

# Level of Anxiety and Depression in Post-Stroke Patients at DR. Hasan Sadikin Hospital Bandung

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## ABSTRAK

Pasien paska stroke dapat mengalami berbagai gejala sisa sehingga dibutuhkan perawatan dalam jangka waktu yang lama. Kondisi tersebut dapat menjadi penghambat dan sumber stress bagi pasien paska stroke. Stres dan depresi dapat menjadi penghambat dan memperberat kondisi pasien. Banyak faktor yang mempengaruhi kecemasan dan depresi pasien sehingga dapat berbeda-beda di berbagai tempat. Oleh karena itu, penelitian ini dilakukan untuk mengidentifikasi kecemasan dan depresi di Rumah Sakit Hasan Sadikin Bandung sehingga dapat dijadikan bahan dasar dalam memberikan asuhan keperawatan yang sesuai dengan kondisi pasien. Penelitian ini merupakan penelitian deskriptif terhadap pasien paska stroke yang kontrol ke poliklinik saraf RS. Hasan Sadikin Bandung. Teknik sample yang digunakan adalah konsektive sampling dengan jumlah sampel sebanyak 50 orang. Instrumen yang digunakan dalam penelitian ini adalah *Hospital Anxiety Depression Scale* (HADS). HADS memiliki kelebihan yaitu dapat mengukur kecemasan dan depresi dalam waktu yang sama. Data yang terkumpul akan dianalisa dengan distribusi frekuensi. Hasil penelitian ini memperlihatkan bahwa 74% pasien paska stroke berada dalam kondisi kecemasan normal, 24% mengalami kecemasan ringan, 2% kecemasan sedang dan tidak ada yang mengalami kecemasan berat. Responden berada pada kondisi depresi ringan 8%, 92 % berada dalam kategori normal dan tidak ada satupun yang mengalami depresi sedang maupun berat. Hasil penelitian ini dapat dipengaruhi oleh karakteristik sebagian besar responden yang berusia pada tahapan dewasa madya, memiliki status menikah, dan tidak memiliki penyakit penyerta apapun. Kecemasan dan depresi sebagian besar pasien paska stroke berada dalam kondisi normal namun ada beberapa yang mengalami kecemasan dan depresi. Tenaga kesehatan khususnya perawat diharapkan dapat mengkaji dan memberikan intervensi terhadap kecemasan dan depresi sedini mungkin dengan memberikan konseling sebagai program tambahan dalam rehabilitasi.

**Keywords:** Kecemasan, depresi, stroke

## ABSTRACT

*Post-stroke patients may experience a variety of residual symptoms that require long-term treatment. These conditions can be a source of stress for patients post-stroke. Stress and depression can be aggravate the condition of the patient. There is many factors can affect anxiety and depression in patients so they can differ in different places. Therefore, this study was conducted to assess anxiety and depression in post-stroke patients at Hasan Sadikin Hospital so that it can be used as a basic data of nursing intervention and implementation to match the conditions that exist there. This research was a descriptive study of post-stroke patients who control at the neurological polyclinic of Hasan Sadikin Hospital Bandung. The sample technique used consecutive sampling with a sample size of 50 people. The instrument used in this study was Hospital Anxiety Depression Scale (HADS). HADS is an instrument for assessing anxiety and depression at the same time in patients at the hospital. The collected data were analyzed by using frequency distribution. The results of this study showed that 74% of post-stroke patients were in normal anxiety states, 24% had borderline abnormal, 2% abnormal. There were 8% of respondents who had borderline abnormal, 92% were in the normal category and none of them had abnormal. The results of this study can be influenced by the characteristics of most respondents who are at middle age mature, married and do not have*

*comorbidities so that his anxiety is low and his coping skills are good. Most of post-stroke patients had normal level of anxiety and depression, only some who experienced mild and severe level of anxiety and depression. Health workers, especially nurses are expected to early assess and provide intervention to anxiety and depression as early as possible by providing counseling as an additional program in rehabilitation.*

**Keywords:** *anxiety, depression, stroke*

## INTRODUCTION

Stroke is one of the main causes of death in many countries. Stroke ranks third in the order of causes of death, after heart disease and cancer (Pinzon, 2010). Based on data obtained from Indonesian Basic Health Research, the incidence of stroke in Indonesia continues to increase, from 8.3 per 1000 population in 2007 to 12.1 per 1000 population in 2013. The highest incidence of stroke in Indonesia occurred in West Java Province, with the number of patients as much as 7.4% or about 238,001 people (Kemenkes RI, 2013).

