

THE INFLUENCE OF SPIRITUALITY ON THE QUALITY OF LIFE OF DIABETES MELLITUS PATIENTS: A LITERATURE REVIEW

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Abstract

Type 2 diabetes mellitus is a chronic metabolic disorder that profoundly affects patients' physical, emotional, and social well-being. This literature review aims to examine the relationship between spirituality and the quality of life of individuals with type 2 diabetes mellitus. A systematic search was conducted across PubMed, Google Scholar, ISJD, Sage Journals, and JSTOR for studies published between 2018 and 2023. Ten articles that met the inclusion criteria were analyzed using a thematic synthesis approach. The results indicate that higher levels of spirituality are positively associated with improved quality of life, primarily through enhanced stress regulation, optimism, self-care behaviors, and social support. Spiritual well-being fosters resilience and adaptive coping, which collectively improve health outcomes. Although spirituality cannot replace medical therapy, it serves as an essential complementary component in holistic diabetes management. Future studies are recommended to explore culturally contextualized spiritual interventions to optimize patient care.

Keywords: Spirituality; Quality of Life; Type 2 Diabetes Mellitus.

INTRODUCTION

Diabetes mellitus is a metabolic condition that occurs when the pancreas fails to generate sufficient insulin or when the body cannot properly utilize the insulin that is produced. The disease is generally categorized into two primary forms: type 1 and type 2. In type 1 diabetes, the pancreas completely loses its ability to secrete insulin, making external insulin administration necessary. On the other hand, type 2 diabetes occurs when the pancreas produces insufficient or ineffective insulin. A defining characteristic of diabetes mellitus is the persistent increase in blood glucose concentration, a condition referred to as hyperglycemia (Noorratri et al., 2019). People with diabetes often experience disruptions in the metabolism of carbohydrates, fats, and proteins due to inadequate insulin production (Ikrima Rahmasari, 2019).

The World Health Organization (WHO) reports that the worldwide occurrence of diabetes mellitus has risen by approximately 51%. The Western Pacific region has the highest concentration of cases, with 159 million people affected, followed by Southeast Asia, with 82 million. In terms of individual countries, China leads with 114 million cases, India follows with 72.9 million, while the United States, Brazil, and Mexico report 30.1 million, 12.5 million, and 12 million cases, respectively (Kadang et al., 2021). The International Diabetes Federation (IDF) also noted a 9.3% increase in diabetes prevalence by 2020 (Khotimah et al., 2021).

In Indonesia, the 2022 Basic Health Research (Riskesdas) reported that 28.57 million people suffer from diabetes mellitus, representing a 47% increase from the previous year. North Sumatra ranks among the top ten provinces with the highest number of diabetes cases (Silaban, and Astuti 2021). Research conducted by Pranata, Pramudita Nugraha, and Handayani (2022) found that the duration of diabetes mellitus significantly impacts various aspects, including

psychological, physical, social, and environmental well-being. The longer one has diabetes, the more it affects their quality of life, experience, and knowledge of treatment (Sani et al., 2023).

Patients with type 2 diabetes often experience daily functional changes accompanied by health complaints such as discomfort and pain. These conditions require special attention and supervision from family members to maintain their quality of life. Such conditions can reduce the patient's ability to perform daily activities, lead to social withdrawal, increase dependence on those around them, and diminish their desire to participate in family activities, all of which can alter their quality of life. These physical changes can also affect emotional, psychological, and spiritual well-being (Salomé, et al 2017).

One crucial aspect of life affected by diabetes is spirituality and its role in quality of life. Spirituality refers to an individual's deep connection to their purpose in life, which provides comfort, support, hope, and belief. Spirituality positively influences health and well-being, motivating chronic disease patients to take responsibility for their health. It fosters a sense of purpose and hope, driving individuals to lead a healthier lifestyle (Khotimah et al., 2021). A study on the relationship between sociodemographic factors, spirituality, and hope in type 2 diabetes patients found that these patients often have lower spirituality levels, with an average Spirituality and Social Support Rating Scale (SSRS) score of 12.6.

