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Patients' Knowledge Description of Range of Motion (ROM) Implementation in Stroke Disease at the Neurology Outpatient Clinic of RSUD Syekh Yusuf Gowa

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ABSTRACT

Stroke is a clinical syndrome characterized by a sudden, rapidly progressive onset of focal and/or global neurological deficits, lasting 24 hours or more, or resulting in immediate death, solely caused by non-traumatic cerebral blood circulation disorders. This study employs a descriptive research design with data collection using a questionnaire. The sample consists of 30 respondents, anyone coincidentally encountered by the researcher can be used as a sample, considering those encountered coincidentally as a data source. The conclusion drawn from 30 respondents in the neurology outpatient clinic of RSUD Syekh Yusuf Gowa indicates that 4 individuals or 13.3% of respondents have good knowledge, 17 individuals or 56.7% have sufficient knowledge, and 9 individuals or 30.0% have insufficient knowledge. Therefore, the knowledge of patients regarding the implementation of Range of Motion (ROM) in patients with stroke needs improvement by relevant health authorities.

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1. INTRODUCTION

Knowledge is closely related to the behaviors to be taken in caring for stroke patients because a lack of knowledge can lead to misconceptions, anxiety, fear, and worsen the patient's condition. One of the pieces of knowledge that both stroke patients and their families should be aware of in caring for stroke patients is the utilization of physiotherapy (Haryati, 2013).

Stroke is a clinical syndrome characterized by a sudden, rapidly progressive onset of focal and/or global neurological deficits, lasting 24 hours or more, or resulting in immediate death, solely caused by non-traumatic cerebral blood circulation disorders. Stroke is divided into two types, namely ischemic stroke and hemorrhagic stroke. Ischemic stroke is caused by a disruption in blood flow to the brain, while hemorrhagic stroke is caused by bleeding in the brain (Widyanto, 2013).

Stroke is a serious medical condition that occurs when blood supply to a part of the brain is disrupted, either due to a blood vessel blockage or the rupture of a blood vessel in the brain. This can lead to permanent damage to the brain and have a negative impact on a person's physical mobility (Fransiska Anita Ekawati, 2021). Impaired physical mobility is one of the common complications experienced by stroke patients. Loss of muscle strength, muscle stiffness, and imbalance can result in limitations in movement and daily activities. To aid in the recovery of the physical mobility of stroke patients, the implementation of Range of Motion (ROM) becomes crucial. Range of Motion (ROM) refers to the joint's ability to move within its full or normal range (Asrijal Bakri, 2020). The application of ROM in stroke patients aims to maintain or improve muscle and joint flexibility, prevent muscle contractures, and minimize the risk of joint stiffness (M. Zulfi Pratama, 2021).

The main goal of implementing ROM in stroke patients with impaired physical mobility is to maintain muscle and joint flexibility. Regular and controlled movements in the affected joints of stroke patients can help preserve muscle and joint flexibility (Windy Silegar Maelani et al., 2022). This is crucial to prevent muscle and joint stiffness that could worsen the patient's condition. Increasing muscle strength: In stroke patients, muscle weakness is often observed. Targeted ROM exercises can assist in strengthening weak or affected muscles. Improved muscle strength will enhance the patient's ability to move and perform daily activities. Enhancing balance and coordination: ROM exercises can also contribute to improving balance and coordination in patients.

Stroke patients often face challenges in maintaining balance and executing coordinated movements. By engaging in appropriate ROM exercises, patients can work towards improving their balance and coordination (Ratna Fithriyah Sholihany et al., 2021).

One common sign and symptom frequently encountered in stroke patients is hemiparesis. Hemiparesis (weakness) in stroke patients is typically caused by anterior cerebral artery stroke, resulting in infarction in the brain area that controls movement (motor nerves) from the frontal cortex (Black, JM & Hawks, JH, 2014). Stroke leads to sudden, progressive, and rapid brain damage due to non-traumatic cerebral blood circulation disorders. This disruption can abruptly manifest symptoms such as changes in consciousness, vision impairment, slurred speech, unclear speech, facial or limb paralysis, and more (Riskesdas, 2018). After a stroke, hemiparesis or muscle weakness on one side is a significant motor impairment affecting 65% of stroke patients. Muscle weakness can lead to immobilization, reducing activity and potentially causing serious complications (Wist et al., 2016).

