, STIKES Husada Jombang, Indonesia

⁷ Nursing Study Programs, Poltekkes Kemenkes Tanjung Karang, Indonesia

⁸ Nursing Study Programs, STIKES Amanah Makassar, Indonesia

ABSTRACT

Stroke is a disorder of blood circulation in the brain, either due to ischemic (non-hemorrhagic stroke) or hemorrhagic (hemorrhagic stroke), which causes a lack of blood supply to the brain. Depression is an emotional disorder experienced by a person that can make him feel sad and helpless. The prevalence of stroke in Indonesia is 12.1 %, the highest in the province of South Sulawesi (17.9%) and the lowest in the provinces of West Papua, Lampung and Jambi (5.3%). The aim of this study was to determine the description of the incidence of depression in post-stroke patients in the Neurology Clinic at Makassar Hospital. The type of research used in this research is descriptive survey research. The instrument in this research uses a questionnaire. The sample in this study was 38 post-stroke patients taken using accidental sampling technique. The results of this study showed that of the 38 respondents (100.0%), 33 respondents (86.8%) were Ischemic (Non-Hemorrhagic Stroke) and 5 respondents (13.2%) were Hemorrhagic (Hemorrhagic Stroke). For the incidence of depression, from 38 respondents (100.0 %), the highest incidence of depression was mild depression, 9 respondents (23.7%) and the lowest was 6 respondents who were not depressed (15.8%). The conclusion of this research is that the incidence of depression in post-stroke patients at the Makassar Hospital Neurology Clinic is that the majority experienced non-hemorrhagic strokes and the majority had mild depression. Patients are advised to reduce or prevent atherosclerosis and Obstructive Sleep Apnea while sleeping by maintaining a lifestyle such as exercising frequently, maintaining body weight, and having regular health





check-ups at health facilities. This is useful for avoiding ischemic strokes or Non-Hemorrhagic Strokes, and it is recommended that respondents always view the stressors they experience positively.

Keyword : Principals of Implementing, Early Mobilization in Patients, Investigative Care Units

*Correspondent : Wahidyanti Rahayu Hastutiningtyas

*E-mail : abclyanti@yahoo.com

1. Introduction

Stroke is the third cause of death in the world after coronary heart disease and cancer in both developed and developing countries. Globally, every year as many as 15 million people suffer from stroke. In 1999-2009, every year there were around 795,000 cases of stroke. Stroke causes 1 in 19 deaths in the United States. Meanwhile, the prevalence of stroke in Indonesia is 12.1 %, the highest in the province of South Sulawesi (17.9%) and the lowest in the provinces of West Papua, Lampung and Jambi (5.3%). Stroke accounts for a percentage of up to 21.1 % as a disease that can cause death (Ministry of Health, 2013; Satyanegara, et al, 2014; Stroke Forum, 2015; BPJS, 2016).

Stroke risk factors are divided into 2, namely modifiable risk factors and non-modifiable risk factors. Risk factors for stroke that cannot be changed are age, gender, race, family history, and previous history of stroke. Meanwhile, risk factors for stroke that can be changed are important to recognize, such as hypertension, diabetes, smoking and dyslipidemia. Strokes can occur at any age, but more than 70% of stroke cases occur over the age of 65 years.

The etiology of ischemic stroke is caused by thrombotic or embolic events which cause a decrease in blood flow to the brain. In a thrombotic event, blood flow to the brain is obstructed within a blood vessel due to dysfunction within the vessel itself, usually secondary to atherosclerotic disease, arterial dissection, fibromuscular dysplasia, or an





inflammatory condition. In an embolism event, a loose thrombus becomes an embolism from elsewhere in the body blocking blood flow through the affected vessel.

2. Research Methods

The type of research used in this research is descriptive survey research with the aim of describing the incidence of depression in post-stroke patients. The population in this study was all 428 post-stroke patients. The sample in this study was 38 post-stroke patients, sampling using "Accidental Sampling".

3. Results and Discussion

a. Results

This research was conducted at Makassar Hospital. This type of research is a descriptive survey research method with the aim of describing the incidence of depression in post-stroke patients. In this study, 38 respondents were obtained who met the predetermined inclusion and exclusion criteria. The data obtained is then presented in table form accompanied by an explanation of the frequency distribution of the data. The results of the research that has been carried out can be seen in the following description.

1) Univariate Analysis

Table 1.
 Distribution Frequency Respondent with
 Genesis Depression in Room Poly Nerve

Incident Depression	n	%
No Depression	6	15.8
Depression Light	9	23.7
Depression Currently	8	21.1
Depression Heavy	7	18.4
Depression Very Heavy	8	21.1
Amount	38	100.0

Based on table 1, data obtained from 38 respondents shows that the frequency distribution based on the incidence of depression, the highest is mild depression, 9 respondents (23.7%) and the lowest is respondents who are not depressed, 6 respondents (15.8%).





