Nursing Care for Clients Suffering from Non-Hemorrhagic Stroke with Impaired Physical Mobility in the Neurology Room, 6th Floor, Block B Koja Regional Hospital, North Jakarta

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Abstract
Non-Hemorrhagic Stroke is a blockage of blood vessels which causes blood flow to the brain to partially or completely stop, causing Non-Hemorrhagic Stroke sufferers to experience muscle weakness in some parts of their body. Based on the number of non-hemorrhagic strokes that occurred at Koja District Hospital from January to July 2017, there were 52 patients. The actions taken by nurses to reduce muscle tone weakness are Range of Motion (ROM) exercises which aim to increase muscle tone strength. In this study the author carried out a case study research design method by comparing 2 clients who experienced Non-Hemorrhagic Stroke with impaired physical mobility. To overcome this physical mobility disorder, the author provided Range of Motion (ROM) nursing actions to 2 clients for 6 days. After carrying out nursing actions for 6 days, the author compared the two clients to determine the client’s response to Range Of Motion (ROM) nursing actions. In carrying out data analysis, the author collected data from interviews, observations, physical assessments, supporting data, medical records, nursing actions for 2 clients who would receive nursing care who experienced Non-Hemorrhagic Stroke with impaired physical mobility. The research results obtained were that there was an increase in muscle tone strength in client 1 (Mr. S) because Mr. S has high motivation, there is support from the family, sufficient knowledge, and the family’s willingness to train ROM independently. Meanwhile, there was no change in increasing muscle strength in client 2 (Mrs. T) due to the client’s low motivation to recover, lack of support from the family, lack of knowledge, and lack of family willingness to train ROM independently. Suggestions for nurses, especially Koja Regional Hospital nurses, are expected to be able to provide ROM exercises to Stroke clients.

Keywords: Non-Hemorrhagic Stroke, Range of Motion (ROM), Physical Mobility Disorders

Introduction
Stroke is an acute vascular injury to the brain. This means that a stroke is a sudden and severe injury to the blood vessels of the brain. Injuries can be caused by blocked blood clots, narrowing of blood vessels, blockages and narrowings, or rupture of blood vessels. All this leads to a lack of adequate blood supply. A stroke may or may not show symptoms (a stroke without symptoms is called a silent stroke), depending on the location and size of the damage.
Ischemic (non-hemorrhagic) stroke is a blockage of blood vessels that causes flow to the brain to partially or completely stop. Stroke is a major health problem in the world. Stroke is the second cause of death in the United States, stroke is the third most common cause of death after cardiovascular disease and cancer in 2011.

Health Research and Development Agency (Litbangkes) Ministry of Health of the Republic of Indonesia and Target Population Data, Pusdatin Ministry of Health of the Republic of Indonesia. It was found that the number of stroke sufferers in Indonesia in 2021 based on the diagnosis of health workers (Nakes) was estimated at 1,236,825 people (7.0‰), while based on the diagnosis of health workers/symptoms it was estimated at 2,137,941 people (12.1‰). Based on health workers’ diagnoses and diagnoses/symptoms, West Java Province has the highest estimated number of sufferers, namely 238,001 people (7.4‰) and 533,895 people (16.6‰), while West Papua Province has the least number of sufferers, namely 2,007 people (3.6‰) and 2,955 people (5.3‰).

The number of non-hemorrhagic stroke sufferers in Indonesia is quite high. If non-hemorrhagic stroke is not treated immediately, it will cause physical mobility problems with complications of thrombocytopenia, pneumonia, joint atrophy and stiffness (contractures), decubitus, depression or anxiety caused by muscle weakness.

To minimize the above complications, nurses have an important role in dealing with stroke, including promotive, namely nurses are able to provide health education to stroke clients, preventive, namely the role of nurses who are able to take actions that can prevent the occurrence of new problems or complications that can occur from stroke, curative, namely the role nurses are able to provide nursing services by collaborating with other health teams to improve the client's health, rehabilitative, namely nurses are able to make clients independent, so that clients can recover and be able to carry out activities as before being treated in hospital.

The general aim of this research is to provide nursing care to clients who have experienced non-hemorrhagic strokes with impaired physical mobility in the Neurology room on the 6th floor, block B, Koja Regional Hospital, North Jakarta, using the nursing process through problem solving methods.

