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NURSING CARE FOR PATIENTS WITH DIABETES MELLITUS WITH BED REST INTERVENTIONS AGAINST THE INCIDENCE OF DECUBITUS ULCERS IN ABDUL MANAP HOSPITAL JAMBI

Intan Syafika[1], Andika Sulistiawan
Department of Nursing, Faculty of Medicine and Health Sciences, Universitas Jambi
Email : intansyafika01@gmail.com

ABSTRACT

Decubitus is a wound caused by excessive external pressure, generally occurring in patients suffering from chronic diseases who often lie in bed for a long time. Another factor that causes decubitus is the presence of a long history of Diabetes Mellitus. The intervention carried out for decubitus is the provision of bed rest. Switching beds every 2 hours can improve blood circulation and improve metabolic regulation to restore the physiology of vital organs and accelerate wound healing. The purpose of this study was to provide Nursing Care for Diabetes Mellitus Patients with Bed Rest Interventions against the Incidence of Decubitus Ulcers in the Interne Room of H. Abdul Manap Hospital, Jambi City. Method: a case study was used. Results: The analysis showed that there was a diagnosis of impaired skin integrity with the intervention of giving bed rest for 3 days, the results showed that after bed rest there was a decrease in the Braden scale on the first day of intervention with a scale of 12 (high risk of pressure sores) after the third day of intervention with a scale of 13 (moderate risk of pressure sores). The conclusion of the study is that shifting beds can reduce and prevent decubitus.

Keywords: *Bedrest, Decubitus, Diabetes Mellitus*

INTRODUCTION

Diabetes mellitus is one of the non-communicable diseases (NCDs) where blood sugar levels increase (hyperglycemia). Diabetes mellitus is a chronic disease that will persist for life. The higher prevalence of Diabetes Mellitus can cause complications such as damage to blood vessels to the brain, heart, periphery, nerve cells, eyes, kidneys, and even lead to death.[1]

The International Diabetes Federation (IDF) in 2019 estimates that there are at least 463 million people aged 20-79 years in the world suffering from diabetes mellitus. Indonesia ranks seventh in the world with the highest prevalence of diabetes along with China, India, the United States, Brazil, Russia, and Mexico with an estimated 10 million people. [2]

The results of the Basic Health Research in 2018, showed that the number of people with diabetes mellitus rose to 8.5 percent from 6.9 percent. The province with the highest prevalence of people with diabetes mellitus is DKI Jakarta Province at 3.4% and the lowest is NTT province at 0.9%. The prevalence of people with diabetes mellitus in Jambi Province was 1.2%. [3]

Based on data obtained from the Jambi Provincial Health Office, it was found that in the Jambi Province area in 2018 there were 5,245 people with diabetes mellitus, then continued to increase in 2019 to 8,202 people with diabetes mellitus, in 2020 there were 7,179 people with diabetes mellitus, and an increase in 2021 of 1543 (Jambi Provincial Health Office, 2021). Meanwhile, the incidence rate of diabetes mellitus in Jambi City in 2021 was 10,317 people and in 2022 it was 11,679 people.

Based on medical record data at RSUD H. Abdul Manap, the number of people with diabetes mellitus for the last 3 years, namely in 2020 there were 193 people, in 2021 there were 160 people. people, in 2021 as many as 160people, in 2022 there were 218 people with diabetes. The number of people with diabetes mellitus in the last 3 months at RSUD H. Abdul Manap is 57 people.

