

Literature Review: The Correlation Between Self-Efficacy and Self-Management and Quality of Life in Type 2 Diabetes Mellitus Patients

Etty Nur Bayani¹, Idris Sutaman², Fitri Dwi Mayasari³, Rani Yuliyanti⁴, Andi Muhammad Khaerun Amin⁵, Eko Susilo⁶

¹Bachelor Nursing Program, Universitas Ngudi Waluyo, ettynurbayani88@gmail.com

²Bachelor Nursing Program, Universitas Ngudi Waluyo, idris.sutaman@gmail.com

³Bachelor Nursing Program, Universitas Ngudi Waluyo, fitridwi1307@gmail.com

⁴Bachelor Nursing Program, Universitas Ngudi Waluyo, raniyulianti379@gmail.com

⁵Bachelor Nursing Program, Universitas Ngudi Waluyo, andimuhammadkhaerunamin@gmail.com

⁶Bachelor Nursing Program, Universitas Ngudi Waluyo, ekosmrg18@gmail.com

Email Correspondence: ettynurbayani88@gmail.com

Article Info	Abstract
Article History Submitted, 2026-05-13 Accepted, 2026-06-24 Published, 2026-06-30 Keywords: Self-efficacy, self-management, quality of life, type II diabetes mellitus	Type II diabetes mellitus is a chronic disease that requires long-term management and has the potential to reduce patients' quality of life if not optimally managed. Psychological and behavioral factors, such as Self-efficacy and self-management, are known to play a crucial role in the successful management of this disease. This literature review aims to analyze the relationship between Self-efficacy and Self-management and quality of life in patients with type II diabetes mellitus, based on recent research. This literature review employed a literature review method. A systematic search was conducted using a computer search using Google Scholar, searching for articles published between 2021 and 2025. Only articles with a quantitative design and full text were included in this analysis. Key data were searched using the PICO (Population Intervention Compare Outcome) technique. Results of this study was Of the 15 articles searched, seven were relevant to the topic of this literature review. Of the 7 articles, all analyzed studies reported a significant relationship between Self-efficacy and the quality of life of patients with type II diabetes mellitus, with p-values ranging from 0.0001 to 0.02. High Self-efficacy contributes to increased patient confidence in managing the disease, thus impacting adherence to therapy, controlling blood glucose levels, and reducing the risk of complications. In addition, all journals also showed a significant relationship between Self-management and quality of life, with p-values ranging from 0.000 to 0.01. Good Self-management includes the ability to regulate diet, physical activity, glucose monitoring, and medication adherence, which directly contribute to improving the health and well-being of patients. Furthermore, several studies have shown that Self-efficacy plays a role as a factor influencing self-management, which in turn impacts the quality of life of patients. This indicates a mutually related relationship between these two variables in improving the quality of life of patients with type II diabetes mellitus. Thus, interventions focused on improving Self-efficacy and Self-management are crucial in managing this disease. Conclusion in this study was Self-efficacy and Self-management are important factors significantly related to the quality of life of patients with type II diabetes mellitus. Therefore, healthcare professionals need to improve these two aspects through education, counseling, and comprehensive disease management programs to achieve optimal quality of life for patients.

Introduction

Diabetes Mellitus (DM) is a chronic metabolic disorder characterized by elevated blood sugar levels due to issues with insulin production or utilization. This disease is not only a

Corresponding author:

Etty Nur Bayani

Ettynurbayani88@gmail.com

The 3th International Conference on Health, Faculty of Health, Vol 3 No 1 2026

Universitas Ngudi Waluyo

leading cause of death globally but also a significant contributor to blindness, heart disease, and kidney failure. Specifically, Type 2 DM often affects older adults and occurs when the body develops insulin resistance or fails to produce sufficient insulin. Managing this condition requires long-term treatment to regulate blood glucose levels effectively and enhance the patient's quality of life (Basri et al., 2021).

According to 2021 data from the International Diabetes Federation (IDF), the global prevalence of diabetes reached 537 million people. By 2024, this figure rose to 588.7 million adults (aged 20–79) and is projected to climb to 852.5 million by 2050. In Indonesia, the number of diabetes patients reached 19.5 million in 2021, ranking the country fifth globally in terms of prevalence (IDF, 2021). By 2024, the number increased to 20.4 million adults—representing 11.3% of the adult population—with mortality reaching 308,400 deaths (IDF, 2025). The annual rise in diabetes cases is often linked to suboptimal self-management by patients (Himmah, 2020). Consequently, a comprehensive approach is urgently needed, particularly by strengthening self-management capabilities.

