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NURSING CARE TO NY.K's CLIENT WITH COMPLICATIONS OF DIABETIC ULCUS IN THE INTERNAL OF FL TOBING HOSPITAL, SIBOLGA IN YEAR 2021

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ABSTRACT

Diabetic ulcers as a chronic complication of Diabetes Mellitus,where as many as 56% of cases of diabetic ulcers accompanied by infection will experience diabetic foot ulcers and will develop into tissue death, if not treated intensively can lead to amputation diabetic ulcer.The results of the case report found data on Mrs. N,namely the client said about ± 1 month the wound did not heal.The wound was located on the left lower extremity.The client says the wound smells, the client's wound looks red, swollen, wet and has pus, the wound is covered with a bandage.The condition of the bandage looks wet and there is blood,on the client's wound there is a lot of necrotic tissue on the edges and surface of the wound, the wound on the big toe of the left p: ±5cm L: ±6 cm and the wound on the back of the foot with a diameter of 6 cm.Pain in the leg with the wound, the pain feels like being stabbed-stab.Pain scale 4,occurs during activity and decreases at rest.The client looks tense when the wound on his leg is cleaned, and the client grimaces when the ulcer is pressed.The client said that while in the hospital his sleep was not comfortable.The results of the study found problems in Ny.N, namely damage to tissue integrity and pain.Based on the nursing problems above,a plan is drawn up and carries out nursing actions and evaluations that refer to the goals and outcome criteria.To prevent the increase of Diabetic Ulcers,it is recommended to hospital agencies to carry out intensive care and provide adequate information to patients about Diabetic Ulcers themselves.

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1. Introduction

Diabetes Mellitus (DM) is a group of metabolic diseases characterized by elevated blood glucose levels or hyperglycemia. Insulin is a hormone produced by the pancreas, which controls glucose levels in the blood by regulating its production and storage. Indonesia is ranked fourth in the highest prevalence of DM worldwide after India, China and the United States (Mu'in, 2011). The World Health Organization (WHO) predicts an increase in the number of people with diabetes in Indonesia from 8.4 million people in 2000 to around 21.3 million people in 2030, which shows an increase in the number of people with diabetes by 2-3 times in 2030 (PERKENI, 2011).

Prolonged high blood sugar levels in DM sufferers can cause various complications if they are not treated properly. Complications that often occur include vascular disorders, retinopathy, nephropathy, neuropathy and diabetic foot ulcers (Poerwanto, 2012). Diabetic foot ulcers are chronic wounds that are difficult to heal. Tissue damage that occurs in diabetic foot ulcers is caused by neurological (neuropathy) and vascular disorders in the legs. These disorders do not directly cause diabetic foot ulcers, but begin with a mechanism of decreased pain sensation, changes in foot shape, foot muscle atrophy, callus formation, decreased blood flow that carries oxygen and nutrients to tissues (Smeltzer & Bare. 2001).

Internal Inpatient FL Tobing Hospital, Sibolga City, the last month from January to June 2021, the incidence of DM was 20 people and 9 people who had Diabetic Ulcer complications were hospitalized. During treatment, Diabetic Ulcer patients experience various nursing problems, thus requiring a nursing process, the nursing process is carried out to identify problems, prevent and overcome nursing problems experienced by patients both actual and potential nursing problems to improve health. Nursing care provided by nurses greatly affects the quality of nursing care received by patients. Efforts are being made to improve the quality of nursing care by implementing various nurse roles. So that it can help patients who experience physical and psychological problems that require further treatment.

2. Research Methods

2.1 Research Type and Design

The research design used is descriptive research using a case study approach, where this research is directed to describe and describe how the application of nursing care with diabetic ulcers in patients with diabetes mellitus.

2.2 Research Place And Time

This research was carried out in the internal inpatient ward of the FL Tobing Hospital, Sibolga City in July 2021.

2.3 Population And Sampel

The population is the whole of the object under study or the subject that meets the established criteria (Nursalam, 2015). The population of this study were internal inpatients at FL Tobing Hospital, Sibolga City with cases of diabetic ulcers. The sample consists of part of the population that can be used as research subjects through sampling. Sampling is the process of selecting a portion of the population that can represent the existing population. The sample of this study was 1 patient with diabetic ulcers.