Based on the prevalence according to the World Health Organization (WHO, 2020), it is stated that since the year 2000, there has been a significant increase in stroke-related deaths from 2 million to 8.9 million (11%) in 2019. According to the Basic Health Research results in 2019, the prevalence of stroke in Indonesia is increasing every year. The prevalence of stroke cases in Indonesia has reached 10.9% per thousand, compared to 7.0% in 2013. The highest diagnosed stroke cases by healthcare professionals occur in individuals aged 75 and above, accounting for 50.2%, and the lowest in the age group over 55 years at 32.4%. Stroke prevalence based on gender is higher in males at 11.0% compared to females at 10.9% (Riskesdas, 2019). Based on data from the Medical Records of RSUD Syekh Yusuf Gowa, the number of patients in the Neurology Clinic in 2018 was 2,500, increased to 4,258 in 2019, decreased to 3,226 in 2020, and in January-February 2021, there were 300 patients.

From the data, it can be concluded that there are several factors influencing patients not to perform Range of Motion (ROM) exercises, one of which is a lack of understanding about the prescribed ROM exercises taught at the Neurology Clinic by the doctor. Some patients do not engage in ROM exercises because they lack comprehension and awareness of the purpose and objectives of these exercises. As a result, these patients do not implement the exercises at home.

2. METHOD

This research employs a descriptive research design with data collection using a questionnaire. The study aims to understand the Patients' Knowledge Description of the Implementation of Range of Motion (ROM) in Stroke Disease at the Neurology Outpatient Clinic of RSUD Syekh Yusuf Gowa. The population is the generalization area consisting of objects/subjects with specific qualities and characteristics defined by the researcher for study and subsequent conclusion drawing (Setiadi, 2013). The sampling technique utilized in this research is the incidental sampling method, where 30 respondents, anyone coincidentally encountered by the researcher, can be used as a sample, considering those encountered coincidentally as a data source.

3. RESULT AND DISCUSSION

Here are the research results, which were then processed using the frequency distribution formula and subsequently presented in the form of a distribution table and frequency as follows:

Respondent Characteristics

1) Respondents' age

The respondents' conditions, when viewed based on age groups, are presented as in the following table:

Table 1 Frequency Distribution of Respondents Based on Age

Age	Frequency	Percentage
45-48	6	20%
49-52	2	6.7%
53-56	1	3.3%
57-60	14	46.7%
61-64	7	23.3%

Age	Frequency	Percentage
Amount	30	100%

Source: Primary Data 2022

Based on the frequency distribution in Table 1 above, it shows that respondents in the Neurology Outpatient Clinic of RSUD Syekh Yusuf Gowa who are aged 45-48 years are 6 (20.0%) respondents, aged 49-52 years are 2 (6.7%) respondents, aged 53-56 years are 1 (3.3%) respondent, aged 57-60 years are 14 (46.7%) respondents, and aged 61-64 years are (23.3%) respondents.

2) Respondents' Gender

The research respondents' conditions, when viewed based on gender groups, are presented as in the following table:

Table 2 Frequency Distribution of Respondents Based on Gender

Gender	Frequency	Percentage
Man	17	56%
Woman	13	43.3%
Amount	30	100%

Source: Primary Data 2022

Based on the frequency distribution in Table 2 above, it shows that respondents in the Neurology Outpatient Clinic of RSUD Syekh Yusuf Gowa who are male are 17 (56.7%) respondents, and those who are female are 13 (43.3%) respondents.

3) Respondents' Education

The research respondents' conditions, when viewed based on the educational groups, are presented as in the following table:

Table 3 Frequency Distribution of Respondents Based on Education

Education	Frequency	Percentage
Elementary School	4	13.3%
Junior High School	5	16.7%
Senior High School	6	20.0%
Bachelor degree	15	50.0%
Amount	30	100%

Source: Primary Data 2022

Based on the frequency distribution in Table 3 above, it shows that respondents in the Neurology Outpatient Clinic of RSUD Syekh Yusuf Gowa have the following educational backgrounds: 4 (13.3%) respondents completed elementary school, 5 (16.7%) respondents completed junior high school, 6 (20.0%) respondents completed senior high school, and 15 (50.0%) respondents have a bachelor's degree.