According to the World Health Organization (WHO), Stroke is a rapidly growing clinical sign of focal or global brain dysfunction, with symptoms that last for 24 hours or more, can cause death, with no cause other than vascular (Munir, 2015). Stroke is caused by blood vessel disorders in the brain, include blockage or bleeding. This condition can cause damage to that part of the brain. The brain functions as a motor center, cognitive, sensory and other vital functions. Therefore, stroke patients can experience various disorders. Impaired brain function experienced by stroke patients can be physical disturbance and emotional disturbance. Physical disorders associated with the limb weakness, cognitive function decline suddenly, communication disorder, swallowing disorders, balance disorders and others. Severe brain dysfunction can lead to decreased awareness that can lead to death (Smeltzer and Bare, 2010).

The physical limitations experienced by post stroke patients can be repaired or not. These condition puts the post-stroke patient

on treatment for a long period of time. Post-stroke patient care should be sustainable in order to prevent recurrent complications and strokes. During this treatment process, post stroke patients may experience changes including social, emotional and financial roles. All these conditions lead to post-stroke patients experiencing emotional disturbances, decreased functional ability and quality of life (Kim, Jong, 2016).

Stroke can also cause emotional disturbance on patients as emotional distress and depression (Smeltzer and Bare, 2010). Various studies have shown that anxiety symptoms are more commonly seen than depressive symptoms in patients with ischemic stroke (Llorca et.al., 2012). These can aggravate the patient's condition. Physical illness, depression and anxiety have strong correlation with their effects on outcome (Clarke and Currie, 2009). Several previous studies show that depression and anxiety of post-stroke patients can influence their quality of life. Quality of life of post-stroke patients is low. The most influential factors are depression, marital status, quality of social support and functional. Quality of life among post-stroke patients is influenced by emotional status, physical weakness, and demography including gender and education level. Futhermore, quality of life among post-stroke patients influenced by emotional state, physical disability, and demografik such as gender and education (Oros et.al., 2016). Whereas a good quality of life is the goal of post-stroke patients care. So depression and anxiety in stroke patients should be overcome. There is many factors can affect anxiety and depression in patients. Anxiety

and depression can differ in different places. Therefore, this study was conducted to assess anxiety and depression in post-stroke patients at Hasan Sadikin Hospital so that it can be used as a basic data of nursing intervention and implementation to match the conditions that exist there.

## MATERIALS AND METHODS

This study was a descriptive study of post-stroke patients who control at the neurological polyclinic of Hasan Sadikin Hospital Bandung. The sample technique used consecutive sampling with a sample size of 50 people. The inclusion criteria of the respondents involved in this study were stroke patients at least 3 months and do not experience communication problems.

The instrument used in this study was Hospital Anxiety Depression Scale (HADS). HADS is a tool used to measure anxiety and depression of patients in hospitals developed by Zigmond and Snaith (1983). This instrument consists of 14 questions which assess levels of depression and anxiety by using Likert scale (0-3). This instrument categorize patients into anxiety and depression level include normal (0-7), borderline abnormal (8-10) and abnormal (11-21). Instrument used in this research is HADS Bahasa Indonesia version which have been developed by Rudi, Widyadharma, Andyana (2012). Validity and reliability test in this instrumen have been done with alpha croncah 0,706 for anxiety scale and 0,681 for depression scale. The collected data were analyzed by using frequency distribution.

## RESULTS

Some characteristics of the respondent may affect anxiety and depression experienced such as age, sex, marital status, type of stroke experienced, comorbidities and functional status. Characteristics of respondents in this study can be seen in table 1.

**Table 1. Characteristics of respondents**

Item	f	%
<b>Age</b>		
18 – 40 years	0	0
41 – 60 years	38	76
> 60 year	12	34
<b>Sex</b>		
Male	29	54
Female	21	56
<b>Marital status</b>		
Merried	43	86
Not married	7	14
<b>Other diseases</b>		
Have other disease	17	34
Don't have other disease	33	66

Most of the respondents in this study were 41–61 years (76%), male (58%), and married (86%), ischemic stroke (82%), and have other diseases (66%). The Patients who treated by the respondents in this study were moderate dependence (96%) and total dependence (4%). Level of anxiety and depression among post-stroke patients can be seen in table 2.

**Table 2. Level of anxiety and depression among post-stroke patients**

Level	f	%
<b>Anxiety</b>		
Normal	37	74
Borderline abnormal	12	24
Abnormal	1	2
<b>Depression</b>		
Normal	46	92
Borderline abnormal	4	8
Abnormal	0	0

Based on the results of this study, most of respondents have normal level of anxiety (74%), borderline abnormal level of anxiety (24%), and abnormal level of anxiety (2%). Futhermore most of them have normal level of depression (92%) and borderline abnormal level of depression (8%). The results of this study can be influenced by the characteristics of most respondents who are at middle age mature, married and do not have comorbidities so that his anxiety is low and his coping skills are good.

