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Relation Between Self Efficacy and Quality of Life in Type II Diabetes Mellitus Patient in Sukabumi District

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ABSTRACT

The target of the study was patients with type II diabetes mellitus. Data were analyzed using univariate analysis to test each variable and bivariate test to test the relationship between variables. Result: Self-efficacy in patients with Type 2 Diabetes Mellitus in the Working Area of Puskesmas in Sukabumi District is in the insufficient category. Quality of life in Type 2 Diabetes Mellitus patients in the Working Area of Puskesmas in Sukabumi Regency is in the moderate category. Self-efficacy has a significant relationship (p value=0.001) with the quality of life of Type 2 Diabetes Mellitus patients in the Working Area of Puskesmas in Sukabumi District.

1. INTRODUCTION

Diabetes mellitus is categorized into two types: type 1 Insulin Dependent Diabetes Mellitus (IDDM) and type II Non-Insulin Dependent Diabetes Mellitus (NIDDM). Type 1 DM is a condition where the body experiences absolute insulin deficiency. This type of condition is caused by an autoimmune disease that damages the beta cells of the pancreas [1]. First-degree diabetes mellitus is characterized by the destruction of pancreatic beta cells. First-degree diabetes mellitus is a catabolic disorder characterized by absolute insulin deficiency, elevated blood glucose, and breakdown of body fat and protein [2]. Type II diabetes mellitus is a situation where blood sugar rises due to the pancreatic beta cells producing less insulin and also a disturbance in insulin function or insulin resistance [1]. Insulin resistance is aggravated by the decreased production of insulin as a result of which blood glucose levels increase, thus qualifying the diagnosis of diabetes mellitus [2].

The largest cause of death in the world is heart and blood vessel (cardiovascular) disease. Up to 50% of these are related to diabetes. The sad fact is that 1 person per 6 seconds or 10 people per minute dies from diabetes [3]. The risk of complications from type II diabetes mellitus continues to overshadow people's lives, around 12-20% of the world's population is thought to have this disease and every 10 seconds people in the world die from complications caused by the disease [2]. According to the IDF's 7th edition of the Diabetes Atlas, from a record 220 countries worldwide, the number of people with diabetes is expected to rise up from 415 million in 2015 to 642 million in 2040. Nearly half of this number is in Asia, especially India, China, Pakistan and Indonesia.

Type II diabetes mellitus represents 90% to 95% of the world's population with diabetes mellitus [4]. World Health Organization (2018) data shows that as many as 422 million adults have diabetes mellitus and as many as 1.6 million die from diabetes mellitus every year. The International Diabetes Federation (IDF) organization estimates that in 2019 there are 463 million people aged 20-79 years in the world suffering from diabetes mellitus. In Indonesia, the prevalence of diabetes mellitus is 6.7% (10,276,100) cases of diabetes mellitus [5]. Based on research results on Kemenkes RI (2018), the prevalence of diabetes mellitus in West Java increased from 1.3% to 1.7%. From the data of the Health Office in Sukabumi District (2021), the number of patients with diabetes mellitus showed 16,086 cases in Sukabumi District. Puskesmas data in 2022 showed that the number of patients suffering from diabetes mellitus from January to September was 179 people.

Tabel 1 Distribution Frequency of 10 Most Common Diseases in January - September Year 2022

No	Type of Disease	Total	Percentage (%)
1.	ISPA	2086	36%

2.	Myalgia	679	12%
3.	Hipertensi	662	11%
4.	Dermatitis	653	11%
5.	Dyspepsia	522	9%
6.	Demam	339	5,3 %
7.	Diare dan Gastroenteritis	280	4,9%
8.	Skabies	226	3,9%
9.	Gastroduodenitis (No Specific)	194	3%
10.	Diabetes Melitus	179	3%

People who have been diagnosed with diabetes will notice gradual changes in their daily activities [6]. People living with diabetes will experience changes in their mental state, lifestyle, quality of life and physical condition. Changes in physical condition include changes in appearance such as thinning hair, hair that falls out easily, teeth that are easily loosened and loose, and dry mouth [7]. People with diabetes mellitus also have other physical changes, such as frequent urination, hunger and thirst, cold sweat, wounds that take a long time to heal, trembling, and dizziness [8]. Long-term complications of type II diabetes mellitus such as cardiovascular disease, chronic kidney failure, retinal failure that can lead to blindness, and nerve damage that can lead to impotence and gangrene with amputation risk that will occur if blood sugar control is poor [9]. Incorrect diabetes management can result in various complications, which usually fall into two categories: miscrovascular and mascrovascular complaints, which can even lead to death. This affects the patient's quality of life [10].

