

ROLE OF NURSE IN THE PROVISION OF HEALTH EDUCATION WITH SELF CARE MODEL APPROACH TOWARD READINESS OF PATIENTS TO INCREASE IN SELF CARE AND STRESS LEVEL IN STROKE PATIENTS

Dhian Satya R, Merina Widyastuti
Lecture in STIKES Hang Tuah Surabaya
Email : dhiardhi03@gmail.com

ABSTRACT

Introduction: Stroke is a disease that attacks anyone with very sudden incident and is one cause of death and major neurological disability in Indonesia. Paralysis is the most common disability experienced by patients with stroke, characterized by paralysis on one side of the body (hemiparesis) and paralysis may also occur in various parts of the body, from the face, hands, feet, tongue and throat. Some stress conditions will influence the attitudes and behavior of stroke patients to improve self-care, this study aims to determine the effect of health education on the readiness of self-care and also on the level of stress in stroke patients. **Method :** This study used pre experiment one group pre-post tests. The experiment was conducted in January 2015 through May 2015 in the pavilion 7 Rumkital dr. Ramelan Surabaya. The population used was that stroke patients treated since the month of October to November 2015 by 23 votes with sample random sampling. The independent variable of this research is the role of nurses in the delivery of health education. and the dependent variable is the level of stress. Measuring instrument used to measure the level of stress is DASS. Data were analyzed by Wilcoxon signed rank test with significance level $\alpha < 0,05$. **Results :** Results showed that health education has a significant effect on the nurse's role in the provision of health education to improve the readiness of self-care on stroke patient and also has a significant effect on the level of stress stroke patient. **Discussion:** The implications of this study was there is effects of the nurse's role in the provision of health education to improve the readiness of self-care in stroke patient, so that nurse on neurological room can apply and develop about health education intensively. This research is also expected to provide an alternative to enter the associated stress reduction that patients with stroke may be susceptible to stressors associated disturbance fulfillment of their activities so as to affect the readiness of care themselves independently

Keywords: stroke, the role of nurses, health education, readiness of self-care , stress

INTRODUCTION

Stroke is a disease that strikes anyone with very sudden occurrence and is one cause of death and major neurological disability in Indonesia (Tarwoto, Wartona & Suryati, 2007: 85). Paralysis is a defect most commonly experienced by patients with stroke, characterized by paralysis on one side of the body (hemiparesis) and may also occur paralysis in various parts of the body, from the face, hands, feet, tongue and throat (Lingga, 2013: 71). Physical changes experienced by patients with stroke is a stressor for patients and families. Stroke patients are no longer able to do any physical activity, all the

activities and needs help from others dependent and requires the attention of someone who cared for him (Lingga, 2013: 72). Family knowledge and stroke patients will influence the attitudes and behavior of stroke patients to improve self-care, lack of knowledge about the disease will result in patients stroke stroke can not perform activities independently and can be complications of the disease. Observations investigators about education in stroke patients in the nerve Lounge Rumkital dr. Ramelan Surabaya was implemented at the beginning of the patients in the hospital and at the moment there are other complaints that

arise during the patient hospitalized. Education program is not maximized due to several factors such as lack of nurses in the care of stroke patients and the degree of dependence of stroke patients. Average - Average total care. Research on the role of nurses in health education with readiness pemberian stroke patients to improve self-care and stress level has never been done before.

Based on data from the International Classification of Disease taken from the National Vital Statistics Reports United States for the year 2011 showed an average death from stroke was 41.4% of the 100,000 patients .. According to data from Health Research Association in 2013, the prevalence of stroke in Indonesia 12.1 per 1,000 residents, which is dominated by the age group above 75 years (43.1 per 1,000 penduduk), aged 65-74 years (33.2 per 1,000 inhabitants), aged 55-64 (24 per 1,000 population), ages 45- 54 years (10.4 per 1,000 inhabitants), aged 35-44 (2.5 per 1,000 penduduk), 25-34 years (0.6 per 1,000 inhabitants), and ages 15-24 years (0.2 per 1,000 population). That figure is up compared Riskesdas 2007 of 8.3 percent. Researchers conducted a preliminary study on June 10, 2015 in Space Nerves Rumkital dr. Ramelan Surabaya, obtained data on the number of stroke patients during the month of January 2015 until May 2015 as many as 243 patients with stroke infarction details of 203 patients while 40 patients experienced bleeding stroke and 100% have received education about the disease at the beginning of the stroke in the hospital. Observations were carried out on 10 patients with stroke, obtained four (40%) of 10 patients with recurrent stroke among other diseases complicated by contractures, decubitus and convulsions. 3 patients (30%) of 10 patients obtained with total care because of restrictions on the activity, whereas 3 patients (30%) the other at the level of partial treatment care. Preliminary studies conducted by researchers obtained seven (70%) of 10 patients had a deficit of self-care and stress due to ignorance and anxiety families and patients on how to self-care in stroke patients. Stroke patients who experience self-care deficit by 2 people (20%) because there is no accompanying families. Patients and families are able to perform the treatment in stroke patients only one person (10%).