2.4 Data Collection Method

Collecting data in this study by observation, interviews, documentation and measurements using the nursing care assessment format as a reference tool used by researchers.

2.5 Data Analysis Techniques

The data that the researchers found during the assessment were grouped and analyzed based on subjective and objective data found by analyzing the data. After analyzing the data, the researcher immediately formulates nursing diagnoses, then prioritizes the problem to develop and determine the preferred diagnosis. After that the researchers carried out the implementation in accordance with the planned intervention and continued with conducting and evaluating nursing. After that, the researcher conducted nursing documentation. In the next analysis, the researcher compared the nursing care that had been done to the participants in accordance with the theory and previous research.

3. Result And Discussion

TABLE 1
DATA ANALYSIS

No	Data	Prolem	Etiology
1	Subjective data : 1. The client said ± 1 month the wound did not heal. 2. The client says the wound smells Objective Data: 1. In the ulcer, there is necrotic tissue on the edges and surface of the ulcer 2. There are 2 wounds on the client's left leg, the wound on the big toe of the left p : ± 5cm L : ± 6 cm and the wound on the back of the foot with a diameter of 6 cm. 3. Pain is felt when the wound is cleaned and active.	Damage to network integrity	Pressure changes in metabolic status, impaired circulation and altered sensation.

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No	Data	Prolem	Etiology
	4. The bandage looks wet and dirty 5. The client is installed infusion of RL 20 tts/i 6. The wound looks wet and there is pus 7. The wound looks red, swollen 8. In the ulcer, there is necrotic tissue on the edges and surface of the ulcer 9. Wounds smell bad 10. GDR : 156 mg/dl (19 June 2017)		
2	Subjective data : 1. The client says pain in the wound 2. The client says the pain feels like being stabbed 3. The client says pain occurs during activities Objective Data: 1. The client's face grimaced when the wound on his leg was cleaned 2. The client grimaced when the ulcer was pressed 3. Pain scale 4 (moderate pain)	Pain	Injury agent: Diabetic ulcers on the feet

TABLE 2
DIAGNOSIS AND INTERVENTION

No	Nursing diagnoses	NOC	NIC
1	Damage to the integrity of the network : DS : 1. The client said that ± 1 month his lukan had not been cured. 2. The client said the wound smelled. DO : 1. In the ulcer there appears to be necrotic tissue on the edges and surface of the ulcer. 2. There were 2 wounds on the client's left leg, a wound on the left big toe p: ±5cm L: ± 6 cm and a wound on the back of the foot with a diameter of ±6 cm. cm. Pain is felt when the wound is cleaned and active. 3. Verban looked wet and dirty Wounds looked Wet and there was a Pus. 4. The wound appeared red and swollen. 5. In the ulcer, there appears to be necrotic tissue on the edges and surface of the ulcer 6. Wound smelled of 7. GDR = 156 mg / dL.	Tissue integrity : skin and mucous Result Criteria: 1. Good skin integrity can be maintained (sensation, elasticity, temperature, hydration, pigmentation) 2. There are no wounds / lesions on the skin 3. Good tissue perfusion 4. Demonstrate understanding in the process of skin repair and prevent recurrence of injury. 5. Able to protect skin and maintain skin moisture and natural care	Pressure ulcer prevention wound care 1. Assess wound characteristics and presence of exudate, including thickness, color and odor. (location, area and depth of wound) 2. Perform wound/skin care regularly. 3. Clean and bandage the wound using the principle of sterility or aseptic measures. 4. Collaboration with doctors for drug administration.
2	Painful: DS 1. The client says pain in the wound 2. The client says the pain feels like being stabbed 3. The client says pain occurs during activities DO 1. The client's face looks grim when the ulcer is pressed 2. Pain scale 4 (moderate pain)	1. Pain Level, 2. Pain control, 3. Comfort level Result Criteria: 1. Able to control pain (know the cause of pain, able to use non-pharmacological techniques to reduce pain, seek help). 2. Reported that pain was reduced by using pain management. 3. Able to recognize pain (scale, intensity, frequency and signs of pain). 4. Express a sense of comfort after the pain is reduced. 5. Vital signs within normal range.	Pain Management 1. Perform a comprehensive pain assessment including location, characteristics, duration, frequency, quality and precipitation factors 2. Teach non-pharmacological relaxation techniques / deep breathing techniques to clients. 3. Use therapeutic communication techniques to know the patient's pain experience 4. Collaborate with the doctor if there are complaints and pain measures don't work