4 pillars of management in type II diabetes mellitus are education, medical nutrition therapy, physical exercise and pharmacological intervention [11]. The aim of management in diabetes mellitus is to achieve normal blood glucose levels without the occurrence of hypoglycemia and serious disruption of the patient's activity pattern, which can be achieved by a balanced diet, exercise, and the use of oral hypoglycemic drugs or insulin [12]. As an educator, nurses play an important role in motivating and improving self-efficacy among patients with type II diabetes mellitus as well as providing appropriate information about the disease, prevention, complications, treatment, and management of type II diabetes mellitus. The treatment of diabetes requires complex behavior changes ranging from lifestyle to diet. One of the factors that can make these behavioral changes achieved is self-efficacy, special actions are required to achieve the desired results [13]. Self-efficacy aims to make an individual believe in their own abilities so that they can carry out the tasks given competently and effectively [14].

Self-efficacy is helpful for predicting improved self-management. Individuals who have good efficacy will try to achieve specific goals despite facing obstacles. Several studies have found that individuals with high levels of self-efficacy have a strong positive relationship with participation in diabetes self-management behaviors, although it does not occur simultaneously in all domains of self-management [15]. The implementation of self-management of patients with diabetes mellitus II is influenced by various factors, one of which is self-efficacy and self management. A few studies have found that individuals with a level of self-efficacy have a positive relationship with participation in diabetes self-management behaviors, even though it does not occur simultaneously in all domains of self-management [15].

Quality of Life is a happy and satisfied feeling in people with diabetes mellitus so that they can carry out daily activities independently [16]. Quality of Life is commonly used as a benchmark in chronic disease conditions [17]. Quality of Life can be mirrored by how high a person's level of peace is, many factors must be the focus of attention because determining Quality of Life does not stand alone based on a single causal factor. Factors to be considered include age, gender, education level, socioeconomics, and the presence of chronic diseases. This is a risk factor in determining a person's Quality of Life, if there is a change or disturbance in one of the points mentioned above, it can reduce the quality of life [18] . Diabetes mellitus sufferers have a risk of decreasing quality of life as much as 6.75 times compared to people who do not suffer from diabetes mellitus [4].

The purpose of this study was to examine the relationship between self-efficacy and quality of life in patients with type II diabetes mellitus in Sukabumi District.

2. METHOD

This research used descriptive correlation method with cross-sectional approach. The population of this study were 179 patients with type II diabetes mellitus (January-September 2022 period) with a sample of 64 people where the sample calculation used the Slovin formula with full rounding. The sampling technique used was the probality sampling method of simple random sampling. Sampling criteria include inclusion and exclusion criteria where each criterion determines whether or not the sample can be used. After the data is obtained, validation and reliability tests are carried out first. After that, the data was processed through editing, coding, data entry and data cleaning. Data were analyzed using univariate analysis to test each variable and bivariate test to test the relationship between variables.

3. RESULTS AND DISCUSSION

Univariat Analysis

a. Age

Table 2 Distribution of Respondents by Age

Age	Total (n)	Percentage (%)
20-35	6	9,4%
>35	68	90,6%
Total	**64**	**100%**

Table 2 shows that most respondents aged 20-35 years were 6 respondents (9.4%), and respondents aged > 35 years were 58 respondents (90.6%).

b. Education

Table 3 Distribution of Respondents Based on Education

Education	Total (n)	Percentage (%)
Elementary HS	24	37,5%
Junior HS	11	17,2%
Senior HS	22	34,4%
Higher Education	7	10,9%
Total	**64**	**100%**

Based on table 3, it shows that the number of respondents with elementary school education was 24 respondents (37.5%), respondents with junior high school education were 11 respondents (17.2%), respondents with high school education were 22 respondents (34.4%), and respondents with higher education were 7 respondents (10.9%).