The state of stroke patients are very

diverse, can be recovered perfectly, recovered with mild disabilities, cured with disabilities may experience moderate or even severe disabilities, especially in stroke patients over the age of 45 years (Junaidi, 2011: 55). The initial attack stroke generally be a disturbance of consciousness, unconsciousness, headaches, difficulty concentrating, disorientation or in other forms. Disturbance of consciousness can appear in other forms such as the feeling of wanting to sleep, hard to remember, blurred vision. In the next few hours disturbance of consciousness will continue the decline in muscle strength and coordination, stroke patients will have difficulty to arrange the words or unable to perform their daily work such as standing, walking, or taking / holding cups, spoons and forks, what held will fall. Other disorders such as inability to control urination and large, lost the ability to feel, have difficulty swallowing and breathing (Junaidi, 2011: 24).

Stroke patients will be people who depend on those around him, including the family and significant others, then many patients who can not independently or minimize the help of others. Restrictions on activities during the acute phase, is the cause of the patient becomes dependent on others to do the activity day living. Patients and families in the acute phase will experience stress because of physical changes that occur because of a stroke. Stress is experienced by the patient or the family if not promptly treated led to focus attention only on weakness and paralysis that occurs when this period of self care needs also support the healing of patients. Stroke patients after passing through the acute phase patients should increase physical activity, modifying the diet and orderly in consuming drugs - drugs in order to support the recovery process. Stroke patients who are not able to improve self-care it is possible to run a deficit of self-care and disease complications (Goldszmidt and Caplan, 2013: 84).

Independence that flows out of stroke patients is critical in accelerating the recovery process defect in the suffering, not only ease the burden on surrounding areas but also can cultivate the spirit for stroke patients (Lingga, 2013: 133). According to Blais, et al (2007: 213) primary teaching role of the nurse is to teach the patient and family. Teaching such as home include health education, how to

perform self-care, taking medication instructions, including side effects and how to do the recommended treatment. Most of the health education provided to patients directly, but a family member or caregiver can also be taught about patient care. Patients with stroke have to be satisfied basic needs, such as nutrition, personal hygiene, and activity, so there is no change in the basic needs. Only patients with stroke need the help of others in doing the activity day living (Lingga, 2013: 93). Family involvement in patient care is also expected to reduce the stress that is felt This also needs to be considered in preparing the independence of patients in self-care. Nurses forced to be more proactive in providing health education on self-care to patients and families. In accordance with the role of nurses as educators that aim to improve the level of knowledge of health resulting in a change of behavior from clients (Hidayat, 2007: 31).

Health education is one of the nursing plan of action which must be incorporated in the planning of discharge (discharge planning). Discharge planning is the first step to start the treatment and preparation of long-term care. Based on the background of the above researchers want to know the influence of the role of nurses in the provision of health education with self-care approach to the model of the patient's readiness in improving self-care and stress levels in stroke patients

METHOD

Table 1. Effect Role of Nurses in Providing Health Education to improve the readiness of self-care in patients with stroke in RumkitalDr Nerve Lounge. Ramelan Surabaya

	N	Mean ± s.d	Mean different ± s.d	Mean different IK 95%	
Readiness before HE	23	55.13 ± 13.69	7.78 ± 12.124	2.54 - 13.03	0.005
Readiness after HE	23	62.91 ± 8.57			

Based on data obtained readiness increase self-care both before and after health education in Stroke Patients of the 23 patients experienced a readiness largely increased as many as 20 patients (87%) and did not increase as much as 3 patients (13%).