Psychological stress in diabetes patients is often influenced by their spiritual and religious adherence. A study on spiritual well-being and quality of life among type 2 diabetes patients in Iran found that poor spiritual well-being can lead to depression, significantly diminishing the quality of life (Ardian, 2016). Research by Hasina, Putri, and Sulistyorini (2020) also supports the idea that spirituality is a key dimension of the quality of life for diabetes patients. Diabetes patients need support from all domains, including spiritual support Engkartini, Rahayu Ningtiyas, and Irawansah (2023). diabetic patients require comprehensive support, including spiritual care. Those who attain spiritual well-being are more likely to find meaning and purpose in their lives, enabling them to adapt better to their conditions. This suggests a positive correlation between higher levels of spirituality and an improved quality of life (Nurmaidah et al., 2021).

Quality of life is a complex and multifaceted concept that reflects how individuals perceive their physical, emotional, and social health, along with cognitive aspects such as satisfaction and affective components like happiness. Numerous factors can influence the quality of life for diabetes patients, with spiritual well-being playing a crucial role, including the ongoing care required for managing diabetes, the symptoms that may arise from unstable blood sugar levels, potential complications of diabetes, and issues like sexual dysfunction Yudianto (Limbong et al., 2018). These factors can be mitigated if patients effectively manage their diabetes through consistent lifestyle changes, reducing complications that would otherwise lower their quality of life.

As discussed, spirituality can enhance cognitive adaptability, optimism, reduce loneliness, and improve self-management of diabetes. This lowers the risk of complications and boosts overall quality of life. In other words, higher spirituality levels lead to better quality of life for diabetes patients. Based on the research presented, this review aims to evaluate various studies on spirituality and quality of life in type 2 diabetes patients. The goal of this literature review is to explore the relationship between spirituality and the quality of life of patients with type 2 diabetes.

METHODS

The research design for this study is a literature review. This method involves gathering, searching, examining, and discussing data or sources related to a specific topic, which may come from journals, books, the internet, and other references. Data used in this study are drawn from previously conducted and published research in national and international online journals. The literature search was conducted using databases such as PubMed, Google Scholar, Sage Journal, ISJD, and JSTOR with the keywords "Spirituality," "Quality of Life," and "Type 2 Diabetes Mellitus." The inclusion criteria for selecting journals are: (a) articles or journals relevant to the topic; (b) literature from the last five years (2018–2023) accessible in full-text PDF format; (c) articles in Indonesian and English with human subjects aged 30 and above diagnosed with type 2 diabetes; and (d) primary research articles with a cross-sectional design. Data analysis was conducted by compiling and simplifying the findings from each article. This systematic literature review utilized the JBI Critical Appraisal tool or Case Series to screen the articles found. The compiled articles were analyzed using the Simplified Approach, part of Thematic Analysis. According to . the thematic approach is a method for summarizing relevant literature for those new to conducting literature reviews. This method has been simplified and adjusted based on the researchers' ideas.

