Relationship Between Knowledge and Attitude of Family in Execution of Range Of Motion (ROM) in Stroke Patient in Outpatient Installation General Hospital of Islam ORPEHA Tulungagung

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I. INTRODUCTION

Stroke is the third leading causing death in the world after cardiovascular disease and cancer. Indonesia ranked 97th among the world's most stroke patients with a mortality rate of 9.7%. In General Hospital of Islam ORPEHA Tulungagung stroke is included in the order of 10 major diseases. Paralysis due to stroke is a defect on one side of the body or hemiplegia, causing the limb to not be energized. To restore the body functions that have Aweakness and paralysis then the patient is given physical exercise regularly one of them with ROM exercises. The purpose of this research was to know the relationship between knowledge and attitude of family in execution of ROM in stroke patient at outpatient installation of Orpeha Hospital Tulungagung. The research design used was quantitative analytic survey. While the research design used was correlational with cross sectional approach. The population in this study was all families of stroke patients at the outpatient installation of RSUI Orpeha Tulungagung. Sampling method using quota sampling that meets the criteria of inclusion and exclusion as many as 30 respondents. Data analysis using Kendalls tau statistic test. From the results of the study note that there are 19 respondents with a good knowledge with a supportive attitude in the implementation of ROM is 63.3%. In addition, supportive attitude on the performance of ROM exercises is found (with total number of 21 respondents or 70 %) The results showed significance value 0.000 or P-Value <a and in this study a using 5% so that in this study H0 rejected and Ha accepted. It can be concluded from this study that there is a relationship between knowledge with family attitudes in the implementation of ROM in stroke patients in outpatient installation RSU Orpeha Tulungagung 2017. So hopefully with good knowledge can improve the attitude that supports the family of stroke patients in the implementation of ROM.

Keywords: Knowledge, Attitude, Implementation of Range Of Motion (ROM)
2016 were 273 cases, 242 patients (88.64%) and stroke patients died during treatment of 31 patients (11.36%). While the data of outpatients with stroke cases until the end of July 2017 were 168 cases.

To restore the function of body parts that experience weakness or paralysis due to stroke, then the patient should be given physical exercise regularly, one of which joint mobilization with range of motion exercise (ROM) is a joint motion exercise that allows the contraction and movement of the muscle where the client moves persendinya appropriate normal movement both active and passive (Potter and Perry, 2006 ). Implementation of ROM exercises in stroke patients admitted to the Islamic Hospital of ORPEHA Tulungagung was conducted daily by the physiotherapy officer in collaboration with the nurse based on the indication set by the responsible service physician (DPJP) by taking into account the general condition of the patient and the signs vital patient.

Therefore, health workers, especially nurses, are expected to improve the provision of education to families during the process of discharge planning (Discharge Planing) from the hospital. The form of education that nurses need to teach is an invitation to the family to stay in close contact with post-stroke patients, understand the patient's limitations, and other forms of follow-up care for stroke patients at home.

II. RESEARCH METHODS

This research was conducted at Tulungagung Islamic General Hospital in the period of November 01 to December 31, 2017 with an estimate of 30 respondents. A total of 30 respondents were included in all samples. The sampling technique used in this research is using Quota sampling technique. Based on data collection, the design of this study is quantitative analytic survey. The research that will be used by researcher is correlational with Cross Sectional approach.

III. RESULTS AND DISCUSSION

Concept of Knowledge

Knowledge is the result of knowing and this happens after people have sensed a particular object. Sensing occurs through the human senses, namely the sense of sight, hearing, smell, taste, and touch. Much of human knowledge is obtained through the eyes, and ears (Notoatmodjo, 2007).

The concept of attitude

According Notoadmodjo (200: 29) menemukan that attitude is "A syndrome of response consistency with regard to social objects". It means attitude is a set of consistent responses to social objects. In the book Notoadmodjo (2003: 124) suggests that attitude (attitude) is a reaction atuarespon which is still closed from someone to the stimulus or object.