TABLE 3
IMPLEMENTATION AND EVALUATION

No	Hari/ tanggal	Dx	Jam	Implementasi	Evaluasi
1	Monday 12/07/ 2020	1	08.00 08.30 11.30	1. Observing the client's wound 2. Perform wound care 3. Clean and bandage the client's wound 4. Continuing the doctor's therapy for giving Domperidone 3x1 capsules and cutimed jelly	S : 1. The client said that after the wound was cleaned the client felt comfortable O: 1. In the client's ulcer there is still pus banak pus ± 15 cc, there is a lot of necrotic tissue on the edges and surface of the ulcer. The client's ulcer length is ± 5 cm, width ± 6 cm. 2. The client's face grimaced when the ulcer was cleaned. 3. Jell has been smeared 4. The client's ulcer has been wrapped with a bandage, the condition of the bandage is clean. 5. Domperidone has been taken 6. Insulin has been injected A : The problem has not been resolved P : Interventions 1, 2, 3, 4 are continued
		2	10.00- 12.00	1. Observing the level of pain felt by the client 2. Teach non-pharmacological relaxation techniques / deep breathing techniques to clients 3. Evaluating actions pain diversion 4. Collaborate with doctors administering Ranitidine	S: - The client says the pain occurs during activities and disappears after resting - The client says the pain feels like being stabbed - The client said the client seemed relaxed after being taught deep breathing techniques O : - The client can repeat what causes pain - The client seems to be able to do deep breathing techniques - The client's face looks grimace - Pain Scale 4 - Ranitidine has been taken - TTV =- Blood pressure = 110/60 mmHg - Breathing = 20x/i - Pulse = 80 x/i - Temperature = 36 C A = Problem partially resolved P = Interventions 1, 2, 3, 4 are continued
2	Tuesday 13/07/ 2020	1	08.00 12.00	1. Observing the client's wound 2. Perform wound care 3. Clean and bandage the client's wound 4. Continuing the doctor's therapy for the administration of Domperidone 3x1 capsules and jelly cutimed	S : the client said that after the wound was cleaned the client felt comfortable. O: In the ulcer there is still pus ± 13 cc, there is a lot of necrotic tissue on the edges and surface of the ulcer. There is no sign of healing on the client's ulcer Jelly has been smeared The client's ulcer is covered with a bandage, the condition of the clean bandage Domperidon has been taken A : The problem has not been resolved P : Interventions 1, 2, 3, 4, continue
		2	10.00 12.00	1. Observing the level of pain felt by the client 2. Teaching non-pharmacological relaxation techniques / deep breathing techniques to clients 3. Evaluating pain transfer actions 4. Collaborating with doctors giving Ranitidine drugs	S : 1. The client says it still hurts when doing activities 2. The client says the pain feels like being stabbed 3. The client says the client is trying to relax as taught 4. The client seems to be able to do the deep breathing technique. The client's face looks grim 5. Pain Scale 4 (moderate pain) 6. Ranitidine has been taken 7. The infusion is already in aff 8. TTV = TD= 120/80 mmHg Breathing = 21x/s Nadi = 81 x/s Temperature = 36.5 C A : The problem has not been resolved P : Interventions 1, 2, 3, 4 are continued

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TABLE 3
IMPLEMENTATION AND EVALUATION

