



## MANAGEMENT OF GERIATRIC NURSING CARE WITH SERVICE EXCELLENCE FOR MRS. Z WITH TYPE 1 DIABETES MELLITUS AT THE SOCIAL SERVICE CENTER FOR THE ELDERLY BINJAI

Vina Eninta Noviany<sup>1</sup>, Siti Nurmawan Sinaga<sup>2</sup>, Sri Mulati Nendah Agreta<sup>3</sup>, Jakson Napitupulu<sup>4</sup>, Yomeka Hasiana Sirait<sup>5</sup>, Laura Manungkalit<sup>6</sup> Lince Ria Siagian<sup>7</sup>

<sup>1,2,3,5,6,7</sup>Sekolah Tinggi Ilmu Kesehatan Mitra Husada Medan

<sup>4</sup>UPTD Pelayanan Sosial Lanjut Uisa Binjai

[2219144057@mitrahusada.ac.id](mailto:2219144057@mitrahusada.ac.id), [sitinurmawan@mitrahusada.ac.id](mailto:sitinurmawan@mitrahusada.ac.id), [srimulati@mitrahusada.ac.id](mailto:srimulati@mitrahusada.ac.id),  
[2219144035@mitrahusada.ac.id](mailto:2219144035@mitrahusada.ac.id), [2419144009@mitrahusada.ac.id](mailto:2419144009@mitrahusada.ac.id), [2419201744@mitrahusada.ac.id](mailto:2419201744@mitrahusada.ac.id)

### ABSTRACT

Type 1 Diabetes Mellitus (T1DM) in the elderly presents complex challenges due to age-related physiological decline and elevated risks of chronic complications. A geriatric nursing approach oriented toward service excellence is essential to optimize the quality of life and clinical outcomes for the elderly in residential care settings. Objective: This case study aims to implement comprehensive nursing care through a service excellence approach for Mrs. Z (66 years old) with Type 1 Diabetes Mellitus. This study employed a descriptive case study design at the Binjai Social Service Center for the Elderly (UPTD), following the standardized nursing process: holistic assessment, diagnosis, planning, implementation, and evaluation. The primary nursing diagnoses identified were instability in blood glucose levels and deficient knowledge regarding self-dietary management. Service excellence interventions were integrated through persuasive health education, intensive blood glucose monitoring, and empathetic psychosocial support. Following a three-day intervention, the patient demonstrated significant improvement in dietary literacy, and capillary blood glucose levels stabilized within the target range. The application of service excellence-based nursing care effectively enhances the independence and clinical stability of elderly patients with T1DM, while fostering a sense of comfort and dignity within the social service environment.

**Keywords:** Management, Geriatric, Nursing Care, Service Excellent

### Introduction

The global and national prevalence of diabetes mellitus has increased significantly, particularly among the elderly population. According to the World Health Organization (2024) over 800 million adults worldwide are currently living with diabetes. In Indonesia, the prevalence has reached approximately 19.5 million people, with projections indicating a continued rise

in the coming decades (International Diabetes Federation, 2021). Managing diabetes-related complications in geriatric patients necessitates a holistic nursing approach that integrates physical, psychological, and social well-being. This strategy aligns with the Sustainable Development Goals (SDGs), specifically targets 3.4 and 4.7, which focus on reducing non-communicable diseases and promoting health through community-based



interventions and family empowerment to prevent severe complications such as diabetic foot ulcers (Zega et al., 2024).

The UPTD Elderly Social Services Center in Binjai serves as a pivotal government institution for the comprehensive care of abandoned elderly individuals. One of the residents, Mrs. Z, presented with hallmark symptoms of Type 1 Diabetes Mellitus, including polyuria, polydipsia, persistent fatigue, and unexplained weight loss. These clinical manifestations indicate suboptimal glycemic control, necessitating precise, empathetic, and holistic geriatric nursing interventions. Effective management is crucial to mitigate the risk of acute and chronic complications, thereby enhancing the patient's overall quality of life (Smeltzer et al., 2020; American Diabetes Association, 2023).

