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Correlation Between Self-Care And Quality Of Life In Patients With Type 2 Diabetes Mellitus At Royal Prima General Hospital, Medan

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ABSTRACT
Self-care plays a crucial role in managing Type 2 Diabetes Mellitus (T2DM) and directly impacts patients' quality of life. This study aims to analyze the correlation between self-care and the quality of life of T2DM patients at Royal Prima General Hospital, Medan. This research employs a cross-sectional design with a sample size of 1.760 patients, selected through 200 Samples. Data were collected using standardized self-care and quality of life questionnaires. The results indicate a significant positive correlation between self-care and quality of life, with a p-value < 0.05. Patients who demonstrated better self-care practices reported higher quality of life scores. These findings suggest that enhancing self-care behaviors through education and support programs can improve the overall well-being of T2DM patients.

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INTRODUCTION

Currently, there are many diseases that can attack humans, one of which is non-communicable diseases (NCDs). Non-communicable diseases (NCDs) have become a major problem in Indonesian society. Non-communicable diseases tend to continue to increase globally and nationally, they have been ranked in the top ten causes of death.(Nurdiantami et al., 2020). This is marked by a shift in the epidemiological pattern of disease from infectious diseases which tend to decrease to non-infectious diseases which are increasing globally in the world.(I Gede, 2022).

Changes in human lifestyles such as lifestyle, socio-economic, urbanization and industrialization will ultimately increase the prevalence of non-communicable diseases, especially degenerative diseases. The tendency to switch from traditional foods to fast and fatty foods, especially in urban areas, results in changes in disease, namely a decrease in infectious diseases and an increase in non-infectious (degenerative) diseases. This shows that an epidemiological transition has occurred. One type of non-communicable disease that turns out to cause high morbidity and mortality is diabetes mellitus(Syam, 2022).

The endocrine system plays a role in maintaining and regulating very important functions, for example: response to injury, stress, reproduction, growth and development, ionic hemostasis and metabolism.(Setiawan, 2021). Endocrine glands are glands that release certain substances into the bloodstream. The pancreas functions to produce the

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hormones insulin and glucagon. The function of the pancreas is very important in the body's metabolic system, in addition to producing hormones, the pancreas also functions as the main organ for producing enzymes and digesting food.(Sofwan, 2022). The endocrine system regulates and maintains body functions, if endocrine disorders occur it will cause complex problems especially disturbed body function metabolism. Some endocrine disorders are Diabetes Mellitus, Hyperthyroidism, Hypothyroidism, Cushing's syndrome, Addison's disease, Acromegaly, and Gigantism.(Fitriani, 2020).

Diabetes Mellitus is a metabolic disorder characterized by hyperglycemia with the characteristic of fasting blood glucose levels of more than 126 mg/dl or abnormalities in insulin secretion, insulin function, or both.(Soelistijo, 2021). Diabetes is a metabolic disorder with multiple etiologies known to be caused by disorders in carbohydrate, lipid and protein metabolism as a result of insufficiency of insulin function from beta Langerhans cells of the pancreas gland, or as a result of the lack of responsiveness of body cells to insulin.(Umam, 2020).

Type 2 diabetes mellitus is a disorder of insulin secretion or insulin function (insulin resistance) in target organs, especially the liver and muscles. Initially, insulin resistance does not yet cause clinical diabetes. At that time, pancreatic beta cells can still compensate for this condition and hyperinsulinemia occurs and blood glucose is still normal or slightly increased. 90% of diabetes cases are type 2 diabetes mellitus with characteristics of impaired insulin sensitivity and/or impaired insulin secretion(Suryati, 2021). Type 2 diabetes mellitus clinically appears when the body is no longer able to produce enough insulin to compensate for the increase in insulin resistance.(Decroli et al., 2019).

Endocrine disorders with an estimated prevalence in the United States of at least 5% in adults include diabetes mellitus, impaired fasting glucose, and impaired glucose tolerance. The least prevalent conditions, affecting less than 1% of the American population, are juvenile diabetes mellitus and pituitary adenoma. The conditions with the lowest incidence are adrenocortical carcinoma, pheochromocytoma, and pituitary adenoma. Certain disorders, such as hyperparathyroidism and thyroid disorders, are more common in women. As expected, the prevalence of diabetes mellitus is highest among ethnic minorities.(Sherita, 2024). The prevalence of endocrine system disorders in Italy is 25%, where endocrine cases that occur are hypogonadism at 15%. The prevalence of endocrine system disorders in Indonesia is not fully explained because it is rare. The most common endocrine system emergency is diabetes, although other endocrine emergencies are relatively rare, but it is important to be aware of this, because of the high mortality rate and its impact on patient survival, diabetes becomes an endocrine system emergency because it has a high prevalence(Guyton, 2020).