No	Hari/ tanggal	Dx	Jam	Implementasi	Evaluasi
1	Monday 12/07/ 2020	1	08.00 08.30 11.30	5. Observing the client's wound 6. Perform wound care 7. Clean and bandage the client's wound 8. Continuing the doctor's therapy for giving Domperidone 3x1 capsules and cutimed jelly	S : 2. The client said that after the wound was cleaned the client felt comfortable O: 7. In the client's ulcer there is still pus banak pus ± 15 cc, there is a lot of necrotic tissue on the edges and surface of the ulcer. The client's ulcer length is ± 5 cm, width ± 6 cm. 8. The client's face grimaced when the ulcer was cleaned. 9. Jell has been smeared 10. The client's ulcer has been wrapped with a bandage, the condition of the bandage is clean. 11. Domperidone has been taken 12. Insulin has been injected A : The problem has not been resolved P : Interventions 1, 2, 3, 4 are continued
		2	10.00- 12.00	5. Observing the level of pain felt by the client 6. Teach non-pharmacological relaxation techniques / deep breathing techniques to clients 7. Evaluating actions pain diversion 8. Collaborate with doctors administering Ranitidine	S: - The client says the pain occurs during activities and disappears after resting - The client says the pain feels like being stabbed - The client said the client seemed relaxed after being taught deep breathing techniques O : - The client can repeat what causes pain - The client seems to be able to do deep breathing techniques - The client's face looks grimace - Pain Scale 4 - Ranitidine has been taken - TTV =- Blood pressure = 110/60 mmHg - Breathing = 20x/i - Pulse = 80 x/i - Temperature = 36 C A = Problem partially resolved P = Interventions 1, 2, 3, 4 are continued
2	Tuesday 13/07/ 2020	1	08.00 12.00	3. Observing the client's wound 4. Perform wound care 3. Clean and bandage the client's wound 4. Continuing the doctor's therapy for the administration of Domperidone 3x1 capsules and jelly cutimed	S : the client said that after the wound was cleaned the client felt comfortable. O: In the ulcer there is still pus ± 13 cc, there is a lot of necrotic tissue on the edges and surface of the ulcer. There is no sign of healing on the client's ulcer Jelly has been smeared The client's ulcer is covered with a bandage, the condition of the clean bandage Domperidon has been taken A : The problem has not been resolved P : Interventions 1, 2, 3, 4, continue
		2	10.00 12.00	5. Observing the level of pain felt by the client 6. Teaching non-pharmacological relaxation techniques / deep breathing techniques to clients 7. Evaluating pain transfer actions 8. Collaborating with doctors giving Ranitidine drugs	S : 1. The client says it still hurts when doing activities 2. The client says the pain feels like being stabbed 3. The client says the client is trying to relax as taught 4. The client seems to be able to do the deep breathing technique. The client's face looks grim 5. Pain Scale 4 (moderate pain) 6. Ranitidine has been taken 7. The infusion is already in aff 8. TTV = TD= 120/80 mmHg

No	Hari/ tanggal	Dx	Jam	Implementasi	Evaluasi
					Breathing = 21x/s Nadi = 81 x/s Temperature = 36.5 C A : The problem has not been resolved P : Interventions 1, 2, 3, 4 are continued

3.1 Discussion

As long as the author performs nursing care on the client, Mrs. N with Diabetic Ulcers in the Internal Inpatient Room, FL Tobing Hospital, Sibolga. Several things that need to be discussed and considered in the application of these nursing cases, the author has tried to apply and apply the Nursing Care process to clients with Diabetic Ulcers in accordance with existing theories. To see more clearly the nursing care provided and the extent to which success has been achieved will be described in accordance with nursing procedures starting from assessment, diagnosis, intervention, implementation, and evaluation.

In conducting a case study on a client, the author had difficulty getting data from the client himself, because the client was very difficult to be invited to tell stories due to pain in his leg but the author got data from the client's family, medical records, room nurses and other health workers.

In the main complaint in the theoretical review with the case review there were no data gaps at the time of the assessment. According to the theory, there is a tingling feeling in the feet / lower legs, decreased sense of touch, a foot wound that does not heal and smells, there is pain in the wound. In the case review, it was found that client data entered the ER FL Tobing Sibolga Hospital with the client's complaint of fever 5 days before hospital admission, there was a wound on the left big toe, the wound did not heal since 2 weeks before hospital admission.

In the theoretical review, data obtained from previous medical history such as hypertension, use of drugs and consuming glucose. And in the case review, when the client was assessed, he said that he did not know that the client had a history of Diabetes Mellitus. There is no gap because there is a client's family who suffers from Diabetes Mellitus, namely the younger brother of the client's father. Based on the theory of heredity supporting.