The concept of ROM

Range of Motion (ROM) is a joint movement exercise that allows for contraction and stretching of the muscles, where the client moves each of the joints according to normal movement either actively or even passive. Range Of Motion is an exercise performed to maintain or improve the level of perfection of the ability to move the joints normally and completely to increase muscle mass and muscle tone (Potter & Perry, 2005).
IV. RESEARCH RESULT

Table 1. Characteristics of respondents in this study include age, education and job in RSUI ORPEHA Hospital in Tulungagung on 01 November to 31 December 2017

<table>
<thead>
<tr>
<th>Number</th>
<th>Panelists Characteristic</th>
<th>ΣN</th>
<th>Σ%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;20</td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>21-30</td>
<td></td>
<td>23%</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td></td>
<td>67%</td>
</tr>
<tr>
<td>2</td>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary School</td>
<td>6.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior High School</td>
<td>46.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Senior High School</td>
<td>33.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>13.3%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Job</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>House wife</td>
<td>36.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Farmer</td>
<td>13.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employment</td>
<td>16.7%</td>
<td></td>
</tr>
</tbody>
</table>

Family knowledge stoke patient against ROM

Table 2 Distribution of the frequency of family knowledge about the implementation of ROM in the Installation of outpatient RSUI ORPEHA Tulungagung on 01 November s / d 31 December 2017

<table>
<thead>
<tr>
<th>No</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Less</td>
<td>4</td>
<td>13.3%</td>
</tr>
<tr>
<td>2</td>
<td>Enough</td>
<td>7</td>
<td>23.3%</td>
</tr>
<tr>
<td>3</td>
<td>Good</td>
<td>19</td>
<td>63.3%</td>
</tr>
<tr>
<td></td>
<td>amount</td>
<td>30</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Primary Research Data 2017

Based on table 2 it can be interpreted that the family knowledge about the implementation of ROM in Installation of Outpatient RSUI ORPEHA Tulungagung on 01 November s / d 31 December 2017 most of the respondents entered the good category as many as 19 respondents (63.3%).

Family Attitudes in the Implementation of ROM

Table 3 Distribution of the frequency of family attitudes in the implementation of ROM at RSUI ORPEHA outpatient installation Tulungagung on 01 November to 31 December 2017

<table>
<thead>
<tr>
<th>No</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Less support</td>
<td>9</td>
<td>30%</td>
</tr>
<tr>
<td>2</td>
<td>Support</td>
<td>21</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>amount</td>
<td>30</td>
<td>100%</td>
</tr>
</tbody>
</table>

Based on table 3 it can be interpreted that the attitude of the family in the implementation of ROM in the Installation of Outpatient RSUI ORPEHA Tulungagung on 01 November to 31 December 2017 most of the respondents in the category of support that is as much as 21 respondents (70%).

**Bivariate Analysis**

**Cross-tabulation between variables**

Table 4: Relationship between knowledge with family attitudes in the implementation of ROM in Installation of Outpatient RSUI ORPEHA Tulungagung month of November 1st to December 31st 2017

<table>
<thead>
<tr>
<th>Family knowledge about ROM</th>
<th>Family attitude towards ROM implementation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Krg</td>
<td>%</td>
</tr>
<tr>
<td>Less</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Enough</td>
<td>5</td>
<td>16.7</td>
</tr>
<tr>
<td>Good</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>30</td>
</tr>
</tbody>
</table>

*Source: Primary Research Data 2017*

Based on Table 4 it is known that the largest percentage of 19 respondents in the family of stroke patients with good knowledge with a supportive attitude in the implementation of ROM is 63.3%.

**Statistic test**

The relationship between knowledge with stroke family attitudes in the implementation of ROM in the Installation of Outpatient RSUI ORPEHA Tulungagung from 01 November to 31 December 2017 using Tau kendalls analysis in tabular form. The result is the value of Significacy 0.000 or P-Value<α and in this study α using 5%, so in this study H0 rejected and Ha accepted. So that the results obtained that the relationship between knowledge and stroke family attitudes in the implementation of ROM in Installation of Outpatient RSUI ORPEHA Tulungagung dated 01 November s/d 31 December 2017.

**V. DISCUSSION**

**Univariate Analysis**

1. **Age**

This research was conducted to 30 respondents where the respondent is a family of stroke patients who are undergoing hospitalization at RSUIT ORPEHA Tulungagung. The youngest age is 27 years (6.7%) and the oldest is 50 years (10%) and the average age of respondents is 38.5 years. So in this case the average age of respondents in the adult category.

According to Sonata and Gayatri 2012 getting older enough then someone will be more mature in thinking and working, this is believed because people more mature yamng have wider experience.

The majority of stroke patient waiting families are the wives or husbands of the patients themselves and most cases of stroke suffered by the age of the god, so the process of information transfer to improve knowledge will be easier.
2. Education

In the distribution of education characteristics of respondents, there are four groups with education of almost half of the respondent's education are junior high school (14), and the rest are 10 respondents (33.3%), university 4 respondents (13.3%) damn SD 2 respondents (6.7%).