The high prevalence of type 2 diabetes mellitus in the world is the most common type of diabetes, accounting for more than 90% of all diabetes worldwide. IDF states that the countries with the highest number of sufferers in the world are: China 116.4 million people, India 77 million people, the United States 31 million people, these three countries are in the top 3 in 2019. Indonesia is ranked 5th in the world with 18 million sufferers in 2020(IDF, 2021). The only country in Southeast Asia that is included in the list, so it can be estimated

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how big Indonesia's contribution is to the prevalence of diabetes in Southeast Asia.(Ministry of Health of the Republic of Indonesia, 2020).

The results of the 2018 Riskesdas showed that the highest prevalence of diabetes mellitus in Indonesia was 4, namely DKI Jakarta (3.4%), East Kalimantan (3.1%), in Yogyakarta (3.1%), and North Sulawesi (3%). North Sumatra was ranked 12th with 2% prevalence of diabetes in Indonesia(Ministry of Health of the Republic of Indonesia, 2020).

The number of diabetes mellitus sufferers in North Sumatra increases every year. Based on data obtained from the North Sumatra Health Office, it was stated that from 2017 to 2018 the number of type 1 diabetes mellitus sufferers was 18,458 people and type 2 was 54,843 people.(Nora, 2021). In 2019, the Medan City Health Office recorded the number of DM patients at 27,075 patients, in total, patients aged > 55 years amounted to 85%, also of that total, 70% were women from all patients spread across 39 health centers in Medan City. From this data, it can be seen that DM in North Sumatra is quite high(Nuryatno, 2019). The increase in the number of cases of diabetes mellitus has an impact on the increase in complications experienced by patients with type 2 diabetes mellitus. Complications that occur due to diabetes include disorders of the blood vessels and disorders of the nervous system or neuropathy.(Nora, 2021).

DM complications can affect all aspects of the sufferer's life and have an increased risk of complications such as heart disease, stroke, neuropathy in the feet which can increase the incidence of infected foot ulcers and even the need for amputation, retinopathy, kidney failure and can be life-threatening or even fatal if not treated immediately and properly controlled.(Up to 202). Diabetes mellitus sufferers who experience complications will have an impact on decreasing life expectancy (UHH), decreasing quality of life, and increasing morbidity rates.(I Gede, 2022).

Quality of life is a good or bad condition of diabetes mellitus patients in viewing their disease. Quality of life is a person's perception of their position in life in the context of the culture and values in which they live and in relation to life goals, expectations, standards, and concerns which are comprehensive concepts that can affect a person's physical health, mental condition, level of dependency, social relationships, personal beliefs, and their relationship to future environmental expectations.(Anggraini, 2021).

Aspects that can affect quality of life, namely the existence of special needs that are continuously ongoing in the care of diabetes mellitus, what symptoms appear when blood sugar levels are unstable, complications that can arise due to diabetes and sexual dysfunction. These aspects can be overcome if patients can carry out good and regular control through regular, appropriate and permanent lifestyle changes. So that there are no complications that can reduce the quality of life of diabetes mellitus patients and can carry out daily life properly.(Imelda, 2014).

One of the factors that can improve the quality of life of type 2 DM patients is by implementing good self-care. Good self-care is seen from compliance with diet, blood sugar measurement, exercise, availability of blood sugar level testing tools and education.(Tjok, 2020). Self-care is a treatment carried out independently by patients to observe their own needs without depending on the surrounding environment. Self-care management of type 2

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DM patients consists of following a diet program, physical exercise, controlling blood sugar levels, medication, and the availability of blood sugar level testing tools to prevent further complications and control blood glucose (Malini, et al, 2022). Self-care in the context of patients with chronic diseases is complex and is very much needed for the successful management and control of the chronic disease. Self-care can be used as a problem-solving technique in relation to coping abilities and stressful conditions due to chronic diseases.(Luther et al., 2022). This is in accordance with the research conductedThe Witch (2021)where diabetes sufferers who carry out self-care have a positive influence on lifestyle changes in attitudes and behavior to prevent complications, so that there is an increase in the quality of life as a whole, namely bio, psycho, socio and spiritual.