Based on the above table obtained value - average in readiness improved maintenance yourself before giving health education in Stroke Patients at room RumkitalDr nerves. Ramelan Surabaya at 55.13

In this study, using experimental design methods research design approach pretest - post test design. The population in this study were all patients with stroke in Space Nerves Rumkital dr. Ramelan Surabaya number of 24 patients in the span of a month in January 2015 to May 2015, using a sample of Probability sampling technique as much as 23 respondents. Variables in the study is the provision of health education through discharge planning activities as independent variables and the dependent variable in the study was the readiness of patients in self-care as measured using Denyes Self Care Activity Instrument (DSCAI) and stress levels were measured using the instrument DASS. The hypothesis is there are significant research with patient readiness Health education in self-care and health education there is the influence of the stress.

RESULT

Collecting data was held on 15 November 2015 until December 10, 2015, and obtained 23 respondents were given perlakuanya the provision of health education. In the results section described the value of preparedness improving self-care and stress levels before being given health education, having given health education and the influence of the nurse's role in providing health education to improve the readiness of self-care and stress levels in stroke patients in Rumkital dr. Ramelan Surabaya

with a standard deviation of 13.686 and on Improved Readiness Self-Care after being given health education with an average value of 62.91 with a standard deviation of 8.570 so the average value increase of 7.783. Based on the test of normality get prior probability values are given health education amounted to $0.514 > \alpha$ (0.05) and after health education is given with probability equal to $0.117 > \alpha$ (0.05), it can be said that the data were normally distributed. The following are the descriptive data for

calculating results Improved Readiness Self-Care in Patients with Stroke in Nerve Lounge Rumkital Dr. Ramelan Surabaya. On the results of the data analysis described normality test and paired t-test.

Based on the test paired t-test in getting the probability value (ρ) before and after administration of health education sebesar 0,005 $< \rho$ (0.05) it can be concluded that their Influence Role of Nurses in Providing Health Education Readiness To Improve Care of

Yourself In Stroke Patients in Space nerves Rumkital dr. Ramelan Surabaya.

Based on research result the data obtained stress levels in patients with stroke in Rumkital Dr. Nerve Lounge Ramelan Surabaya before being given the Health Education by respondents as many as 23 rang known with normal stress as much as 21.7%, 21.7 mild stress, moderate stress and severe stress 39.1 17.4%.

Table 2. The effect of Nurse Roles in Providing *Health Education* on the level of stress in patients with stroke in Rumkital Dr. Nerve Lounge Ramelan Surabaya

PREHE POSTHE Crosstabulation	*	POST HE			
		normal	Moderate	Severe	Total
PRE HE	normal	5	0	0	5
	Light	5	0	0	5
	Moderate	7	1	1	9
	Severe	3	1	0	4
Total	20	2	1	23	

Characteristics of stress levels in patients with stroke in Rumkital Dr. Nerve Lounge Ramelan Surabaya after health education given by respondents as many as 23 people obtained amounted to 87.0 normal, mild stress 0%, 8.7% moderate stress and severe stress 4.3%. Statistical test results obtained with the Wilcoxon test p equal to 0.020. Based on this it can be concluded that there is the influence of the role of nurses in the provision of health education on the stress scale in stroke patients

DISCUSSION

According to result obtained readiness in providing self care both before and after Stroke Patients given education in health of 23 patients experienced a readiness largely increased as many as 20 patients (87%) and did not increase as much as 3 patients (13%). Based on the value - average in readiness improvement of self-care before being given health education on stroke patients in Space RumkitalDr nerves. Ramelan Surabaya at 55.13 with a standard deviation of 13.686 and the readiness of an increase in self-care after a given health education with an average value of 62.91 so the average value increase of 7.78.

Based on the test paired t test sign on

the values obtained before and after health education of 0.005 $< \alpha$ (0.05) it can be concluded that the Influence Role of Nurses in Providing Health Education Readiness To Improve Care of Yourself In Stroke Patients in Neurology Lounge Rumkital dr. Ramelan Surabaya.

Gender male before being given health education average value of 64.75 and all male respondents have rated above average, having given health education nilai the average is 64.50 and all male respondents experienced an increase in value but there are two respondents whose value is below the average. In the female respondents are given health education before the average value of 50, which is below the average of 10 respondents and which is above the average of five respondents. Education nilai health Sesudah pemberian average increased to 62.07 and respondents who score above average as many as 10 respondents while 5 respondents still have a value below the average even though the increases in value. Behavioral differences by gender This could be possible due to hormonal factors, physical structure and division of labor norms. Women often behave based on feelings, while men tend to behave or act on rational considerations (Notoatmojo, 2014: 14). In

Women have more feeling smoother and more conscientious about something. But women tend to experience more severe stroke because women tend to experience stress and depression. This condition will worsen health conditions (Lingga, 2013: 22). In women with menopause because estrogen increases the risk of stroke initially act as protective experienced penurunan. Itu also become more answers pertanyaan stroke experienced by older women than men old.

