

Original Research

# The Relationship Between Family Support And The Quality Of Life Of Dm Patients

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## Abstract

**Background:** In today's modern era, the pattern of people's life structure has undergone changes that trigger people's lifestyles in an unhealthy direction so that it can cause non-communicable diseases, one of which is diabetes mellitus. An increase in the incidence of diabetes mellitus will have an impact on the physical, psychological, social and economic sufferers. Support from family can help their quality of life because poor family support can affect the quality of life of sufferers which can lead to physical complications. **Objective:** To determine the relationship between family support and the quality of life of DM patients in the Working Area of Antang Health Center Makassar City.

**Methods:** The research method used was quantitative research with descriptive correlation and *cross-sectional* approach conducted on 63 samples of DM patients in the Antang Health Center work area obtained by purposive sampling technique, and data collection using validated questionnaires.

**Results:** The results showed good family support as many as 50 people (79.4%) and respondents who had poor family support as many as 13 people (20.6%) while the quality of life was good as many as 48 people (76.2%) and the quality of life was poor as many as 15 people (23.8%).

**Conclusion:** From the results of the study, it can be concluded that there is a relationship between family support and the quality of life of DM patients with  $p < \alpha$  values ( $p = 0.000$ ).

**Keywords:** Diabetes Mellitus, Family Support, Quality of Life

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## Introduction

In today's modern era, the pattern of life structure of Indonesian people has undergone significant changes. The change from an agrarian society to an all-modern industry triggered people's lifestyles in a less healthy direction. This happens due to several factors, namely the work environment, diet, exercise, and stress so that it can cause non-communicable diseases or *Non-Communicable Disease* (NCD), one of which is diabetes mellitus.

According to *the International Diabetes Federation*, diabetes mellitus is one of the non-communicable diseases, which occurs when there is an increase in glucose levels in the blood or so-called *hyperglycemia*, where the body cannot produce enough insulin hormone or use insulin effectively (IDF, 2019).

In 2019, diabetes mellitus cases worldwide reached 463 million cases and there were 4.2 million cases of death (IDF, 2019). The Southeast Asia region ranks third in the world with 11.3% of diabetes mellitus cases and Indonesia is ranked seventh with 10.7 million people with diabetes (Ministry of Health, 2020). The incidence of diabetes mellitus in South Sulawesi still ranks second in non-communicable diseases after heart and blood vessel disease (PJPD) in 2017, which is 15.79% (Dinkes Sulsel, 2018).

An increase in the incidence of diabetes mellitus will have an impact on the physical, psychological, social and economic sufferers. Support from family members can provide comfort and calm for sufferers to help their quality of life. This is because, poor family support can affect the quality of life of diabetics which can cause physical complications such as hypertension, obesity, stroke and weight loss as well as excessive stress and anxiety (Amzal Mortin Andas et al., 2020; Andas et al., 2022; Mulyana et al., 2022)

Family support has an influence on the quality of life of DM patients and family support is one of the control efforts in the quality of life of DM patients. Family members are seen as an inseparable part

of the family environment as well as the closest people with mutual support and are always ready to provide help if needed (Andas et al., 2023).

Family support has a positive impact on the quality of life of patients (Nabela et al., 2022). The concept of quality of life includes physical, psychological, social and environmental health. In addition, the quality of life of DM patients can also be related to several other factors such as age, gender, education level, income, length of suffering and complications of DM (Retno et al., 2016).

In research conducted by Chusmeywati (2016), the quality of life of DM sufferers measured by the DQOL questionnaire showed the results of 104 respondents as many as 71.2% had poor quality of life and 80.8% received good support from family. While research conducted by Felicia (2017), showed patients who had supportive family support and good quality of life were found in 50 patients (50%). While for patients with supportive family support but poor quality of life amounted to 5 patients (5%). Unsupportive family support and good quality of life were found in 32 respondents (32%). For poor family support and poor quality of life amounted to 13 respondents (13%).

