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IMPLEMENTATION OF MOBILIZATION IN STROKE PATIENTS WITH DECUBITUS ULCER UNDERGOING TOTAL BEDREST AT IRYOU HOUJIN FUKUJUKAI NISHIHARA KEIAIEN JAPAN

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ABSTRACT

Patients with stroke and pressure ulcers undergoing total bed rest require specialized nursing care attention. This study aims to explore the implementation of mobilization in such patients, focusing on nursing care. A descriptive research approach was utilized to depict the assessment, planning, implementation, and evaluation processes of mobilization interventions. Data were collected through observation, physical examination, and documentation from December 1-3, 2023, at Iryou Houjin Fukujukai Nishihara Keiaien, Japan, involving one participant. Significant improvement in the patient's condition was observed following routine interventions. Initially, the patient presented with a Stage II pressure ulcer at the sacrum and left trochanter with a Braden Scale score of 12. After performing side-lying maneuvers for 3x8 hours, the Braden Scale score improved to 15, and the pressure ulcer healed. This research contributes to understanding the importance of mobilization in caring for stroke patients with pressure ulcers undergoing total bed rest.

Keywords: bedrest; mobilization; pressure ulcers; stroke

INTRODUCTION

Stroke is one of the silent killers or fatal diseases that can strike humans. The number of stroke patients in Indonesia has been increasing annually, almost surpassing heart disease as the leading cause of death in the country (Ridwan, 2017). According to the Riskesdas 2018 data, the proportion of stroke patients seeking healthcare facilities among the age group of 55-64 years was 19.59%, and among those aged 65-74 years, it was 41.88% (National Institute of Health Research and Development, 2019). The majority of stroke patients are aged 55 years and older, categorized as elderly according to Law No. 13 of 1998, which defines the elderly as those aged 60 years and above. As elderly individuals age, the incidence of stroke increases (Oktarina et al., 2020). The prevalence of pressure ulcers (decubitus) in an international study worldwide reaches 63.6% (Wardani & Nugroho, 2022). In Indonesia, the prevalence is 33.3%, which remains high compared to the ASEAN average of 31.3%. Based on the Indonesian Population and Demographic Census (SKDI) of 2016, approximately 1 million cases are reported annually, with a prevalence rate of 6.1 per 1000 population. In Central Java hospitals alone, there were 9,413 cases (30%) of decubitus (Central Java Health Office, 2021).

Decubitus is a wound caused by prolonged pressure, leading to local blood circulation disturbance if the patient remains in the same position for more than 6 hours. The skin integrity problems associated with decubitus are primarily due to pressure. The severity ranges from loss of the entire skin thickness, including damaged or necrotic subcutaneous tissue. When decubitus occurs, hospitalization duration and costs increase. Immediate intervention is necessary, as neglect can worsen the patient's skin condition. Issues commonly faced by stroke patients include communication difficulties due to paralysis, which can lead to depression, and the formation of blood clots in immobilized tissues causing swelling. Additionally, pressure ulcers can develop in

stroke patients due to prolonged pressure, affecting areas such as the hips, buttocks, heel, and ankle joints. As a nurse, addressing these impacts promptly is crucial; failure to do so can exacerbate the patient's condition (Hernata, 2013).

METHOD

This research employs a descriptive approach through observation, physical examination, and documentary study. The instrument used for collecting data on Pressure Ulcer clients utilizes the Nursing Care Plan format. Subsequently, the data obtained from medical records and other healthcare team inputs related to the case will be studied to support nursing interventions and client progress.

RESULTS AND DISCUSSION

Tabel 1.
Braden Scale Measurement Results on Day 1

Time	Braden Score	Description
Before Intervention	12	High Risk
After Intervention	13	Low Risk

A Braden Scale score of 12 indicates a high risk of skin damage.