Type 2 Diabetes Mellitus is characterized by glucose metabolism disorders resulting from insulin resistance, which can lead to various serious complications, both acute and chronic. These conditions impact not only physical health but also the psychological and social well-being of patients, ultimately diminishing their overall quality of life. Therefore, diabetes management must focus not only on glycemic control but also on improving the patient's quality of life as a key indicator of therapeutic success (Hamidi et al., 2022).

Quality of life in Type 2 DM patients is a multidimensional concept encompassing physical, psychological, social, and environmental domains. Patients often experience a decline in quality of life due to complications, physical limitations, and high psychological burdens. Research indicates that the quality of life for diabetes patients is heavily influenced by an individual's ability to manage their disease independently and consistently. Thus, a holistic approach is required—one that integrates medical therapy with behavioral and psychological considerations (Ting et al., 2025).

One psychological factor that plays a crucial role in diabetes management is self-efficacy. Self-efficacy refers to an individual's belief in their capacity to execute the actions necessary to achieve specific outcomes, including managing a chronic illness. Patients with high self-efficacy tend to have better motivation to adhere to therapy, control their diet, and engage in regular physical activity. This suggests that self-efficacy contributes significantly to enhancing the quality of life in Type 2 DM patients (Ataya et al., 2024).

In addition to self-efficacy, self-management is a vital component in managing Type 2 DM. Self-management includes various activities performed independently by the patient, such as dietary regulation, physical activity, blood glucose monitoring, and medication adherence. Proficiency in self-management helps patients control their condition and prevent further complications, underscoring its essential role in improving quality of life (Wicaturatmashudi et al., 2024).

Based on the aforementioned points, it can be concluded that self-efficacy and self-management are pivotal factors in determining the quality of life for patients with Type 2 Diabetes Mellitus. However, further study is required to comprehensively understand the relationship between these two variables based on recent research findings. Therefore, this literature review is conducted to analyze the relationship between self-efficacy, self-management, and quality of life in Type 2 DM patients, serving as a foundation for developing more effective nursing and health interventions.

Methods

This study employed a Literature Review (LR) method, which is conducted systematically and transparently by collecting, identifying, and evaluating existing research data. The objective of this review is to identify the factors associated with the quality of life in patients with Type 2 DM, particularly focusing on self-efficacy and self-management. A systematic search was performed using electronic databases, namely Google Scholar, PubMed, Science Direct, and ProQuest. The search was limited to articles published between 2021 and 2026. The keywords used were "Self-efficacy," "Self-management," and "Type 2 DM." The inclusion criteria established for this literature review process were as follows: 1) Articles focusing on the relationship between self-efficacy, self-management, and the quality of life in Type 2 DM patients; 2) Full-text articles published between 2021 and 2026; 3) Articles written in either Indonesian or English; 4) Articles categorized as original research articles. The exclusion criteria were: 1) Articles in the form of undergraduate theses or master's dissertations; 2) Articles that are not open-access or cannot be retrieved in full text; 3) Review articles or prior literature reviews.

Results and Discussion

A literature review was conducted on 7 selected articles. The publications ranged from 2021 to 2026. The results of the journal analysis are presented in Table 1 as follows:

Table 1. Results of Journal Review

No	Researchers	Research methods	Result
1	The Relationship between Self-Efficacy, Self-Management, and Quality of Life of Type II Diabetes Mellitus Patients in Lembursitu Health Center, Sukabumi (Nurbayanti et al., 2023)	Descriptive-correlational study with a cross-sectional approach. Total sample: 64 respondents (Simple Random Sampling). Data analyzed using Chi-Square.	1. Significant relationship between self-efficacy and quality of life (p=0.001) 2. Significant relationship between self-management and quality of life (p=0.000).
2	Relationship between <i>Self-management</i> and Quality of Life among Patients with Diabetes Mellitus: A Cross-Sectional, Correlational Study (Al Gamal et al., 2024)	Descriptive, cross-sectional, and comparative design. Total sample: 87 respondents (Purposive Sampling). Data analyzed using Pearson correlation (r) and t-test.	Significant relationship between self-management and quality of life (p=0.001).
3	Examining the Relationship Between Social Support, <i>Self-efficacy</i> , Diabetes Self-Management, and Quality of Life Among Rural Individuals With Type 2 Diabetes in Eastern China: Path Analytical Approach (Wang et al., 2024)	Analytical survey with a cross-sectional design. Total sample: 1,758 respondents (Purposive Sampling). Data analyzed using Chi-Square and multiple regression.	1. Significant relationship between self-efficacy and quality of life (p=0.01). 2. Significant relationship between self-management and quality of life (p=0.01).
4	Network Analysis Of The Relationship Between Self-Management, <i>Self-efficacy</i> , And Quality Of Life Among Diabetes Mellitus Patients (Le et al., 2025)	Analytical survey with a cross-sectional design. Total sample: 363 respondents (Random Sampling). Data analyzed using Spearman Correlation.	1. Significant relationship between self-efficacy and quality of life (p=0.01). 2. Significant relationship between self-management and quality of life (p=0.01).
5	The Relationship between Self-Efficacy and Quality of Life in Type II Diabetes Mellitus Patients (Rahman et al., 2025)	Correlational-analytical study with a cross-sectional method. Total sample: 71 respondents (Purposive Sampling). Bivariate analysis using Spearman-Rank.	Significant positive correlation between self-efficacy and quality of life (p=0.0001).
6	The Relationship of Self-management and Self-efficacy to the Quality of Life of Type 2 Diabetes Mellitus Patients (Samsuddin et al., 2025)	Observational-analytical study with a cross-sectional design. Total sample: 97 respondents (Simple Random Sampling). Data analyzed using Chi-Square.	1. Significant relationship between self-efficacy and quality of life (p=0.003). 2. Significant relationship between self-management and quality of life (p=0.002).
7	Association between self-compassion, meaning in life, resilience, health-related quality of life and diabetes <i>Self-management</i> among people living with type 2 diabetes in Nigeria (Aliche et al., 2026)	Analytical survey with a cross-sectional design. Total sample: 301 respondents (Random Sampling). Data analyzed using Chi-Square and multiple regression.	1. Significant relationship between self-efficacy and quality of life (p=0.02). 2. Significant relationship between self-management and quality of life (p=0.01).

Based on the synthesis of the seven reviewed articles, the results regarding self-management are as follows:

Self-efficacy

Self-efficacy refers to an individual's belief in their capability to manage their medical condition, including performing self-care for type 2 diabetes mellitus. Based on the research conducted by Nurbayanti et al. (2023), a significant relationship was found between self-efficacy and the quality of life among type 2 diabetes mellitus patients at the Lembursitu Public

Health Center, Sukabumi, with a p-value of 0.001. This suggests that a higher level of self-efficacy is associated with a better quality of life. Self-efficacy plays a vital role in increasing patient adherence to medication, diet, and physical activity, all of which directly impact health stability (Nurbayanti et al., 2023).

These findings are further reinforced by Wang et al. (2024), who stated that self-efficacy has a significant correlation with the quality of life in type 2 diabetes patients ($p = 0.01$). This study explains that self-efficacy exerts both direct and indirect influences by enhancing self-management abilities. Individuals with high self-efficacy tend to possess greater motivation to maintain their health, thereby reducing complications and improving overall well-being (Wang et al., 2024).

Furthermore, a study by Le et al. (2025) using a network analysis approach also demonstrated a significant relationship between self-efficacy and quality of life in type 2 diabetes patients ($p = 0.01$). The study clarifies that self-efficacy is a key variable influencing various aspects of a patient's life, including psychological and social conditions. This indicates that enhancing self-efficacy could serve as a strategic intervention to improve the quality of life for diabetes patients (Le et al., 2025).

Rahman et al. (2025) also identified a highly significant positive relationship between self-efficacy and quality of life in type 2 diabetes patients, with a p-value of 0.0001. This result indicates that self-efficacy contributes strongly to quality of life enhancement. Patients with high self-confidence in managing their disease tend to experience lower stress levels and exhibit better adaptability to their chronic condition (Rahman et al., 2025).

In addition, Samsuddin et al. (2025) reported a significant association between self-efficacy and quality of life in type 2 diabetes patients ($p = 0.003$). This research confirms that self-efficacy plays a role in improving a patient's ability to control blood glucose levels, which ultimately leads to an overall improvement in their quality of life (Samsuddin et al., 2025).

