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SELF-MANAGEMENT AND QUALITY OF LIFE AMONG ADULTS WITH DIABETES MELLITUS AT TANAH TINGGI COMMUNITY HEALTH CENTER

Nida Amaliatus Sholehah[1], Dona Sartika[2]

[1]Applied Bachelor Study Program in Nursing, Poltekkes Kemenkes Banten, nidaasamalia2516@gmail.com
[2]Nursing Department, Poltekkes Kemenkes Banten, dona.sartika@poltekkesbanten.ac.id
*Corresponding author: nidaasamalia2516@gmail.com

ABSTRACT

Background: Diabetes mellitus control can be achieved through prevention and management, namely with diabetes mellitus self-management. Problems arising from poor diabetes self-management will affect quality of life if not handled optimally. Objective: This study aims to determine the relationship between self-management and the quality of life of adults with diabetes mellitus in the working area of the Tanah Tinggi Public Health Center, Tangerang City. Method: This study used a descriptive correlational design with a cross-sectional approach. The study population was DM patients at the Tanah Tinggi Public Health Center. Data were collected through questionnaires on self-management and quality of life, then analyzed using the chi-square statistical test to determine the relationship between variables. Results: Among 180 respondents, 71 (39.4%) had good self-management and 74 (41.1%) had good quality of life. The Chi-Square test showed a p-value of 0.000 ($p < 0.05$), indicating a relationship between self-management and quality of life among adults with diabetes mellitus. Conclusion: In conclusion, good self-management is an important factor in improving the quality of life of adult diabetes mellitus patients. Therefore, education and interventions that support disciplined self-management need to be improved in an effort to improve the welfare and health of patients.

Keywords: Diabetes Mellitus; Self-management; Quality of Life

INTRODUCTION

Diabetes Mellitus (DM) is a chronic disease that can't be cured but can be managed, so it needs comprehensive management including proper medical care and a healthy lifestyle. DM requires long-term care, and if it's not managed properly, it can lead to life-threatening complications and affect the quality of life for people with diabetes (Hasmi, Maulina, and Arnita, 2022). The International Diabetes Federation (IDF) reported that in 2021, about 537 million people aged 20–79 worldwide had diabetes. Indonesia is now ranked fifth globally, with 19.5 million people with diabetes, roughly 10.8% of the adult population (IDF, 2021).

According to the 2023 Indonesian Health Survey, Banten ranked 7th highest in Indonesia for diabetes mellitus cases (Ministry of Health BKPK, 2023). In Banten Province, there were 249,564 diabetes mellitus patients in 2023 out of a population of 12.31 million, with a prevalence of 2.3%. The highest number of diabetes mellitus patients in Banten Province was found in Tangerang City, with 93,500 patients out of a population of 1.913 million, representing a prevalence of 4.89% (Banten Provincial Health Office, 2024).

Diabetes mellitus increases every year because most sufferers are not able to manage their self-care optimally (Cita, Yuanita and Antari, 2019). Diabetes mellitus can be controlled through prevention and management, namely diabetes self-management, which includes lifestyle modifications (Asnaniar and Fasruddin, 2019). Some aspects included in diabetes self-management are diet management, physical activity/exercise, blood sugar monitoring, adherence to medication, and foot care (wound care). Proper implementation of self-management in diabetic patients can also help improve the achievement of goals in managing diabetes mellitus (Solikin and Heriyadi, 2020).

Problems arising from diabetes self-management will affect quality of life if not handled optimally (Sofia et al., 2023). Quality of life is meant as an effort to bring consideration in achieving health. The desire

to have a better quality of life can influence a person's lifespan (Mustika, Suarnianti and Fajriansi, 2024). The high cases of diabetes in Indonesia reflect a major challenge in controlling this disease. In her research, Nurhayati (2022) worked on diabetes management, one of which was diabetes self-management. In the study by Kurniawati, Huriah, and Primanda (2019), diabetes was controlled through promotive efforts with self-care education. Thome (2023) conducted early detection as a preventive effort in controlling diabetes mellitus.

Research by Solikin and Heriyadi (2020) showed that some diabetes patients at Landasan Ulin Community Health Center are already aware of how important it is to carry out diabetes self-management, like maintaining a diet, exercising, caring for wounds on their feet, taking medication consistently, and monitoring

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Research by Solikin and Heriyadi (2020) showed that some diabetes patients at Landasan Ulin Community Health Center are already aware of how important it is to carry out diabetes self-management, like maintaining a diet, exercising, caring for wounds on their feet, taking medication consistently, and monitoring

blood sugar levels. However, in practice, some diabetes patients still haven't fully applied all aspects of self-management. In the study by Luthfa and Fadhilah (2019), consistently and optimally practicing self-management can help control blood sugar instability, minimize complications, and improve quality of life.