Tabel 2.
Braden Scale Measurement Results on Day 3

Time	Braden Score	Description
Before Intervention	14	Low Risk
After Intervention	15	Very Low Risk

The increase in the Braden Scale score to 15 demonstrates significant improvement in skin damage risk management.

Nursing Assessment

On December 1, 2023, at 07:00, nursing assessment revealed Mr. I, a 78-year-old male, currently admitted with a diagnosis of non-hemorrhagic stroke. Mr. I complains of difficulty swallowing, leading to loss of appetite. His medical history includes ongoing treatment for stroke and a pressure ulcer at the sacrum and left trochanteric region, classified as a Stage II pressure injury measuring 1 cm x 0.5 cm. Physical examination indicated stable vital signs: blood pressure 118/75 mmHg, body temperature 37.0°C, heart rate 88 beats per minute, respiratory rate 18 breaths per minute, and oxygen saturation 97%. The presence of a pressure ulcer necessitates intensive care to prevent infection and facilitate optimal healing. Nutritional status assessment revealed decreased appetite, requiring nutrition via gastrostomy to meet nutritional needs.

Nursing Diagnoses

In this case study, two primary nursing problems are identified. Firstly, there is an impairment in skin and tissue integrity evidenced by the presence of a Stage II pressure ulcer at the sacrum and left trochanteric region, characterized by a 1 cm x 0.5 cm open blister-like wound with a red base. Although the wound edges are irregular, there are no clear signs of infection; however, the skin surrounding the ulcer feels warm. This issue is directly related to prolonged patient immobilization, where prolonged unchanged body positions increase pressure on specific areas of the skin. Secondly, the patient experiences limited body movement due to previously diagnosed non-hemorrhagic stroke. This physical mobility impairment arises from neuromuscular disturbances

following the stroke. This condition not only limits the patient's ability to perform daily activities independently but also increases the risk of pressure ulcer formation due to reduced mobility and uneven pressure on the skin.

Nursing Interventions

Nursing interventions conducted over three 8-hour shifts aim to address skin and tissue integrity issues due to immobilization and physical mobility impairments resulting from stroke. For skin integrity concerns, interventions include regular skin observation to identify primary causes such as decreased mobility. Therapeutic measures involve repositioning every 2 hours to reduce skin pressure, using petroleum or oil-based moisturizers to maintain skin moisture, and educating on the importance of bathing with appropriate soap and moisturizer use. Conversely, interventions for physical mobility impairments due to stroke focus on improving physical mobility by monitoring pain and physical tolerance during activities. Therapies include facilitating mobilization activities with appropriate assistive devices as needed and educating on the goals and correct procedures for mobilization. Pressure ulcer prevention involves routine skin observation to identify signs of damage, careful patient repositioning every 1-2 hours, and using pressure-relief cushions to prevent excessive skin pressure.

Nursing Implementation

Nursing implementation on the first day indicated patient discomfort during right lateral positioning and wound care. Physical observations noted increased skin moisture and the need for assisted repositioning. By the third day, the patient showed a calmer response to right lateral positioning and moisturizer application. Physical observations indicated drier and less moist skin. Decreased pain expression during interventions reflected improved discomfort management.

Nursing Evaluation

Based on evaluations over three 8-hour shifts, it is concluded that intensive care for skin and tissue integrity issues and physical mobility impairments due to stroke has yielded positive outcomes. The patient demonstrated significant improvement in tolerance for mobilization and position changes, with noticeable daily improvement in skin condition. A Braden Scale score indicating low risk for skin damage on the third day is an indicator of the success of applied care strategies.

CONCLUSION

This study proves that implementing right-left lateral positioning every 2 hours is effective in preventing and managing pressure ulcers in stroke patients with mobility limitations. However, mobilization therapy alone is not the sole primary intervention in improving pressure ulcer conditions measured by the Braden Scale. Other supporting factors such as adequate nutrition, optimal blood circulation, proper wound care, and careful medication management also play crucial roles in the healing process.

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