Table 2.

Tabulation Cross Patient Poststroke with Incident Depression in Room Poly Nerve

Patient Poststroke	Incident Depression											
	Depression Very Heavy		Depression Heavy		Depression Currently		Depression Light		No Depression		Amount	
	n	%	n	%	n	%	n	%	n	%	n	%
Non Hemorrhagic Strokes	6	18.2	6	18.2	7	21.1	9	27.3	5	15.2	33	100.0
Hemorrhagic Strokes	2	40	1	20	1	20	0	0	1	20	5	100.0
Amount	8	21.1	7	18.4	8	21.1	9	23.7	6	15.8	38	100.0

Based on table 2, data shows that 33 respondents (100%) suffered from NHS post-stroke. It was found that the highest incidence of depression was mild depression, 9 respondents (27.3%) and 5 respondents (100%) experienced HS post-stroke. It was found that the highest incidence of depression was very severe depression, 2 respondents (40%).

b. Discussion

1) Occurrence of Depression

The results of research using the Hamilton Depression Ratio Scale questionnaire showed that the highest incidence of depression was 9 respondents with mild depression (23.7 %) and the lowest incidence of depression was 6 respondents (15.8%) who were not depressed.

The results of the Hamilton Depression Ratiog Scale questionnaire showed that more respondents experienced mild depression. Where respondents often experience disturbed sleep patterns, experience anxiety (somatic anxiety), and experience decreased or abnormal function in their genitalia, etc.

According to researchers, mild depression experienced by respondents was due to internal and external factors. The internal factors are biogenic dysfunction, serotonergic and noradrenergic cell bodies located in the brain stem and external





factors such as insomnia and anxiety about their health so that a person can experience mild depression.

In accordance with previous research conducted at Irina F RSUP Prof. Dr. RD Kandou Manado by Dudung, Kaunang, and Dundu (2015), it was found that mild depression was most often experienced by post-stroke patients (45.8%).

According to the North East Valley Division of General Practice /NEVDGP (2012) in Mundiartasari (2014), the cause of post-stroke depression is due to biogenic-amine dysfunction, serotonergic and noradrenergic cell bodies located in the brainstem which sends projections to the frontal cortex. Abnormal tissue that disturbs the frontal cortex or basal ganglia can damage existing nerve fibers. This causes serotonin levels to decrease, resulting in depression.

According to Suwantara (2004) in Mundiartasari (2014), apart from brain disorders, depression can also occur as a reaction due to disability or helplessness caused by stroke.

2) Post-troke Patients

The results of the study showed that more post-stroke patients experienced non-hemorrhagic strokes, namely 33 respondents (100%) and more experienced mild depression (27.3%), while more than 5 respondents (100%) experienced hemorrhagic strokes. The majority experienced very severe depression (40%).

According to researchers from this study and previous research, the same results were obtained, where more people experienced ischemic strokes (Non-Hemorrhagic Strokes) compared to hemorrhagic strokes (Hemorrhagic Strokes). Many respondents who suffered ischemic strokes were caused by brain blood vessel abnormalities caused by several factors, one of which was atherosclerosis, Obstructive Sleep Apnea during sleep and others. The incidence of depression in Non-Hemorrhagic Stroke is more likely to experience mild depression due to abnormalities in the brain or because of the helplessness they experience.





In previous research conducted at Irina F RSUP Prof. Dr. mild depression (37.5%) depression can occur as a result of brain infarction or due to helplessness caused by stroke.

According to research conducted at Karakatau Medika Hospital by Nastiti (2012), the proportion of ischemic strokes was higher than hemorrhagic strokes (85%). Many disorders can support the occurrence of ischemic strokes, but atherosclerosis is the main cause.

According to research conducted at the Neurology Polyclinic at Doctor Abdul Aziz Hospital, Singkawang by Lidia (2015), sleep quality is the cause of NHS strokes. Factors that can increase the risk of stroke embolic thrombus are the increased ability of platelet aggregation during Obstructive Sleep Apnea Douglas and John (2009) in Lidia (2015). The combination of cerebral hypoperfusion and hypercoagulability in Obstructive Sleep Apnea is the cause of an increased risk of stroke Vahid (2001) in Lidia (2015).

4. Conclusion

- a) Most post-stroke patients are non-hemorrhagic stroke.
- b) Most cases of depression are mild depression. This is useful for avoiding ischemic strokes or Non-Hemorrhagic Strokes.
- c) Seeing the possibility of depression in post-stroke patients which could hinder recovery, it is recommended that respondents always view the stressors they experience positively.

5. Compliance with ethical standards

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Disclosure of conflict of interest





This research collaboration is a positive thing for all researchers so that conflicts, problems and others are absolutely no problem for all writers.

Statement of informed consent

Every action we take as authors is a mutual agreement or consent.

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