THE RELATIONSHIP BETWEEN PSYCHOSOCIAL SUPPORT FROM FAMILIES AND THE QUALITY OF LIFE OF PATIENTS WITH DIABETES MELLITUS IN THE WORKING AREA OF THE GARUDA COMMUNITY HEALTH CENTER IN PEKANBARU CITY

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Abstract

Diabetes mellitus (DM) is one of the fastest growing diseases worldwide and is projected to affect around 693 million adults by 2045. In Indonesia, in 2021, the number of people with DM is estimated to reach 19.47 million. The city of Pekanbaru also showed significant numbers with 19,587 cases in 2023. DM is a chronic disease that requires long-term and strict management. In addition to physical impacts, DM often triggers psychological impacts on patients, one of which is Burnout Syndrome. This study aims to determine the relationship between family psychosocial support and the quality of life of DM patients. This quantitative study uses a correlation design approach with a cross-sectional study approach. A sample of 46 respondents was selected using purposive sampling from 1,848 people with diabetes mellitus. The research instrument used the Hensarling Diabetes Family Support Scale (HDFSS) and Diabetes Quality of Life (DQOL) questionnaires. The analysis used univariate and bivariate analysis using the chi-square statistical test to determine the relationship between variables. The results of the chi-square statistical test showed a significant relationship between family psychosocial support and quality of life in people with diabetes mellitus. Scale (HDFSS) and Diabetes Quality of Life (DQOL) questionnaires. The analysis used was univariate and bivariate analysis using the chi-square statistical test to determine the relationship between variables. The results of the chi-square statistical test showed a pvalue of 0.645 > 0.05, indicating that there is no relationship between family psychosocial support and the quality of life of diabetes mellitus patients.
Keyword: Family support 1; Psychosocial 2; Quality of life 3: Diabetes mellitus4.

INTRODUCTION

Diabetes is one of the fastest-growing diseases worldwide and is projected to affect 693 million adults by 2045. The devastating macrovascular (cardiovascular disease) and microvascular (diabetic kidney disease, diabetic retinopathy, and neuropathy) complications of diabetes contribute to increased mortality, blindness, kidney failure, and a decline in overall quality of life among individuals with diabetes (Wang et al., 2021). According to the International Diabetes Federation (IDF, 2022), 537 million adults (aged 20–79 years) worldwide were reported to have diabetes, with 6.7 million deaths attributed to the disease in 2021. The Southeast Asia region, where Indonesia is located, ranks third with a prevalence rate of 11.3%. Indonesia ranks seventh among the ten countries with the highest number of diabetes cases, with 19.47 million people affected in 2021 (Juli et al., 2024).

Based on data from the Pekanbaru City Health Office, the number of diabetes mellitus (DM) cases across all public health centers in Pekanbaru reached 19,587 in 2023, with Garuda Health Center recording the highest number at 1,848 cases. Diabetes mellitus is a chronic disease that requires long-term treatment and strict management. Despite various efforts to reduce the incidence of DM, it can lead to psychological impacts, one of which is a sense of exhaustion known as *Burnout Syndrome*. Among diabetic patients, this condition is referred

to as *DM Burnout Syndrome*. The contributing factors include monotonous treatment routines, regular medical checkups, long disease duration, and lack of family support during the recovery process.

Family psychosocial support plays a crucial role for diabetes mellitus patients, as individuals suffering from chronic illnesses need attention and care from their families (Nuraisyah, Kusnanto, & Rahayujati, 2017). Quality of life is an essential factor influencing one's health; poor quality of life can worsen a person's condition, and conversely, chronic diseases such as diabetes mellitus can significantly reduce quality of life (Ratnasari, Andayani, & Endarti, 2019).

RESEARCH METHOD

This study used a quantitative research method with a correlational design and a cross-sectional approach. The research was conducted at Garuda Public Health Center, located in Marpoyan Damai District, Pekanbaru City. The study population was obtained from data provided by the Pekanbaru City Health Office, which recorded a total of 19,582 people with diabetes mellitus. Garuda Public Health Center was selected as the research site because it has the highest number of diabetes mellitus cases in Pekanbaru, with a total of 1,848 patients.

The sampling technique used was purposive sampling, which determines samples based on specific criteria aligned with the study objectives. The instruments used in this research were the Hensarling Diabetes Family Support Scale (HDFSS) questionnaire and the Diabetes Quality of Life (DQOL) questionnaire to measure the independent variable (family support) and the dependent variable (quality of life)..