The most recent study by Aliche et al. (2026) supports previous results, showing that self-efficacy is significantly related to the quality of life of type 2 diabetes patients ($p = 0.02$). This study also highlights that psychological factors, such as self-compassion and resilience, further strengthen the impact of self-efficacy on quality of life, emphasizing the need for a holistic approach in diabetes management (Aliche et al., 2026).

Based on the synthesis of these research findings, it can be concluded that self-efficacy is a crucial factor contributing to the improvement of quality of life in type 2 diabetes mellitus patients. Higher self-efficacy leads to better disease management capabilities, which in turn enhances the patient's physical, psychological, and social conditions.

Self-management

Self-management refers to an individual's ability to manage their disease independently through dietary regulation, physical activity, blood glucose monitoring, and treatment adherence. The study by Nurbayanti et al. (2023) indicates a significant relationship between self-management and the quality of life in type 2 diabetes mellitus patients, with a value of $p = 0.000$. This demonstrates that patients with good self-management skills tend to have a more optimal quality of life because they are able to control their disease condition more effectively (Nurbayanti et al., 2023).

The findings of Al Gamal et al. (2024) also reveal a significant association between self-management and the quality of life of type 2 diabetes mellitus patients, with a value of $p = 0.001$. This research emphasizes that self-management is a crucial component in diabetes care, as it directly influences glycemic control and prevents the occurrence of long-term complications (Al Gamal et al., 2024). Wang et al. (2024) also found in their research that self-management has a significant relationship with quality of life ($p = 0.01$). Furthermore, this study indicates that self-management serves as a mediator between self-efficacy and quality of life. This implies that high self-efficacy will improve self-management, which subsequently impacts the improvement of the patient's quality of life (Wang et al., 2024).

Furthermore, Le et al. (2025) also revealed that self-management has a significant relationship with the quality of life of type 2 diabetes mellitus patients ($p = 0.01$). This study explains that self-management encompasses various critical aspects such as treatment adherence, dietary regulation, and physical activity, which collectively contribute to the enhancement of quality of life (Le et al., 2025).

The research by Samsuddin et al. (2025) supports these results by finding a significant relationship between self-management and quality of life with a value of $p = 0.002$. Good self-management capabilities enable patients to control symptoms and prevent complications, thereby improving both physical and psychological well-being (Samsuddin et al., 2025). In addition, the study by Aliche et al. (2026) demonstrates that self-management is significantly associated with the quality of life of type 2 diabetes mellitus patients with a value of $p = 0.01$. This study highlights that effective self-management is not only influenced by individual factors but also by social support and the patient's psychological condition (Aliche et al., 2026).

Based on the synthesis of these various studies, it can be concluded that self-management plays a highly critical role in improving the quality of life for type 2 diabetes mellitus patients. Patients with good self-management abilities tend to achieve more optimal disease control, a lower risk of complications, and a better overall quality of life.

Conclusion and Recommendations

Based on the results of literature reviews from seven journals, it can be concluded that Self-efficacy and Self-management have a significant relationship with the quality of life of type II diabetes mellitus patients, where Self-efficacy plays a role as a psychological factor that increases patient confidence in managing the disease, while Self-management is a practical ability in carrying out self-care such as diet management, physical activity, and therapy compliance that directly impacts the improvement of quality of life. Therefore, it is recommended to health workers to increase educational and counseling interventions that focus on strengthening Self-efficacy and self-management, to health care institutions to provide comprehensive and sustainable diabetes management programs, to further researchers to examine other factors that influence quality of life with a stronger research design, and to patients to be more active in managing their disease in order to achieve optimal quality of life.

Acknowledgments

The author would like to express sincere gratitude to the Rector of Ngudi Waluyo University, the Dean of the Faculty of Health, and the Head of the Bachelor of Nursing Study Program for this support. Deepest appreciation is also extended to lecturer for her guidance.