## DISCUSSION

Stroke is a disease that leaves residual symptoms. These symptoms can be physical

or emotional disturbances that put the post-stroke patient in a limitation and dependence on others. These conditions can lead to post stroke patients experiencing anxiety and depression. According data from this study, most of respondents have normal level of anxiety (74%) but 2% responden have abnormal level of anxiety and normal level of depression (92%). Respondens in this study was patients with stroke at least 3 month (early phase). This is similar to previous studies. Anxiety and depression should be sought systematically in all patients after stroke, especially in the early phase (Zahi et.al.,2017).

The results of this study can be influenced by the characteristics of most respondents who are at middle age mature. Middle age adults usually have a good ability to accept problems and choose a good coping mechanism (Skinner and Gembeck, 2007). In addition to, most of the respondents have married status. By having a partner, the respondent has a friend to always share so that the anxiety experienced by the patient can be reduced. The level of anxiety respondents in this study can also be influenced by the characteristics of most respondents who do not have comorbidities so that respondents are not so worried about their condition

Based on the results of this study, there are still respondents who experience moderate and severe anxiety. This can worsen their health condition, and can affect their quality of life. This is similar to previous studies that there were a high prevalence of anxiety and depression symptoms in a community of patients with cerebrovascular disease (Broomfiled, 2014). Stroke is one of the cerebrovascular disease which can cause various physical limitations such as the limb weakness, cognitive function decline suddenly, communication disorder, swallowing disorders, balance disorders and others. This physical limitation caused the patient's functional status to decrease, so that

they depends on others in their activity daily living. These condition put on the changing social role of patients with stroke in the family and society. Futhermore, prevalence of moderat to severe depression and anxiety were high the findings suggest that cognition and mood are linked over and above physical independence (Barker-Collo, 2007).

Anxiety is an uncertain feeling of fear accompanied by feelings of uncertainty, helplessness, isolation and insecurity (Stuart, 2016). Factors related to anxiety in stroke patients include education, age, gender. Most of responden in this study were 41 – 61 years (76%), male (58%), and married (86%), ischemic stroke (82%), and have other diseases (66%). 41 – 61 years is a period in which one of the more mature phase in the life of a person's productivity. Physical limitations in this period cause them can not be productive so that will affect to their psychosocial. Moreover, most of responden were male. Male stroke patients can not perform their role maximally as the head of the family and the wageworker. This condition causes them anxiety and depression. Another factor that may affect anxiety and depression in stroke patients is the presence of other disease. this will worsen the patient's health condition. The length of stroke is also likely to affect the abnormal level of anxiety in responden in this study). Anxiety and depression in stroke patients can occur in 3 months post stroke (Barker-Collo, 2007).

Anxiety and depression experienced by respondents in this study should be addressed because it can affect his health condition. Physiologic anxiety can increase the pulse rate, rapid breathing, and increased blood pressure. When experiencing anxiety, the body system will work by increasing sympathetic nervous work to respond to stress. The sympathetic nervous system working through the adrenal medulla activity increases epinephrine expenditure resulting in an increase in blood pressure (Stuart,2016; Videbeck,2008; Corwin,2009). This may

increase the risk of recurrent stroke (Stroke Foundation, 2013). Therefore anxiety and depression in stroke patients should be addressed and are part of the rehabilitation care.

Individuals who experience anxiety and depression, can use a coping source in the environment to cope with anxiety and depression. In this case, health care workers and families can assist patients in overcoming their anxiety and depression experienced by helping patients in their activities, maintaining good communication so that patients can devote all the feelings they feel. In addition, they can provide continuous motivation to stroke patients in order to keep the spirit to heal and run his life.

Management of anxiety and depression problems is necessary, ranging from continuous assessment of anxiety and depression levels and effective interventions to overcome anxiety and depression problems in stroke patients. rehabilitation services among stroke patients in addition to physical needs in stroke patients, the psychosocial needs of the patient must be met simultaneously. Patients with stroke and families can consult with health professionals. Nurses as health professionals should receive special training on psychosocial issues.

## CONCLUSION

Health conditions and physical limitations experienced by stroke patients cause disruption in their activities daily living, so that patients experience anxiety and depression. Most stroke patients in this study had normal level of anxiety and depression (74%), but still there were respondents who had borderline abnormal (24%) and abnormal level of anxiety (2%). Most stroke patients had normal level of depression (92%), borderline abnormal (8%) and abnormal (0%). Based on the results of this study, the anxiety most of the respondents are still in the normal category, but there are still experiencing moderate and severe anxiety so

it needs to be done assessment and intervention as early as possible Therefore, professional health care workers should pay attention to the psychosocial condition of stroke patients. Handling psychosocial problems such as anxiety and depression is one part in the treatment of stroke patients to achieve a good quality of life of stroke patients. One of the psychosocial treatments for stroke patients include counseling performed with health workers for educational facilities and motivation of stroke patients and their families.

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