Many cases that occur in patients with DM who are admitted to the Intensive room are due to decreased consciousness so that patients need strict handling. Patients admitted to Intensive are patients whose conditions are critical so that they require coordinated, sustainable management of organ system functions and require continuous monitoring. Critical patients with bedrest are in a

position for a long time either sitting or lying down with limited movement, which will result in patients at risk of decubitus. Because they are unable to change position to relieve pressure. [4]

Decubitus is a condition where there is local tissue damage or wounds caused by excessive external pressure, generally occurring in patients suffering from chronic diseases who often lie in bed for a long time. Damage to skin integrity can come from trauma and surgical wounds, but it can also be caused by prolonged skin pressure that causes irritation and will develop into decubitus or pressure sores. [5]

Healing of decubitus ulcers can be influenced by various factors including: Changing the position of the patient to tilt right and left at least every 2 hours is effective in reducing the high risk of decubitus for those already affected by decubitus and for preventing the risk of decubitus. Using aids such as soft foam pillows to reduce pressure on the skin, keeping the skin clean and dry and maintaining nutritious food intake and adequate drinking. Other than that, prevention of decubitus can be done by protecting the skin from exposure to excessive moisture by applying topicals to reduce the risk of pressure damage. [6]

Based on the background and the phenomenon above, the authors are interested in conducting research with the title "Nursing Care for Diabetes Mellitus Patients with Alih Baring Interventions against the Incidence of Decubitus Ulcers in the Interne Room of H. Abdul Manap Hospital Jambi City". The general purpose of writing this scientific work is to be able to analyze Nursing Care for Diabetes Mellitus Patients with Alih Baring Interventions against Decubitus Ulcers in the Interne Room of H. Abdul Manap Hospital, Jambi City

METHODS

The research used a case study method, the technique of taking respondents used was purposive sampling. The respondent chosen was a patient with a 58-year-old Diabetes Mellitus ulcer who had a decubitus ulcer. Data collection in this study was taken using unstructured interview methods, participatory observation and documentation. Data collection tools in the form of SOP (Standard Operating Procedure) over lying used for decubitus ulcer wound care applications. Data analysis is carried out after making Nursing Care which contains data, then the data is analyzed by domain analysis.

RESULTS

The results of the assessment obtained by the researcher through anamnesa, observation and documentation study, on behalf of Mrs. H, a 58-year-old female client with a medical diagnosis of diabetes mellitus, the assessment was carried out on June 08, 2023 obtained on the sacrum there was a 2nd degree decubitus ulcer, an assessment of the patient's medical record obtained a decubitus ulcer on the 5th day of treatment in the ICU before being transferred to the interne room. The patient looked weak and all activities were assisted by family, the patient was attached to an NGT.

Physical examination found on the sacrum there is a decubitus ulcer with grade 2, pus (-), shallow ulcers with clear edges and red-pink skin pigment changes, wound length 6 cm with a width of 4 cm, open wounds with moist conditions. The patient appeared weak and all activities were assisted by family, muscle strength 4444.

Previous Medical History, the patient had type 2 diabetes mellitus from 2018 about 5 years ago and the drug used was novorapid 3x6 units, a history of hypertension from 2021 about 2 years ago and the drug consumed was amlodipine 1x5mg.

The client's complaint occurred in the integrity of the skin, namely there was a decubitus ulcer with degree 2 on the sacrum. Healing of decubitus ulcers can be influenced by various factors including: Changing the position of the patient to tilt right and left at least every 2 hours is effective in reducing the high risk of decubitus for those already affected by decubitus and for preventing the risk of decubitus. [6]

Based on the results of the assessment on Mrs. H, there is a main complaint, namely that there is a decubitus ulcer with grade 2 on the sacrum. So that the author raises a case diagnosis of impaired skin integrity associated with changes in circulation. Researchers prioritize diagnoses of skin integrity disorders that describe the client's response to health conditions or life processes that can cause clients to experience health problems.

The diagnosis of skin integrity disorders is evidenced by the presence of a grade 2 decubitus ulcer on the sacrum, namely a shallow ulcer with clear edges, there are red-pink skin pigment changes, a wound length of 6 cm with a width of 4 cm and a braden scale (13 moderate risk of pressure sores).