Literature Review

Definition of Self-Care

The theory of self-care nursing was put forward by Dorothea E. Orem in 1971 and is known as the self-care deficit nursing theory (SCDNT).(Nursalam, 2020). Self-care is defined as a form of behavior that a person carries out to maintain their health, life, development, and the life around them.(Selviana, 2023). The concept of self-care is that a person must be responsible for implementing self-care for himself and be involved in making decisions regarding his health.(Alligood, 2021).

According toOrem (2019)Self-care is a basic need of an individual where humans try to maintain their quality of life and well-being in healing their illness and avoiding complications. *Self care*in patients with type 2 diabetes mellitus is a type 2 diabetes mellitus management that is carried out for the long term in preventing complications, management can result in psychological changes for patients in the form of depression and stress. This is often associated with self-efficacy and self-motivation of patients in carrying out self-care(Luthfa, 2019).

The better self-care in patients with type 2 diabetes mellitus, the more blood sugar levels can be controlled so that other complications can be prevented, and improve the quality of life of patients with type 2 diabetes mellitus, the goal of good self-care is to be able to control glycemic well and the increase in blood glucose levels after eating and drinking stimulates the pancreas to produce insulin so as to prevent an increase in blood glucose levels which can cause blood glucose levels to decrease slowly. Aspects contained in self-care in type 2 diabetes mellitus are diet, physical activity/exercise, blood sugar monitoring, compliance with drug consumption, and the availability of blood sugar level testing tools (Rah et al., 2020).

Factors Affecting Self-Care in Type 2 Diabetes Mellitus Patients

The factors that can make someone do self-care are as follows:

1) Age

   Age has a positive relationship with self-care. As one ages, one's thinking becomes more rational about the benefits of taking care of oneself. In patients with type 2 diabetes mellitus, it usually occurs at the age of over 30 years and is often experienced by adults over 40 years because insulin resistance increases at the age of 40-60 years. The increasing age increases the prevalence of DM(Ningrum et al.,

2019). As a person gets older, their level of maturity increases, so that a person is able to think rationally about the benefits they will receive when carrying out diabetes self-care.(Ningrum et al., 2019).

2) Socio-economic
A person's socioeconomic status has a positive effect on their self-care behavior. If the economic situation is not sufficient, it will be difficult to visit a health service center regularly, and vice versa.

3) Long suffering
Longer time in suffering from type 2 diabetes mellitus can have an adequate understanding of the importance of self-care for the disease they suffer from so that they can seek all information about their treatment to be used as a basis for their self-care. Patients with a longer diagnosis of type 2 diabetes mellitus will have experience in managing self-care that is quite good. The length of time a person suffers from type 2 diabetes mellitus affects diabetes self-care where patients with a long diagnosis have a better understanding of the importance of diabetes self-management behavior so that they can easily seek information related to diabetes care. Patients with a diagnosis of the disease for years can accept their disease and its treatment, and will have better adaptation to their disease by integrating a new lifestyle into their daily lives.(Ningrum et al., 2019).

4) Emotional aspect
A person's emotional problems, such as stress, sadness, worries about future life, thinking too much about long-term impacts, feeling anxious about the program that will be monitored. Worried about infecting those closest to you, bored with routine care that needs to be followed.

5) Motivation
Motivation can be the most important factor for someone, because it can increase motivation to take care of yourself. People with good motivation will take good care of themselves to achieve their desired goals.

6) Communication
Health workers make an important contribution to increasing patient independence using education. Efforts to increase knowledge help patients set clear and realistic goals to encourage behavioral change and maintain ongoing emotional support. A good relationship between patients and nurses helps the individual. The high level of communication between health workers in terms of providing health education about diabetes self-care activities will increase self-care activities in patients. Communication between health workers related to services provided to clients in the form of providing information/education including diet activities or regulating eating patterns, physical exercise, blood sugar monitoring, adherence to taking medication, and health care. This information is adequately conveyed to clients so that clients have an understanding of the disease they are experiencing. Communication with health workers, in addition to providing information, is also important in compliance with

treatment planning and improving the achievement of results from diabetes management.

7) Knowledge
Someone who is intelligent, thinks critically, and makes decisions for himself. When someone can independently take care of himself. He feels the need to take action to prevent early complications of the disease.

8) Social support
Social support is the support that individuals receive from interacting with other people and helps increase the comfort and security of the individuals involved.(Suhendra et al., 2020).

9) Gender
Gender can contribute to*self care*suffererdiabetes mellitus type 2. Female diabetes mellitus type 2 sufferers show better self-care compared to male sufferers. Self-care for diabetes mellitus type 2 can be done by anyone, both men and women, but in reality women seem to care more about their health so that they will try optimally to do self-care management for the disease they suffer from.(Ningrum et al., 2019).