Based on this, researchers are interested in researching the "Relationship between Family Support and Quality of Life of DM Patients in the Working Area of Antang Health Center, Manggala District, Makassar City".

## Methods

### Study Design

This research is included in quantitative research using correlation descriptive research design. This study used a *cross-sectional approach* to determine the relationship between family support and quality of life of DM patients.

### Samples/Participants

The population of this study was all DM patients who came for treatment at the Antang Health Center for the January-June 2022 period totaling 170 people. Techniques in sampling, using the slovin formula.

### Instruments

This research instrument uses a questionnaire with several questions. This questionnaire refers to the literature review made by researchers in their research.

### Data Collection

Researchers collect data on research samples that meet the criteria, after which researchers provide questionnaires and consent sheets to be filled in by research samples. If the research sample agrees to be measured and assessed, the responder will be observed using a questionnaire and an assessment will be carried out by the researcher.

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### Data Analysis

The data that has been collected is processed using the help of a computer program SPSS (*Statistical Product and Service Solutions*).

#### Univariate analysis

The purpose of univariate analysis is to describe each variable studied with the results of data analysis using descriptive numerical data, namely calculating frequency and percentage. The characteristics of respondents consist of age, gender, and education level. Other univariate analyses include family support and quality of life.

#### Bivariate analysis

Bivariate analysis was used to see the relationship between the independent variable and the dependent variable using the *chi-square test formulation*. This analysis looked at the relationship between family support and quality of life. The *Chi Square test* was used in this study because it did not meet the requirements of the parametric test (data is not normally distributed).

### Ethical Considerations

This research has been approved by the Institute of Ethics Universitas megarezky Makassar.

## Results

## Univariate Analysis

## Characteristics of Respondents in the Working Area of Antang Health Center 2022

Table 1 Characteristics of Respondents in the Region  
Antang Health Center Work 2022

Characteristi Responden	Sum	Percent (%)
<b>Age (Years)</b>		
40-59	28	44,5
60-79	35	55,6
<b>Gender</b>		
Laki-laki	15	23,8
Perempuan	48	76,2
<b>Education</b>		
SD	9	14,3
SMP	5	7,9
SMA	38	60,3
S1	11	17,5
<b>Total</b>	<b>63</b>	<b>100,0</b>

## Family support

Table 2 Family Support of DM Patients in the Region  
Antang Health Center Work

Family Support	Frequency	Percent (%)
Good (Supportive)	50	79.4
Less good (Non Supportive)	13	20.6
Total	63	100.0

## Quality of life

Table 3 Quality of Life of DM Patients in the Region  
Antang Health Center Work

Quality of Life	Frequency	Percent (%)
Good	48	76.2
Not good	15	23.8
Total	63	100.0

## Bivariate Analysis

Table 4 Analysis of Family Support Relationship with  
Quality of Life of DM Patients in the Working Area of Antang Health Center

Family Support	Quality of Life		Sum	P (Value)
	Good	Not good		
Good	45	5	50	0.000
Not good	3	10	13	
Sum	48	15	63	

## Discussion

## Univariate Analysis

## Family support of DM patients in the Antang Health Center work area

In the results of the study, it showed that most respondents of Type 2 DM patients in the Antang Health Center work area received good family support, which was 50 people (79.4%). While respondents who received poor family support were 13 people (20.6%).

Family support is one form of assistance provided by family members to one of the sick family members, this includes emotional support, instrumental support, information support and appreciation support.

According to Felicia (2017), family support is very necessary because it is related to patient compliance in undergoing therapy provided such as limiting food intake, physical activity and self-monitoring of blood sugar levels.

So, according to researchers that DM sufferers who often get family support is a natural thing because the family is the closest person to the sufferer. In addition, family has the deepest meaning, so

when there is a family member who is sick, the first person to support and care for him is his own family. So, sufferers are also more open to family members who are closer to him to tell his problems and ask for help.

