



Physical Mobility Disorder in Patient Tn. S With Non-Hemorrhagic Stroke in Room A RS Iryou Houjin Aiwakai (Ikeda En) Okinawa Japan

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ABSTRACT

Non-hemorrhagic stroke is a major global health problem that causes disability and death. Based on the results of a pre-survey conducted on January 10 2023 at Houjin Aiwakai Hospital (Ikeda En), there were 10 patients who suffered from non-hemorrhagic stroke. These findings aim to describe the care of non-hemorrhagic stroke patients and physical disabilities at Iryou Houjin Aiwakai Hospital (Ikeda en), Okinawa, Japan. This study applies a descriptive method through a case study approach as an in-depth understanding of the nursing care process carried out. Data was collected through direct observation, interviews with medical staff patients. The research was conducted on one patient who experienced physical mobility problems on the right side. The findings after implementing nursing care within 3 days were that physical mobility problems improved, still complaining of difficulty moving the extremities a little. This research provides important insights for improving nursing practice and management of patients with stroke, as well as providing a reference in developing more effective care strategies.

Keywords: *non-hemorrhagic stroke, functional disorders, treatment, case studies*

1. INTRODUCTION

Stroke is a chronic neurological disorder affecting small arteries and veins, often affecting the cerebral arteries, brain or brain. Changing a relaxed lifestyle, sasapovan, Bejari to meet the needs of society. According to the World Health Organization (WHO), stroke is defined as an ischaemic stroke or functional loss of cerebrovascular function after an ischaemic stroke that lasts for 24 hours or more (Suwaryo et al., 2021).

According to the International Emergency Association (2022), more than 12.2 million people aged ≥ 25 tahun, or one in four people, have suffered a stroke worldwide, and billions

of people have now suffered more than 101 strokes, accounting for more than 7.6 million or more than 62% of all strokes. Shots fired year. More than 28% of strokes are associated with intracerebral haemorrhage and 1.2 million with blood loss. About 795,000 people in America suffer a new or recurrent stroke. You get the idea. Of these, about 610,000 suffered a stroke and 185,000 suffered an acute stroke. Based on first aid survey data (Riskestas 2018).

Stroke non-hemorrhagic reduce blood flow to the brain due to sudden blockage of intracranial blood vessels. Normal blood flow to the brain is 50 ml/100 grams of brain per minute. When the blood vessels are blocked or

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narrowed, the blood flow decreases beyond the normal limit. If the blood flow drops to 12 ml/100 grams per minute, this may be due to ischaemia or reduced blood flow (Putri et al., 2023).

According to research conducted (Purnawinadi, (2019), it was found that 100% or 20% of diabetic patients experienced movement disorders. Movement disorders can be defined as impaired motion in one or more joints, regardless of the definition of position. (Mauliddiyah et al., 2022). Results research (Purnawinadi, (2019) revealed that stroke patients with cognitive impairment among all gait abnormalities were clumsiness, clumsiness, irregular posture, clumsiness, difficulty changing position, clumsiness, stiffness, stiffness (100%) and shaking when walking and fine motor skills (90%).

One of the rehabilitation programmes that Designed ROM is the ability to maintain and increase range of motion, thereby increasing strength and muscle tone (Faridah et al., 2022).

According to the pre-survey set on 10 January 2023 at Iryou Hojin Aiwakai Hospital (Ikeda en) Okinawa Japan, there were 10 patients suffering from stroke with different physical conditions. Among the non-hemorrhagic stroke patients, there were problems with physical mobility disorders with patient data complaining that the right upper lower extremity was difficult to move. So the author is interested in raising the case of nursing care with the title "Nursing Care with a Diagnosis of Non Hemorrhagic Stroke in Mr S in Room A of Iryou Houjin Aiwakai Hospital (ikeda en) Okinawa Japan.

2. RESEARCH METHODS

Design research final assignment this applied a case study design of with descriptive method. process nursing Via during 3 days with observation, interview and This case study was chosen because related to assessment, data analysis, diagnosis, intervention, implementation and evaluation in nursing. In this study, a sample of patients with subject criteria was used, namely the patient was willing to be a subject, the patient's main

nursing problem was physical movement disorders.

The author evaluates patients to collect data. The research methods the author used were observation and physical mobility discussion through a trusting relationship. After obtaining assessment data, the author determines nursing diagnoses, nursing plans, nursing interventions, and evaluation nursing.

3. RESULTS AND ASSESSMENT

Assessment

According to nursing management carried out in a series of nursing processes from assessment to evaluation, there are many problems in nursing that must be overcome related to the problems discussed in the theoretical perspective, namely nurse retention. The patient's diagnosis, plan of action or intervention and response or progression of the problem were obtained within three days of treatment. There was a case of non-hemorrhagic stroke, and the author noted that there was impaired physical mobility associated with muscle weakness. The evaluation was conducted on 10 January 2023 and the patient data of Mr. S, 75 years old, a teacher, was collected. S is 75 years old, a teacher, and lives in Nishihara, Okinawa, Japan. The patient reported difficulty in moving his right upper and lower limbs.