10) Level of education
The level of education is an indicator that someone has completed formal education, but not an indicator that they have mastered a field of knowledge. Good education certainly produces positive behavior so that they are more open and objective in receiving information, especially in actions.*self care* Type 2 diabetes mellitus. Patients with higher education will generally have a good understanding of implementing self-care for type 2 diabetes mellitus and will often seek information about their disease through the media compared to patients with a low level of education.(Ningrum et al., 2019).

11) Job Level
A person's job affects their level of physical activity, work is an activity or activity of a person to earn income for their daily needs. Length of work is an individual's experience that will determine growth in work that work history greatly affects knowledge, the better a person's job, the better their knowledge of health will be.(Ningrum et al., 2019).

Type 2 Diabetes Mellitus Theory

Diabetes Mellitus is a metabolic disorder characterized by hyperglycemia with the characteristic of fasting blood glucose levels of more than 126 mg/dl or abnormalities in insulin secretion, insulin function, or both.(Soelistijo, 2021). Diabetes mellitus type 2 is a disease whose essential system is caused by insulin resistance. Other diseases such as heart disease and stroke are one of the complications caused by type 2 DM. In addition, type 2 DM has a relatively high mortality rate.(Gumilas et al, 2018).

Type 2 diabetes mellitus is a disorder of insulin secretion or insulin function (insulin resistance) in target organs, especially the liver and muscles. Initially, insulin resistance does not yet cause clinical diabetes. At that time, pancreatic beta cells can still compensate for this condition and hyperinsulinemia occurs and blood glucose is still normal or slightly

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increased. 90% of diabetes cases are type 2 diabetes mellitus with characteristics of impaired insulin sensitivity and/or impaired insulin secretion(Suryati, 2021). Type 2 diabetes mellitus clinically appears when the body is no longer able to produce enough insulin to compensate for the increase in insulin resistance.(Decroli et al., 2019).

The two main pathophysiologies underlying the occurrence of type 2 diabetes mellitus genetically are insulin and the effects of pancreatic beta cell function. Insulin resistance is a common condition for people who are overweight or obese. Insulin cannot work optimally in muscle, fat and liver cells, forcing the pancreas to compensate by producing more insulin. When insulin production by pancreatic beta cells is inadequate to compensate for increased insulin resistance, blood glucose levels will increase, and chronic hyperglycemia will eventually occur. Chronic hyperglycemia in type 2 diabetes mellitus further damages beta cells on the one hand and worsens insulin resistance on the other, so that type 2 diabetes mellitus is increasingly progressive.(Decroli et al., 2019).

Diabetes mellitus (DM) type II is the most widely known type, the average age of DM sufferers is ≥ 30 years. In DM type II the pancreas is able to produce insulin, but the nature of the insulin produced is poor and cannot work as expected as a key to inserting glucose (blood sugar) into cells. Thus there is an increase in blood glucose. Another possibility of DM type II is that the patient's body tissue and muscle cells are not effectively sensitive to (insulin obstruction) so that glucose cannot enter the cells and in the long term accumulates in the bloodstream (Ministry of Health, 2020). (Ministry of Health, 2020).

According toSubiyanto (2019)There is still no clear understanding of the exact cause of type 2 DM, but there are a number of factors that make DM 2 more likely to occur, including the following:

1. Obesity
   Being overweight is a major risk factor for type 2 DM. The more fat tissue a person has, the more insulin receptors are compromised which leads to insulin resistance.
2. Dyslipidemia
   Dyslipidemia, also known as HDL cholesterol levels below 35 mg/dL or triglyceride levels above 250 mg/dL, is associated with a high risk of type 2 DM.
3. Race
   Blacks, Hispanics, American Indians, and Asian Americans are at greater risk of developing type 2 DM than whites, although the reasons for this difference are not clearly understood.
4. Lifestyle (Stress)
   Chronic stress tends to make someone look for fast food that is rich in preservatives, fat, and sugar. This food has a big effect on the work of the pancreas. Stress will also increase the work of metabolism and increase the need for energy sources which results in increased work of the pancreas. High loads make the pancreas easily damaged which has an impact on decreasing insulin(Nuraisyah, 2018).

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METHODS

This type of research is a mix methods research (combination method) using a cross sectional approach. According toThe Last Supper (2019) "Combination research method is a research method that combines or combines quantitative methods and qualitative methods to be used together in a research activity, so that more comprehensive, valid, reliable and objective data is obtained."