Planning was designed by the author based on the Indonesian Nursing Intervention Standards (SIKI) where the actions to be taken consisted of observation, therapeutic, educational, and collaborative actions. The target time for achieving the outcome criteria in all diagnoses is determined with the same time span, which is 3 x 24 hours.

Nursing interventions used based on (SIKI, 2018) are skin integrity care with nursing activities to identify the causes of skin integrity disorders (eg changes in circulation, changes in nutritional status, decreased humidity, environmental temperature, decreased mobilization), change position every 2 hours if bed rest, massage the bone protrusion area, use petrolium or oil-based products on dry skin, recommend using moisturizers (eg lotion, serum).

The implementation of bed transfer was carried out for 3 days starting from June 08-10, 2023 in the interne room of H. Abdul Manap Hospital Jambi City. In this case study, the authors implemented and evaluated the patient's condition from 08.00 WIB to 14.00 WIB every 2 hours, continued at 16.00 WIB to 20.00 WIB every 2 hours, at night continued by the family at 22.00 WIB and 00.00 WIB continued at 04.00 WIB and 06.00 WIB so that the patient's sleep is not disturbed.

Implementation of the first day before bed transfer, first identify the cause of decubitus, where the wound is located, the degree of decubitus, the length and width of the wound, the characteristics of the wound and the braden scale. The patient's decubitus ulcer was caused by bed rest when the patient was in the ICU with immobility. The wound was located on the sacrum with grade 2 decubitus ulcer, 6 cm long with 4 cm wide, open wound with moist condition, no pus and signs of infection. The ulcer was shallow with well-defined edges, red-pink wound color and Braden scale (12 height of pressure ulcers).

After the bed rest intervention was carried out, the results showed that the patient seemed to follow the bed rest given every 2 hours, the family seemed to help in doing the bed rest and the family seemed to understand how to do the bed rest.

Implementation of the second day before the action is taken first evaluate the previous day's bedding transfer action. The results showed that the degree of decubitus ulcers did not increase and the wound was only found on the sacrum with a degree of 2, a wound length of 6 cm with a width of 4 cm, an open wound with a moist condition, no pus and signs of infection. Shallow ulcers with clear edges, red-pink wound color and braden scale (12 high risk of pressure sores). After the intervention, it was found that the degree of decubitus ulcers did not increase and will continue to apply it and will be re-evaluated the following day.

Implementation of the third day before action is taken first evaluate the previous day's bed rest action. The degree of decubitus ulcers on the third day did not increase and the wound was only on the sacrum with a degree of 2, 6 cm long with a width of 4 cm, the wound was not too moist and had dried up a little and around the wound was also not too moist anymore, there was no pus and signs of infection. Shallow ulcers with clear edges, red-pink wound color on the braden scale (13 moderate risk of pressure sores).

After the intervention was carried out, the results obtained by the family said that they understood how to do bed rest and could be carried out independently by the family at home to reduce the risk that would worsen the patient's decubitus ulcer condition.

Nursing evaluation of patients with skin integrity disorders related to changes in circulation is to show improvement and improvement in patient health, on the third day in Mrs. H's patient after being given nursing interventions with a total of lying down every 2 hours for 7 times per day carried out by researchers and 4 times carried out by the family at night and obtained the results there is no change from the Braden scale which is 13 (moderate risk of pressure sores) characterized by a decrease in humidity from the first and second days which has slightly decreased or not too humid excessively.

DISCUSSION

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The action to reduce the incidence of decubitus is to provide bed rest. The reason for giving bed rest is because this position is able to prevent the skin from rubbing and tearing of tissue, thereby reducing the incidence of decubitus. Bed rest also has the advantage that it does not take a lot of time and is easy for nurses to implement, tools and materials are easy to obtain and families waiting for patients can carry out themselves in reducing patient decubitus. [7]

The implementation of bed transfer carried out by the author in the case found that the client and family were able to work together well, cooperatively, and understand what the author was saying. In total, bed transfers were carried out every 2 hours on the third day, 7 times per day, carried out by the researchers and 4 times carried out by the family at night, and the results showed that there was no change on the Braden scale, namely 13 (moderate risk of developing pressure sores), indicated by a decrease in humidity. the first and second days were slightly less or not too humid.

