



The Role of Nurses in Managing Self-Care for Diabetes Mellitus Patients in Surgical Medical Services: A Literature Review

Tommy Pangandaheng

STIKes RS Prof. dr. J. A. Latumeten

DOI:

<https://doi.org/10.47134/phms.v3i2.563>

*Correspondence: Tommy Pangandaheng

Email: tomspup1907@gmail.com

Received: 22-12-2025

Accepted: 22-01-2026

Published: 22-02-2026



Copyright: © 2026 by the authors. Submitted for open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

Abstract: This study aims to explore the role of nurses in managing self-care among patients with diabetes mellitus in medical-surgical services through a comprehensive literature review. Using a qualitative descriptive design, the research employed a library-based approach that analyzed 22 peer-reviewed articles published between 2019 and 2025. Data were collected through systematic literature tracing, document analysis, and thematic synthesis to identify recurring patterns in nursing interventions related to diabetes self-care management. The analysis revealed five dominant thematic areas: (1) diabetes self-management education (DSME), (2) psychosocial and spiritual support, (3) wound and foot care management, (4) family involvement in self-care, and (5) integration of health information technology. The findings demonstrate that nurses play a central role as educators, motivators, and care coordinators in improving patient self-efficacy, treatment adherence, and glycemic control. Moreover, the integration of family support and digital health interventions enhances continuity of care and patient empowerment. These results reinforce the relevance of Orem's *Self-Care Deficit Nursing Theory* and Bandura's *Self-Efficacy Theory* in nursing practice while providing evidence for the holistic and transformative contributions of nurses in chronic disease management. The study concludes that advancing interprofessional collaboration, digital health integration, and culturally sensitive approaches are essential to optimizing diabetes self-care outcomes and enhancing nursing professionalism.

Keywords: Nurse Role, Diabetes Mellitus, Self-Care Management, Qualitative Study, Medical-Surgical Nursing.

Introduction

Diabetes mellitus (DM) remains one of the most pressing global health challenges, with a rapid rise in prevalence driven by aging populations, urbanization, and unhealthy lifestyles (Dailah, 2024). The International Diabetes Federation (IDF) reports that by 2045, approximately 783 million adults will be living with diabetes, underscoring the urgent need for effective management strategies (Sun et al, 2025). In clinical practice, especially within medical-surgical settings, nurses play a central role in supporting patients' ability to engage in self-care — a critical determinant of long-term health outcomes (Zhu et al, 2024).

Self-care management is a cornerstone of diabetes treatment, encompassing diet regulation, medication adherence, glucose monitoring, and physical activity (Naser, 2024). However, adherence remains suboptimal, often hindered by psychosocial factors, poor literacy, and inadequate patient education (Ahmad et al, 2020). These barriers highlight the pivotal role of nurses in delivering patient-centered education and behavioral support to enhance self-management capabilities (Dailah, 2024).

Recent evidence emphasizes that nurse-led interventions significantly improve glycemic control and self-efficacy among patients with type 2 diabetes mellitus (T2DM) (Sun et al, 2025). Nurse educators have demonstrated their ability to lower HbA1c levels by 0.5–0.9% through structured Diabetes Self-Management Education (DSME) programs, improving overall patient outcomes (Zhu et al, 2024). This finding reflects the growing recognition of nurses not merely as caregivers but as educators, motivators, and coordinators in multidisciplinary diabetes care teams (Kamade, 2025).

Within medical-surgical services, nurses are uniquely positioned to bridge acute inpatient care and long-term outpatient management, ensuring continuity and coherence in diabetes self-care plans (Gbaba et al, 2025). Their dual role as clinical practitioners and health coaches enables them to integrate physical, psychological, and social dimensions of care, empowering patients toward sustainable lifestyle changes (Syikir et al, 2025).

Despite advancements, there remains a significant gap in the consistency and scope of nurse-led interventions across healthcare settings. Variability in educational content, limited institutional support, and time constraints often impede effective implementation (Bashir & Ahmad, 2024). Addressing these gaps is critical to strengthening the nurse's contribution to diabetes self-management, particularly in resource-limited environments (Salihu, 2023).

Psychological well-being has also emerged as a crucial determinant of successful self-care behaviors. Patients frequently experience diabetes distress, anxiety, and depression, which can diminish motivation and adherence (Yelne et al, 2025). Nurses equipped with mental health competencies can mitigate these barriers through emotional support and early psychosocial interventions (Diana, 2024).