At the age of 50-55 years before giving education the average value of 57.80. After being given health education average value rose to 60.80. 2 respondents have a value below the average and 3 respondents have rated above average. Respondents age 56-60 years before the administration of health education has a value below the average and after the administration of health education 1 respondents have rated below average and 1 respondent above average. Age 61-65 years average value prior to the administration of health education adalah 53.18, 5 respondents have rated below average and 6 respondents have rated above average. After administering the health education only two respondents who have a value below the average, while 9 respondents have rated above average. Respondents 66-70 years of age prior to the administration of health education terdapat 1 respondents who have an average value below and 4 above the average, after being given a health education terdapat 2 respondents below the average and 3 above average.

Two-thirds of stroke survivors are those aged 65 years. The aging process of cells as age and illness experienced by people tuamemperbesar risk of stroke in old age. Entering the age of 50 years, the risk of stroke becomes double every 10 years of age increased (Lingga, 2013: 21). Usia also affect the behavior in people with stroke, behavioral health of a person or society is determined by the intentions of the health of the object, the presence or absence of support from the community surroundings, whether there is information about the health, the freedom of individuals to make decisions, and situations in which a person behaves or not (Notoatmojo, 2014: 78). The forms of individual behavior change one of them is a willingness to change, occur when there is innovation in society, which often happens is that some people are very quick to accept the change and partly slow to

accept change (Notoatmojo, 2014: 89). A person with old age would be difficult to accept the changes.

Last Education in junior high school respondents have an average value of 47.33 for the prior administration of health education with 6 respondents have a value below the average and 3 respondents than average and the average of health after giving education the average increased to 61.78 with 3 respondents under average and 6 respondents than average. Education High School prior to the administration of health education have an average value of 60.14 while for after the administration of health education have an average value of 63.64. At the high school education in values before and after the health education there are 5 respondents with a value below the average and 10 respondents have above-average grades.

Theory Lowrenc Green, as quoted by Notoatmodjo (2014: 76), analyzing the human attitude of soundness. The health of a person or community is influenced by two main factors, namely the attitude factor and factors beyond attitude. Furthermore, the behavior itself is determined or formed from three factors: predisposing factors, enabling factors, and factors driving. Health behavior change through means of education or health promotion by providing health information. Furthermore, the knowledge that will lead to awareness and ultimately will cause people to behave in accordance with their knowledge (Notoatmojo, 2014: 90). Changes in behavior with education will result in a change yang effective when done via method "discussion participation". Health knowledge as the basis of the behavior of even a reference the behavior of others (Notoatmojo, 2014: 91). Changes in a person's behavior is not only influenced by higher education but is also affected by how much information a person obtained in improving the health and self-care.

Health behavior change, especially on self-care a little different with the existing theory that says the higher one's education is more and more knowledge. Readiness of self-care in stroke patients not only based on the height of one's education but rather lead to the willingness or intention, attention to health, experience and how often a person gets information about health.

Value to each question in the questionnaire DSCAI given after the

administration of health education have increased in all the numbers, but the highest value lies in the number 33 is entered in the point strength of the ego (ego strength). Here it can be seen that the power of the ego is more predominant in patients and families with stroke, it is because some of the things that is knowledgeable about health and self-care in stroke patients has increased, the energy expended in performing self-care is getting lower and attention to health is better than before given health education.

The questionnaire DSCAI in use obtained the highest score before the administration of health education on numbers about 8 and 9 with the average value of 59 which is the point of feeling (feelings), so it can be concluded during this time the patient and family with stroke perform self-care based on feeling without constituted adequate knowledge in decision-making, especially in the readiness of self-care.

Stroke is a condition that arises because of a circulatory disorder of the brain that causes the death of brain tissue resulting in a person suffering from paralysis or death (Batticaca, 2008: 56). Clinical symptom arising from stroke is a sudden neurological deficit, which is preceded by prodromal symptoms occur at rest or waking. Neurological deficits that occur in stroke patients led to voluntary control disappears, resulting in patients with ischemic or hemorrhagic stroke would damage the physical mobility related to neurovascular disorders. Damage to physical mobility is characterized by weakness, paraesthesia, damage coordination, limited range of motion and decreased muscle strength.