According toThe Last Supper (2021)quantitative research is a type of research that uses numbers in responding to data to produce structured information. Qualitative is research that is descriptive and tends to use analysis with an inductive approach. Qualitative research is also called interpretative research, nature research, or phenomenological research. The qualitative approach emphasizes the meaning, reasoning, definition of a particular situation (in a particular contest), and examines more things related to everyday life (Rukin, 2019).

Qualitative research according toHendryadi et al., (2019)is a naturalistic inquiry process that seeks a deep understanding of social phenomena in nature. A case study is a comprehensive description and explanation of various aspects of an individual, a group, an organization, or a program, or a social situation. Case studies are used to provide an understanding of something of interest, a concrete event, and a social process.(Unika, 2018).

*Cross-sectional*is research that is carried out once without any continuation(Sugiyono, 2019). This research design uses Cross Sectional. According toNotoatmodjo (2018)Cross Sectional is a study that studies risk factors and effects, by means of an approach, observation or data collection at the same time.

Population is the totality of every element to be studied that has the same characteristics, it can be individuals from a group, an event, or something to be studied.(Handayani, 2020). Population is a generalization area consisting of: objects/subjects that have a certain quantity and characteristics determined by the researcher to be studied and then conclusions drawn.(Sugiyono, 2019). The population in this study were patients with type-2 diabetes mellitus at RSU Royal Prima Medan in the last 3 months, totaling 1,760 patients.

According toThe Man Who Loved Me (2021)sample is a part of the population. Sample according toThe Last Supper (2019)sample is part of the number and characteristics owned by the population. While sample size is a step to determine the size of the sample taken in conducting a study. From several opinions of the experts above, it can be concluded that the sample is part of the population.

Determination of the sample using interpretation estimation with Structural Equation Modeling (SEM), purposive sampling approach. According to Hair et al., (2019), the sample size in a study if it is too large will make it difficult for researchers to get a suitable research model and it is recommended that the appropriate sample size ranges from 100-200 respondents so that interpretation estimation with Structural Equation Modeling (SEM) can be used so that the sample used in this study was 200 samples.

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The sampling method used in this study is accidental sampling. Incidental Sampling/Accidental Sampling is a sampling technique based on coincidence, namely any type-2 diabetes mellitus patient who accidentally meets the researcher can be used as a sample, if it is considered that the person who was accidentally met is suitable as a data source.(Sugiyono, 2019).

The informants in this study for qualitative analysis were 8 patients. Various variables according toThe Greatest Showman (2019)There are five, namely independent variables, dependent variables, intervening variables, moderating variables, and control variables. However, in this study, the researcher only used two variables, namely the independent variable or free variable and the dependent variable or bound variable.

RESULTS AND DISCUSSION

Quantitative Research Results

The following are the results of univariate analysis of the quality of life of Type 2 DM patients.

Table 1. Distribution of Respondents' Answers on the Quality Variable of Type 2 DM Patients

No	Question	Answer					Total %
	Patient Satisfaction	Very Bad	Bad	Mediocre	Good	Very good	
1	How do you think your quality of life is?	1 (0.5%)	14 (7%)	66 (33%)	62 (31%)	57 (28.5%)	200 (100%)
No	Question	Answer					Total %
		Very No satisfied	No satisfied	Quite satisfied	Satisfied	Very satisfied	
2	How satisfied are you with your health?	-	21 (10.5%)	51 (25.5%)	76 (38%)	52 (26%)	200 (100%)
No	Question	Answer					Total %
		No Once	Seldom	Enough often	Very often	Always	
3	How often does physical pain interfere with your activities?	-	18 (9%)	66 (33%)	75 (37.5%)	41 (20.5%)	200 (100%)
4	How often do you need health services to be able to do your activities?	-	15 (7.5%)	70 (35%)	46 (23%)	69 (34.5%)	200 (100%)
5	How often do you enjoy your life?	5 (2.5%)	13 (6.5%)	62 (31%)	74 (37%)	46 (23%)	200 (100%)
6	How often do you feel that your life has meaning?	-	11 (5.5%)	36 (18%)	65 (32.5%)	88 (44%)	200 (100%)
7	How often are you able to concentrate?	-	12 (6%)	65 (32.5%)	79 (39.5%)	44 (22%)	200 (100%)

