



## SERVICE EXCELLENT SURGICAL MEDICAL NURSING CARE MANAGEMENT ON TN. D WITH TYPE II DIABETES MELLITUS WITH INDICATIONS OF DIABETIC ULCERS IN ROOM RA 4 RSUP H. ADAM MALIK CITY MEDAN NORTH SUMATERA YEAR 2025

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### ABSTRACT

*Diabetes Mellitus Type II remains a prevalent chronic disease in Indonesia, often leading to serious complications such as diabetic foot ulcers when left unmanaged. This scientific paper presents a comprehensive nursing care management approach with a focus on service excellence for a patient diagnosed with Type II Diabetes Mellitus and diabetic ulcers. The case study involved a 51-year-old male patient (Mr. D) admitted to the RA 4 Ward of H. Adam Malik General Hospital in Medan. The nursing process implemented included five stages: assessment, diagnosis, planning, intervention, and evaluation, guided by the standards outlined in the Indonesian Nursing Diagnosis and Intervention System (SDKI & SIKI). Key nursing diagnoses identified were unstable blood glucose levels, impaired tissue integrity, and limited physical mobility. Over the course of three consecutive days, targeted nursing interventions were administered, including wound care, blood glucose monitoring, patient education, and collaboration with the healthcare team. The outcomes indicated notable clinical improvements in wound healing, glycemic control, and patient awareness. This case highlights the importance of an integrated and empathetic nursing approach that emphasizes professional, accountable, collaborative, and patient-centered care—consistent with the PACER values adopted by STIKes Mitra Husada Medan. Furthermore, the findings support the significance of early health education, family involvement, and lifestyle modification in diabetes management. The application of excellent service within the nursing process not only contributes to better patient outcomes but also aligns with Indonesia's broader health goals, particularly in reducing complications and promoting sustainable healthcare delivery. Through this study, nurses are encouraged to adopt evidence-based strategies that combine clinical precision with compassionate care, ultimately enhancing the quality of life for patients with chronic illnesses such as diabetes..*

**Keywords:** *Nursing Management, Service Excellence, Type II Diabetes Mellitus, Diabetic Ulcer, Patient-Centered Care*



## Introduction

Diabetes mellitus (DM), a chronic metabolic disorder marked by elevated blood glucose (or blood sugar) levels that seriously harm the heart, blood vessels, eyes, kidneys, and nerves, is one of the non-communicable diseases that affect people's quality of life (Sinaga, 2025)

Due to either insufficient insulin synthesis or poor insulin use, non-insulin-dependent diabetes mellitus typically manifests in adulthood. Type 2 diabetes accounts for 90–95% of all instances of the disease worldwide. The annual incidence rates of type 1 and type 2 diabetes in the US are 18.6/100,000 and 8.5/100,000, respectively. According to the most recent census, the prevalence of type II diabetes in Indonesia rose dramatically from 1.5–2.3% approximately 15 years ago to 12.8% in 2023 (Agussamad & Murdianto, 2024)

Non-communicable diseases (NCDs) are a major health challenge in Indonesia, one of which is type 2 diabetes mellitus which continues to increase every year. This disease can reduce quality of life and cause serious complications, such as diabetic ulcers-chronic wounds on the feet due to nerve damage and impaired blood flow. If not treated properly, this condition can lead to severe infection and amputation. To address this, the government issued Minister of Health Regulation No. 4/2019 which emphasizes the importance of early detection, foot care education, and continuous control of blood sugar levels. This step aims to prevent diabetic ulcers and reduce the risk of amputation that can worsen the patient's condition. The Indonesian government is committed to reducing premature mortality from non-communicable diseases through effective prevention and treatment strategies, in line with the Sustainable Development Goals (SDGs) target point 3.4. This effort is

realized through strengthening primary health services and community education, as stipulated in Permenkes No. 4 of 2019. One of the focuses is type 2 diabetes mellitus, a chronic metabolic disorder characterized by high blood sugar levels due to the body not responding optimally to insulin (Harmilah.,2021; Tandra, 2017). If not controlled, diabetes can lead to serious complications such as diabetic ulcers, which are chronic wounds on the feet that are difficult to heal due to nerve and blood flow damage. Based on its cause, diabetes mellitus is classified into several types, namely type 1, type 2, gestational, and other types due to genetic disorders or certain medical conditions (Tandra, 2017). Understanding the types of diabetes is important to determine the appropriate prevention and treatment measures for each individual.