In addition to direct patient care, nurses serve as coordinators who align interprofessional collaboration among physicians, dietitians, and psychologists, thereby enhancing the comprehensiveness and continuity of diabetes management (Zhu et al, 2024). Effective coordination reduces hospitalization rates and healthcare costs, marking a shift toward preventive, community-integrated models of care (Gbaba et al, 2025).

Health coaching, a contemporary nursing practice, synthesizes educational, motivational, and advocacy functions to cultivate patients' autonomy and engagement in disease management (Syikir et al, 2025). This approach aligns with the paradigm of person-centered care, promoting empowerment and shared decision-making, which are central to modern nursing philosophy (Solís et al, 2023).

Moreover, the introduction of nurse-led clinics and telehealth follow-up programs has expanded the accessibility of DSME, particularly for patients in remote or underserved regions (Zhu et al, 2024). These initiatives not only sustain behavioral adherence post-discharge but also contribute to healthcare system efficiency (Bashir & Ahmad, 2024).

The urgency of this issue is further amplified by the global shift toward chronic disease management within acute care environments. As medical-surgical wards increasingly care for patients with multiple comorbidities, the integration of self-care education into hospitalization becomes a vital preventive strategy (Kamade, 2025).

Nevertheless, despite strong empirical evidence, the operationalization of nurse-led diabetes management remains fragmented, often lacking standardized frameworks and institutional endorsement (Dailah, 2024). This inconsistency underlines a critical research gap concerning the optimization of nursing roles in medical-surgical diabetes care (Naser, 2024).

Therefore, exploring the comprehensive role of nurses in facilitating diabetes self-care, particularly within medical-surgical settings, is both timely and necessary. A literature-based synthesis can illuminate best practices, identify contextual barriers, and propose scalable models for improved implementation (Suriadi & Dewi, 2025).

From a theoretical standpoint, this study contributes to the development of nursing science by reinforcing the conceptualization of self-care support as a multidimensional nursing competency (Diana, 2024). Practically, it offers insights for policymakers, educators, and healthcare administrators to strengthen nurse-led diabetes care models across diverse settings (Zhu et al, 2024).

Ultimately, this article aims to examine and synthesize existing literature on the role of nurses in managing self-care among patients with diabetes mellitus in medical-surgical services. The overarching goal is to provide an integrative understanding of how nursing interventions enhance patient outcomes, bridge hospital-to-community care, and promote sustainable health behaviors (Sun et al, 2025).

By consolidating empirical findings and identifying implementation gaps, this review seeks to advocate for systemic recognition of nurses as pivotal agents in diabetes management, aligning clinical practice with the global movement toward holistic, patient-centered chronic disease care (Dailah, 2024).

Methodology

This study utilized a qualitative research design with a descriptive approach through a literature study (library research). The qualitative-descriptive method was selected because it enables a deep exploration of conceptual and empirical understandings of the nurse's role in managing self-care among diabetes mellitus patients within medical-surgical services (Dailah, 2024) (Doyle, 2019). This approach allows researchers to synthesize findings from previous studies, describe patterns, and interpret contextual relationships among variables without statistical generalization (Abraham & P, 2024). In nursing and health sciences, the descriptive qualitative design is highly relevant for mapping phenomena related to clinical practice, education, and psychosocial support (Baillie, 2019) (Sun et al, 2025).

The data sources for this study consisted of secondary data, including scientific articles, research reports, books, and other scholarly documents related to diabetes care and nursing practice. Specifically, the review included journal articles published between 2015 and 2025, ensuring contemporary relevance (Naser, 2024) (Zhu et al, 2024). Sources were

selected from peer-reviewed journals in the fields of medical-surgical nursing, diabetes management, and qualitative health research. Reference materials covered empirical and theoretical dimensions of self-care, nursing roles, and health education interventions (Dailah, 2024) (Gbaba et al, 2025). The inclusion of official reports and conceptual reviews further enriched the contextual depth of this research (Bandaranayake, 2024) (Jimenez, 2024).

Data were collected through systematic literature tracing and document analysis, emphasizing credibility and rigor in selecting and synthesizing relevant materials. The literature search employed keywords such as nurse-led intervention, self-care management, diabetes mellitus, medical-surgical nursing, and qualitative descriptive study across major databases (Granikov et al, 2020) (Togia & Malliari, 2017). The search process included four main steps: identification of sources, screening of titles and abstracts, eligibility assessment, and inclusion of final articles that met established criteria. Each selected document was reviewed based on methodological soundness, thematic relevance, and contribution to understanding the role of nurses in diabetes self-care (Ahmad et al, 2020) (Bashir & Ahmad, 2024).

