



The Relationship Of Self Care With The Quality Of Life Of Type II Diabetes Mellitus Patients At Mitra Medika General Hospital Medan

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ABSTRACT

Background; Type II diabetes mellitus is often known as diabetes. Type II diabetes mellitus is a metabolic disorder characterized by an increase in blood sugar levels above the normal threshold. Objective; To determine the relationship between self-care and the quality of life of type II diabetes mellitus sufferers at Mitra Medika Medan General Hospital in 2015. Materials and Methods; The research design used in this research uses the Analytical Survey method with a Cross Sectional approach. The population in this study was type II diabetes mellitus sufferers, totaling 129 respondents. The sampling used was purposive sampling, namely taking samples for a purpose by determining certain characteristics that are considered representative of the population. The sampling was done using the Slovin technique, totaling 56 respondents. Results; Based on the results of the analysis using the Chi-Square test, it shows that the significant probability value (Asymp.Sig) of Self Care is 0.003<sig value α 0.05, this proves that there is a relationship between self care and the quality of life of type II diabetes mellitus sufferers at home. Mitra Medika Medan General Hospital 2015. Conclusion; This research shows that statistically there is a relationship between self-care and the quality of life of type II diabetes mellitus sufferers at Mitra Medika Medan General Hospital in 2015. Type II diabetes mellitus sufferers are expected to improve self-care behavior to improve quality of life, at the research site it is recommended to provide education to type II diabetes mellitus patients about the relationship between Self Care and the quality of life of type II diabetes mellitus sufferers.

ABSTRAK

Latar belakang; Diabetes melitus tipe II sering dikenal dengan sebutan kencing manis. Diabetes melitus tipe II merupakan kelainan metabolisme yang ditandai dengan peningkatan kadar gula darah di atas ambang batas normal. Objektif; Untuk mengetahui hubungan perawatan diri dengan kualitas hidup penderita diabetes melitus tipe II di Rumah Sakit Umum Mitra Medika Medan Tahun 2015. Bahan dan Metode; Desain penelitian yang digunakan dalam penelitian ini menggunakan metode Survei Analitik dengan pendekatan Cross Sectional. Populasi dalam penelitian ini adalah penderita diabetes melitus tipe II yang berjumlah 129 responden. Pengambilan sampel yang digunakan adalah

purposive sampling, yaitu pengambilan sampel untuk suatu tujuan dengan menentukan ciri-ciri tertentu yang dianggap mewakili populasi. Pengambilan sampel dilakukan dengan teknik Slovin yang berjumlah 56 responden. Hasil; Berdasarkan hasil analisis dengan menggunakan uji Chi-Square menunjukkan nilai probabilitas signifikan (Asymp.Sig) Self Care sebesar $0,003 < \text{nilai sig } \alpha 0,05$ hal ini membuktikan terdapat hubungan antara self care dengan kualitas kehidupan penderita diabetes melitus tipe II di rumah. RSUD Mitra Medika Medan 2015. Kesimpulan; Penelitian ini menunjukkan bahwa secara statistik terdapat hubungan antara perawatan diri dengan kualitas hidup penderita diabetes melitus tipe II di Rumah Sakit Umum Mitra Medika Medan tahun 2015. Penderita diabetes melitus tipe II diharapkan dapat meningkatkan perilaku perawatan diri untuk meningkatkan kualitas pelayanan, kehidupan, pada tempat penelitian disarankan untuk memberikan edukasi kepada pasien diabetes melitus tipe II tentang hubungan Self Care dengan kualitas hidup penderita diabetes melitus tipe II.

Kata Kunci: Perawatan Diri, Kualitas Hidup, Diabetes Melitus Tipe II

1. INTRODUCTION

Type II Diabetes Mellitus is a chronic disease characterized by hyperglycemia and glucose intolerance, which occurs because the pancreas cannot fully produce insulin or the body cannot effectively use the insulin produced, or both. International Diabetes Federation.

Type II Diabetes Mellitus is an endocrine disease characterized by metabolic disorders and long-term complications involving other organs such as the eyes, kidneys, nerves and blood vessels . Common symptoms of diabetes are polyuria, polyphagia, and polydipsia. The classification of diabetes is type 1 diabetes, type II diabetes, gestational diabetes and other types of diabetes. The type of diabetes that is most commonly affected is Type II diabetes where around 90-95% of people suffer from this disease.

Through pharmacological and non-pharmacological control of blood sugar in Type II Diabetes Mellitus sufferers, complications in Type II DM sufferers can still be suppressed or prevented. If the patient can initiate and carry out self-care activities independently, then the goals of diabetes treatment will be successful. Self care is the ability of individuals, families and communities to maintain health, improve health, prevent disease and overcome disabilities or without the support of health service providers .