Mobility physical damage in stroke patients will experience a decrease in self-care needs that require post-stroke patients become dependent on others, at least for the time until the physical and mental condition improves. Stroke patients with limited physical mobility requires the help of others to do the day living activity can not be done alone (Lingga, 2013: 93). The role of care as educators should be optimized to provide health education to patients and families in order to improve the readiness of improving self-care.

Based on self-care nursing theory raised by Dorothea Orem, people basically have the ability to care for himself the so-called self-care agency (Nursalam, 2013: 58). Self care agency may change at any time influenced by

the role of nurses comprised As educators: Award health education, For nursing care provider, as an advocate, as a coordinator, as a collaborator, as a consultant, as a reformer. When there is a deficit of care, the role of nurses as nursing agency helps to maximize the capabilities of the implementation of the self-care of stroke patients through health education, to improve the ability or independence in the implementation of self-care stroke patients (self care agency) against self-care needs of stroke patients (self care demand), such as the ability to meet the nutrition and fluids, mobilization, personal hygiene, elimination.

The role of nurses in health promotion in the present era is penteng. Dimana nurses seek to increase the responsibility of nurses to personal health and Community. Trend in nurses towards health promotion has created an opportunity for nurses to strengthen the influence of nurses on health promotion, spread information that enhances the public more aware of the health and assist individuals and communities to change health behaviors that last a long time (Kozier, et al, 2010: 173).

The level of stress in patients with stroke in Rumkital Dr. Nerve Lounge Ramelan Surabaya before being given the Health Education by respondents as many as 23 rang known with normal stress as much as 21.7%, 21.7% mild stress, the stress was 39.1% and 17.4% severe stress. Characteristics of stress levels in patients with stroke in Rumkital Dr. Ramelan Surabaya after health education given by respondents as many as 23 people obtained amounted to 87.0% of normal, mild stress 0%, 8.7% moderate stress and severe stress 4.3%. Statistical test results obtained with the Wilcoxon test p equal to 0.020. Based on this it can be concluded that there is education of the health effects of stress scale stroke patients.

According to Hans Selye (1976) stress is the body's response that is not specific to any claims or expenses. Stress can cause negative feelings contrary to what is desired or threaten the emotional well-being, which in result by the stressor increase. Stressor is generally divided into two: the stressor internal and external stressors. Stress levels appear depending on the pain that is experienced individuals.

Stress is a condition where a person experiences an imbalance between the condition of the body and mind because of many factors. The human body responds to

anxiety and stress is characterized by muscle tension. When stress increases the autonomic nervous system responds by stimulating the adrenal gland to increase the secretion of adrenal hormones and cortisol. Increased adrenaline resulted in increased work of the heart, breathing patterns, blood pressure, and increased metabolism. A good knowledge tends to form a positive attitude towards an object which is a predisposition to do well too. But the process is not always the case because the three are influenced by factors of age, education level, experience, confidence, amenities, availability of resources and socio-cultural (Brehm and Kassin, 2000). The higher the person's knowledge then the behavior will also be getting better, it is in accordance with the theory of Notoatmodjo (2003) states that a good knowledge, will lead to a positive attitude and good behavior anyway. Stress is very situational and influenced by several factors. The existence of an intervention that comes from outside the client is expected to minimize the internal stress. In this condition the adrenal hormone secretion decreases, thus the condition of the body that previously increased work of the heart, breathing patterns, blood pressure and metabolism will decrease with changes in stress ranges.

CONCLUSION

That has been conducted on November 15, 2015 through to December 10, 2015, it can be concluded readiness improve self-care in stroke patients before pemberian health education in Rumkital dr. Surabaya Ramelan average of 55.13 with a standard deviation of 13.69. Readiness improve self-care in stroke patients after the administration of health education in Rumkital dr. Surabaya Ramelan average value of an average of 62.91 with a standard deviation of 8.57. Statistical analysis showed there are significant role of nurses in the provision of health education to improve the readiness of self-care in patients with stroke in Rumkital dr. Ramelan Surabaya.

The level of stress in stroke patients in Rumkital Dr. Ramelan before given HE showed moderate stress, and after being given HE stress levels showed a decline, could thus be concluded that there is education of the health effects of stress scale stroke patients.

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