c. Gender

Table 4 Distribution of respondents based on gender

Gender	Total (n)	Percentage (%)
Male	31	48,4%
Female	33	51,6%
Total	**64**	**100%**

Table 4 shows that most of the respondents were male as many as 31 respondents (48.4%), and female respondents were 33 respondents (51.6%).

d. Occopation

Table 5 Distribution of Respondents Based on Occupation

Occopation	Total (n)	Percentage (%)
Housewife/ Not Working	34	53,1%
Enterpreneur	24	37,5%
Civil Servant	6	9,4%
Total	**64**	**100%**

Based on table 5, it shows that most of the respondents were housewives / not working as many as 34 respondents (53.1%), 24 respondents (37.5%) were self-employed workers, and 6 respondents (9.4%) were civil servants.

e. Duration of Diabetes Mellitus

Table 6 Distribution of Respondents Based on Duration of Diabetes Mellitus

Duration of Diabetes Mellitus	Total (n)	Percentage (%)
1-5 year	50	78,13 %
6-10 year	11	17,19 %
11-15 year	4	4,68 %
Total	**64**	**100%**

Based on table 6 shows that the large number of respondents with long suffering from type 2 diabetes mellitus for 1-5 years were 50 respondents (78.13%), 6-10 years were 11 respondents (17.19%), 11-15 years were 3 respondents (4.68%).

f. Self-Efficacy

Table 7 Frequency Distribution of Respondents' Self Efficacy

Self Efficacy	Total (n)	Percentage (%)
Good	18	28,1%
Less	46	71,9%
Total	**64**	**100%**

Table 7 shows that the self-efficacy of respondents in the good category was 18 respondents (28.1%), and the poor category was 46 respondents (71.9%).

g. Quality of Life

Table 8 Frequency Distribution of Quality of Life

Quality of LIfe	Total (n)	Percentage (%)
Good	13	20,3%
Fair	43	67,2%
Less	8	12,5%
Total	**64**	**100%**

Table 8 shows that the Quality of Life of respondents in the good category was 13 respondents (20.3%), the moderate category was 43 respondents (67.2%), and the poor category was 8 respondents (12.5%).

Bivariat Analysis

Table 9 Relationship between Self-Efficacy and Quality of Life in Type 2 Diabetes Mellitus Patients in the Working Area of Puskesmas, Sukabumi District.

Self -efficacy	Quality of LIfe						Total		P Value
	Good		Fair		Less				
	F	%	F	%	F	%	F	%	0,001
Good	9	14,1%	7	10,9 %	2	3,1%	18	28,1 %	
Less	4	6,2 %	36	56,2 %	6	9,4%	46	71,9 %	
Total	**13**	**20,3 %**	**43**	**67,2 %**	**8**	**12,5%**	**64**	**100%**	

Based on table 9 above, of the 64 respondents, the data shows that good self-efficacy who experienced good Quality of Life were 9 respondents (14.1%), good self-efficacy who experienced sufficient Quality of Life were 7 respondents (10.9%), good self-efficacy who experienced less Quality of Life were 2 respondents (3.1%). While less self-efficacy who experienced good Quality of Life was 4 respondents (6.2%), less self-efficacy who experienced sufficient Quality of Life was 36 respondents (56.2%), and less self-efficacy who experienced less Quality of Life was 6 respondents (9.4%). From the results of the chi-square test obtained P value: 0.001 <0.05, where it can be concluded that there is a relationship between self-efficacy and Quality of Life in patients with type 2 diabetes mellitus in the working area of the Buniwangi Health Center, Sukabumi Regency.

Discussion

Self-efficacy is a key notion of social cognitive theory developed by [13], which defines self-efficacy as an individual's belief in his or her ability to organize and perform certain tasks needed to obtain expected results. Self-efficacy is an important component of general social cognitive theory, in which it is said that individual behavior and environmental factors for health and chronic diseases are highly interrelated [19]. Individuals with type II diabetes mellitus in the implementation of management require changes in personal behavior, and the environment in daily activities [20].