Self care is self-care carried out for diabetes patients including diet or diet management, exercise, monitoring blood sugar levels, medication compliance, and foot care to prevent an increase in blood sugar levels .

The patient's ability to carry out Self Care appropriately and successfully is closely related to morbidity and mortality rates and significantly influences the productivity and quality of life of Type II Diabetes Mellitus patients.

The decrease in the quality of life of type 2 Diabetes Mellitus sufferers is usually caused by the sufferer's inability to take care of themselves independently, which is often called Self Care. The inability of diabetes patients to care for themselves will affect their quality of life in terms of physical health, psychological health, social relationships and their relationship with the environment.

Quality of life is a feeling of satisfaction and happiness so that individuals can carry out their daily lives well. There are several aspects that can affect the quality of life, these aspects are the existence of special needs that are continuously ongoing in the treatment of Type II Diabetes Mellitus, symptoms that may appear when blood sugar levels are unstable, complications that can arise as a result of diabetes and sexual dysfunction.

2. RESEARCH METHODE

This research is quantitative research, using a quasi experimental design with a one group pretest-posttest design. This research was carried out by giving a pretest (initial observation) before the intervention was given, after the intervention was given, then a posttest (final observation) would be carried out again. After the intervention is carried out, changes are expected to occur by comparing the pretest and posttest blood pressure. The location of this research was carried out in Dusun II, Helvetia Village, Medan, Jl. Mosque, Gg. Self-subsistent. The research was carried out from March until the end of 2015, starting from submitting the title, initial survey, data collection, proposal consultation, proposal ACC, data processing, and compiling research results. The population in this study was all 40 elderly people with hypertension in Hamlet II, Helvetia Village. Sampling used total sampling, namely with a sample of 60 elderly people with hypertension.

3. RESULT AND ANALYSIS

Characteristics of Respondents: Table 1 shows the Frequency Distribution of Characteristics Based on Age, Gender, Education, Occupation, Marital Status, Monthly Income and Length of Type II Diabetes Mellitus at Mitra Medika Tanjung Mulia General Hospital in 2015.

Table 1. Characteristics of Respondents

No	Characteristic	Total	
		f	%
1	Age		
	Late adulthood (36-45 years)	4	7,1
	Early Elderly (46-55 years)	20	35,7
	Late Old Age (56-65 years)	26	45,6
	Old Age (<65 years)	6	10,7
2	Gender		
	Man	24	42,9
	Woman	32	57,1
3	Education		
	SD	7	12,5
	SMP	21	36,8
	SMA	18	31,6
	University	10	17,9
4	Occupation		
	IRT	21	37,5
	Farmer	6	10,7
	Self-employed	15	26,8
	Government employees	4	7,1
	Etc	10	17,9
5	Marital status		
	Marry	41	73,2
	Widow	9	16,1
	Widower	6	10,7

6	Monthly Income		
	UMR	47	83,9
	> UMR	9	16,1
7	Suffering from Type II DM for a long time		
	< 2 Years	34	59,6
	>2 Years	22	38,6
	Total	56	100

Based on table 1, characteristics of respondents based on age, it was found that of the 56 respondents, the majority were aged 56-65 years, namely the late elderly period with 26 respondents (46.4%), followed by those aged 46-55 years or early elderly with 20 respondents (35.7%). Age is a factor that can influence the occurrence of diabetes mellitus. The results of the study showed that the majority of respondents were in the age range above 45 years. This is in line with research conducted by Annisa Pahlawati entitled The relationship between education level and age with the incidence of diabetes mellitus in the working area of the Palaran Community Health Center, Samarinda City in 2013, that someone aged > 45 years is at risk of developing diabetes mellitus due to protective or preventing factors that have decreased. (11). The research results showed that the majority were women, 32 respondents (57.1%). Meanwhile, there were 24 male respondents (42.9%). This is in line with research by Hassanein et al (2014) which shows that there is a relationship between gender and the incidence of type II diabetes mellitus. The high incidence of diabetes mellitus in women can be caused by differences in body composition, lifestyle, stress levels and women have a greater chance of increasing their body mass index than men (12).

Characteristics of respondents based on education were that most had junior high school education, 21 respondents (36.8%). This is in line with Ismonah's research which shows that there is a relationship between education and self-care management of diabetes mellitus. Education also influences Diabetes mellitus patients because someone who has a higher education tends to have good knowledge about health and has a positive and open attitude in receiving information so that patients will be more active in carrying out self-care such as self-care activities (13).