In carrying out a physical examination on Mrs. N the authors experienced many obstacles, not all physical examinations on clients could be done, but in theoretical examinations and case reviews there were no gaps because examinations were very important to explore the extent of the development of the client's disease and condition. According to the theory, a head to toe examination should be performed on every patient, namely in the form of inspection by inspection, palpation, percussion and auscultation. In the case of Mrs. N found abnormalities on several examinations, namely: in the lower extremity area of the client's left where there is an ulcer on the client's big toe.

In the nursing diagnosis of Diabetes Mellitus, theoretically, according to the fifth edition of NANDA nic noc, there are 8 nursing diagnoses that may appear in diabetic ulcer patients, while in the case review, only 2 nursing diagnoses were found, the diagnoses that appeared in the case review were Damage to tissue integrity and pain. Of the 8 diagnoses above, there were 6 diagnoses that were not included in the case review, namely impaired tissue perfusion, impaired skin integrity, nutritional imbalance less than body requirements, risk of infection, lack of fluid volume and impaired body image. However, this diagnosis was not established because the authors did not find supporting data to support the diagnosis.

In preparing a nursing action plan for a client based on the priority of the problems found, not all the action plans in theory can be enforced in the case review because the action plan in the case review is adjusted to the complaints felt by the client when the assessment is carried out. For the first diagnosis, namely damage to tissue integrity, the plan of action is to assess the characteristics of the wound and the presence of exudate, including thickness, color and odor (location, area and depth of the wound). Perform wound / skin care regularly. Clean and bandage the wound using the principle of sterility or aseptic measures. Collaboration with doctors for drug administration and for the second diagnosis of pain, the action plan taken is to conduct a comprehensive assessment including location, characteristics, duration, frequency, quality and precipitation factors. Teach therapeutic communication techniques to know the patient's pain experience. Collaboration with doctors if there are complaints and pain measures don't work.

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After the action plan is set, it is continued by carrying out the plan in real form, before being applied to the client, first approach the client and the client's family so that the actions to be given can be approved by the client and the client's family, so that all nursing care action plans are in accordance with the problems faced. Client. For the first diagnosis, namely damage to tissue integrity, the action that the author takes is to observe the client's wound. Perform wound care. Clean and bandage the client's wound. Continuing the doctor's therapy for giving 3x1 capsules of domperidone and jelly cumited and for the second diagnosis, namely pain, the action that the author takes is to observe the level of pain felt by the client. Teach non-pharmacological relaxation techniques / deep breathing techniques to clients. Evaluate pain diversion measures. Collaborate with doctors if there are complaints and pain measures don't work.

Of the 2 nursing diagnoses that the author established according to what the authors found in conducting case studies and carrying out nursing care, the expected developments had not yet reached the expected development, due to the short time, therefore it was hoped that nurses and other medical personnel would continue the interventions that the authors had planned. In carrying out nursing care to achieve maximum results requires cooperation between the author and clients, nurses, doctors, and other health teams. For the first diagnosis of damage to tissue integrity, changes in circulation are considered unresolved because the ulcer still smells, there is necrotic tissue, pus and there are no signs of healing in the wound. For the second diagnosis, the pain is considered partially resolved because the client feels comfortable but encourages the client to use relaxation techniques when pain occurs.

4. Conclusion

From the results of the implementation of Nursing Care for Mrs. N with Diabetic Ulcers in the Internal Room of the FL Tobing Hospital in 2020, it can be concluded: (1) During the assessment, data were found that matched the patient's disease, namely Diabetic Ulcers, and later these data would be the basis for the author to establish a diagnosis in carrying out nursing actions. (2) Based on the data obtained, the diagnosis in Mrs.N's case was found, namely: Damage to tissue integrity and pain. (3) Interventions carried out refer to diagnoses that are enforced and made according to the theory in the Nursing Care Plan Book, Interventions can be in the form of independent actions or collaborative actions. For intervention in the case of several theoretical interventions, the author does not include it because the author adapts to the client's condition. (4) Implementation carried out in the room is more focused on health education and collaboration with families to care for patients, while other implementations are continuously carried out by room nurses because of limited time for the authors to monitor and implement the client. (5) Evaluation can be in the form of verbal responses, non-verbal responses, and examination results. Of the 2 diagnoses that the author established, there was 1 problem that was partially resolved, and 1 problem had not been resolved due to time constraints and the author's ability to provide nursing care.

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