The factors that influence self-efficacy in patients with type 2 diabetes mellitus are age, education level, socio-economic and length of suffering. At the age of 40-65 years, it is also called the success stage, which is the time of maximum influence, self-guidance and self-assessment, so that at that age the patient has good self-efficacy. The level of education will generally affect the ability to process information. Education is an important factor in diabetes mellitus patients to be able to understand and regulate themselves as well as in controlling blood sugar. In the income factor that contributes to self-efficacy because it helps in getting access to health services and long suffering. According to [21] people who suffer from diabetes mellitus are longer after adapting to diabetes mellitus treatment compared to people who have had the disease for a long time.

The results of the study [22] found that 34 respondents (46.6%) had good self-efficacy and 39 respondents (53.4%) had less self-efficacy. According to researchers, self-efficacy states that individuals who have good self-efficacy will always stick to their goals, and vice versa, individuals who have poor efficacy will have low commitment to their goals.

Based on Table 8, the results showed that the quality of life of respondents in the good category was 13 respondents (20.3%), in the moderate category was 43 respondents (67.2%), and in the poor category was 8 respondents (12.5%). This research is in line with Solih's research (2020), it can be seen that most of the respondents' quality of life in the good category were 23 respondents (23.5%), in the moderate category were 56 respondents (57.1), and in the poor category were 19 respondents (19.4%).

Quality of life is an individual's perception of his position in life, in the context of culture, the value system in which they are and their relationship with life goals, expectations, standards set and one's attention [23]. Quality of life in people with Diabetes Mellitus is one of the main focuses in treatment, as much as possible a good quality of life must be maintained [24]. Factors that affect the quality of life of patients with type 2 diabetes mellitus include gender, education, age, socioeconomic

status and complications due to diabetes mellitus. These complications can increase the patient's physical, psychological, and social disabilities.

The results of the study [22] showed that the quality of life of patients with type 2 DM was found that out of 73 respondents, 37 respondents (50.7%) had a quality of life in the good category and as many as 36 respondents (49.3%) had a poor quality of life. According to the researcher, most respondents have a good quality of life because people with diabetes mellitus feel able to accept their current situation and feel satisfied with their efforts in treatment. Meanwhile, respondents who have sufficient quality of life because respondents feel enough to accept their condition and respondents feel enough with their efforts in treating diabetes mellitus. And respondents who have a poor quality of life because the respondent feels anxious about the condition of the pain experienced, and the respondent feels less confident in his efforts in treatment.

Quality of life greatly affects the condition of people with diabetes mellitus. As much as possible, a good quality of life in patients with diabetes mellitus must be maintained. Based on Table 4.9 From the results of the chi-square test obtained P value: 0.001 <0.05, where it can be concluded that there is a relationship between self-efficacy and the quality of life of patients with type 2 diabetes mellitus in the Puskesmas Working Area in Sukabumi Regency. The results of this study are in line with research [22] with the title of the relationship between self-efficacy and family support with the quality of life of patients with type 2 diabetes mellitus at the internal medicine clinic rsud dr. soedarso pontianak where the study used the Chi-Square test with a sample of 73 respondents. which is used with non-probabillity sampling technique. In research [22] where there is a relationship between self-efficacy and the quality of life of patients with type 2 DM with a p value of 0.001 which means there is a relationship between self-efficacy and the quality of life of patients with type 2 diabetes mellitus at the Internal Medicine Clinic of Dr. Soedarso Pontianak Hospital.

Self-efficacy in patients with type 2 diabetes focuses on the beliefs they have about their ability to carry out self-care or diabetes self-management [25]. Self-efficacy possessed by people with diabetes mellitus is good or poor can be formed by the individuals themselves. The existence of beliefs in diabetes mellitus patients can be shown from a certain behavior and change certain mindsets so that they can manage and minimize the symptoms they experience and improve their quality of life [26]. These results are also in line with research conducted by [27] which shows that the correlation between self-efficacy and quality of life is significant (p=0.000). The correlation coefficient value of 0.751 indicates a strong correlation strength with a positive correlation direction. Research conducted by [28] also explains that self-efficacy is significantly positively related to self-management behavior (diet, physical activity, drug therapy, foot care) in type 2 DM patients.