However, providing standard clinical care alone is insufficient for the elderly in social care settings, who often face psychological abandonment and diminished motivation. Therefore, this study introduces the Service Excellence approach into geriatric nursing care. Service excellence in a nursing context goes beyond clinical routines by prioritizing "caring," responsiveness, and high-quality interpersonal communication to foster a sense of dignity and comfort for the patient (Johnston & Clark, 2021).

By implementing the Management of Geriatric Nursing Care with Service Excellence, this case study focuses on stabilizing Mrs. Z's blood glucose levels while simultaneously addressing her knowledge deficit regarding dietary management through persuasive and empathetic education. This holistic intervention is expected to provide a

benchmark for high-quality social-health services at the UPTD Binjai, ensuring that even abandoned elderly individuals receive care that meets international standards of excellence.

### Research Method

This study employed a descriptive case study design focusing on a comprehensive nursing care approach. The subject was Mrs. Z, a 66-year-old female resident at the UPTD Elderly Social Services Center in Binjai, diagnosed with Type 1 Diabetes Mellitus. Data were collected through a triangulated method consisting of in-depth interviews, direct observations, and holistic physical examinations. These qualitative and clinical assessment methods are essential in nursing research to capture a multi-dimensional perspective of the patient's condition and response to care (Polit & Beck, 2021). Furthermore, the nursing process was documented following the Service Excellence framework, ensuring that every interaction prioritized patient dignity and responsiveness.

"The collected data were analyzed descriptively and interpreted within the framework of geriatric nursing theories, specifically the Functional Consequences Theory. This approach emphasizes holistic care that integrates the physical, psychological, social, and spiritual dimensions of elderly health (Miller, 2019). The analysis focused on identifying how age-related changes and risk factors, such as diabetes, affect Mrs. Z's functional status. By applying this framework, the nursing interventions were tailored to minimize negative functional consequences and promote positive outcomes, thereby

enhancing her autonomy and well-being within the social care environment.

## Result

Based on the assessment results, three primary nursing diagnoses were identified: unstable blood glucose levels related to inadequate insulin use, activity intolerance due to decreased musculoskeletal function, and risk of impaired skin integrity associated with immobility and dry skin. These diagnoses are consistent with common nursing problems found in elderly patients with diabetes mellitus (International Diabetes Federation, 2021).

The nursing interventions focused on insulin management education, light physical exercises, routine blood glucose monitoring, and prevention of skin complications. The implementation of these interventions over a period of 3×24 hours demonstrated positive outcomes, including stabilized blood glucose levels, improved muscle strength, and better skin condition, which align with evidence-based diabetes nursing care practices (American Diabetes Association, 2023); (Potter et al., 2021).

Evaluation using standardized assessment tools such as the Mini-Mental State Examination (MMSE), Short Portable Mental Status Questionnaire (SPMSQ), and Beck Depression Inventory (BDI) showed no signs of cognitive impairment or depression. Additionally, the client demonstrated strong social support, effective coping mechanisms, and good adaptation to her health condition, which are key indicators of successful geriatric nursing outcomes (Townsend & Morgan, 2020).

## Discussion

The increasing prevalence of diabetes mellitus globally and nationally poses a significant challenge, particularly among elderly populations. According to the World Health Organization, more than 800 million adults worldwide are affected by diabetes, while in Indonesia, the number of diagnosed cases reached approximately 19.5 million and is expected to increase to 28.6 million by 2045. These trends highlight the urgent need for effective chronic disease management strategies for the elderly, aligned with SDGs targets 3.4 and 4.7 (World Health Organization, 2016); (International Diabetes Federation, 2021).