**Method**

The research design used a case study by conducting research on 3 clients who experienced Non-Hemorrhagic Stroke with Impaired Physical Mobility. The author will provide nursing actions such as Range of Motion (ROM) exercises to 2 clients for 6 days. After carrying out the action for 6 days, the author carried out a comparison to determine the response of 2 clients to the Range of Motion (ROM) nursing action.

The author took 2 clients who were medically diagnosed with non-hermorrhagic stroke who experienced impaired physical mobility at the Koja Regional General Hospital, North Jakarta, Neurology Room, 6th Floor, Block B. These clients were monitored by comparing the physical mobility experienced by client A and client B. At the first assessment of client A, client B said that the client experienced weakness in half of his body after suffering a non-hemorrhagic stroke. So the author will compare how to teach ROM movement exercises carried out every day for 6 days to client A, and client B with an activity/mobility level of 2.

**Result and Discussion**

At this assessment stage the author obtained data by conducting direct interviews with clients, room nurses and the client's status. The assessment is carried out in stages and is structured according to the assessment format. The assessment lasted for 6 days starting from July 10 2022 to July 15 2022.
Using a nursing process approach starting from the assessment stage, data analysis, nursing diagnosis, nursing planning, nursing implementation and nursing evaluation.

1. Assessment
Assessment is the initial stage of the nursing process, where the author tries to assess the client thoroughly through bio-psycho-social and spiritual aspects. The results of the study include basic data, special data, supporting data, physical examination, reading medical records and nursing notes.

In the study of theory and cases, there was no gap, where in theory the factors that cause stroke that cannot be controlled are age, gender and family history of disease, especially families with a history of hypertension. At Mr. The stroke he experienced was a recurrent stroke in which Mr. S had experienced this stroke in 2019 and currently Mr. S had a stroke because the client fell in the bathroom. Meanwhile, Mrs. T was caused by uncontrolled blood pressure so Mrs. T experienced a stroke which occurred gradually. In these two clients, non-hemorrhagic strokes occurred because both of them had a history of hypertension.

In theory and cases, there is no gap in the signs and symptoms that appear. The signs and symptoms obtained in theory are paralysis in one side of the body that appears suddenly or gradually, difficulty in speaking (aphasia), slurred or slurred speech (dysarthria), difficulty swallowing (dysphasia) and frequent choking. This symptom was also experienced by Mr. S and Mrs. Q.

During the assessment, it was found that Mr. The right S is 5555, the left is 1111 and the client's mobility level scale is 3. Meanwhile, Mrs. The right side of S is 0000, the left side is 4444 and the client's mobility level scale is 4. Supporting factors when conducting an assessment are the availability of an assessment format, the establishment of therapeutic communication, the establishment of a good relationship between the nurse and the client and family and also the availability of supportive or adequate hospital facilities. And in general there are no inhibiting factors in carrying out the assessment.

2. Nursing Diagnosis

In the case of Mr. There are 6 diagnoses, four of which have the same diagnosis as the theory, namely impaired cerebral tissue perfusion related to cerebral edema, impaired physical mobility related to muscle weakness, impaired self-care: ADL related to decreased muscle strength and endurance, impaired bowel elimination: constipation associated with changes in intestinal peristalsis. While the two diagnoses differ from the theory, namely the risk of nutritional disorders less than body requirements related to weakness of chewing and swallowing muscles, the risk of damage to skin integrity is related to prolonged bed rest. Where this diagnosis arises is due to the client's condition having difficulty chewing and swallowing food, and the client's condition experiencing impaired physical mobility due to muscle weakness. This is characterized by the client
experiencing weakness on the left side of the body and difficulty in carrying out activities.

Meanwhile, in the case of Mrs. T there are 6 diagnoses, four of which have the same diagnosis as the theory, namely physical mobility disorders related to muscle weakness, verbal/non-verbal communication disorders related to neuromuscular disorders, self-care disorders: ADL related to decreased muscle strength and endurance, bowel elimination disorders: constipation related to changes in intestinal peristalsis. While the two diagnoses differ from the theory, namely the risk of nutritional disorders less than body requirements related to weakness of chewing and swallowing muscles, the risk of damage to skin integrity is related to prolonged bed rest. Where this diagnosis arises is due to the client's condition having difficulty chewing and swallowing food, and the client's condition experiencing impaired physical mobility due to muscle weakness. This is characterized by the client experiencing weakness on the left side of the body and difficulty in carrying out activities.