The characteristics of respondents based on work showed that the majority were housewives (21 respondents (37.5%). Meanwhile, the fewest were PNS (Civil Servants) 4 respondents (7.1%). Characteristics of respondents based on marital status showed that the majority were married, 41 respondents (73.2%). Followed by widow status, there were 9 respondents (16.1%). Meanwhile, the fewest were those with widower status, namely 6 respondents (10.7%).

Characteristics of respondents based on monthly income showed that 47 respondents (62.5%) had minimum income. Characteristics of respondents based on the length of time they have suffered from type II diabetes mellitus, there are more respondents who suffer < 2 years, namely 34 respondents (59.6%). while > 2 years were 22 respondents (38.8%).

Univariate Analysis: aims to determine the frequency distribution of a respondent's answers to variables based on the research problem outlined in the frequency distribution table. Based on research conducted at Mitra Medika Tanjung Mulia Hospital, Medan in 2015, the following research results were obtained.

Table 2. Frequency Distribution of Self Care in Type II Diabetes Mellitus Patients at Mitra Medika Tanjung Mulia General Hospital in 2015.

No	Self Care	Total	
		f	%
1	Good	17	30,4

2	Enough	19	33,9
3	Not Good Enough	20	35,7
Total		56	100

Based on table 2 above, it can be seen that of the 56 respondents, the majority had poor self-care, 20 respondents (35.7%) and the least had good self-care, 17 respondents (30.4%).

Table 3. Frequency distribution of quality of life in type II diabetes mellitus sufferers at Mitra Medika Tanjung Mulia General Hospital in 2015

No	Quality of Life	Total	
		f	%
1	Good	17	30,4
2	Enough	18	32,1
3	Not Good Enough	21	37,5
Total		56	100

Based on table 3 above, it can be seen that the highest quality of life is in the poor category, 21 respondents (37.5%), the least is in the good category, 17 respondents (30.4%).

Bivariate Analysis: Bivariate analysis aims to determine whether there is a relationship between the self-care variable (x) and the quality of life variable (y).

Table 4. Cross tabulation of the relationship between self-care and quality of life for type II diabetes mellitus sufferers at Mitra Medika Tanjung Mulia General Hospital, Medan, 2015

No	Self Care	Quality of Life						Total	P-Value	
		Good		Enough		Not Good Enough				
		f	%	f	%	f	%			
1	Good	11	19,6	3	5,4	3	5,4	17	30,4	0,003
2	Enough	2	3,6	6	10,6	11	19,6	19	33,9	
3	Not Good Enough	4	7,1	9	16,1	7	12,5	20	35,7	
Total		17	30,4	18	32,1	21	37,5	56	100	

Based on table 4, it can be seen that the cross tabulation between Self Care and the Quality of Life of type II diabetes mellitus sufferers at the Mitra Medika Tanjung Mulia General Hospital, Medan in 2015. Of the 56 respondents, the highest number was good Self Care with a good quality of life and good Self Care. enough with poor quality of life as many as 11 respondents (19.6%). Based on the results of the Chi square test, it shows that the significant value for the probability of self-care is $\text{sig-}p = 0.003$ or $< \text{sig } \alpha = 0.05$. This proves that there is a relationship between self-care and quality of life in type II diabetes mellitus sufferers.

Self Care: Diabetes Self Care aims to optimize blood sugar levels, optimize quality of life and prevent acute and chronic complications. Several studies show that maintaining normal blood glucose can minimize complications that occur due to Type II Diabetes Mellitus.

Self care is the physical activity or ability of individuals, families and communities to improve health, prevent disease and maintain health, overcome disease and disability with or without the support of family and health service providers (14). This research is in line with Melda's research, regarding factors that influence Self Care in diabetes mellitus sufferers at the Pancur Batu

Community Health Center in 2013, that education influences self care because lack of knowledge will hinder the management of Self Care (15).

The results of research conducted by Ismonah (2013) show that patients with higher education will have a positive and open attitude in receiving information so that they will be more active in carrying out self-care such as self-care activities (13).

The results of research conducted by Prasetyani (2012) regarding the relationship between characteristics, knowledge and family support with self-care abilities in type 2 DM patients at Cialacap Tengah 1 and 2 community health centers. The results show that there is a significant relationship between age and self-care abilities because the patients are Older people tend to experience physical and cognitive decline which can affect their ability to carry out self-care (9). Table 2 shows that 20 respondents (35.7%) have self-care for type II diabetes mellitus sufferers in the poor category, which means that type II diabetes mellitus sufferers still do not carry out good self-care due to the patient's lack of knowledge regarding diabetes self-care regarding diet management. Diabetes and age are factors that influence a patient's level of self-care. This causes patients to be unable to carry out activities such as physical exercise and controlling their diet due to the aging process so that patients experience a decline in memory and thinking patterns.