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No	Question	Answer					Total %
	Patient Satisfaction	Very Bad	Bad	Mediocre	Good	Very good	
8	How often do you feel safe in your daily life?	2 (1%)	7 (3.5%)	43 (21.5%)	79 (39.5%)	69 (34.5%)	200 (100%)
9	How often do you participate in cleaning the environment where you live?	-	14 (7%)	28 (14%)	109 (54.5%)	49 (24.5%)	200 (100%)
10	How often do you have the energy to do activities?	1 (0.5%)	6 (3%)	49 (24.5%)	92 (46%)	52 (26%)	200 (100%)
11	How often do you like the way you look?	-	21 (10.5%)	75 (37.5%)	78 (39%)	26 (13%)	200 (100%)
12	How often do you have money to meet your daily needs?	-	16 (8%)	97 (48.5%)	65 (32.5%)	22 (11%)	200 (100%)
13	How often is the availability of important information for you in your daily life?	5 (2.5%)	17 (8.5%)	68 (34%)	82 (41%)	28 (14%)	200 (100%)
14	How often do you have the opportunity for fun/recreation?	-	13 (6.5%)	77 (38.5%)	77 (38.5%)	33 (16.5%)	200 (100%)
No	Question	Answer					Total %
		Very Bad	Bad	Mediocre	Good	Very good	
15	How good are you at socializing?	1 (0.5%)	10 (5%)	56 (28%)	83 (41.5%)	50 (25%)	200 (100%)
No	Question	Answer					Total %
		Very No satisfied	No satisfied	Quite satisfied	Satisfied	Very satisfied	
16	How satisfied are you with your sleep?	1 (0.5%)	10 (5%)	59 (29.5%)	76 (38%)	54 (27%)	200 (100%)
17	How satisfied are you with your ability to perform daily activities?	-	1 (0.5%)	87 (43.5%)	106 (53%)	6 (3%)	200 (100%)
18	How satisfied are you with your ability to work?	1 (0.5%)	-	73 (36.5%)	110 (55%)	16 (8%)	200 (100%)
19	How satisfied are you with yourself?	-	15 (7.5%)	75 (37.5%)	87 (43.5%)	23 (11.5%)	200 (100%)
20	How satisfied are you with your current social life?	2 (1%)	13 (6.5%)	74 (37%)	72 (36%)	39 (19.5%)	200 (100%)
21	How satisfied are you with your sex life?	-	6 (3%)	96 (48%)	85 (42.5%)	13 (6.5%)	200 (100%)
22	How satisfied are you with	1	17	77	104	1 (0.5%)	200

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No	Question	Answer					Total %
	Patient Satisfaction	Very Bad	Bad	Mediocre	Good	Very good	
	the support from your friends?	(0.5%)	(8.5%)	(38.5%)	(52%)		(100%)
23	How satisfied are you with the environmental conditions in which you currently live?	1 (0.5%)	5 (2.5%)	66 (33%)	100 (50%)	28 (14%)	200 (100%)
24	How satisfied are you with the health services you receive?	1 (0.5%)	18 (9%)	73 (36.5%)	100 (50%)	8 (4%)	200 (100%)
25	How satisfied are you with the vehicle you own?	-	3 (1.5%)	103 (51.5%)	79 (39.5%)	15 (7.5%)	200 (100%)
No	Question	Answer					Total %
		No Once	Seldom	Enough often	Very often	Always	
26	How often do you have negative feelings such as loneliness, hopelessness, anxiety and sadness?	1 (0.5%)	2 (1%)	87 (43.5%)	105 (52.5%)	5 (2.5%)	200 (100%)

Table 2. Quality of Life of Type 2 DM Patients

Quality of Life of Type 2 DM Patients	n	%
Good	129	64.5
Not good	71	35.5
Total	200	100

Source: Primary Data Processed 2024

Table 2 explains the results of the frequency of quality of life of Type 2 DM patients in this study. The results of the study show that there were 129 (64.5%) patients with good quality of life, and 71 (35.5%) patients with poor quality of life..

The following are the results of univariate analysis of self-care diet of Type 2 DM patients.