Based on interviews through the health facility, the total population of diabetes patients at Tanah Tinggi Community Health in 2025 is 291 people. Preliminary study results showed self-management data involving five respondents, indicating that three of them have not been doing self-management properly, and for quality of life data involving five respondents, three of them experienced poor quality of life. The role of nurses in this study can be as educators about self-management and quality of life. Based on the background above, the author is interested in conducting research with the title "The Relationship Between Self-Management and Quality of Life in Adults with Diabetes Mellitus in the Working Area of Tanah Tinggi Community Health Center, Tangerang City."

MATERIALS AND METHODS

This study uses a correlational descriptive design with a cross-sectional research approach. The sampling technique used is non-probability sampling with a purposive sampling method, involving 180 respondents. Data was collected through questionnaires about self-management and quality of life at the Tanah Tinggi Public Health Center from February to March 2025. The data was analyzed using the chi-square test to determine the relationship between variables.

RESULTS

1. Univariate Analysis

Table 1. Frequency Distribution of Self-Management in the Tanah Tinggi Health Center Work Area (N=180)

No	*Self-Management*	Frequency	Percentage %
1.	Good	71	39.4%
2.	Moderate	62	34.4%
3.	Poor	47	26.1%

Table 1 shows that more than half of the respondents in the Tanah Tinggi health center work area have good self-management, totaling 71 respondents (39.4%).

Table 2. Frequency Distribution of Quality of Life in the Tanah Tinggi Health Center Work Area (N=180)

No	Quality of Life	Frequency	Percentage %
1.	Good	74	41.1%
2.	Moderate	65	36.1%
3.	Poor	41	22.8%

Table 2 shows that more than half of the respondents in the Tanah Tinggi health center work area have a good quality of life, totaling 74 respondents (41.1%).

2. Bivariate Analysis

Table 3. Chi-Square Test of the Relationship Between Self-Management and Quality of Life (N=180)

	Quality of Life						Total		*P-Value*
	Poor		Moderate		Good				
Self-Management	F	%	F	%	F	%	F	%	
Poor	40	22	7	3.9	0	0.0	47	26.1	*0,000*
Moderate	1	0.6	58	32.2	3	1.7	62	34.4	
Good	0	0.0	0	0.0	71	39.4	71	39.4	

DISCUSSION

1. Univariate
   a. Self-Management
      There are 71 respondents (39.4%) who have good self-management. The data shows that most respondents have good self-management, which is supported by research from Juairiah, Istianah, and Nurmansyah (2022), stating that good self-management gives patients the ability to monitor their own condition, leading to cognitive, behavioral, and emotional changes needed to maintain a satisfying quality of life. These behavior changes are related to a reduced risk of complications for patients, so it is expected that patients with diabetes mellitus will not have additional factors that worsen their condition and lower their quality of life (Juairiah, Istianah, and Nurmansyah, 2022).
   b. Quality of Life
      Based on the research results, some respondents in the work area of Tanah Tinggi Health Center have a good quality of life, totaling 74 (41.1%). The data shows that the majority of respondents have a high quality of life. Most respondents with a good quality of life are so because people with diabetes mellitus feel satisfied with their efforts in treatment. Meanwhile, respondents with a moderate quality of life feel somewhat accepting of their condition and feel adequate about their efforts in managing diabetes mellitus. Respondents with a lower quality of life experience anxiety about their illness (Nurbayanti et al., 2023).
2. Bivariate

   The chi-square statistical test results in this study showed a p-value of 0.000, which means it is not more than 0.05. Therefore, it can be concluded that Ha is accepted, or there is a relationship between self-management and the quality of life of diabetes patients in the work area of Tanah Tinggi Health Center, Tangerang City. The study also found that the better the self-management of diabetes patients, the higher their quality of life.

   Self-management in patients aims for patients to be able to manage symptoms, physical care, as well as psychosocial impacts and lifestyle changes in chronic conditions. Self-management provides skills that include the ability to monitor oneself, resulting in the cognitive, behavioral, and emotional changes needed to maintain a satisfying quality of life (Juariah, Istianah, and Nurmansyah, 2022). This study is supported by research from Solikin & Heriyadi (2020), which states that improving self-management can help individuals manage themselves effectively, actively engage, take full responsibility for changes, and manage thoughts and feelings well, allowing them to develop optimally.