Menteri PPN/kepala Bappenas No Kep 136/M.PPN/HK/12/2021Menyelenggarakan peraturan tentang Penetapan Rencana Aksi Nasional dengan Tujuan Pembangunan berkelanjutan (TPB/SDGs) pada tahun 2021-2024, Pemerintah menjadikan TPB/SDGs sebagai pedoman utama dalam pelaksanaan pembangunan nasional. Dokumen ini menjadi rujukan dalam menyusun perencanaan, melaksanakan program, memantau perkembangan, serta mengevaluasi dan mengendalikan berbagai sektor pembangunan, termasuk di bidang kesehatan. sesuai dengan keputusan tersebut ditegaskan bahwa setiap pemangku kepentingan, baik pemerintah maupun non-pemerintah, diharapkan menjadikan SDGs sebagai referensi dalam merumuskan kebijakan guna mencapai target nasional. Dalam bidang kesehatan, dua tujuan SDGs yang relevan adalah Tujuan 3, yang menekankan peningkatan kualitas kesehatan dan penurunan angka kesakitan



termasuk luka bakar, serta Tujuan 17 yang mendorong kolaborasi lintas sektor untuk mendukung upaya preventif, kuratif, rehabilitatif dalam bidang kesehatan terkhusus pada luka bakar. Times New Roman type, size 11, normal style, presented with left and right alignment and written without indentation at the beginning of the sentence. Keywords consist of 3-5 words. (Hastuti, 2017). Luka bakar merupakan jenis luka bakar tergolong berat yang tidak hanya mempengaruhi kulit, tetapi juga bisa merusak jaringan yang lebih dalam hingga menyebabkan gangguan sistemik pada tubuh seseorang. Cedera ini bisa dipicu akibat paparan langsung terhadap berbagai sumber panas seperti api, cairan atau benda yang memiliki suhu sangat tinggi (Angelica, 2023). Selain itu, luka bakar juga dapat disebabkan oleh kontak dengan zat berbahaya jika kontak dengan kulit, bisa karena sengatan listrik, gesekan yang kuat, serta kondisi dari lingkungan yang ekstrim seperti suhu yang sangat dingin. Tingkat keparahan luka bakar biasanya bergantung pada faktor penyebabnya, durasi paparan, serta luas dan kedalaman jaringan yang terdampak. Dalam beberapa situasi, luka bakar yang sangat berat dapat mengganggu fungsi organ di tubuh seseorang sehingga memerlukan penanganan medis yang intensif dan berkelanjutan (Santoso, 2025).

Data from the International Diabetes Federation (IDF) shows that diabetes cases continue to increase every year around the world, including in Indonesia. In 2013, more than 382 million people in the world were recorded as having diabetes, and by 2021, the prevalence will increase to 537 million adults (aged 20 to 79 years), or one in ten people in the world with diabetes. Diabetes also causes 6.7 million deaths, or one death every five seconds. Meanwhile, according to data

from RISKESDAS, Indonesia ranks fifth in the world in the number of people with diabetes, with 19.47 million people out of a population of 179.72 million. This indicates that the prevalence of diabetes in Indonesia reaches 10.6%. It is estimated that by 2035, the number of people with diabetes will increase. This data clearly shows that the number of people with diabetes is growing much faster than previously thought (Prawinda., 2023).

The rising prevalence of diabetes mellitus remains a major concern, including at H. Adam Malik General Hospital, where the number of diagnosed patients increased significantly from 1,191 in 2023 to 2,118 in 2024. During a preliminary survey conducted on April 25, 2025, in RA 4 Ward, 28 patients were identified with diabetes mellitus. As part of the research process, the investigator conducted interviews with five Type 2 diabetes patients to determine a suitable case subject. Three patients declined to participate, and one was excluded due to language barriers. Ultimately, Mr. D was selected because he agreed to receive nursing care and presented symptoms and lifestyle patterns consistent with Type 2 diabetes. He reported frequent fatigue, excessive thirst, and increased urination, particularly at night, along with slow-healing wounds on his feet. His medical history revealed a high intake of carbohydrates, low consumption of vegetables and fruit, lack of physical activity, irregular health checkups, and poor medication adherence.