Table 3. Distribution of Respondents' Answers on the Self-Care Diet Variable

No	Question	Answer								Total %
	*Self Care*Diet	0	1	2	3	4	5	6	7	
1	On average, in the last month, how many days per week did you plan your meal plan/diet?	-	3 (1.5 %)	34 (17%)	21 (10.5 %)	18 (9%)	27 (13.5 %)	51 (25.5 %)	46 (23%)	200 (100 %)
2	How many days in the last seven days have you	-	5 (2.5 %)	40 (20%)	10 (5%)	15 (7.5 %)	52 (26%)	46 (23%)	32 (16%)	200 (100 %)

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N	Question		Answer							Total
	eaten fruit and vegetables?									
3	How many days in the last seven days did you consume high-fat foods (beef, lamb, pork, fast food) or dairy products (cheese, cream, yogurt, butter)?	-	3 (1.5 %)	36 (18%)	22 (11%)	15 (7.5 %)	46 (23%)	42 (21%)	36 (18%)	200 (100 %)
4	How many days in the last seven days have you regulated your intake of foods containing carbohydrates (rice, bread, noodles, corn, cassava)?	-	4 (2%)	20 (10%)	32 (16%)	19 (9.5 %)	24 (12%)	73 (36.5 %)	28 (14%)	200 (100 %)
5	How many days in the last seven days did you follow a healthy diet?	-	11 (5.5 %)	33 (16.5 %)	11 (5.5%)	17 (8.5 %)	33 (16.5 %)	56 (28%)	39 (19.5 %)	200 (100 %)
6	How many days in the last seven days did you eat snacks containing sugar (such as cakes, biscuits, chocolate, ice cream)?	-	5 (2.5 %)	31 (15.5 %)	16 (8%)	26 (13%)	43 (21.5 %)	39 (19.5 %)	40 (20%)	200 (100 %)

Table 4. Self-Care Diet

*Self Care*Diet	n	%
Good	127	63.5
Not good	73	36.5
Total	200	100

Table 4. explains the results of the frequency of self-care diet of Type 2 DM patients in this study. The results of the study showed that there were 127 (63.5%) patients with good self-care diet, and 73 (36.5%) patients with poor self-care diet.

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Self-Care Physical Activity

The following are the results of univariate analysis of self-care physical activity in Type 2 DM patients.

Table 5. Distribution of Respondents' Answers on the Physical Activity Self-Care Variable

No	Question	Answer								Total
	Self-Care Physical Activity	0	1	2	3	4	5	6	7	%
1	How many days in the last seven days did you do physical activity (e.g. washing, sweeping, mopping, drying) for at least 30 minutes?	-	2 (1%)	45 (22.5%)	17 (8.5%)	7 (3.5%)	20 (10%)	77 (38.5%)	32 (16%)	200 (100%)
2	On how many days in the last seven days did you participate in a special exercise session (e.g., swimming, walking, cycling) other than what you do around the house or what is part of your job?	-	-	25 (12.5%)	33 (16.5%)	13 (6.5%)	29 (14.5%)	58 (29%)	42 (215)	200 (100%)

Table 6. Self-Care Physical Activity

Self CarePhysical Activity	n	%
Good	126	63
Not good	74	37
Total	200	100

Table 6 explains the results of the frequency of self-care physical activity of Type 2 DM patients in this study. The results of the study show that patients with good self-care physical activity were 126 (63%), and patients with poor self-care physical activity were 74 (37%).

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Self-Care Drug Therapy

The following are the results of univariate analysis of self-care drug therapy for Type 2 DM patients.

Table 7. Distribution of Respondents' Answers on the Drug Therapy Self-Care Variable

No	Question	Answer								Total
	Self-Care Drug Therapy	0	1	2	3	4	5	6	7	%
1	How many days in the last week did you take your recommended diabetes medication?	-	3 (1.5%)	24 (12%)	32 (16%)	13 (6.5%)	42 (21%)	53 (26.5%)	33 (16.5%)	200 (100%)
2	Do you use insulin? If yes, how many days in the last seven days did you use the recommended insulin for you?	-	4 (2%)	42 (21%)	11 (5.5%)	18 (9%)	41 (20.5%)	63 (31.5%)	21 (10.5%)	200 (100%)

Table 8. Self-Care Drug Therapy

*Self Care*Drug Therapy	n	%
Good	123	62.5
Not good	77	37.5
Total	200	100

Source: Primary Data Processed 2024

Table 8 explains the results of the frequency of self-care drug therapy for Type 2 DM patients in this study. The results of the study show that patients with good self-care drug therapy were 123 (62.5%), and patients with poor self-care drug therapy were 77 (37.5%).