Researchers argue that there is a relationship between self-efficacy and quality of life because self efficacy forms a motivation within the patient and regulates emotions and allows a person to form an appropriate environment so that it helps achieve the goals of the patient, namely to minimize symptoms and follow treatment properly. Someone who has good efficacy will encourage someone to behave positively in his life and have an impact on high self-confidence in responding to certain things to achieve goals so that it will affect the treatment program that is being carried out starting from eating arrangements in accordance with health worker recommendations, physical exercise, controlling blood sugar levels and consuming drugs so that it can maintain and improve a good quality of life in patients. Conversely, if self efficacy is sufficient or lacking, a person will be anxious, feel unable and avoid tasks that are considered difficult, resulting in a lack of participation from patients in carrying out a therapy/treatment program and having an impact on the patient's quality of life in the moderate or low category.

4 CONCLUSION

Self-efficacy in patients with Type 2 Diabetes Mellitus in the Working Area of Puskesmas in Sukabumi District is in the insufficient category. Quality of life in Type 2 Diabetes Mellitus patients in the Working Area of Puskesmas in Sukabumi Regency is in the moderate category. Self-efficacy has a significant relationship (p value=0.001) with the quality of life of Type 2 Diabetes Mellitus patients in the Working Area of Puskesmas in Sukabumi District.

REFERENCES

[1] Haryono. (2019). *Buku Ajar Asuhan Keperawatan Pada Pasien Dengan Gangguan Sistem Endokrin*. Pustaka Bumi Press.
[2] Kusniadi, N. (2015). *Stop! Diabetes, Hipertensi, Kolestrol Tinggi, Jantung Koroner*. Istana Medika.
[3] Tandra, H. (2017). *Segala Sesuatu Yang Harus Ketahui Tentang Diabetes* (2nd Ed.). Pt Gramedia Pustaka.
[4] American Diabetes Association. (2015). Standards Of Medical Care In Diabetes 2015-Abridged For Primary Care Providers. *Clin Diabetes*, *33*(2), 77–113.
[5] Idf. (2019). International Diabetes Federation (Idf) Diabetes Atlas. In *Idf Diabetes Atlas, 8th Edition* (Idf Diabet).
[6] Nursari, M. (2014). Hubungan Efikasi Diri Dengan Kualitas Hidup Pada Pasien Diabetes Melitus Di Polikilinik Interna Blud Sanjiwani Gianyar. *Keperawatan Jiwa, Komunitas Dan Manajemen*, *2*, 186–192.
[7] Sofia, Dewi, J. (2013). *Antara Dukungan Keluarga Dengan Kualitas Hidup Klien Diabetes Mellitus Tipe 2 Di Rumah Sakit Wijaya Kusumah Kuningan*. 98–102.
[8] Hidayat, F., Hamid, A. Y. S., Jiwa, D. K., Ilmu, F., Universitas, K., Koping, H., Dengan, I., Kepatuhan, T., & Diabetes, P. (2014). *Penyandang Diabetes Mellitus Sebagai Anggota*. 175–183.
[9] Hasdianah. (2012). *Mengenal Diabetes Melitus Pada Orang Dewasa Dan Anak- Anak Dengan Solusi Herbal*. Nuha Medika.
[10] American Diabetes Association. (2018). Standard Medical Care In Diabetes 2018. *The Journal Of Clinical And Applied Research And Education*, *41*(January). Https://Doi.Org/10.2337/Dc18-Sint01
[11] Perkeni. (2015). Pedoman Pengelolaan Dan Pencegahan Diabetes Melitus Tipe 2 Di Indonesia. In *Perkeni*.
[12] Black, H. (2014). *Keperawatan Medikal Bedah* (8th Ed.). Egc.
[13] Bude, O. (2020). *Hubungan Self Efficacy Dengan Kualitas Hidup Pada Pasien Diabetes Tipe 2*.
[14] Pace, G. (2017). *A Adaptation And Validation Of The Diabetes Manajement Self Effcacy Scale Brazilian Portuguese* (1st Ed.).
[15] Sharoni, K. (2012). Self Efficacy And Self Care Behaviour Of Malaysian Patients With Type 2 Diabetes : A Cross Sectional Survey. *Nursing And Health Sciences, 14(1)*, 38–45. Https://Doi.Org/Http://Doi.Org/10.1111/J.1442- 2018.2011.00658.X
[16] Mhd. Zainudin, W. U., & Herlina. (2015). Hubungan Stress Dengan Kualitas Hidup Penderita Diabetes Melitus Tipe 2 Mhd. Zainuddin 1 , Wasisto Utomo 2 , Herlina 3. *Jom*, *2*(1), 890–898.
[17] Walker, S. (2014). *Effect Of Diabetes Self Efficacy On Glycemic Control Mediacation Adherence Self Care Behaviours And Quality Of Life In A Predominantliy Low In Come Minority Population*. *3*, 349–355.
[18] Safitri, A., Marwati, T., & Handayani, L. (2022). Faktor Yang Berhubungan Dengan Kualitas Hidup (Quality Of Life) Penderita Diabetes. *Jurnal Ilmiah Indonesia*, *7*(1), 15361–15379.
[19] Nellisa, D., Khairani, K., Keperawatan, R. R.-J. I., & 2022, Undefined. (2022). Hubungan Self Efficacy Dengan Kualitas Hidup Lansia Dengan Diabetes Mellitus Di Kota Banda Aceh. *Jurnal.Unsyiah.Ac.Id*, *10*(3), 1. Http://Www.Jurnal.Unsyiah.Ac.Id/Jik/Article/View/22351
[20] Manuntung, A. (2020). Efikasi Diri Dan Perilaku Perawatan Diri Pasien Diabetes Melitus Tipe 2 Di Wilayah Puskesmas Pahandut. *Adi Husada Nursing Journal*, *6*(1), 52. Https://Doi.Org/10.37036/Ahnj.V6i1.159
[21] Bararah, T., & Jauhar, M. (2013). *Asuhan Keperawatan: Panduan Lengkap Menjadi Perawat Professional*. Prestasi Pustaka
[22] Nisa, K., Nurfianti, A., & Sukarni. (2018). Hubungan Efikasi Diri Dan Dukungan Keluarga Dengan Kualitas Hidup Penderita Diabetes Melitus Tipe 2 Di Klinik Penyakit Dalam Rsud Dr Soedarso Pontianak. *Proners*, *4*(1), 1–7.
[23] Sugiyama, T., Steers, W. N., Wenger, N. S., Duru, O. K., & Mangione, C. M. (2015). Effect Of