The implementation of geriatric nursing care for Mrs. Z demonstrated that managing Type 1 Diabetes Mellitus in a social care setting requires a comprehensive approach that extends beyond routine clinical monitoring. The stabilization of Mrs. Z's blood glucose levels was successfully achieved through a strategic integration of pharmacological adherence and non-pharmacological interventions. This holistic strategy aligns with the findings of (Manurung & Sigalingging, 2020), who emphasize that physiological comfort and relaxation techniques—such as specialized touch therapies—can significantly influence metabolic stability and overall patient well-being. In this case, the "Service Excellence" approach functioned as a non-pharmacological catalyst, providing a calming effect that is vital for elderly patients facing the chronic stress of metabolic illness.

The UPTD Elderly Social Services Center in Binjai, North Sumatra, plays an essential role in providing care for abandoned elderly individuals with chronic conditions. Mrs. Z,

aged 66, presented with classic symptoms of type 1 diabetes mellitus, including polyuria, polydipsia, fatigue, and weight loss. Given the chronic nature of diabetes and the complexity of elderly care, implementing an accurate, holistic, and service excellence-oriented nursing approach is critical to improving patient outcomes and ensuring dignity in elderly care services (Smeltzer et al., 2020).

Furthermore, the success of the intervention was heavily dependent on the quality of interpersonal communication and the patient's psychological readiness. Sinaga (2022) notes that psychological factors and mental health readiness are fundamental predictors of how a patient adheres to long-term health management. Initially, Mrs. Z exhibited significant fatigue and diminished motivation; however, these barriers were effectively addressed through empathetic communication, which is a core component of service excellence. By improving her psychological state, the nursing team was able to foster a more proactive attitude in the patient toward her dietary management.

This improvement in patient compliance underscores the importance of high-quality health service principles. (Nainggolan et al., 2023) highlight that providing Service Excellent-based Communication, Information, and Education (KIE) is essential to improve patient understanding and adherence, particularly in managing complex chronic conditions. By adopting these superior service standards, the nursing team ensured that the care provided to Mrs. Z was not only clinically sound and evidence-based but also delivered in a manner that deeply respected her dignity and human value. This integrated model of

care serves as a vital benchmark for enhancing geriatric nursing services within social care environments.

### Conclusion And Suggestion

Geriatric nursing care using a service excellence approach applied to Mrs. Z, a 66-year-old elderly patient with type 1 diabetes mellitus, had a positive impact on both physical and psychosocial conditions. Through a comprehensive nursing process-assessment, diagnosis, intervention, implementation, and evaluation-three main problems were identified: unstable blood glucose levels, activity intolerance due to decreased musculoskeletal function, and risk of impaired skin integrity due to immobility. These findings are consistent with common clinical issues observed in elderly patients with diabetes mellitus (NANDA International, 2021; (American Diabetes Association, 2023).

The interventions implemented over 3×24 hours resulted in improved clinical outcomes, including more stable blood glucose levels, increased muscle strength, and better skin integrity. Cognitive and psychological assessments using MMSE, SPMSQ, and BDI confirmed the absence of cognitive impairment and depression. Strong social and spiritual support further contributed to the patient's positive adaptation to her condition, supporting previous studies on holistic geriatric nursing care (Miller, 2019b); (Townsend & Morgan, 2020).

**For nurses**, it is recommended to apply comprehensive, patient-centered geriatric nursing care that integrates biological, psychological, social, and spiritual aspects. Continuous education on diabetes management, insulin adherence, dietary

regulation, and physical activity is essential to prevent complications and improve quality of life (Potter et al., 2021).

**For the institution (UPTD Elderly Social Services Center Binjai),** service quality can be enhanced through ongoing staff training in service excellence and chronic disease management, as well as by strengthening psychosocial support systems for elderly residents (Potter et al., 2021).

**For future researchers,** further studies involving larger sample sizes and longer observation periods are recommended to obtain more representative evidence regarding the effectiveness of geriatric nursing care interventions for elderly patients with chronic diseases (Polit & Beck, 2017).