Quality of life of DM patients in the Antang Health Center work area

In the results of the study, it showed that most of the Type 2 DM respondents in the Antang Health Center work area had a good quality of life, which was 48 people (76.2%). While respondents who have a poor quality of life as many as 15 people (23.8%). Quality of life is the level or value of goodness in a person's life including physical health, psychological health, social relationships and relationships with the environment.

In research conducted by Wirnasari (2019) on the quality of life of DM patients, quite good quality of life results were obtained because there are several influencing factors such as: pain conditions that inhibit daily activities, discomfort overcoming pain and disruption of sleep patterns. However, according to Ruth et al (2012) in Wirnasari (2019) that some respondents who have a quality of life are influenced by physical changes experienced by DM patients such as fatigue and disturbances during activities.

So, according to researchers that quality of life is very important because the quality of life is closely related to the condition of the patient, the healing process of the patient, the severity of the disease and even complications that will occur if the patient has a poor quality of life.

Bivariate Analysis

The results of the study using the *Chi Square* test showed a relationship between family support and the quality of life of patients. This is evidenced by a *p value* smaller than ( $\alpha = 0.05$ ), which is 0.000. The results of cross-tabulations between family support and quality of life of Type 2 DM patients showed that there were 45 respondents who had good family support and good quality of life. While respondents with good family support but poor quality of life as many as 5 people. In respondents with poor family support and good quality of life as many as 3 people while there were 10 respondents with poor family support and good quality of life.

In respondents with good family support but less quality of life due to several factors, namely gender, age, length of suffering and complications while in respondents with poor family support but good quality of life due to several things, namely education and socioeconomic levels. However, influential factors in the relationship of family support with quality of life are education level and gender. Education level has an important role in family support while the female gender plays a role in determining the quality of life either.

This is in accordance with the study "*Literature Review*" conducted by Nabela et al (2022) with the same title, 8 out of 10 journals showed that family support can improve the quality of life of DM patients.

This research is in line with the research of Amelia, et al (2018) in Nabela et al (2022). In the study explained that patients with supportive family support and have a good quality of life obtained a *p value result of 0.010* ( $p < 010$ ) which means there is a relationship between family support and the quality of life of DM patients.

This can happen because family support is believed to be very helpful for Type 2 DM patients in their treatment. According to Meidikayanti and Umbul (2017) in their journal entitled "*The Correlation Between Family Support with Quality of Life Diabetes Mellitus Type in Pademawu PHC*" explained that the higher the family support obtained, the lower the degree of depression experienced by DM sufferers so that the quality of life is higher, and vice versa.

The results of this study are also in line with research conducted by Sakti et al (2020) in the work area of the Silago Health Center, stating that there is a significant relationship between family support and the quality of life of Type 2 DM patients. In addition, a strong category relationship of *cramers'v = 0.580* was obtained. *Cramers'v* is used to determine the strength of the relationship between two variables.

From the analysis above, researchers can conclude that family support with quality of life is very closely related and inseparable because family support supports the quality of life of patients. The better the family support for eating, the better the quality of life for Type 2 DM patients.

## Conclusion

Based on the results of the study, the conclusions that researchers can make are as follows:

Most respondents of Type 2 DM in the Antang Health Center work area have good family support, which is 79.4%

Most respondents of Type 2 DM in the Antang Health Center work area have a good quality of life at 76.2%

There is a significant relationship between family support and the quality of life of Type 2 DM patients in the Antang Health Center work area