In general, educated people have a wider level of understanding than those with lower education (Notoadmodjo, 2010). This is also supported by the results of analysis using tau obtained Kendalls test $P$-value $0.042 <0.05$, which means there is a relationship between education and knowledge of the respondents in the implementation of ROM.

3. Job

Based on the distribution of respondents' occupation, most of respondents work are housewives of 11 person (36.6%), private 6 person (20%), laborer 5 person (16.6%), and civil servant and farmer equal number respectively 4 people (13.3%).

The work is a source of family income, as well as the direct incomes earned allowing individuals to acquire knowledge (Notoatmodjo 2010). Treatment of stroke patients requires high cost, low income families are generally hampered by financial factors in the implementation of rehabilitation / ROM (Sonata and Gayatri 2012).

4. Family knowledge about ROM

Based on the results of the research, it is known that the family knowledge of stroke patients in the Installation of Outpatient RSUI ORPEHA Tulungagung from 01 November to 31 December 2017 which includes knowledge about understanding ROM most of the respondents in the category enough that is as much as 15 respondents (50%), knowledge about the purpose of ROM entering good category, 20 respondents (66.7%), knowledge of ROM type of movement into enough category, 17 respondents (56.7%), knowledge about working step of ROM implementation into good category, 24 respondents (80%), while the Family Knowledge of Stroke Patients in ROM Implementation in General Installation InapRSUI ORPEHA Tulungagung on November 01 to December 31, 2017 most of them good category, which is 19 respondents (63.3%).

The main factor affecting good family knowledge in the implementation of ROM is the education of respondents that a small number of respondents who are educated PT got good knowledge as many as 4 respondents (13.3%), almost half of respondents with high school education obtained good knowledge as many as 10 respondents (33.3%). While the respondents with elementary education obtained less knowledge that is 2 respondents (6.7%). This is also supported by the results of analysis using tau obtained Kendalls test $P$-value $0.042 <0.05$, which means there is a relationship between education and knowledge of the respondents in the implementation of ROM.

This is in accordance with the theory Kuncoroningrat (1997) in Nursalam (2001) increasingly high level education someone, more easy receive information, so more a lot of knowledge owned. The researchers argue that in addition to the level of education related to knowledge, so to increase knowledge need support of giving information and education every patient and family of stroke patient when entering at RSUI ORPEHA hospital installation of Tulungagung. Some of the respondents of this study had been assisting patients when trained ROM by physiotherapists, this is a new experience for respondents to gain knowledge in training their ill family ROM. In addition to the experience of the patient's family by seeing firsthand the implementation of ROM in stroke patient by Physiotherapy officer, so to increase the patient's family knowledge also this education has been done routinely either individually or group. Provision of education by physiotherapy officers and nurses at the time at the outpatient installation by educational methods through question and answer activities using media leaflets, and also roll play or direct demonstration by nurses or physiotherapists followed by the patient's family.

In addition it is also planning the patient's departure (Dischargeplaning) involving the patient and family as well as the attendant carer (PPA) of others including the physician responsible services.
to mengidentifikasi health care needs of patients to ensure continuity of patient care after hospitalization remain implemented including the need for implementation of ROM.

5. Family Attitudes of Stroke Patients in ROM Implementation

Attitudes of respondents in this study are known through questionnaires that contain the statement of family attitudes in the implementation of ROM exercises that include components of cognitive, affective and conative attitudes. Family cognitive attitudes toward ROM implementation. Based on the results of research to get an overview of cognitive attitude keluragapasi stroke dalampelaksaan ROM majority of respondents in the category of supporting as many as 22 respondents (73.3%), affective attitude mostly in the category of family support in the amount of 21 respondents (70%) and the attitude of the family conative most of them in the supporting category that is 20 patients (66.6%). While the overall attitude of the family based on the three indicators of attitude is the attitude of the family towards the implementation of ROM mostly in the category of support for 21 respondents (70%).

The main actors that influence attitudes in favor of deep stroke patients ROM implementation is knowledge respondents in accordance with the data above most respondents with good category knowledge got supportive attitude that is as much as 19 respondents (63.3%). On the contrary, family knowledge that lacked less favorable family attitude was 4 respondents (13.3%).

Family attitudes in the implementation of ROM here include family belief that ROM exercise as an effort to heal stroke patients with disorders of weakness of motion and joint members then the family will know the benefits of ROM (cognitive) exercise, the family provides support / motivation to the patient in carrying out physical activities (affective) and assist patients in ROM (conative) exercises. Attitude is defined as a person's judgment of a stimulus or an object after a person knows (Notoatmodjo 2003). According to Notoatmodjo (2007) one form of health can be spelled out by knowledge gained from his own experience.