Diabetes mellitus is a chronic disease with significant long-term impacts, requiring serious and continuous attention. To address this issue, the Indonesian government, through the Ministry of Health, has implemented a community empowerment program aimed at raising



public awareness about the dangers of diabetes, its prevention, and the importance of early symptom detection. This program includes direct education, random blood sugar screening, and basic training to help individuals better understand how to manage their own health. However, its effectiveness remains limited due to persistent lifestyle factors such as lack of physical activity, high consumption of carbohydrate- and fat-rich foods, and genetic predisposition (Darmareja., 2025). In this context, nursing care plays a crucial role, particularly for patients with type 2 diabetes. Proper nursing interventions help regulate blood glucose levels more effectively, thereby reducing the risk of serious complications such as non-healing wounds and gangrene (Pokhrel, 2024).

### Research Method

The type of case study used in this scientific paper is a descriptive case study. Through the application of nursing care, this study aims to provide a detailed account of a nursing case, including comprehensive patient assessment, nursing diagnosis, intervention planning, implementation, and evaluation of care. The findings are presented in both narrative form and tables that document the entire nursing care process (Silmi, 2017). This scientific paper follows the nursing care approach, which consists of five essential stages: assessment, diagnosis, planning/intervention, implementation, and evaluation.

The research was conducted at Haji Adam Malik General Hospital in Medan,

**Result** This case study was conducted in Room RA 4 of H. Adam Malik General Hospital on a 51-year-old male patient named Mr. D, who has been living with type II diabetes mellitus for over ten years.

from April 26 to 28, 2025. The subject of the case study was selected based on specific inclusion criteria.

The sample in this study involved a single individual diagnosed with type 2 diabetes mellitus and indications of diabetic ulcers. The inclusion criteria required that the patient, Mr. D, met the clinical condition and willingly agreed to participate in the research. Exclusion criteria included patients without diabetic ulcers or those who declined to take part in the study.

Data collection was carried out to obtain relevant information from the patient during hospitalization. The techniques used included three main methods: **Interview**, which involved direct communication with the patient to gather personal identity, main complaints, current and past health history, and other important information related to the patient's condition, **Observation**, conducted through direct monitoring of the patient to identify behavioral changes or other relevant signs that support the research; and, **Documentation**, which involved recording information after providing nursing care using a standardized format for medical-surgical nursing assessments.

A descriptive approach was used in data analysis, covering data collection and conclusion drawing based on findings. The process included assessment, diagnosis, intervention planning, implementation, and evaluation, carried out consistently to ensure accurate results. The analysis was conducted interactively and continuously throughout the study.

The main complaints included frequent nighttime urination, excessive thirst, and slow-healing wounds on both feet, especially the right leg. A thorough nursing assessment was performed through



interviews, direct observation, and physical examinations, revealing signs of diabetic foot ulcers and limited mobility. Based on these findings, five nursing diagnoses were established: risk of infection, ineffective peripheral perfusion, unstable blood glucose levels, impaired skin/tissue integrity, and impaired physical mobility. These diagnoses were aligned with the Indonesian Standard Nursing Diagnoses (SDKI, 2018) and tailored to Mr. D's specific clinical condition.

Nursing interventions were developed based on the Indonesian Standard Nursing Interventions (SIKI), focusing on addressing each diagnosis through both independent and collaborative actions. Interventions included monitoring signs of infection, wound care using sterile techniques, education on blood sugar control, and physical support for mobility. Implementation was carried out over three days, from April 26 to April 28, 2025. The nursing team also collaborated with medical staff in administering insulin, antibiotics, and dietary management. All procedures were conducted with strict attention to aseptic principles and a holistic care approach, involving the patient's family in the healing process to promote both physical recovery and emotional support (Sari et al., 2021).

The nursing evaluation showed that most problems had not been fully resolved by the third day of care. However, there were improvements, including reduced infection symptoms, cleaner wounds, and increased patient understanding of self-care practices. The chronic nature of diabetes presented a significant challenge, requiring continued monitoring and long-term management. The nursing care provided was firmly grounded in legal and ethical standards, as outlined in the Indonesian Nursing Profession Act and Medical

Record Regulation. Additionally, the approach reflected the service excellence values and PACER culture (Professional, Accountable, Caring, Empathetic, Responsible) promoted by STIKes Mitra Husada Medan, aiming to deliver competent, compassionate, and patient-centered healthcare services.