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## References

- Amzal Mortin Andas, Christantie Effendi, & Sri Setyarini. (2020). Validity and Reliability Test on Sleep Quality Scale (SQS) Instruments in Indonesia Version on Cancer Patients. *International Journal of Research in Pharmaceutical Sciences*, 11(4), 7275–7280. <https://doi.org/10.26452/ijrps.v11i4.3865>
- Andas, A. M., Harahap, D., Purnamasari, A., & Prima, A. (2022). Effectiveness of cognitive behaviour therapy (CBT) to improve the sleep quality of the elderly in hospital. *International Journal of Health Sciences*, 6(April), 1669–1678. <https://doi.org/10.53730/ijhs.v6ns4.6320>
- Andas, A. M., Sansuwito, T. bin, Said, F. M., Puspitasari, I., Prima, A., & Andas, N. H. (2023). The Effect of Box Breathing on Sleep Disorders in Elderly at Tresna Werdha Social Institution. *Malaysian Journal of Medicine and Health Sciences*, 19(Supplement 9), 197–204. <https://doi.org/10.47836/mjmhs.19.s9.29>
- Azizah, U. N., Wurjanto, M. A., Kusariana, N., & Susanto, H. S. (2022). The Relationship Of Sleep Quality With Glycemic Control In Diabetes Mellitus Patients : Systematic Review. *Journal Of Community Health Epidemiology*, 7(1), 411–422. <https://doi.org/10.14710/Jekk.V7i1.13310>
- Carolina, P., & Aziz, Z. A. (2019). Family Support In Improving The Quality Of Life Of Patients With Chronic Kidney Failure At RSUD Dr. Doris Sylvanus Palangka Raya. *Health Dynamics Journal Of Midwifery And Nursing*, 10(2), 795–808. <https://doi.org/10.33859/Dksm.V10i2.484>
- Damayanti, S. (2015). *Diabetes Mellitus & Nursing Management*. Yogyakarta: Nuha Medika.
- Damayanti, S. (2019). *Diabetes Mellitus & Nursing Management*. Yogyakarta: Nuha Medika.
- Dheny, M. (2019). The Relationship Between Visual Intelligence And Long Suffering With Self Management In Type 2 Diabetes Mellitus Patients At Internal Medicine Poly RSUD Haji Surabaya. In *Journal Of Nursing* (Vol. 3, Issue 1). [https://repository.unair.ac.id/82990/Diabetes Mellitus Type 2](https://repository.unair.ac.id/82990/Diabetes%20Mellitus%20Type%202). (2015). In *Faculty Of Health Sciences, University Of Muhammadiyah Ponorogo* (Vol. 4, Issue 1).
- Erda, R., Harefa, C. M., Yulia, R., & Yunaspi, D. (2020). The Relationship Of Family Support And Stress To The Quality Of Life Of Type II Diabetes Mellitus Elderly. *Journal Of Nursing*, 12(4), 1001–1010.
- Felicia. (2017). The Relationship Between Depression And Quality Of Life In Type 2 Diabetes Mellitus Patients At Puskesmas Amplas Medan. <http://repositori.usu.ac.id/handle/123456789/3807>.
- Ginting, D., & Brahmins, N. E. B. (2019). The Relationship Between Family Support And The Activity Of The Elderly Participating In Posyandu Activities In Lumban Sinaga Village, Working Area Of The Lumban Sinaga Health Center, Pangaribu District, North Tapanuli Regency In 2017. *Journal Of Healthcare Technology And Medicine*, 5(1), 72. <https://doi.org/10.33143/Jhtm.V5i1.327>
- Hartanto, F. M. (2018). The Relationship Between Family Support And The Quality Of Life Of DM Patients At RSUD Kabupaten Temanggung Hospital In 2018. In *Publication Manuscripts*.
- Helmawati. 2021. *Prevent Diabetes Before It's Too Late*. Editor Herman Adamson. Yogyakarta : Healthy. Retrieved June 23, 2022
- Ministry Of Health. 2020. *Infodatin 2020: Stay Productive, Prevent, And Overcome Diabetes Mellitus*. Jakarta.
- Lara, A. G., & Hidajah, A. C. (2017). The Relationship Between Education, Exercise Habits, And Diet With The Quality Of Life Of The Elderly At Puskesmas Wonokromo Surabaya. *Journal Of PROMKES*, 4(1), 59. <https://doi.org/10.20473/Jpk.V4.I1.2016.59-69>
- Mulyana, Z. A., Andas, A. M., & Astuti, P. (2022). Prevalensi Kualitas Tidur Keluarga di Ruang Rawat Inap RS Izza Karawang di Masa Pandemi Covid-19. *Jurnal Surya Medika*, 7(2), 190–198. <https://doi.org/10.33084/jsm.v7i2.2815>
- Muzakir, A. (2016). Analysis Of Nursing Clinical Practice In Diabetes Mellitus Patients With TENS (Transcutaneous Electric Nerves Stimulation) Therapy Innovation Intervention For 15 Minutes To Reduce Peripheral Nueropathy Pain In The Emergency Department (IGD) Of A.Wahab Hospital SJ. In *Journal Of Nursing* (May Issue). <http://etd.lib.metu.edu.tr/upload/12620012/index.pdf>
- Nabela, S., Kusyani, A., Roni, F., & Joko Prasetyo. (2022). Literature Review: Relationship Between