On the case is proved by the results of Mr S's assessment. Mr S showed that he was experiencing weakness muscle weakness at the right hand and foot extremities have limited mobility in performing daily activities. Damage to the motor and sensory cortex can also interfere with the transmission of signals to the nervous system, which can lead to muscle and motor paralysis and muscle damage. The extent of nerve damage in patients depends on the type of nerve damage and its location in the brain (Muhammad Aldo Aditama & Ummu Muntamah, 2024). Muscle examination confirmed right upper limb 1 and right lower limb 1, and left upper limb 4 and lower limb muscle weakness. ROM results - right upper. 1 and right lower end less than 1, right upper end less than 4 and right lower end less than 4.

All procedures with the patient are performed by a career, and movement can be done with a wheelchair. Different levels are used when assessing and responding to muscle movement: a value of 0 means no muscle contraction or movement, a value of 1 means little contraction or no muscle movement, and a

value of 2 means none. Muscle movement is weak, but does not resist gravity: with a value of 3, the muscle cannot resist gravity, and with a value of 4, the muscle resists. The load has the most resistance, and a value of 5 means that the muscle movement has the most resistance to the load (Hartinah et al., 2019).

Table 1. Data Analysis of Nursing Care for Physical Mobility Disorders in Non-Haemorrhagic Stroke Patients

No	Subjective and Objective Data	Analysis	Nursing Problems
1.	Subjective data: Thepatient said he complained of difficulty moving his extremities. The patient complained of pain when moving the right arm and leg. Objective data: Patient appears to have difficulty moving Patient appears to have limited movement BP: 200/100 mmHg	Muscle weakness	Impaired physical mobility (D.0054)

Nursing Diagnosis

The problems discussed here are real problems, based on a review of the data previously provided. Therefore, the nursing diagnosis method follows the Indonesian nursing diagnosis standard which outlines the problem, causes, and accompanying symptoms.

Nursing diagnosis of limited mobility due to muscle weakness (D.0054). This movement disorder is caused by non-hemorrhagic stroke which makes it difficult for sufferers to walk due to weakness and fatigue (Computerisation et al., 2017).

Factors causing motility include damage to skeletal structures, metabolic status, physical imbalance, loss of muscle control, enlargement and increased muscle density, muscle weakness, sensory stiffness, brain injury, malnutrition, muscle pain, neuromuscular disorders, body mass index more than 57% movement. age percentile, pharmacological effects, programmes that cause scars, pain, physical activity information, anxiety, cognitive problems, neurocognitive disorders (PPNI, 2017).

Nursing Plan

After determining the correct nursing diagnosis in the patient, the researcher then establishes a nursing plan. The care plan prepared by the nurse must be equated with the patient's condition according to the study and nursing diagnosis (Simanullang, 2019).

Determination of goals and criteria for patient outcomes Mr. S is in accordance with the Indonesian nursing outcome standards (SLKI), namely after implementing nursing actions within 3x24 hours, hopefully physical mobility will increase (L.05042) with outcome criteria: increased limb movement, increased range of motion (ROM), increased muscle strength.

The author's planned actions include ambulation support (I.06171), identifying pain or other physical complaints, determining physical tolerance before walking, monitoring heart rate and blood pressure before walking, monitoring vital signs or TTV methods. apply to assess a person's basic health status , an assessment that can strengthen the diagnosis and help plan appropriate treatment. (Pangaribuan et al., 2021).

Nursing Implementation

Nursing implementation that has been carried out according to the selected intervention. Actions taken by the author on the first day include: identifying pain / other physical complaints, monitoring heart frequency and blood pressure before starting ambulation, identifying physical tolerance for ambulation, facilitating ambulation activities with aids, explaining the purpose and procedure of ambulation, teaching ambulation to be done.

Actions taken on the second day included: monitoring cardiac frequency and blood

pressure before starting ambulation, and facilitating activities with wheelchair aids.

The actions taken on day three were to teach simple ambulation to be done by ambulating from bed to wheelchair.

Nursing Evaluation

The evaluation phase is the final phase of the patient's care plan and the results are compared with the steps developed during the planning phase.

Table 2. Nursing evaluation in non-hemorrhagic stroke patients

Indicators	Day 1			Day 2			Day 3		
	Start	End	Now	Beginning	End	Now	Beginning	End	Now
Movement of extremities	1	4	2	1	4	2	1	4	3
Range of motion (ROM)	1	4	2	1	4	2	1	4	3
Muscle strength	1	4	2	1	4	2	1	4	3

Description:

- 1: Worsening
- 2: Moderately deteriorated
- 3: Medium
- 4: Quite improved
- 5: Improve

CONCLUSION

The implementation of therapy was carried out for 3 times for 3 days, each time doing ambulation. This study shows that physical mobility disorders can be resolved. For nursing knowledge and technology, it is hoped that ambulation techniques will be applied in clinical practice to improve quality in nursing. applicatio implementatio n research of monbility nursing physi Limitations This is Lack coafl. support in the ifna tme rifl yr e innccarrying out interventions so as toemake patients reluctant to carry out interventions to the fullest, language limitations so that the author only gets minimal information from patients.