The data analysis process followed the qualitative thematic analysis framework, which involved identifying recurring patterns, coding, categorizing concepts, and drawing inductive conclusions (Bingham, 2023) (Fife & Gossner, 2024). The analysis began with familiarization through repeated reading of texts, followed by open coding to identify recurring themes. Codes were then grouped into categories such as educational roles, psychosocial support, and care coordination, reflecting the multiple dimensions of nursing practice in diabetes management (Dailah, 2024) (Syikir et al, 2025). Data reduction and abstraction were performed iteratively to ensure that final interpretations accurately represented the evidence base (Kalpokaite & Radivojevic, 2018) (Vila-Henninger et al, 2022).

The inclusion criteria comprised peer-reviewed journal articles published between 2015–2025, focusing on nurse-led or collaborative interventions in diabetes self-care within medical-surgical or hospital-based contexts (Gbaba et al, 2025) (Zhu et al, 2024). Studies with clear methodological design, analytical transparency, and empirical or theoretical contributions were prioritized. Meanwhile, the exclusion criteria included non-academic sources, duplicate publications, editorials, and research lacking explicit nursing components (Kamade, 2025). This ensured that the data analyzed were robust, relevant, and grounded in credible evidence (Salihu, 2023).

To ensure data validity and reliability, the study employed triangulation and conceptual peer review as validation techniques. Triangulation was achieved by comparing findings across different study types—narrative reviews, scoping reviews, and meta-analyses—to confirm consistency (Dailah, 2024) (Zhu et al, 2024). Peer review validation was conducted by aligning identified themes with established frameworks in nursing research, particularly the DSME (Diabetes Self-Management Education) model and health coaching frameworks (Naser, 2024) (Syikir et al, 2025). These strategies enhanced the credibility, transferability, and trustworthiness of the findings (Doyle, 2019) (Pratt, 2025).

Result and Discussion

The findings of this literature review emphasize the multifaceted role of nurses in supporting self-care management among patients with diabetes mellitus (DM) in medical-surgical settings. Analysis across 22 recent sources (2019–2025) reveals five primary thematic domains: (1) clinical education and DSME (Diabetes Self-Management Education), (2) psychosocial and spiritual support, (3) wound and foot care management, (4) family involvement, and (5) integration of health information technology. Each dimension contributes significantly to improved glycemic control, self-efficacy, and quality of life for patients with type 2 diabetes (Maulidina et al, 2025) (Windyastuti & Solikhah, 2022).

1. Clinical Education and Diabetes Self-Management Education (DSME)

Nurses serve as clinical educators, playing a crucial role in equipping patients with knowledge and skills for effective diabetes self-care. Several studies demonstrated that structured DSME programs led by nurses significantly enhance adherence to medication, dietary management, and glucose monitoring (Ndururu et al, 2025) (Qurniawati et al, 2020). Repetitive education on physical activity, nutrition, and foot care contributed to improved self-management, especially among elderly patients (Fahardianto & Rosyid, 2023) (Windyastuti & Solikhah, 2022). Furthermore, nurse-led DSME interventions have shown consistent reductions in glycemic levels and hospital readmission rates, supporting the vital educator function of nurses within medical-surgical environments (Muhammad & Ahmad, 2020).

2. Psychosocial and Spiritual Support

Psychological distress is a frequent barrier to adherence among diabetic patients. Nurses mitigate this issue through therapeutic communication, emotional support, and spiritual care interventions that strengthen patients' self-efficacy (Hasanah et al, 2023). BaharudinLutfi et al. (2019) highlighted that spiritual care directly increases patients' belief in their capacity to manage their illness, resulting in more consistent engagement in self-care behaviors. These findings align with the view that holistic care—addressing emotional and spiritual dimensions—improves long-term disease management outcomes.

3. Wound Care and Complication Prevention

In medical-surgical services, nurses are often at the forefront of preventing and managing complications such as diabetic foot ulcers and skin integrity impairment. Evidence from multiple studies shows that modern wound care techniques, combined with educational interventions on foot care, markedly reduce the incidence of ulceration and promote faster wound healing ((Agusri et al, 2025) (Kurniawati & Kartika, 2022) (Setiyana & Susilo, 2025). Antara (2020) and Qurniawati et al. (2020) further support that nurses' roles in foot-care education and pain management significantly improve patient recovery trajectories and reduce hospital stays.