Healing of decubitus ulcers can be influenced by various factors including: Changing the patient's position to the right and left side at least every 2 hours. Use tools such as soft foam pillows to reduce pressure on the skin, keep the skin clean and dry, use powder for skin that is prone to friction and maintain nutritious food intake and drink enough. [6]

Supported by research conducted by Novitasari in 2018, it proves that changing lying positions every 2 hours can prevent pressure ulcers. Lying down is a position adjustment given to reduce pressure and friction that can injure the skin. The aim of lying down instead is to prevent the pressure area from getting injured. Therefore, bed transfers must be precise without any frictional forces that can damage the skin. [8]

The results of the research in the case showed that the degree of the decubitus ulcer during the three days of bed transfer intervention did not increase and the wound was only on the sacrum with grade 2, the length of the wound was 6 cm with a width of 4 cm, the wound was not too moist and had dried out a little and around the wound It's also no longer too moist, there is no pus or signs of infection. Shallow ulcers with clear edges, red-pink wound color on the Braden scale (13 moderate risk of pressure ulcers). The patient seemed comfortable with being given a bed shift.

The results of this study are supported by Faridah's research in 2019, there was a difference between the intervention group after giving bed shifts every hour for 7 days, it was more effective in reducing the degree of pressure ulcers. The results showed that in the intervention group there were no grade 3 pressure ulcers, while in the control group there were still grade 3 pressure ulcers. as many as 1 respondent. Meanwhile, degree 1 was the most common in the intervention group after being given treatment with 13 respondents and degree 1 in the control group was only 4 respondents. It can be seen that the treatment of giving bed rest is more effective in reducing the degree of decubitus compared to control group without treatment. [7]

This shows that bed transfer is effective in preventing the occurrence of decubitus in prominent bone areas because bed transfer can reduce pressure due to holding the patient in one position which is given to reduce pressure and skin friction, reducing the chance of decubitus occurring due to friction. [9]

CONCLUSIONS

After providing a bed shift for cases of decubitus, it can be concluded that the benefits of bed transfer can prevent damage to skin integrity, improve circulation and perfusion, and reduce the risk of worsening the degree of decubitus.

The assessment carried out was based on the integumentary system, namely location, area, depth, presence or absence of pus, presence or absence of tissue necrosis, signs of infection, wound expansion, wound moisture, and Braden scale. The musculoskeletal system obtained muscle strength and weakness in patients.

The author establishes a nursing diagnosis for Mrs. H, namely impaired skin integrity related to changes in circulation, impaired physical mobility related to neuromuscular disorders, and risk of infection and damage to skin integrity.

All nursing interventions can be carried out by the author, such as assessing wounds, changing bed every two hours, applying oil such as olive oil to dry and pressured areas, placing on a therapeutic mattress in a position as comfortable as possible, providing passive movement exercises, maintaining patient hygiene, monitoring signs. and symptoms of infection, wash hands before and after contact

with patients and the patient's environment, teach the family how to check the condition of wounds and teach the patient and family how to wash hands properly.

The implementation of all actions has been carried out, the author has no obstacles in providing nursing care according to the intervention.

Evaluation of the problem of skin integrity disorders being resolved to some degree in decubitus ulcers was carried out for three days every 2 hours and carried out 7 times per day by the researcher and 4 times carried out by the family at night and the results showed that the degree of decubitus ulcers did not increase. The Braden scale increased from a scale of 12 with a high risk of developing pressure ulcers to a scale of 13 with a moderate risk of developing pressure ulcers, proving that bed transfer is effective in reducing the risk of increasing the degree of decubitus ulcers and does not worsen the condition of decubitus ulcers in patients.

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