RESEARCH RESULTS

A. Analisis Univariat

Table 1. Frequency Distribution of Respondents Based on Age

Kategori Usia	Frekuensi (f)	Presentase%
early adulthood (26-35 Tahun)	2	4,3
late adulthood (36-45 Tahun)	4	8,7
early elderly (46-55 Tahun)	30	65,2
late elderly (56-65 Tahun)	10	21,7
Total	46	100

Sumber: Analisis Data

Table 2. Frequency Distribution of Respondents by Gender

Jenis Kelamin	Frekuen si (f)	Presentase %
Male	4	8,7
Female	42	91,3
Total	46	100

Sumber: Analisis Data Primer 2025

Table 3. Frequency Distribution of Respondents Based on Education

Kategori Pendidikan	Frekuensi (f)	Presentase %
SD	3	6,5
SMP	11	23,9
SMA	22	47,8
Collage	10	21,7
Total	46	100

Sumber: Analisis Data Primer 2025

Tabel 4. Frequency Distribution of Respondents Based on Education

Work	Frequency (f)	Presentase (%)
IRT	15	32,6
Retired	1	2,2
PNS	1	2,2
Doesn't work	14	30,4
Private sector employee	3	6,5
businessman	12	26,1

Sumber: Analisis Data Primer 2025

Table 5. Frequency Distribution Based on Duration of Suffering

Long Suffering	Frequency (f)	Presentase (%)
≤5 tahun	27	58,7
>5 tahun	19	41,3
Total	46	100%

Sumber: Analisis Data Primer 2025

Table 6. Frequency Distribution of Respondents Based on Family Support

Family Support	Frequency (f)	Presentase %
Low	9	19,6
Tall	37	80,4
Total	46	100

Sumber: Analisis Data Primer 2025

Table 7. Frequency Distribution of Respondents Based on Quality of Life

Quality of Life	Frequency (f)	Presentase %
Low	8	17,4
Tall	38	82,6
Total	46	100

Sumber: Analisis Data Primer 2025

Table 8. The Relationship Between Family Psychosocial Support and Quality of Life of Diabetes Mellitus Patients in the Puskesmas Garuda Pekanbaru

Family Psychosocial Support	Quality of Life						P value
	Low	%	Tall	%	Total	%	
Low	2	25,0	6	75,0	8	100	
Tall	7	18,4	31	81,6	38	100	0,645
Total	9	19,6	37	80,4	46	100	

Sumber: Analisis Data Primer 2025

DISCUSSION

The results of the study showed that most respondents were in early elderly age (46–55 years), totaling 30 people (65.2%). This finding aligns with the study by Oktavia et al. (2022), which stated that individuals over 40 years old have a higher risk of developing type 2 diabetes mellitus due to the aging process, which decreases the ability of pancreatic beta cells to produce insulin and increases insulin resistance as a result of muscle fat accumulation (Komariah & Rahayu, 2020).

The majority of respondents were female (91.3%). This finding is consistent with the research of Suratun et al. (2023), which explained that women are more at risk of developing diabetes mellitus due to differences in body composition, decreased levels of estrogen and progesterone after menopause, and a higher tendency toward obesity caused by low physical activity (Sela, 2023).

Almost half of the respondents had a high school education (47.8%). Although Nugroho & Sari (2020) stated that education level influences the incidence of diabetes mellitus, the researcher assumes that this relationship is not absolute since other factors such as heredity and lack of physical activity also play significant roles (Ramadhani & Khotami, 2023).

Some respondents worked as housewives, totaling 15 people (32.6%). Low physical activity is one of the main risk factors for increased blood glucose levels and insulin resistance (Mawan et al., 2021; Saqila & Muflihatin, 2021). Individuals who are unemployed have a 1.5

times higher risk of developing diabetes mellitus compared to those who are employed (Eli & Soraya, 2022).

The majority of respondents had been suffering from diabetes mellitus for ≤5 years (58.7%). According to Divianty et al. (2021), the duration of suffering from diabetes mellitus reflects the severity of the disease. The longer a person suffers from diabetes, the greater the risk of complications due to decreased pancreatic beta-cell function (Prasetyaningsih, Hartono, & Himawan, 2022).

From the aspect of family support, more than half of the respondents had high psychosocial family support (80.4%). Family support plays a crucial role in helping patients manage stress, increase motivation, and improve adherence to treatment (Maduriani et al., 2023; Priharsiwi & Kurniawati, 2021; Siregar & Siregar, 2022). Families also play an important role in guiding patients and strengthening their adaptation to disease management (Putri & Puspitasari, 2024).