4. Family Involvement in Self-Care Support

Family engagement emerged as a critical factor in ensuring adherence and behavioral consistency among diabetic patients. Studies consistently report a positive correlation between family support and self-care performance, including diet compliance, medication adherence, and glucose monitoring (Bayaranie et al, 2024) (Santi et al, 2025). Windyastuti &

Solikhah (2022) and Rizana et al, (2025) observed that family-based education enhances patient motivation and control over glucose levels. Similarly, Nurmalasari et al. (2023) emphasized that the family's role extends beyond emotional encouragement to include active participation in meal planning and physical activity reinforcement.

5. Integration of Health Information Technology

The integration of digital health technology in diabetes care has expanded nurses' capacity to provide continuous monitoring and education. Studies highlight that mobile applications, telehealth services, and SMS reminders improve self-management behavior and treatment adherence (Pudiyanti & Afriani, 2020) (Salsabiella & Andanalusia, 2025). These tools not only facilitate remote follow-up but also enhance efficiency in patient communication and documentation. Consequently, technology adoption has become an essential competency for nurses managing chronic conditions in modern medical-surgical contexts.

6. Summary of Key Impacts

The synthesis of findings reveals that the combined implementation of DSME, psychosocial-spiritual support, foot care education, family engagement, and digital interventions results in holistic patient empowerment. Collectively, these nursing roles lead to reduced complication rates, improved glycemic control, and enhanced quality of life (Maulidina et al, 2025).

Tabel 1. below summarizes the key dimensions, interventions, and outcomes derived from the reviewed studies.

Dimension	Key Nursing Roles	Primary Outcomes	Supporting Sources
Clinical Education (DSME)	Structured education on diet, medication, exercise, monitoring	Increased adherence and self-efficacy	(Ndururu et al, 2025) (Qurniawati et al, 2020) (Windyastuti & Solikhah, 2022)
Psychosocial & Spiritual Support	Therapeutic communication, emotional & spiritual care	Reduced distress, improved motivation	(BaharudinLutfi et al, 2019) (Hasanah et al, 2023)
Wound & Foot Care	Foot care training, modern wound management	Fewer ulcers, faster healing	(Agusri et al, 2025) (Kurniawati & Kartika, 2022) (Setiyana & Susilo, 2025)
Family Involvement	Family education & emotional reinforcement	Better glucose control, higher compliance	(Bayaranie et al, 2024) (Rizana et al, 2025) (Santi et al, 2025)
Health Technology	Use of apps, telehealth, SMS follow-up	Improved monitoring & self-care continuity	(Pudiyanti & Afriani, 2020) (Salsabiella & Andanalusia, 2025)

Overall, this review confirms that nurses act as educators, coordinators, motivators, and caregivers who integrate psychosocial and technological strategies to promote patient independence. Compared to earlier studies, recent evidence underscores a stronger emphasis on technology integration and family-centered approaches as complementary aspects of diabetes self-care management. These findings provide a comprehensive basis for advancing nursing practices and interventions in medical-surgical care.

Discussion

The synthesis of findings across the reviewed literature reveals a consistent pattern emphasizing the centrality of nursing roles in diabetes self-care management, particularly within medical-surgical contexts. Conceptually, the results align strongly with Orem's Self-Care Deficit Nursing Theory, which posits that nursing interventions are essential when patients are unable to maintain adequate self-care due to knowledge, motivation, or physical limitations (Harahap et al, 2024) . The reviewed studies expand upon Orem's framework by contextualizing it within modern nursing practices that integrate patient education, psychosocial support, family engagement, and technology-assisted care to achieve optimal diabetes outcomes.

1. Integration of Nursing Education and Self-Care Theory

The role of nurses as educators emerged as a cornerstone of diabetes care. Studies consistently confirm that structured Diabetes Self-Management Education (DSME) significantly improves adherence and glycemic control (Fahardianto & Rosyid, 2023) (Ndururu et al, 2025) (Qurniawati et al, 2020). These findings reinforce Bandura's Self-Efficacy Theory, where perceived confidence directly influences health behaviors. Educational reinforcement enhances patients' self-belief, enabling sustained engagement in self-care routines such as diet adherence and foot care (Maulidina et al, 2025) (Windyastuti & Solikhah, 2022). The consistency of this evidence underscores DSME as an evidence-based nursing intervention that operationalizes both Orem's and Bandura's models in clinical nursing practice.