References

- Al Gamal, E., Alnaser, Z., Mohammed, I., Kaliyaperumal, L., AL Qudah, A., Hyarat, S., Alawas, H., Alrashed, J., Alhamad, A., & Long, T. (2024). Relationship between Self-management and Quality of Life among Patients with Diabetes Mellitus: A Cross-Sectional, Correlational Study. *The Open Nursing Journal*, 18(1). <https://doi.org/10.2174/0118744346309631240517111532>
- Aliche, C. J., Idemudia, E. S., & Onyishi, I. E. (2026). Association between self-compassion, meaning in life, resilience, health-related quality of life and diabetes self-management among people living with type 2 diabetes in Nigeria. *Journal of Psychology in Africa*, 36(1), 107–115. <https://doi.org/10.32604/jpa.2026.075295>
- Ataya, J., Soqia, J., Albani, N., Tahhan, N. K., Alfawal, M., Elmolla, O., Albaldi, A., Alsheikh, R. A., & Kabalan, Y. (2024). The role of self-efficacy in managing type 2 diabetes and emotional well-being: a cross-sectional study. *BMC Public Health*, 24(1), 3471. <https://doi.org/10.1186/s12889-024-21050-2>
- Basri, M., Rahmatiah, S., Andayani, D. S., K, B., & Dilla, R. (2021). Motivasi dan Efikasi Diri (Self Efficacy) dalam Manajemen Perawatan Diri Pada Pasien Diabetes Mellitus Tipe 2. *Jurnal Ilmiah Kesehatan Sandi Husada*, 10(2), 695–703. <https://doi.org/10.35816/jiskh.v10i2.683>
- Hamidi, S., Gholamnezhad, Z., Kasraie, N., & Sahebkar, A. (2022). The Effects of Self-Efficacy and Physical Activity Improving Methods on the Quality of Life in Patients with Diabetes: A Systematic Review. *Journal of Diabetes Research*, 2022, 1–14. <https://doi.org/10.1155/2022/2884933>
- Himmah, S. C. (2020). Pengaruh Pola Makan dan Aktivitas Fisik Terhadap Penurunan Kadar Gula Darah Pada Pasien Diabetes Melitus Tipe 2 di Klinik Aulia Jombang [Undergraduate thesis]. Universitas Muhammadiyah Surabaya.
- IDF. (2025). IDF Diabetes Atlas.
- Le, M. H., Dao, T. NP., Le, N. D., & Tran, V. D. (2025). Network analysis of the relationship between self-management, self-efficacy, and quality of life among diabetes mellitus patients. *Narra J*, 5(1), e2029. <https://doi.org/10.52225/narra.v5i1.2029>
- Nurbayanti, M. S., Alamsyah, M. S., & Abdillah, H. (2023). Hubungan Self Efficacy Dan Self Management Dengan Kualitas Hidup Pasien Diabetes Melitus Tipe II Di Wilayah Kerja Puskesmas Lembursitu Kota Sukabumi. *Jurnal Ilmu Psikologi Dan Kesehatan (SIKONTAN)*, 2(2), 185–198. <https://doi.org/10.47353/sikontan.v2i2.1310>
- Rahman, Z., Rizka Juniawati, A., Eka Putri, M., & Widiastuti, L. (2025). Hubungan Self Efficacy Dengan Kualitas Hidup Pada Pasien Diabetes Melitus Tipe II. *Al-Asalmiya Nursing: Jurnal Ilmu Keperawatan (Journal of Nursing Sciences)*, 14(1), 66–76. <https://doi.org/10.35328/keperawatan.v14i1.2910>
- Samsuddin, Sastria, A., & Asriadi. (2025). Hubungan Self-Management dan Self-Efficacy

- terhadap Kualitas Hidup Pasien Diabetes Melitus Tipe 2. *Mega Buana Journal of Nursing*, 4(2), 68–80. <https://doi.org/10.59183/sks54935>
- Ting, Z., Huicai, W., Kudelati, Z., Yongkang, G., Alimu, A., Xiaotian, Z., Xingge, Q., & Tong, L. (2025). Exploring the dynamics of self-efficacy, resilience, and self-management on quality of life in type 2 diabetes patients: A moderated mediation approach from a positive psychology perspective. *PLOS ONE*, 20(1), e0317753. <https://doi.org/10.1371/journal.pone.0317753>
- Wang, L., Li, L., Qiu, Y., Li, S., & Wang, Z. (2024). Examining the Relationship Between Social Support, Self-Efficacy, Diabetes Self-Management, and Quality of Life Among Rural Individuals With Type 2 Diabetes in Eastern China: Path Analytical Approach. *JMIR Public Health and Surveillance*, 10, e54402. <https://doi.org/10.2196/54402>
- Wicaturatmashudi, S., Soewondo, P., Dahlia, D., Asih, S. R., Gayatri, D., & Aryani, R. (2024). Impact of Self-Management on the Quality of Life of Patient with Diabetes Mellitus: A Systematic Review. *Jurnal Promkes*, 12(1), 120–128. <https://doi.org/10.20473/jpk.V12.I1.2024.120-128>