The quality of life of diabetes mellitus patients in this study was categorized as high (82.6%). This finding is consistent with the research of Pratama et al. (2023) and Nisa & Kurniawati (2022), who stated that family support and patient knowledge greatly contribute to improving quality of life. Good knowledge about diabetes mellitus helps patients understand the risk of complications and the steps to prevent them (Saputra & Rosyid, 2024).

However, the statistical test results showed no significant relationship between psychosocial family support and the quality of life of diabetes mellitus patients (p-value = 0.645 > 0.05). This result aligns with the studies by Octariviani et al. (2021) and Jais et al. (2021), which found that although family support was high, patients' quality of life did not always improve due to psychological factors such as feelings of resignation toward the disease. Conversely, Zanzibar & Akbar (2023) found different results, showing that family support can enhance quality of life through increased adherence and better psychological regulation..

CONCLUSION

The results of the study from 46 respondents showed that among 8 respondents with low psychosocial family support, 2 respondents (25.0%) had a low quality of life and 6 respondents (75.0%) had a high quality of life. Among 38 respondents with high psychosocial family support, 7 respondents (18.4%) had a low quality of life and 31 respondents (81.6%) had a high quality of life. The chi-square statistical test obtained a p-value of 0.645 > 0.05, indicating that H₀ is accepted. Therefore, it can be concluded that there is no significant relationship between psychosocial family support and the quality of life of diabetes mellitus patients in the working area of Garuda Public Health Center, Pekanbaru City.

REFERENCE

1 Amalia Ayu Ramadhani, dan Roissiana Khotami. 2023. "Hubungan Tingkat Pendidikan, Pengetahuan, Usia dan Riwayat Keluarga DM dengan Perilaku Pencegahan Diabetes Mellitus Tipe 2 pada Usia Dewasa Muda." SEHATMAS: Jurnal Ilmiah Kesehatan Masyarakat 2(1): 137–47.
2 Divianty, Rika, Noor Diani, dan Tina Handayani Nasution. 2021. "Karakteristik Pasien Diabetes Melitus dengan Pengetahuan Tentang Hipoglikemia." Dunia Keperawatan: Jurnal Keperawatan dan Kesehatan 9(3): 443.
3 Eli, Indrawati, dan Afifah Soraya. 2022. "Pengaruh Kepatuhan Minum Obat Terhadap Keseimbangan Kadar Gula Darah Pasien Diabetes Melitus Tipe 2 di Puskesmas Kecamatan Cipayung." Jurnal Pendidikan dan Konseling 4(4): 657.

4   Jais, Muhammad, Teuku Tahlil, dan Suryane Sulistiana Susanti. 2021. "Dukungan Keluarga dan Kualitas Hidup Pasien Diabetes Mellitus yang Berobat di Puskesmas." Jurnal Keperawatan Silampari 5(1):82– 88.

5   Juli, Vol No et al. 2024. "Hubungan Dukungan Psikososial dengan Proses Penyembuhan Luka Gangren Pada Pasien Diabetes Mellitus Tipe 2 di Klinik Ibnu Sina Sejahtera Jenggawah Universitas Muhammadiyah Jember, Indonesia Provinsi Jawa Timur melaporkan jumlah penderita diabetes usia , f." 2(3).

6   Komariah, K, dan Sri Rahayu. 2020. "Hubungan Usia, Jenis Kelamin Dan Indeks Massa Tubuh Dengan Kadar Gula Darah Puasa Pada Pasien Diabetes Melitus Tipe 2 Di Klinik Pratama Rawat Jalan Proklamasi, Depok, Jawa Barat." Jurnal Kesehatan Kusuma Husada (Dm): 41–50. Maduriani, Ismi,

7   Andik Matulessy, Amhrestia Pasca Rina, dan Ninda Pratitis. 2023."Pentingnya Meningkatkan Penerimaan Diri pada Pasien Diabetes dengan Dukungan Keluarga." Jiwa: Jurnal Psikologi Indonesia 1(1): 30–39.

8   Mawan, I A, Muflihatin, S K. 2021. "Hubungan Kecemasan Dengan Manajemen Diri Pada Penderita Diabetes Mellitus." Borneo Student Research 2(2): 738–46.

9   Nisa, Hoirun, dan Putri Kurniawati. 2022. "Kualitas Hidup Penderita Diabetes Melitus Dan Faktor Determinannya." Medical Technology and Public Health Journal 6(1): 72–83.