- Family Support And Quality Of Life In Patients With Diabetes Mellitus. 20(1), 1–11.
- Ningrum, T. P., Okatiranti, & Wat, D. K. K. (2017). The Relationship Of Family Support With The Quality Of Life Of The Elderly (Case Study: Kelurahan Sukamiskin Bandung). *BSI Journal Of Nursing*, V(2), 6. [Http://Ejournal.Bsi.Ac.Id/Ejurnal/Index.Php/Jk](http://Ejournal.Bsi.Ac.Id/Ejurnal/Index.Php/Jk) 83
- Gems, T. P. (2021). Factors Related To The Anxiety Level Of Type 2 Diabetes Mellitus Patients At The Tamalanrea Jaya Health Center In Makassar City In 2021.
- Prima, A., Harahap, D., Lanahdiana, L., Ilyas, A. S., Rambu, S. H., Hermawan, A., Andas, N. H., & Andas, A. M. (2022). Prevalence Anxiety Family Members of Patients Admitted to Inpatient Hospital Room during Pandemic COVID-19. *Open Access Macedonian Journal of Medical Sciences*, 10(E), 1029–1034. <https://doi.org/10.3889/oamjms.2022.9968>
- Qiftiyah, M. (2018). Overview Of Factors (Family Support, Knowledge, Pregnancy Status And Type Of Childbirth) Behind The Occurrence Of Post Partum Blues On The 7th Day Of Postpartum Mothers (At Polindes Doa Ibu Gesikharjo And Polindes Teratai Kradenan Palang). *Journal Of Midwifery*, 10(2), 9. <https://doi.org/10.30736/Midpro.V10i2.75>
- Rahayu, Tanti Dwi. (2020). The Relationship Between Family Support For Adherence To The Use Of Anti-Tuberculosis Drugs (OAT) In The Puskesmas Area Of Sukun District, Malang City. *Eprints.Um*, 4(1), 1–23.
- Sari, S. Amelia. (2017). The Relationship Between Family Support And The Activeness Of The Elderly In Participating In The Elderly Posyandu. In *Journal Of Nursing* (Vol. 549).
- Sitorus, N., Suriani, O., & Putri, I. Y. S. (2018). Determinants Of Quality Of Life Of Type 2 Diabetes Mellitus Patients In Bogor City. Ministry Of Health Of The Republic Of Indonesia.
- Sri Wahyuni. (2018). Identification Of Quality Of Life In Diabetes Mellitus Patients At Siti Khodijah Muhammadiyah Hospital Abang Sepanjang Branch Sidoarjo (Vol. 7, Issue 2).
- Theresia, B. (2021). Literature Review: The Relationship Of Self Management To Quality Of Life In Type 2 Diabetes Mellitus Patients.
- Tumanggor, W. A. (2019). The Relationship Between Self-Care And The Quality Of Life Of Diabetes Mellitus Patients At Santa Elisabeth Hospital Medan 2019. *Stikes Saint Elisabeth Medan*, 1–73.