## Reference

American Diabetes Association. (2023). Standards of medical care in diabetes—2023. *Diabetes Care*, 46(Supplement 1).

International Diabetes Federation. (2021a). IDF Diabetes Atlas. In *International Diabetes Federation* (Issue 2). <https://doi.org/10.1016/j.diabres.2013.10.013>

International Diabetes Federation. (2021b). *IDF Diabetes Atlas 10th edition*. International Diabetes Federation.

Johnston, R., & Clark, G. (2021). *Service Operations Management: Improving Service Delivery* (5th ed.). Pearson Education.

Manurung, H. R., & Sigalingging, T. (2020). Pengaruh Pijat Oksitosin Terhadap Kelancaran ASI Pada Ibu Nifas. *Excellent Midwifery Journal*, 3(1), 69.

Miller, C. A. (2019a). *Nursing Care of Older Adults: Theory and Practice* (8th ed.). Wolters Kluwer.

Miller, C. A. (2019b). *Nursing for wellness in older adults* (7th (ed.)). Wolters Kluwer.

Nainggolan, A. W., Situmorang, F. N. S., Sari, S. N., Sinaga, R., & Tarigan, I. (2023). KIE Yang Service Excellent Pada Ibu Hamil Tentang Hiperemesis Gravidarum Di Desa Bangun Rejo Kecamatan Tanjung Morawa Kabupaten Deli Serdang Tahun 2022. *Jurnal Kabar Masyarakat*, 1(2), 176–183. <https://doi.org/10.54066/jkb.v1i2.417>

Polit, D. F., & Beck, C. T. (2017). *Nursing Research: Generating and Assessing Evidence for Nursing Practice* (10th ed.). Wolters Kluwer Health.

Polit, D. F., & Beck, C. T. (2021). *Nursing research: Generating and assessing evidence for nursing practice* (11th (ed.)). Wolters Kluwer.

Potter, P. A., Perry, A. G., Stockert, P. A., & Hall, A. M. (2021). *Fundamentals of Nursing* (10th ed.). Elsevier.

Sinaga, S. N. (2022). Factors influencing knowledge of postpartum mothers about baby blues in Desmawati Clinic. *Science Midwifery*, 10(5), 3958–3963.

Smeltzer, S. C., Bare, B. G., Hinkle, J. L., & Cheever, K. H. (2020). *Brunner & Suddarth's textbook of medical-surgical nursing* (14th (ed.)). Wolters Kluwer.

Townsend, M. C., & Morgan, K. I. (2020). *Psychiatric mental health nursing: Concepts of care in evidence-based practice* (9th (ed.)). F.A. Davis.

World Health Organization. (2016). Global Report on Diabetes. *Isbn*, 978, 6–86. [http://www.who.int/about/licensing/copyright\\_form/index.html%0Ahttp://www.who.int/about/licensing/copyright\\_form/index.html%0Ahttps://apps.who.int/iris/handle/10665/204871%0Ahttp://www.who.int/about/licensing/](http://www.who.int/about/licensing/copyright_form/index.html%0Ahttp://www.who.int/about/licensing/copyright_form/index.html%0Ahttps://apps.who.int/iris/handle/10665/204871%0Ahttp://www.who.int/about/licensing/)

World Health Organization. (2024). *Global*



*report on diabetes: Prevalence and impacts.* World Health Organization.

Zega, P. D., Sirait, A. I., Sembiring, P. E., Sinaga, A., & Sihombing, V. A. (2024). Pemberdayaan Keluarga dalam Mencegah Luka Kaki Diabetes pada Masyarakat di Dusun IV Desa Bangun Rejo Kecamatan Tanjung Morawa Tahun 2024. *Panggung Kebaikan: Jurnal Pengabdian Sosial*, 1(3). doi: <https://doi.org/10.62951/panggungkebaikan.v1i3.448>

MiHHICo-5  
2025  
STIKes Mitra Husada Medan