4) Respondents' Work

The research respondents' conditions, when viewed based on the occupational groups, are presented as in the following table:

Table 4 Frequency Distribution of Respondents Based on Occupation

Work	Frequency	Percentage
Housewife	6	20.0%
Farmer	6	20.0%
Self-employed	3	10.0%
Teacher	3	10.0%
Civil Servants	12	40.0%
Amount	30	100%

Source: Primary Data 2022

Based on the frequency distribution in Table 4 above, it shows that respondents in the Neurology Outpatient Clinic of RSUD Syekh Yusuf Gowa have the following occupations: 6 (20.0%) respondents are housewives, 6 (20.0%) respondents are farmers, 3 (10.0%) respondents are entrepreneurs, 3 (10.0%) respondents are teachers, and 12 (40.0%) respondents are civil servants.

Custom Data

Finally, if we consider the respondents' condition in terms of knowledge, the research results are as follows:

Table 5 Distribution of Respondents Based on Knowledge

Knowledge	Frequency	Percentage
Good	4	13.3%
Enough	17	56.7%
Not enough	9	30.0%
Amount	30	100%

Source: Primary Data 2022

Based on the above Table 5, it can be seen that out of 30 respondents, 4 (13.3%) have good knowledge, 17 (56.7%) have sufficient knowledge, and 9 (30.0%) have insufficient knowledge. So, the majority of respondents have a sufficient level of knowledge.

Discussion

Knowledge is a crucial aspect of life acquired through both formal and informal education. Education implies the guidance provided by someone towards the development of others, directing individuals towards specific aspirations that shape human actions and fill life with the pursuit of safety and happiness. (Notoatmodjo, 2014).

Patient knowledge in the implementation of Range of Motion (ROM) is crucial in stroke management, where the execution of range of motion can prevent the occurrence of bedsores. According to Notoatmodjo (2003), cited in the book by Wawan A and Dewi, 2011, knowledge is the result of "knowing" and occurs after a person perceives a specific object. Perception of an object happens through the human senses, namely vision, hearing, smell, taste, and touch. The majority of human knowledge is acquired through the eyes and ears.

From the results of the research conducted on 30 respondents in the neurology outpatient clinic of RSUD Syekh Yusuf Gowa, it is shown that there are 4 (13.3%) respondents with good knowledge because they received information from television, bulletin boards, pamphlets, nurses, and doctors about the implementation of Range of Motion (ROM), and they understand physical exercise movements, leading them to perform physical exercises regularly. There are 17 (56.7%) respondents with sufficient knowledge and 9 (30.0%) with inadequate knowledge regarding the implementation of Range of Motion (ROM) in stroke patients. Those with sufficient and insufficient knowledge lack information or understanding about the implementation of Range of Motion (ROM), resulting in infrequent engagement in physical exercise movements by the patients.

According to the research assumption, respondents with sufficient knowledge may be attributed to a lack of information or a lack of understanding of what has been provided, resulting in limited knowledge about the implementation of Range of Motion (ROM) in stroke patients. This is the reason why 17 (56.7%) respondents have sufficient knowledge.

4. CONCLUTION

Based on the research findings on "Patients' Knowledge Description of the Implementation of Range of Motion (ROM) in Stroke Disease at the Neurology Outpatient Clinic of RSUD Syekh Yusuf Gowa," it can be concluded that out of 30 respondents in the neurology outpatient clinic of RSUD Syekh Yusuf Gowa, 4 (13.3%) respondents have good knowledge because they received information from television, bulletin boards, pamphlets, nurses, and doctors about the implementation of Range of Motion (ROM), and they understand physical exercise movements, leading them to perform physical exercises regularly. There are 17 (56.7%) respondents with sufficient knowledge and 9 (30.0%) with inadequate knowledge regarding the implementation of Range of Motion (ROM) in stroke patients. Those with sufficient and insufficient knowledge lack information or understanding about the implementation of Range of Motion (ROM), resulting in infrequent engagement in physical exercise movements by the patients.

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