There are differences in nursing diagnoses between two clients, namely Mr. S there is a nursing diagnosis of impaired cerebral tissue perfusion related to cerebral edema. Meanwhile, Mrs. S has a nursing diagnosis of verbal/non-verbal communication disorders related to neuromuscular disorders.

From the data analysis, the author prioritizes the nursing problem of impaired physical mobility related to muscle weakness in Mr. S and Mrs. T. In theory there are 2 nursing diagnoses were found during the assessment regarding these two diagnoses.

3. Nursing Planning
In determining priorities for nursing diagnoses of physical mobility disorders, there are no gaps in theory and cases. The aim of nursing planning in implementing ROM movement exercises in general between theory and cases of physical mobility disorders is appropriate, and the author carries out ROM movement exercises within a period of 6x24 hours until the evaluation.

In general, the results criteria in the case are in accordance with theory, where the formulation of the results criteria is in accordance with the SMART method (specific, measurable, actable, reality, time limited), namely specific, measurable, achievable, in accordance with theory (reality), and within a time limit. Implementation of nursing, but this is also adjusted to the development conditions of increasing the strength of the client's muscle tone.

Meanwhile, in general nursing action planning, theory and cases are appropriate. In accordance with the priority nursing diagnosis problem, the author plans nursing actions to be carried out 6x24 hours with a frequency of 3x a day for Mr. S and Mrs. T. The supporting factor for planning nursing actions is the existence of adequate room facilities, while in general there are no inhibiting factors.

4. Implementation of Nursing
In general, the implementation of ROM movement training nursing actions has been carried out based on a plan that has been prepared and then adjusted to the circumstances or conditions of development of increasing the strength of the client's muscle tone. Where in the implementation the author collaborates with the room nurse in carrying out nursing actions. The
supporting factors for nursing are good cooperation between the client, the client's family, the writer and the room nurse in carrying out nursing actions and also adequate facilities in the room.

5. Nursing Evaluation

In this nursing evaluation, it was found that there were differences between Mr. S and Mrs. T where these two clients experience the same problem, namely impaired physical mobility related to muscle weakness. Mr. S and Mrs. T received the same treatment, namely being given ROM movement exercises every day.

The muscle weakness experienced by Mr. S experienced an increase in muscle strength more quickly compared to the muscle weakness experienced by Mrs. Q. This happened because Mr. S has high motivation to recover, there is support from the family, sufficient knowledge of the client and family, the family's willingness to train the client's joints by practicing ROM movements independently, as well as experience for the client and family to handle stroke cases that have previously happened to him. Mr. S. Developments in Mr. This S can be seen because there is progress in increasing muscle strength every day during the 6 days of nursing care.

Meanwhile, Mrs. During the 6 days of nursing care, there was no improvement in muscle strength, this was because the client's motivation to recover was still low, lack of support from the family, lack of knowledge, and lack of family willingness to train the client's joints by practicing ROM movements independently.

After the author cared for and carried out ROM movement exercises for Mr. S muscle tone strength, the client experienced an increase in muscle tone in the right body part 5555, left body part 4444. In Mrs. The client's muscle tone has increased muscle tone in the right body part 0000, left body part 4444. The problem of impaired physical mobility is related to muscle weakness in Mr. S and Mrs. T has not been resolved.

Conclusion

In the assessment process, the signs and symptoms that most often appear are paralysis in the side of the body that appears suddenly or gradually, difficulty in speaking (aphasia), slurred or slurred speech (dysstria), difficulty swallowing (dysphasia) and frequent choking. These signs and symptoms can be seen immediately. In the formulation of this nursing diagnosis, there are similarities between the theory and the diagnosis that emerged in Mr. S and Mrs. T. The diagnoses that emerge are impaired physical mobility related to muscle weakness, impaired self-care: ADL related to decreased muscle strength and endurance, bowel elimination disorders: constipation related to changes in intestinal peristalsis. Meanwhile, at the planning stage, general nursing actions in theory and cases are appropriate. The author has a nursing action plan for ROM movement exercises that will be carried out with two clients who experience physical mobility disorders.

References

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