2. Psychosocial and Spiritual Dimensions of Nursing Care

Beyond clinical education, the literature identifies psychological and spiritual support as vital components of holistic nursing practice. Hasanah et al. (2023) and BaharudinLutfi et al. (2019) demonstrated that interventions incorporating therapeutic communication and spiritual counseling reduce diabetes distress and enhance self-efficacy. This is consistent with Holistic Nursing Theory, which views health as a dynamic balance among mind, body, and spirit. The integration of psychosocial and spiritual care improves emotional regulation and reduces burnout among patients managing long-term illnesses. However, a few studies highlight challenges such as time constraints and lack of standardized protocols for delivering spiritual care, underscoring the need for institutional policy support to systematize such interventions in hospitals.

3. Wound Management and Preventive Nursing Practice

In alignment with evidence-based practice models, wound and foot care represent the clinical manifestation of preventive nursing. Research indicates that nurses' involvement in foot-care education and modern wound management significantly reduces complications like diabetic ulcers and gangrene (Agusri et al, 2025) (Kurniawati & Kartika, 2022) (Setiyana & Susilo, 2025). The application of the Moist Wound Healing (MWH) concept has been particularly effective in accelerating recovery (Antara, 2020). The findings demonstrate that nurses' technical and educational competencies synergistically contribute to improved outcomes, reflecting the paradigm shift from reactive to preventive care in diabetes

management. Nonetheless, disparities in resource availability and clinical training remain obstacles in rural healthcare facilities, necessitating further training and technology integration for equitable implementation.

4. Family Involvement and Social Support Mechanisms

The pivotal role of family support in diabetes care is extensively validated across multiple studies (Bayarani et al, 2024) (Rizana et al, 2025) (Santi et al, 2025). Drawing upon Social Support Theory, family engagement fosters emotional reinforcement, improves dietary adherence, and sustains motivation for long-term behavior change. Family-centered education also mitigates caregiver fatigue and strengthens collaborative care between nurses and patients' families (Nurmalasari et al, 2023). However, cultural factors and variations in family structure may influence the depth of involvement. Future nursing strategies should therefore integrate culturally sensitive family education frameworks to ensure inclusivity and effectiveness.

5. Digital Transformation in Nursing Practice

The rise of digital health innovations has reshaped how nurses deliver education and follow-up care. Studies by Pudiyaniti & Afriani (2020) and Salsabiella & Andanalusia (2025) emphasize the effectiveness of telehealth, mobile applications, and SMS-based interventions in improving patient monitoring, adherence, and self-management. This aligns with the Technology Acceptance Model (TAM), which explains how perceived usefulness and ease of use drive healthcare professionals' adoption of digital tools. Integration of these systems supports continuity of care beyond hospital walls, ensuring patients receive ongoing support. Nevertheless, challenges such as digital literacy and infrastructure disparities limit scalability, calling for institutional policies to promote training and access equity.

6. Limitations and Future Directions

While the reviewed literature provides robust insights, certain limitations are apparent. Most studies employ cross-sectional or descriptive designs, which limit causal inference. The variability of intervention duration, setting, and participant characteristics also complicates direct comparison across studies. Additionally, limited exploration of male patients' self-care behaviors and technological adherence in low-resource settings represents a research gap. Future studies should adopt mixed-method or longitudinal designs to evaluate long-term behavioral outcomes and explore gender or cultural differences in diabetes self-care.

7. Theoretical and Practical Implications

The findings contribute substantially to both nursing theory and practice. Theoretically, they reinforce the integration of Orem's self-care framework with modern constructs like digital health and psychosocial nursing. Practically, they highlight the necessity for interdisciplinary collaboration—combining nurses, physicians, psychologists, and IT professionals—to deliver holistic, patient-centered diabetes care. In medical-surgical contexts, these insights support policy development for continuous nurse training, standardized DSME programs, and inclusion of family-based and technology-driven interventions. Collectively, the review advances nursing's role as a driver of empowerment, prevention, and innovation in chronic disease management.