10   Nugroho, Purwo Setiyo, dan Yonita Sari. 2020. "HubunganTingkat Pendidikandan Usiadengan Kejadian HipertensidiWilayah Kerja Puskesmas Palaran Tahun 2019." Jurnal Dunia Kesmas 8(4): 1–5.

11   Nuraisyah, Fatma, Hari Kusnanto, dan Theodola Baning Rahayujati. 2017. "Dukungan keluarga dan kualitas hidup pasien diabetes mellitus." Berita Kedokteran Masyarakat 33(1): 25.

12   Octariviani, Reliza, Zovancha 1 da n Anisa Catur Wijayanti. 2021. "Nomor 3, Halaman 182-188." Jurnal Kesehatan Masyarakat Indonesia 16(September): 182.

13   Oktavia, Santi et al. 2022. "Faktor - Faktor Sosial Demografi yang berhubungan dengan KejadianDiabetes Melitus Tipe 2." Jurnal Ilmiah Permas: Jurnal Ilmiah STIKES Kendal 12(4): 1039–52.

14   Prasetyaningsih, Retnaning Ayu, Rodhi Hartono, dan Fatchurrozak Himawan. 2022. "Pengaruh Dukungan Keluarga Terhadap Efikasi Diri Pada Penyandang Diabetes Mellitus Tipe 2 Di Wilayah Kerja Puskesmas Srondol Banyumanik Kota Semarang." Juru Rawat. Jurnal Update Keperawatan 2(1): 25– 32.

15   Pratama, Y K, M A Yuswar, dan F Nugraha. 2023. "Gambaran Kualitas Hidup Pasien Diabetes Melitus Menggunakan Instrumen DQLCTQ Studi Kasus : Puskesmas X Kota Pontianak." Indonesian Journal of Pharmaceutical Education (e-Journal) 3(3): 2775–3670.

16   Priharsiwi, Dwi, dan Trina Kurniawati. 2021. "Gambaran Dukungan Keluarga Dan Kepatuhan Diet Pada Pasien Diabetes Mellitus Tipe 2: Literature Review." Prosiding Seminar Nasional Kesehatan 1: 324–35.

17   Putri, Nur Ilmya Nugraha Ningrum Irfandi, dan Nunik Puspitasari. 2024. "Literature Review: Hubungan Dukungan Keluarga Dengan Penerapan Pola Hidup Sehat Sebagai Pencegahan Diabetes Melitus T2 Di Indonesia." Prepotif: Jurnal Kesehatan Masyarakat 8(2): 4529–40.

18   Ratnasari, Pande Made Desy, Tri Murti Andayani, dan Dwi Endarti. 2019. "Analisis Kualitas Hidup Pasien Diabetes Melitus Tipe 2 Berdasarkan Pola Peresepan Antidiabetik dan Komplikasi." JURNAL MANAJEMEN DAN PELAYANAN FARMASI (Journal of

Management and Pharmacy Practice) 9(4): 260.

19 Saputra, Kurnia Agil, dan Fahrun Nur Rosyid. 2024. "Hubungan tingkat pengetahuan terhadap kualitas hidup penderita diabetes mellitus." 8: 4456–64.

20 Saqila, Reka Ladina, dan Siti Khoiroh Muflihatin. 2021. "Hubungan Pengetahuan Dengan Manajemen Diri Pada Penderita Diabetes Mellitus Tipe II Di Wilayah Kerja Puskesmas Palaran Kota Samarinda." Borneo Student Research 2(2): 872–78.

21 Sela, Aner. 2023. "Resource allocations in the best-of-k (k= 2 , 3) contests." Journal of Economics/ Zeitschrift fur Nationalokonomie 139(3): 235–60.

22 Siregar, Henrianto Karolus, dan Sri Wahyuni Siregar. 2022. "Hubungan Dukungan Keluarga terhadap Kepatuhan Minum Obat pada Penderita Diabetes Mellitus di RSUD Sawah Besar Jakarta Tahun 2022." ASJN (Aisyiyah Surakarta Journal of Nursing) 3(2): 83–88.

23 Suratun, Suratun, Dewi Pujiana, dan Mareta Sari. 2023. "Pencegahan Diabetes Melitus Di Palembang." Masker Medika 11(1): 9–18.

24 Suwanti, Erna, Sulistyo Andarmoyo, dan Lina Ema Purwanti. 2021. "Hubungan Dukungan Keluarga Dengan Kualitas Hidup Pasien Diabetes Melitus Tipe 2." Health Sciences Journal 5(1): 70.

25 Wang, Yaqi et al. 2021. "The Relationship between Erythrocytes and Diabetes Mellitus." Journal of Diabetes Research 2021.