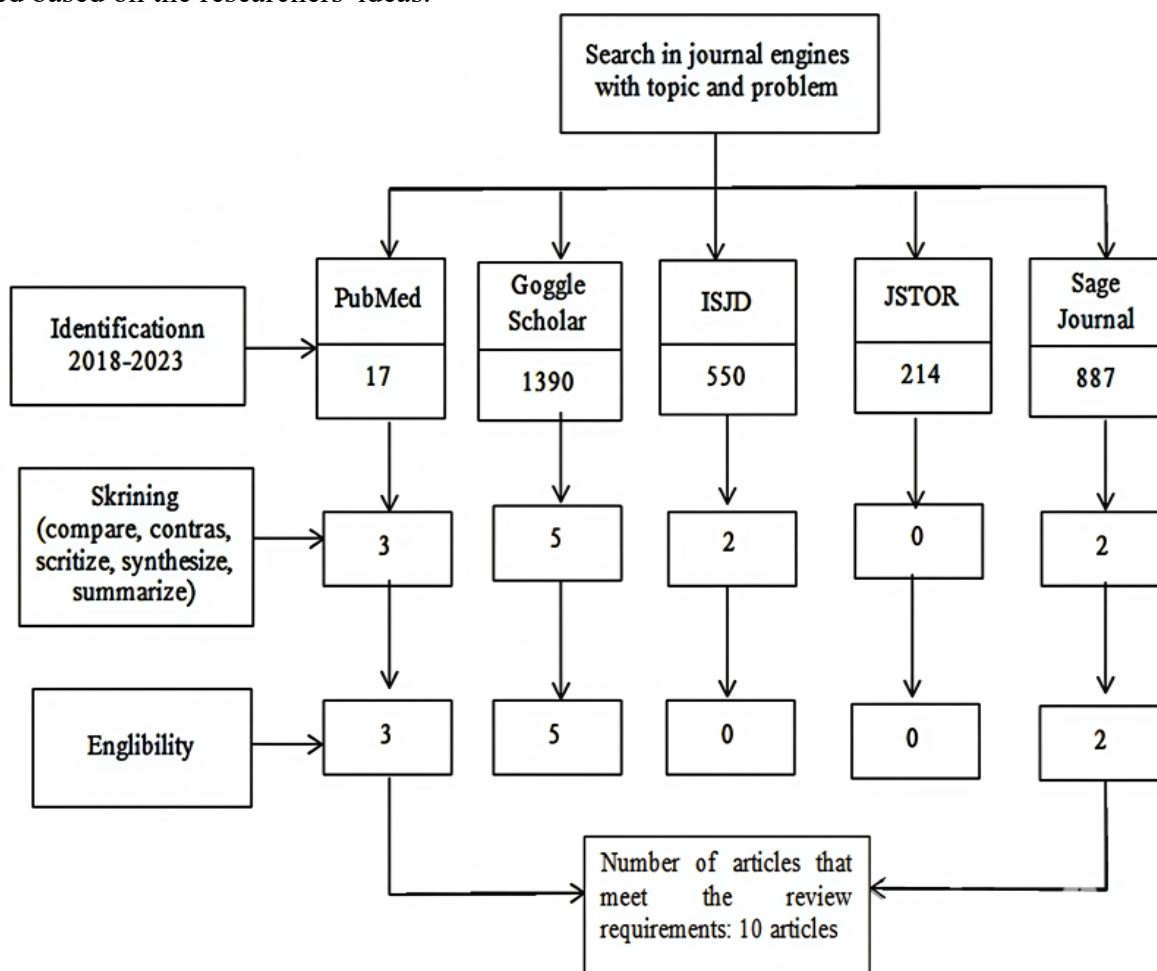


Figure 1. Article selecting process

The data analysis, based on 10 selected journals or articles that met the established criteria, involves combining and summarizing them into one comprehensive review. This includes key details such as the author and year, research objectives, study design, sample

size, measurement instruments, and research findings. The next stage involves discussing and providing insights into the contents of each journal by thoroughly reading and analyzing their objectives and findings using content analysis. After this, a summary of all the analyzed journals will be created. The summarized articles will then be compiled into a table, arranged chronologically by publication year.

RESULTS

The following Table 1 presents a summary of the key findings from the ten articles that were analyzed. Based on the selected literature that met the inclusion criteria, ten studies were identified examining the relationship between spirituality and quality of life among patients with type 2 diabetes mellitus. Overall, the findings consistently indicate that higher levels of spirituality are positively associated with improved quality of life. Moreover, several studies highlight additional factors such as stress, social support, and self-care behaviors that mediate or reinforce this relationship.

Table 1. Study finding

No	Author and year of publication	Research purposes	Research Design	Research sample	Measuring instrument	Results
1.	Jafari et al. (2018)	Examine association between spirituality, QoL, and depression among T2DM patients	Cross-sectional	203 patients	Questionnaire	Lower QoL and spirituality linked to higher depression; highlights need for psychosocial and spiritual care integration.
2.	Astutik (2019)	Assess relationship between spirituality and psychological QoL among elderly T2DM patients.	Cross-sectional	70 patients	Questionnaire	Spirituality significantly correlated with psychological dimension of QoL.
3.	Lima et al. (2020)	Explore influence of psychological and social factors on QoL among older adults	Cross-sectional	604 participants	Questionnaire	Spirituality and social support identified as key modifiable determinants of QoL.