Conclusion

This qualitative literature review concludes that nurses play a pivotal and multidimensional role in promoting self-care management among patients with diabetes mellitus within medical-surgical settings. The findings reveal that the integration of nurse-led education, psychosocial and spiritual support, family involvement, and technology-based care significantly enhances patients' self-efficacy, adherence, and glycemic control. These results deepen the understanding of Orem's Self-Care Deficit Nursing Theory and Bandura's Self-Efficacy Theory by demonstrating their practical relevance in holistic diabetes care. Culturally, the evidence underscores the importance of family-centered education and spiritual care, reflecting the social and moral dimensions of nursing practice in the Indonesian context. Academically, the review enriches the body of knowledge on the evolving competencies of nurses as educators, motivators, and coordinators in chronic disease management. However, variations in research design, contextual disparities, and limited exploration of gender and digital literacy aspects represent constraints that should be addressed through future mixed-method and longitudinal studies. Moving forward, advancing interprofessional collaboration, digital innovation, and culturally tailored interventions will be crucial to optimizing nursing's contribution to diabetes self-care and patient empowerment. Nurses should strengthen the implementation of structured Diabetes Self-Management Education (DSME) programs, integrate psychosocial and spiritual care into daily nursing practice, and utilize digital health technologies to enhance patient monitoring and engagement. Health institutions and policymakers are encouraged to develop standardized nursing guidelines that support these roles, while future research should apply triangulated and interdisciplinary approaches to deepen understanding of cultural and technological influences on diabetes self-care.

References

- Abraham, D., & P, P. (2024). A Methodological Framework for Descriptive Phenomenological Research. *Western Journal of Nursing Research*, 47, 125–134. <https://doi.org/10.1177/01939459241308071>
- Agusri, A., Rezeki, R., Muhazir, R., Nadiya, S., Wahyuni, L., & Andala, S. (2025). Hubungan self care perawatan kaki dengan pencegahan luka diabetik pada pasien diabetes melitus. *Holistik Jurnal Kesehatan*. <https://doi.org/10.33024/hjk.v19i4.864>
- Ahmad, N., Sallehuddin, M., Teo, Y., & Rahman, H. (2020). Self-Care Management of Patients with Diabetes: Nurses' Perspectives. *Journal of Diabetes & Metabolic Disorders*, 19, 1537–1542. <https://doi.org/10.1007/s40200-020-00688-w>
- Antara, I. (2020). *Gambaran Asuhan Keperawatan pada Pasien Diabetes Melitus Tipe II dengan Gangguan Integritas Kulit di Ruang Oleg RSD Mangusada Badung 2020*.
- BaharudinLutfi, S., Rayasari, F., & Irawati, D. (2019). Peningkatan self-efficacy melalui spiritual care pada pasien diabetes melitus tipe 2. *IJNSP*, 1, 83–91. <https://doi.org/10.24853/ijnspp.v1i2.83-91>
- Baillie, J. (2019). Commentary: An overview of the qualitative descriptive design within nursing research. *Journal of Research in Nursing*, 25, 458–459. <https://doi.org/10.1177/1744987119881056>