Wounds that already exist in diabetes mellitus sufferers greatly influence the activities that can be carried out in type II diabetes mellitus patients. Patients who already have wounds tend to have less self-care because the patient is unable to do physical exercise such as walking around the house, caring for and cleaning the feet, Many patients rarely check blood sugar levels and take medication because patients often forget.

Insufficient self-care greatly influences the increase in blood sugar levels in type II diabetes mellitus patients. Therefore, self-care is needed, such as adjusting your diet (a diet low in salt, purine, fat), regulating your intake of carbohydrates and calories, doing physical exercise, checking your blood sugar levels, taking medication as recommended by your doctor, and taking care of your feet, so that your blood sugar levels within the normal range and can prevent complications from other diseases. After research, type II diabetes mellitus sufferers who lack self-care are encouraged to carry out regular self-care to prevent increased blood sugar levels.

Quality of Life: Quality of life is a feeling of satisfaction and happiness so that individuals can carry out their daily lives well. There are several aspects that can affect the quality of life, these aspects are the ongoing special needs in the treatment of Type II Diabetes Mellitus, symptoms that may appear when blood sugar levels are unstable, complications that can arise as a result of diabetes and sexual dysfunction (8).

This research is in line with Chaidir's (2014) research on the relationship between self-care and the quality of life of diabetes mellitus patients, showing that age affects the quality of life of diabetes mellitus sufferers because in the age range of 55-59 years, patients experience a decrease in the work of pancreatic hormones in producing insulin and this results in an increase in blood sugar levels. blood so that patients tend to experience a decrease in quality of life (6).

This research is in line with Hastuti's (2014) research on the relationship between self-care and the quality of life of diabetes mellitus patients in the Garuda room at Anutapura Hospital, Palu. Shows that a long time suffering from diabetes mellitus affects the quality of life because diabetes mellitus sufferers who are <2 years old tend not to be ready to live their lives as diabetes mellitus sufferers and experience a decrease in quality of life (12).

According to researchers' assumptions based on research conducted at Mitra Medika Medan General Hospital in 2015, it can be seen that most patients have a poor quality of life, 21 respondents (37.5%) due to several factors that influence it, such as physical health, psychology, social relationships and their living environment. . The majority of patients have a poor quality of

life because it is influenced by their physical health, such as illnesses that hinder daily activities, inability to cope with pain, and disturbed sleep patterns.

The length of time suffering from type II diabetes mellitus greatly affects the quality of life in type II diabetes mellitus patients because patients who suffer from it for < 2 years need to adjust themselves in carrying out daily activities so that patients feel their life is less satisfied due to the physical changes experienced by the patient which causes a decrease in quality. life. The length of time suffering from diabetes mellitus also influences an individual's experience and knowledge in treating type II diabetes mellitus.

Type II diabetes mellitus sufferers who already have wounds tend to have a low quality of life because of the patient's feelings regarding the pain and anxiety experienced by the patient, dependence on medical care, limited mobility so that the patient experiences a decrease in quality of life.

The Relationship between Self Care and the Quality of Life of Type II Diabetes Mellitus Sufferers

Based on research conducted at Mitra Medika Hospital in Medan in 2015, using the Chi-Square test, a significant value or p -value of 0.003 and α -value (0.05), H_0 is rejected and H_a is accepted, meaning there is a significant relationship between self care with the quality of life of type II diabetes mellitus sufferers.

According to researchers' assumptions, self-care greatly affects the quality of life of type II diabetes mellitus sufferers, because if physical activity is carried out correctly and well, such as always following a diet, consuming food according to doctor's recommendations, doing regular exercise, checking blood sugar levels regularly, and caring for the feet so that blood sugar levels remain controlled, thereby preventing complications from other diseases and improving the quality of life for people with type II diabetes mellitus. Good self-care can also prevent and speed up wound healing because if blood sugar levels are within the normal range, the wound healing process will be faster so that the quality of life for type II diabetes mellitus sufferers will also increase.

Shows the results that the quality of life will be better if self-care is carried out well and patients who have less self-care have a poorer quality of life (10).

4. CONCLUSION

Based on the results and analysis carried out by researchers regarding the relationship between self-care variables and the quality of life of type II diabetes mellitus sufferers at the Mitra Medika Medan general hospital in 2015.

Suggestion: Hopefully the results of this research will be a benchmark for future researchers and can be used as initial data for conducting further research regarding variables related to the quality of life of diabetes mellitus sufferers such as self-efficacy, social support and complications.

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