5.	Handayani, Hasneli, and Amir (2022)	Examine link between spirituality and QoL during the COVID-19 pandemic	Cross-sectional	121 respondents	Questionnaire	Higher spirituality associated with improved QoL and coping capacity amid health crisis.
6.	Teli, Thato, and Rias (2023)	Synthesize determinants of health-related QoL in adults with T2DM	Cross-sectional review	24,346 participants (35 studies)	Questionnaire	Self-management, family support, and psychosocial programs essential to enhance HRQoL.
7.	Engkartini et al. (2023)	Evaluate correlation between stress, spirituality, and QoL among T2DM patients	Cross-sectional	70 patients	Questionnaire	Lower stress and higher spirituality significantly improve QoL.
8.	Mega et al (2023)	Examining the relationship between spirituality and quality of life in diabetic ulcer patients	Cross-sectional	29 respondents	Questionnaire	Spirituality positively associated with QoL in diabetic ulcer patients.

9.	Sahriana, Sofiani, and Kamil (2023)	Assess effect of spiritual therapy on QoL among hospitalized T2DM patients	Quasi-experimental	5 patients	Questionnaire	Spiritual therapy improved comfort, acceptance, and overall QoL.
10.	(Aljawadi et al. 2023)	Identify tools assessing spirituality's role in QoL among diabetic patients	Systematic review (PRISMA)	–	Questionnaire	Spiritual well-being enhances emotional stability and QoL in chronic diabetes conditions.

DISCUSSION

The strict inclusion and exclusion criteria applied in this review limited the number of eligible studies to ten, covering research published between 2018 and 2023. Despite the relatively small number of articles, the findings consistently demonstrate that spirituality significantly contributes to enhancing the quality of life among individuals with type 2 diabetes mellitus. Spirituality serves as an essential factor contributing to mental, emotional, and physical well-being, complementing conventional medical management (Handayani et al. 2022; Engkartini et al. 2023). Patients with higher spiritual well-being tend to adapt more effectively to chronic conditions, demonstrating improved coping mechanisms, stress regulation, and social engagement. These findings suggest that spirituality not only provides psychological resilience but also supports better physiological outcomes through behavioral consistency and self-care.

Religiosity, coping strategies, and self-care behaviors were identified as crucial determinants of QoL in individuals with diabetes (Dewi et al. 2022). Patients with strong spiritual orientation exhibit greater adherence to medical recommendations and are more likely to maintain healthy behaviors such as balanced nutrition, regular exercise, and commitment to long-term therapy. Integrating spiritual dimensions into diabetes management programs may therefore enhance patient engagement and overall well-being. Patients who interpret diabetes as a divine challenge or life test often display greater optimism and commitment to self-management. Elevated spiritual awareness is associated with reduced depression, higher emotional stability, and improved overall health outcomes (Mega et al. 2023; Teli et al. 2023). Incorporating spirituality and family support into diabetes programs can further strengthen patients' capacity to manage their condition and mitigate psychosocial distress. Social and spiritual community engagement has also been shown to reduce isolation and foster a sense of belonging, both of which contribute to improved quality of life.

Religious practices such as faith-based coping are significantly correlated with lower depressive symptoms and enhanced QoL among individuals with chronic diseases (Jafari et al 2018; Astutik 2019). Spirituality fosters meaning, purpose, and hope, which

help patients manage stress and anxiety associated with long-term illness. By promoting emotional regulation and psychological adaptation, spirituality indirectly improves patients' overall life satisfaction. Similarly, spiritual coping mechanisms play a pivotal role in alleviating depressive symptoms and promoting emotional resilience (Lima et al. 2020); Sahriana et al. 2023). From the perspective of the "Spiritual Well-being Theory," individuals with higher spirituality exhibit a more optimistic worldview, allowing them to handle illness-related challenges with greater acceptance and strength. Incorporating spirituality into holistic healthcare models is therefore essential, particularly for chronic disease populations that face prolonged emotional and physical burdens.

Spiritual interventions have also been recognized as complementary strategies in diabetes management, aligning with conventional medical treatments (Aljawadi et al. 2023). Spirituality encourages healthy lifestyle choices, reinforces adherence to therapeutic regimens, and nurtures a belief in maintaining bodily health as part of spiritual responsibility. Such integration supports the notion that addressing spiritual needs alongside medical care can lead to improved patient outcomes and enhanced quality of life.