- Bandaranayake, P. (2024). Application of Grounded Theory Methodology in Library and Information Science Research: An Overview. *Sri Lanka Library Review*. <https://doi.org/10.4038/sllr.v38i2.70>
- Bashir, A., & Ahmad, A. (2024). The effectiveness of nurse-led interventions on chronic disease management. *International Journal of Midwifery and Nursing Practice*. <https://doi.org/10.33545/26630427.2024.v7.i1a.153>
- Bayaranie, M., Yuliza, E., & Herliana, I. (2024). Pengaruh edukasi peran keluarga terhadap dukungan keluarga dalam kemampuan merawat pasien diabetes melitus pada pasien poliklinik di RS Hermina Depok tahun 2023. *Barongko: Jurnal Ilmu Kesehatan*. <https://doi.org/10.59585/bajik.v3i1.504>
- Bingham, A. (2023). From Data Management to Actionable Findings: A Five-Phase Process of Qualitative Data Analysis. *International Journal of Qualitative Methods*, 22. <https://doi.org/10.1177/16094069231183620>
- Dailah, H. (2024). The Influence of Nurse-Led Interventions on Disease Management in Patients with Diabetes Mellitus: A Narrative Review. *Healthcare*, 12. <https://doi.org/10.3390/healthcare12030352>
- Diana, V. (2024). Literature Review: Family and Nurse Support in Improving Self-Management in Patients with Diabetes Mellitus. *Jurnal Keperawatan Respati Yogyakarta*. <https://doi.org/10.35842/jkry.v11i1.771>
- Doyle, L. M. C., Keogh, B., Brady, A. & McCann, M. (2019). An overview of the qualitative descriptive design within nursing research. *Journal of Research in Nursing*, 25, 443–455. <https://doi.org/10.1177/1744987119880234>
- Fahardianto, F., & Rosyid, F. (2023). Pengaruh Diabetes Self-Management Education (DSME) terhadap self-care penderita diabetes melitus tipe 2. *Malahayati Nursing Journal*. <https://doi.org/10.33024/mnj.v5i12.10130>
- Fife, S., & Gossner, J. (2024). Deductive Qualitative Analysis: Evaluating, Expanding, and Refining Theory. *International Journal of Qualitative Methods*, 23. <https://doi.org/10.1177/16094069241244856>
- Gbaba, S., Turkson-Ocran, R., Renda, S., Ogungbe, O., Somervell, H., Harne-Britner, S., Commodore-Mensah, Y., & Baptiste, D. (2025). Referral for Diabetes Self-Management Education and Support in Adult Primary Care: An Integrative Review. *Journal of Advanced Nursing*. <https://doi.org/10.1111/jan.16719>
- Granikov, V., Hong, Q., Crist, E., & Pluye, P. (2020). Mixed methods research in library and information science: A methodological review. *Library & Information Science Research*, 42(2), 101003. <https://doi.org/10.1016/j.lisr.2020.101003>
- Hasanah, L., Yulia, Y., & Edison, C. (2023). Peran perawat dalam mengatasi diabetes distress. *Journal of Telenursing (JOTING)*. <https://doi.org/10.31539/joting.v5i2.7807>
- Jimenez, S. B., J. & De La Torre, R. (2024). How do university libraries contribute to the research process? *The Journal of Academic Librarianship*. <https://doi.org/10.1016/j.acalib.2024.102930>
- Kalpokaite, N., & Radivojevic, I. (2018). Demystifying Qualitative Data Analysis for Novice Qualitative Researchers. *The Qualitative Report*. <https://doi.org/10.46743/2160-3715/2019.4120>

- Kamade, S. (2025). The Role of Medical-Surgical Nurses in Managing Chronic and Acute Conditions: A Comprehensive Review. *The Spectrum Journal*. <https://doi.org/10.64790/tsj.2025.v1.i1.17>
- Kurniawati, T., & Kartika, D. (2022). Edukasi perawatan kaki pada pasien diabetes melitus di Desa Karangjampo Kelurahan Tirto Kabupaten Pekalongan. *Jurnal Batikmu*. <https://doi.org/10.48144/batikmu.v1i2.1089>
- Maulidina, S., Sicilia, A., Wardhani, P., Wahyudi, H., & Aini, U. (2025). Hubungan self-care pada pasien diabetes melitus tipe 2 di Poliklinik Penyakit Dalam RSUD Bhakti Asih Kota Tangerang tahun 2024. *Journal of Educational Innovation and Public Health*. <https://doi.org/10.55606/innovation.v3i1.4306>
- Naser, A. (2024). The Role of Nursing in Diabetes Management: The Impact of Biochemical Markers on Diagnosis, Complications, and Patient Outcomes through Comprehensive Care and Support. *Egyptian Journal of Chemistry*. <https://doi.org/10.21608/ejchem.2024.334932.10769>
- Ndururu, J., Kaban, K., Novia, D., Agustina, S., Dakhi, T., & Winarti, W. (2025). Hubungan peran perawat sebagai edukator dengan kepatuhan minum obat pada pasien diabetes melitus tipe 2 di RSUD Kota Sabang. *Malahayati Nursing Journal*. <https://doi.org/10.33024/mnj.v7i4.19316>
- Nurmalasari, B., Rahariyani, L., & Sulystiono, D. (2023). Peran keluarga dalam ketaatan diet pada pasien diabetes mellitus di Kelurahan Kemayoran Surabaya. *Jurnal Keperawatan*. <https://doi.org/10.36568/nersbaya.v15i2.73>
- Pratt, M. (2025). On the Evolution of Qualitative Methods in Organizational Research. *Annual Review of Organizational Psychology and Organizational Behavior*. <https://doi.org/10.1146/annurev-orgpsych-111722-032953>
- Pudiyanti, P., & Afriani, T. (2020). Kajian literatur: Peranan teknologi informasi kesehatan pada perawatan diabetes melitus. *Nursing Current Jurnal Keperawatan*. <https://doi.org/10.19166/nc.v8i1.2722>
- Qurniawati, D., Fatikasari, A., Tafonao, J., & Anggeria, E. (2020). Pengaruh Diabetes Self-Management Education (DSME) terhadap perawatan diri pasien luka diabetes melitus. *Jurnal Keperawatan Indonesia*, 8, 10–21.
- Rizana, N., Fitria, N., Nadiya, S., Zahara, R., Salsabila, S., & Amanda, M. (2025). Hubungan dukungan keluarga dengan self-care manajemen pada penderita diabetes melitus di Kota Lhokseumawe, Aceh. *Jurnal Ners*. <https://doi.org/10.31004/jn.v9i3.45968>
- Salihu, K. (2023). Nursing care for diabetes mellitus. *International Journal of Endocrinology (Ukraine)*. <https://doi.org/10.22141/2224-0721.19.7.2023.1324>
- Salsabiella, B., & Andanalusia, M. (2025). Pharmaceutical care berpengaruh terhadap kualitas hidup, kepatuhan dan outcome klinis pasien diabetes melitus tipe 2 di beberapa daerah di Indonesia: Kajian literatur. *Wiraraja Medika: Jurnal Kesehatan*. <https://doi.org/10.24929/fik.v15i1.3474>
- Santi, P., Sipollo, B., & Syukkur, A. (2025). Hubungan dukungan keluarga dengan self-care management pada pasien diabetes melitus di Puskesmas Bareng Kota Malang. *Malahayati Nursing Journal*. <https://doi.org/10.33024/mnj.v7i8.21619>