ADVISE

The author hopes that patients pay more attention to their body condition, if they need

something related to the healing process and the family provides moral and emotional support to patients, encourages patients to continue practicing and not give up. For future authors to prepare case studies properly and improve skills in assessing and managing patients, they must master good theory and nursing care. In general, and specifically according to the study in order to determine more appropriate interventions to maximise patient healing.

Patient Mr S having difficulties in moving his right hand. After examination and treatment, it was found that the patient's main problem was impaired physical mobility due to muscle weakness. The nurse had provided appropriate care, such as helping the patient walk with a wheelchair and explaining the importance of movement exercises. Although there was a slight improvement, the problem of movement difficulties in the patient's right hand had not been completely eliminated resolved.

REFERENCES

- Faridah, A. A., Noor Istiqomah, I., Kurnianto, S., & Khovifah, N. (2022). The Effectiveness of Range of Motion (ROM) on Increasing Muscle Strength in Stroke Patients: Literature Review. Nursing and

- Health Sciences Journal (NHSJ), 2(2), 137–142.
<https://doi.org/10.53713/nhs.v2i2.118>
- Hartinah, S., Pranata, L., & Koerniawan, D. (2019). Efektivitas Range of Motion (Rom) Aktif Terhadap Kekuatan Otot Ekstremitas Atas Dan Ekstremitas Bawah Pada Lansia. Publikasi Penelitian Terapan Dan Kebijakan, 2(2), 113–121.
<https://doi.org/10.46774/pptk.v2i2.87>
- Hutahean, R. E., & Hasibuan, M. T. D. (2020). Pengaruh Range Of Motion terhadap Kekuatan Otot pada Pasien Stroke Iskemik Di Rumah Sakit Umum HKBP Balige. Indonesian Trust Health Journal, 3(1), 278–282
- Hartati, L., Siwi, A. S., & Suandika, M. (2021). Studi Kasus pada Pasien Stroke Non Hemoragik Tn S dengan Hambatan Mobilitas Fisik di Ruang Anggrek RSUD dr. R. Goeteng Taroenadibrata Purbalingga. Seminar Nasional Penelitian Dan Pengabdian Kepada Masyarakat, 1462–1467.
<https://prosiding.uhb.ac.id/index.php/SNPPKM/article/view/850>
- Komputerisasi, S., Laporan, P., Keperawatan, A., Keperawatan, M. I., Aries, N., Sampe Payung, D., Purnawinadi, I. G., & Rotikan, R. (2017). A Computer-Based Reporting System for Nursing Care Plan for Nursing Students. Citec Journal, 4(4).
- Mauliddiyah, D., Ulfah, M., & Siwi, A. S. (2022). Asuhan Keperawatan dengan Masalah Gangguan Mobilitas Fisik pada Pasien Stroke Non Hemoragik (SNH). Journal of Management Nursing, 2(1), 168–172.
<https://doi.org/10.53801/jmn.v2i1.74>
- Muhammad Aldo Aditama, & Ummu Muntamah. (2024). Pengelolaan Gangguan Mobilitas Fisik Pada Pasien Hemiparesis Dengan Stroke Non Hemoragik. Jurnal Keperawatan Berbudaya Sehat, 2(1), 7–14.
<https://doi.org/10.35473/jkbs.v2i1.2444>
- Pangaribuan, R., Sutri Manjani, Y., & Tarigan, J. (2021). Mobilitas Fisik Pada Stroke Non Haemoregik Ekstremitas Atas Dengan ROM Aktif (Cylindrical Grip) di UPT Pelayanan Sosial Lanjut Usia Binjai. Oktober, 10(2), 163–174.
- Salsabila, N. Z., Pardilawati, C. Y., & Ramdini, D. A. (2024). Studi Literatur Rasionalitas dan Ketepatan Penggunaan Terapi Antihipertensi Literature Study Rationality and Appropriate Use Of Antihypertension Therapy. 8, 10–15.
- Suwaryo, P. A. W., Levia, L., & Waladani, B. (2021). Penerapan Terapi Cermin Untuk Meningkatkan Kekuatan Otot Pada Pasien Stroke Non Hemoragik. Journal of Borneo Holistic Health, 4(2), 127–135.
<https://doi.org/10.35334/borticalth.v4i2.2263>
- Siswanto, S., & Susanti, E. T. (2018). Tindakan Keperawatan Melatih Teknik Range Of Motion Pasif Untuk Menurunkan Hambatan Mobilitas Fisik Pada Ny. S Dengan Stroke Non Hemoragik. Jurnal Keperawatan Karya Bhakti, 4, 39–44.
- Sari, W. D. T. (2022). Penerapan Terapi Range Of Motion (Rom) Pada Gangguan Mobilitas Fisik Pasien Stroke Non Hemoragik (Doctoral dissertation, Universitas Widya Husada Semarang).
- PPNI. (2017). Standar Diagnosa Keperawatan Indonesia: Definisi dan Indikator Diagnostik (2nd ed.). DPP PPNI. PPNI.