   Based on the theory above, it shows that people with diabetes who have good self-management tend to be able to manage important aspects of their disease optimally, like controlling their diet, physical activity, and medication use. This contributes to better quality of life, because good self-management can improve overall health.

CONCLUSION

Based on research results from a sample of 180 respondents, it was found that 71 respondents (39.4%) had good self-management, and 74 respondents (41.1%) had a good quality of life. The chi-square statistical test in this study showed a significance value of 0.000 < 0.05, which means that Ha is accepted, or there is a relationship between self-management and the quality of life of diabetes patients in the working area of Tanah

Tinggi Health Center, Tangerang City. The study shows that the better a diabetes patient's self-management, the better their quality of life.

REFERENCES

Asnaniar, W.O. sri and Fasruddin. (2019). Hubungan self-management diabetes dengan kualitas hidup pasien diabetes melitus tipe 2. *Penelitian Kesehatan Suara Fores*, 10(4), pp. 295–298.

Cita, E.E., Yuanita and Antari, I. (2019). Perawatan Diri (self care) pada pasien diabetes melitustipe II, Jurnal Kesehatan Madani Medika.

Dinkes Provinsi Banten. (2024). Profil Kesehetan Provinsi Banten 2023 . Available at: https://dinkes.bantenprov.go.id/profil-kesehatan-provinsi-bant (Accessed: 28 November 2024).

Hasmi, N.M., Maulina and Arnita, Y. (2022). Self-care management agregat dewasa dengan diabetes melitus', Jurnal Ilmiah Mahasiswa, 5(3), pp. 169–174.

IDF. (2021). Diabetes in Indonesia. Available at: https://idf.org/our-network/regions-and-members/western-pacific/members/indonesia/ (Accessed: 20 November 2024).

Juariah, Istianah and Nurmansyah. (2022). Hubungan Self Management Dengan Kualitas Hidup Pada Pasien Diabetes Melitus Tipe 2 Di Poliklinik Penyakit Dalam RS Rajawali. *Medical-Surgical Journal of Nursing Research Istianah, et.al.*

Kemenkes BKPK. (2023). Survey Kesehatan Indonesia (SKI) 2023. Available at: https://www.badankebijakan.kemkes.go.id/hasil-ski-2023/ (Accessed: 3 December 2024).

Kurniawati, T., Huriah, T. and Primanda, Y. (2019). Pengaruh diabetes self management education (DSME) terhadap self management pada pasien diabetes mellitus. *Jurnal Ilmiah Kesehatan*, 12(2).

Luthfa, I. and Fadhilah, N. (2019). Self management menentukan kualitas hidup pasien diabetes mellitus. *Jurnal Endurance*, 4(2), p. 402. Available at: https://doi.org/10.22216/jen.v4i2.4026.

Mustika, Suarnianti and Fajriansi, A. (2024). Hubungan gaya hidup dengan kualitas hidup pada penderita diabetes melitus tipe 2 di wilayah kerja UPT Blud Puskesmas Bajoe Kab.Bone. *Jurnal Ilmiah Mahasiswa& Penelitian Keperawatan*, 4(4), pp. 60–65.

Nurhayati, C. (2022). Hubungan tingkat pengetahuan tentang diabetes melitus, self management dengan kualitas hidup pada pasien diabetes melitus tipe 2. *Journal of Nursing and Health Science*, 1(2), pp. 58–65. Available at: www.ejournal.stikes-pertamedika.ac.id/index.php/jnhs.

Sofia, R. et al. (2023). Determinan kualitas hidup pasien diabetes melitus tipe 2 di Puskesmas Banda Sakti Lhokseumawe. *Jurnal Ilmiah Manusia dan kesehatan*, 6(2), pp. 307–315.

Solikin and Heriyadi, M.R. (2020). Hubungan self management dengan kualitas hidup pasien diabetes melitus di Puskesmas Landasan Ulin. *Dinamika Kesehatan Jurnal Kebidanan dan Keperawatan*, 11(1), pp. 432–439.

Thome, A.L. (2023). Penyuluhan dan deteksi dini sebagai upaya preventif diabetes melitus pada remaja. *Communnity Development Journal*, 4(6).