## Discussion

This case study focuses on Mr. D, a 51-year-old male patient admitted to H. Adam Malik General Hospital, Medan, on April 23, 2025, with a history of type 2 diabetes mellitus for over 10 years. He presented with chronic wounds on both feet, particularly on the right lower leg, that had persisted for approximately three months. During the initial nursing assessment on April 26, Mr. D exhibited classic signs of diabetic complications, such as frequent urination at night (polyuria), excessive thirst (polydipsia), and reduced ability to walk due to foot ulcers. Vital signs recorded were: blood pressure 120/90 mmHg, heart rate 78 beats per minute, respiratory rate 22 breaths per minute, and temperature 36°C. Laboratory tests supported the diagnosis of diabetic foot ulcers, with a random blood glucose (GDS) of 240 mg/dL, fasting glucose of 128 mg/dL, hemoglobin level of 9.9 g/dL, and elevated levels of urea (71 mg/dL) and creatinine (3.25 mg/dL), indicating possible renal impairment.

Based on these findings, five primary nursing diagnoses were identified: risk of infection, ineffective peripheral perfusion, unstable blood glucose levels, impaired skin/tissue integrity, and impaired physical mobility. Each problem was addressed through specific interventions based on the Indonesian Nursing Interventions Standards (SIKI) and Expected Nursing Outcomes (SLKI).



Infection prevention was carried out by monitoring wound characteristics and applying aseptic wound care using NaCl and Duoderm hydroactive gel. Glucose control involved insulin administration, diet education, and encouraging oral fluid intake. Peripheral perfusion was managed through leg assessment, foot care, and application of moisturizing agents like olive oil. Mobility was gradually improved through range-of-motion (ROM) exercises and the use of assistive devices, with support from family members.

The nursing interventions were implemented from April 26 to April 28, 2025. Daily evaluations showed gradual improvement in several areas. For instance, the wound's redness and swelling reduced, pus discharge became minimal, and Mr. D began to demonstrate better understanding of hand hygiene and early signs of infection. Blood glucose levels decreased from 240 mg/dL to 192 mg/dL over the three-day care period. The patient also showed a positive response to mobility support, being able to sit up with assistance and perform limited movement. His vital signs remained stable throughout the treatment, indicating no acute deterioration. While the skin damage and impaired mobility remained partially unresolved, the overall patient response to care was encouraging.

Mr. D expressed hope for recovery and was motivated to resume daily activities and religious practices. The support from his wife and children also contributed significantly to his emotional well-being and rehabilitation. This case highlights the importance of holistic nursing care that combines technical skills, patient education, family involvement, and consistent monitoring. Furthermore, it reflects the relevance of ethical and professional standards in nursing practice,

including the use of a patient-centered approach and the PACER values (Professional, Accountable, Caring, Empathetic, and Responsible). With continued care and adherence to the treatment plan, patients like Mr. D with diabetic foot ulcers can achieve better outcomes and quality of life (Sinaga, 2022).

## Conclusion and Suggestion

### Conclusion

Based on the nursing care process applied to a 51-year-old male patient with Type II Diabetes Mellitus and diabetic foot ulcers in the inpatient unit of RSUP H. Adam Malik from April 26 to 28, 2025, it can be concluded that a structured and holistic nursing approach is crucial in managing chronic complications. The five nursing diagnoses established risk of infection, ineffective peripheral perfusion, unstable blood glucose levels, impaired skin integrity, and impaired physical mobility were based on the patient's condition and supported by both clinical findings and laboratory data. All stages of the nursing process were implemented, including assessment, diagnosis, planning, intervention, implementation, and evaluation, in accordance with professional standards.

The interventions provided resulted in gradual improvements, such as reduced redness and swelling around the wound, better understanding by the patient regarding infection signs and self-care, and improved comfort during mobilization. However, due to the chronic nature of the illness and the presence of complications, the problems were not fully resolved within the short care period. These outcomes highlight the need for continuous nursing support, family involvement, and



interdisciplinary collaboration in managing complex diabetic conditions.

#### Suggestion

For educational institutions, especially STIKes Mitra Husada Medan, this case study is expected to serve as a learning reference for nursing students in understanding and implementing comprehensive care for patients with Type II Diabetes Mellitus and complications such as diabetic ulcers. For RSUP H. Adam Malik, the results of this study can be used to enhance nursing service quality through continuous education, adherence to clinical guidelines, and improved patient education strategies.

For the writer, this nursing experience has significantly contributed to developing clinical reasoning skills, deepening the understanding of diabetic ulcer care, and reinforcing professional attitudes such as accountability, empathy, and collaboration. It also emphasizes the importance of integrating service excellence values into daily nursing practice to improve patient outcomes and satisfaction.

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