CONCLUSION

Spirituality has a significant and consistent positive impact on the quality of life of patients with type 2 diabetes mellitus by reducing stress, enhancing optimism, encouraging healthy self-care behaviors, and strengthening emotional and social well-being. Although spirituality does not substitute medical treatment, it serves as an essential complementary component that supports holistic diabetes management. Patients are encouraged to engage in spiritual practices that align with their beliefs, such as prayer, meditation, or participation in spiritual communities to promote emotional stability and resilience. Healthcare professionals, particularly clinical nurses, should integrate spiritual perspectives into diabetes education and care programs to strengthen patient adherence and motivation toward healthy lifestyles. Future research is recommended to explore the effectiveness of spiritual-based interventions across diverse cultural and clinical contexts to optimize their implementation in diabetes care.

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REFERENCES

- Aljawadi, Mohammad H., Asim A. Babaeer, Almothanna S. Alghamdi, Abdullah M. Alhammad, Mansour S. Almuqbil, and Khalid F. Alonazi. (2023). "Quality of Life Tools among Patients on Dialysis: A Systematic Review." *Saudi Pharmaceutical Journal* 32(3):101958. doi: 10.1016/j.jsps.2024.101958.
- Ardian, Iwan. (2016). "Konsep Spiritualitas Dan Religiusitas (Spiritual and Religion) Dalam Konteks Keperawatan Pasien Diabetes Melitus Tipe 2." *Jurnal Keperawatan Dan Pemikiran Ilmiah* 2(5):1–9. DOI: <http://dx.doi.org/10.30659/nurscope.2.2.40-48>.
- Astutik, Tri. (2019). "Hubungan Tingkat Spiritualitas Dengan Kualitas Hidup Aspek Psikologis Pada Penderita Diabetes Mellitus Di Puskesmas Gatak Kabupaten

- Sukoharjo.” *Universitas Muhammadiyah Surakarta* 1–14.
- Dewi, Roslana, Santhna Letchmi Panduragan, Nur Syazana Umar, Fera Melinda, and Johan Budhiana. (2022). “The Effect of Religion, Self-Care, and Coping Mechanisms on Quality of Life in Diabetes Mellitus Patients.” *Jurnal Keperawatan Padjadjaran* 10(1):58–65. doi: 10.24198/jkp.v10i1.1971.
- Engkartini, Engkartini, Anisa Rahayu Ningtiyas, and Opi Irawansah. (2023). “Hubungan Tingkat Stres Dan Tingkat Spiritualitas Dengan Kualitas Hidup Pada Penderita DM Tipe 2 Di Puskesmas Cilacap Utara.” *JINTAN: Jurnal Ilmu Keperawatan* 3(1):53–59. doi: 10.51771/jintan.v3i1.466.
- Handayani, Sukma, Yesi Hasneli, and Yufitriana Amir. (2022). “Hubungan Tingkat Spiritual Terhadap Kualitas Hidup Penderita Diabetes Melitus Di Masa Pandemi Covid-19.” *Indonesian Journal of Nursing Research (IJNR)* 5(2):117–26. doi: 10.35473/ijnr.v5i2.1820.
- Hasina, Siti Nur, Rahmadaniar Aditya Putri, and Sulistyorini. (2020). “Penerapan Shalat Dan Doa Terhadap Pemaknaan Hidup Pada Pasien Diabetes Mellitus.” *Jurnal Keperawatan* 12(1):47–56. doi: <https://doi.org/10.32583/keperawatan.v12i1.607>.
- Jafari, Najmeh, Ziba Farajzadegan, Amir Loghmani, Mansoureh Majlesi, and Noushin Jafari. (2014). “Spiritual Well-Being and Quality of Life of Iranian Adults with Type 2 Diabetes.” *Evidence-Based Complementary and Alternative Medicine* 2014. doi: 10.1155/2014/619028.
- Kadang, Yuniharce, Muhammad Awal, Muh Tahir Abdullah, Herman, and Zulfiah Rusli. (2021). “Factors Affecting The Quality Of Life In Patient With Diabetes Mellitus Type 2 At Public Health Center Of Sudiang.” *Media Kesehatan Politeknik Kesehatan Makassar XVI*(2):1–5.
- Khotimah, K., A. S. Siwi, and R. T. Muti. (2021). “Hubungan Spiritualitas Dan Efikasi Diri Dengan Strategi Koping Pada Penderita Diabetes Melitus Tipe II Di Desa Karanggedang Kecamatan Sidareja.” In *Seminar Nasional Penelitian dan Pengabdian Kepada Masyarakat*. (pp. 422-432).
- Lima, Sara, Lurdes Teixeira, Raquel Esteves, Fátima Ribeiro, Fernanda Pereira, Ana Teixeira, and Clarisse Magalhães. (2020). “Spirituality and Quality of Life in Older Adults: A Path Analysis Model.” *BMC Geriatrics* 20(1):1–8. doi: 10.1186/s12877-020-01646-0.
- Limbong, Uliadi Barrung, Ridwan Amiruddin, Ridwan Mochtar Thaha, (2018). “The Influence of Motivational Interviewing and Gymnastics on The Quality Of Life of Patients With Type 2 Diabetes in Pattingaloang Health Center.” *Jurnal Kesehatan Masyarakat Maritim*, 1(3).
- Mega, Sandy, Handoko, Sriyono Arik, Grido, and Rizka Yunita. 2023. “Hubungan Tingkat Spiritualitas Dengan Kualitas Hidup Pada Pasien Ulkus Diabetikum Di Wilayah Kerja RSUD Besuki Kabupten Situbondo.” *Health Reasearch Journal (HRJ)* 84(2).
- Nurmaidah, Rurin, Nur Widayati, and Jon Hafan Sutawardana. (2021). “Hubungan Spiritual Well-Being Dengan Hardiness Pada Pasien Diabetes Melitus Tipe 2 Di Poliklinik RS Tingkat III Baladhika Husada Jember.” *Dunia Keperawatan: Jurnal Keperawatan Dan Kesehatan* 9 (3):402. doi: 10.20527/dk.v9i3.9179.
- Pranata, Meki, Rizqia Pramudita Nugraha, and Dian Handayani. (2022). “Hubungan Kualitas Hidup Terhadap Lama Menderita Pasien Penyakit Diabetes Melitus Di Kabupaten Kudus.” *Original Article MFF* 26(3):101–3. doi:

10.20956/mff.v26i3.20733.

Rahmasari, Ikrima, and Endah Sri Wahyuni. 2019. "Efektivitas Memordoca Carantia (Pare) Terhadap Penurunan Kadar Glukosa Darah 1,2." 9(1):57–64.

Sahriana, Yani Sofiani, and Abdu Rahim Kamil. (2023). "Penerapan Terapi Spiritual Terhadap Peningkatan Kualitas Hidup Pasien DM Tipe II." *Jurnal Keperawatan* 15(1):247–54. <https://doi.org/10.32583/keperawatan.v15i1.787>.

Salomé, Geraldo Magela PhD, RN; de Almeida, Sergio Aguinaldo. (2017). "Association of Sociodemographic Factors with Spirituality and Hope in Patients with Diabetic Foot Ulcers." *Advances in Skin & Wound Care* 30(1). doi: 10.1097/01.ASW.0000508446.58173.29.

Sani, Fakhruddin Nasrul, Agung Widiastuti, Muzaroah Ermawati Ulkhasanah, and Nur Azma Amin. 2023. "Gambaran Kualitas Hidup Pada Pasien Diabetes Melitus." *Jurnal Penelitian Perawat Profesional* 5(3):1151–58. <https://doi.org/10.37287/jppp.v5i3.1708>.

Silaban, Riwanti, Rasyidah AZ, and Ani Astuti. (2021). "Korelasi Kadar Glukosa Darah Dengan Nilai ABI Pada Diabetes Melitus Tipe II." *REAL in Nursing Journal* 4(2):89. doi: 10.32883/rnj.v4i2.1350.

Teli, Margareta, Ratsiri Thato, and Yohane Andy Rias. 2023. "Predicting Factors of Health-Related Quality of Life Among Adults With Type 2 Diabetes: A Systematic Review." *SAGE Open Nursing* 9. doi: 10.1177/23779608231185921.