On the assessment of this attitude the researcher observes that partial responses to ROM exercises are known that the observed respondents can perform various ROM exercise movements in the patient correctly. Respondents responded to ROM practice positively, in this case respondents respond ROM as upayapenyuhan patient stroke with weakness of member motion and joints.

ROM exercises in stroke patients will be implemented effectively if family knowledge related to ROM and its impact if not done ROM exercise has been known by the family. One form of ROM exercise that can be implemented by the family is to bend and straighten each joint, opening and closing each joint and movement twisted out and into the joint. This is done to prevent the occurrence of contractures and atrophy of the muscles.

To present family experiences in ROM exercises during treatment at outpatient installations RSUI ORPEHA Tulungagung health workers have provided education to families about ROM exercises. Family of stroke cenderung patients will follow the steps of ROM movement after seeing and paying attention to the patient when dilatasi ROM by physiotherapy officer.

After the ROM exercise, a periodic evaluation of muscle strength training is performed to monitor the effectiveness of ROM exercises and monitor family ability in ROM exercise by reviewing family knowledge about ROM in order to achieve the goal of ROM exercise.

Family patients who have a good knowledge of ROM implementation and ROM benefits tend to have a supportive attitude towards ROM implementation so as to be able to carry out routine ROM exercises at home as follow-up care to minimize the risk of disability in stroke patients.

Based on the answers of questionnaires respondents also known that the respondents are less supportive of the implementation of ROM sebanyak 9 people (30%). The lack of supportive attitude indicates that family attitudes in the implementation of ROM are not yet optimal. Therefore, the role of the nurse after the new patient is admitted to the outpatient ward may be done early outpatient assessment to identify the existing nursing problem and as an ingredient in preparing the nursing care plan including the fulfillment of the patient's need for ROM service.
Bivariate Analysis

Relationship Between Knowledge with Family Attitudes in the Implementation of ROM at Outpatient Installation RSUI ORPEHA Tulungagung from 01 November to 31 December 2017.

It is known from the cross table that the largest percentage of 19 respondents in the family of stroke patients obtained good knowledge with a supportive attitude in the implementation of ROM is 63.3%. The result of bivariate analysis using Kendalls tau correlation test shows the value of Significance 0.000 or P-Value < a and in research a using 5%, so in this study H0 rejected and Ha accepted. This shows that the better the knowledge of respondents about the implementation of ROM, the more supportive attitude of respondents in the implementation of ROM against stroke patients.

The results of this study provide a picture that the knowledge of respondents about ROM exercise will have an impact on family attitudes in the implementation of ROM exercises in stroke patients in the Installation of Outpatient RSUI ORPEHA Tulungagung.

This is in accordance with the opinion Notoatmodjo (2007) which states that knowledge is the result of know and this happens after people do sensing of a particular object. This opinion is in accordance with the opinion of Meliono (2007) that knowledge of the state of sickness and illness is one's experience of the state of health and illness that causes a person to act to solve his illness problem and act to maintain his health or even improve his health.

In this research, the researcher argues that in an effort to improve patient's knowledge, especially family of patient with stroke about ROM training which is still strange to be heard by patient's family, in RSUI ORPEHA Tulungagung already have leaflet placed at front door of outpatient room respectively so that patient and patient family can read it. In addition, most of the patient's family followed and watched carefully every education provided by the nurse in the room.

During the study, families who have followed the education, have been practicing routinely to patients correctly. It is expected that with good knowledge about ROM exercises and supportive family attitudes, ROM exercises can be performed routinely by the family at home. Periodic evaluation is also performed when the patient controls in Poly the development of the patient's muscle strength to monitor the effectiveness of ROM exercises and monitors the family's ability in implementing ROM exercises by reviewing family knowledge about ROM so that the objectives of the ROM exercise can be achieved and the patient is protected from disability.

VI. CONCLUSIONS

Based on the results of research that has been done in the Installation of Outpatient RSUI ORPEHA Tulungagung on 01 November s / d 31 December 2017 2017 can be concluded as follows: Family knowledge about ROM in Installation of Outpatient RSUI ORPEHA Tulungagung that most of the respondents enter good category that is 19 respondents (63,3 %). Family attitudes in the implementation of ROM in Installation Outpatient RSUI ORPEHA Tulungagung show most of the respondents in the category of support as many as 21 respondents (70 %). There is a significant relationship between knowledge with family attitudes in the implementation of ROM in the Installation of Outpatient RSUI ORPEHA Tulungagung.

VII. REFERENCES


http://gerontologist.gerontologyjournals.org/cgi/content/full/48/5/573