- Setiyana, N., & Susilo, T. (2025). Pengelolaan gangguan integritas kulit dengan perawatan luka modern moist wound healing pada Ny. S dengan diabetes melitus tipe II di RSJ Prof Dr. Soerojo Magelang. *Jurnal Informatika Dan Kesehatan*. <https://doi.org/10.35473/ikn.v2i2.4225>
- Solís, L., Del Rocío Lascano Sánchez, A., Martínez, C., López, A., & Guama, M. (2023). Nursing intervention in the care of patients with diabetes mellitus. *Sapienza: International Journal of Interdisciplinary Studies*. <https://doi.org/10.51798/sijis.v4i4.718>
- Sun, J., Fan, Z., Kou, M., Wang, X., Yue, Z., & Zhang, M. (2025). Impact of nurse-led self-management education on type 2 diabetes: A meta-analysis. *Frontiers in Public Health*, 13. <https://doi.org/10.3389/fpubh.2025.1622988>
- Suriadi, S., & Dewi, E. (2025). The Practice of Skilled Nurses in the Care of Patients Diabetes Mellitus: Scoping Review. *Jurnal Indonesia Sosial Sains*. <https://doi.org/10.59141/jiss.v6i7.1765>
- Syikir, M., Sjattar, E., Kadar, K., & Najamuddin, N. (2025). The Roles of Nurses in Health Coaching to Improve Self-Care Management among People with Type 2 Diabetes Mellitus: A Scoping Review. *Genius Journal*. <https://doi.org/10.56359/gj.v6i1.643>
- Togia, A., & Malliari, A. (2017). Research Methods in Library and Information Science. *IntechOpen*. <https://doi.org/10.5772/intechopen.68749>
- Vila-Henninger, L., Dupuy, C., Van Ingelgom, V., Caprioli, M., Teuber, F., Pennetreau, D., Bussi, M., & Gall, C. (2022). Abductive Coding: Theory Building and Qualitative (Re)Analysis. *Sociological Methods & Research*, 53, 968–1001. <https://doi.org/10.1177/004912412111067508>
- Windyastuti, E., & Solikhah, M. (2022). Pengaruh pendidikan kesehatan berbasis keluarga terhadap self-care manajemen diabetes melitus di Posbindu Lansia Sakura Kelurahan Plesungan Kabupaten Karanganyar. *Jurnal Kesehatan Kusuma Husada*. <https://doi.org/10.34035/jk.v13i2.856>
- Yelne, S., Gawai, J., Kasturkar, P., Meshram, P., Uke, T., & Taksande, V. (2025). Mental health nursing care for people with diabetes mellitus: A narrative review. *Multidisciplinary Reviews*. <https://doi.org/10.31893/multirev.2025268>
- Zhu, Y., Zhang, H., Xi, Y., Zhu, H., Lu, Y., Luo, X., Tang, Z., & Lei, H. (2024). The Implication of Diabetes-Specialized Nurses in Aiming for the Better Treatment and Management of Patients with Diabetes Mellitus: A Brief Narrative Review. *Diabetes Therapy*, 15, 917–927. <https://doi.org/10.1007/s13300-024-01558-x>