A Community-Based Diabetes Self-Management Empowerment Program On Mental Health-Related Quality Of Life: A Causal Mediation Analysis From A Randomized Controlled Trial. *Bmc Health Services Research*, *15*(1), 1–9. Https://Doi.Org/10.1186/S12913-015-0779-2

[24] Winahyu, K. M., Anggita, R., & Widakdo, G. (2019). *Characteristics Of Patients , Self-Efficacy And Quality Of Life Among Patients With Type 2 Diabetes Mellitus*. *7*(3), 277–282.

[25] 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), 58–65.

[26] Nuraisyah, F., Kusnanto, H., & Rahayujati, T. B. (2017). Dukungan Keluarga Dan Kualitas Hidup Pasien Diabetes Mellitus Di Puskesmas Panjaitan Ii , Kulon Progo. *Community Medicine And Public Health*, *33*(1), 25–30.

[27] Ratnawati, N. (2016). Hubungan Efikasi Diri Terhadap Kualitas Hidup Pasien Diabetes Melitus Tipe 2 Di Rs Pku Muhammadiyah Yogyakarta. *Ucv*, *I*(02), 0–116. Http://Dspace.Unitru.Edu.Pe/Bitstream/Handle/Unitru/10947/Miñano Guevara%2c Karen Anali.Pdf?Sequence=1&Isallowed=Y%0ahttps://Repository.Upb.Edu.Co/Bitstream/Handle/20.500.11912/3346/Diversidad De Macroinvertebrados Acuáticos Y Su.Pdf?Sequence=1&Isallowed=

[28] Septiani Dkk. (2020). Pengaruh Peer Group Support Terhadap Self-Care Management Pada Penderita Diabetes Mellitus Di Kecamatan Kembaran. *Jurnal Kesmas Indonesia*, *12 Nomor 1*, 66–76. Http://Jos.Unsoed.Ac.Id/Index.Php/Kesmasindo/Article/View/1915/1357