CONCLUSION

The conclusions in this study are as follows: The majority of respondents in this study were aged >40 years (112 (56%), male (126 (63%), had a high school education (95 (47.5%) and had a duration of suffering >2 years (112 (56%). Majority of quality of lifeType 2 DM patients in this study were in good condition, as many as 129 (64.5%). There isCorrelation of self-care diet with quality of life of Type 2 Diabetes Mellitus Patients at Royal Prima Hospital Medan. There is a correlation between self-care physical activity and the quality of life of Type 2 Diabetes Mellitus Patients at Royal Prima Hospital, Medan. There is a correlation between self-care drug therapy and the quality of life of Type 2 Diabetes Mellitus Patients at Royal Prima Medan Hospital. There is a correlation between self-care

monitoring of blood sugar and the quality of life of Type 2 Diabetes Mellitus Patients at Royal Prima Hospital, Medan. There is a correlation between self-care availability of blood sugar level testing tools and the quality of life of Type 2 Diabetes Mellitus Patients at Royal Prima Medan Hospital. There is a correlation between self-care knowledge and the quality of life of Type 2 Diabetes Mellitus Patients at Royal Prima Medan Hospital.

REFERENCES

Abdullah, Karimuddin, dkk. 2022. Metodologi Penelitian Kuantitatif. Pidie: Yayasan Penerbit Muhammad Zaini

Adiputra, I. Made Sudarma, et al (2021), Metodologi Penelitian Kesehatan, Medan: Yayasan Kita Menulis

Ahyar, Hardani, and Dkk. 2020. Buku Metode Penelitian Kualitatif & Kuantitatif. Yogyakarta: CV. Pustaka Ilmu

Alza, Y., Arsil, Y., Marlina, Y., Novita, L., & Agustin, N. D. (2020). Aktivitas Fisik , DurasiPenyakit Dan Kadar Gula. Gizido, 12(1), 18–26

Alligood. (2021). " Your Wellness Program Is Interfering With My Well-Being ": Reducing the Unintended Consequences of Wellness Initiatives in Undergraduate Medical Education. https://doi.org/https://doi.org/10.15694/mep.2021.000146.1

Arikunto, S. (2019). Prosedur Penelitian. Jakarta: Rineka cipta

Anggraini, R. B., Prasillia, A., Studi, P., Keperawatan, I., Citra, S., & Belitung, D. B. (N.D.). (2021). Hubungan Self Care Terhadap Kualitas Hidup Pasien Diabetes Mellitus: Study Literature. In Nursing Science Journal (Nsj) (Vol. 2, Issue 2)

Bandur, A. (2019). Penelitian Kualitatif : Studi Multi-Disiplin Keilmuan dengan NVivo 12 Plus. Bogor: Penerbit Mitra Wacana Media

Bingga IA. Kaitan kualitas tidur dengan diabetes melitus tipe 2. J Med Huatama. 2021;02

Decroli E. Diabetes Melitus Tipe 2. Padang: Fakultas Kedokteran Universitas Andalas; 2019. 1-52

Drisco, J. W, & Maschi, T. (2016). Content Anlysis, Oxford University Press

Fitriani I, F., Fadilla, R., & Studi Sarjana Keperawatan STIKES Mitra Adiguna Palembang Komplek Kenten Permai Blok, P. J. (2020). Pengaruh Senam Diabetes 53 Terhadap Penurunan Kadar Gula Darah Pada Pasien Diabetes Mellitus. In Jurnal Kesehatan Dan Pembangunan (Vol. 10, Issue 19)

Ghozali, Imam. 2018. Aplikasi Analisis Multivariate dengan Program IBM SPSS 25. Badan Penerbit Universitas Diponegoro: Semarang

Gumilas, et al., (2018). Karakteristik penderita diabetes melitus (dm) tipe 2 di purwokerto. Jurnal Kesehatan, 1(2), 14–15

Guyton, Arthur C. HE. insulin glukagon dan diabetes mellitus. Buku Ajar Fisiologi Kedokteran. Ermita, editor. Jakarta: EGC; 2020

Hardianto D. Telaah Komprehensif Diabetes Melitus: Klasifikasi, Gejala, Diagnosis, Pencegahan, Dan Pengobatan. Jurnal Bioteknologi Biosains Indonesia. 2021;7(2):304–17

Handayani, Ririn. 2020. Metodologi Penelitian Sosial. Yogyakarta: Trussmedia Grafika

Hendryadi, Tricahyadinata, I., & Zannati, R. (2019). Metode Penelitian: Pedoman Penelitian Bisnis dan Akademik. Jakarta: Lembaga Pengembagan Manajemen dan Publikasi Imperium (LPMP Imperium)

Hair, J. F. et. al. 2018. A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). SAGE Publications, Los Angeles

Heryana, A. (2020). Buku Ajar Metodologi Penelitian pada Kesehatan Masyarakat. Bahan Ajar Keperawatan Gigi, June, 1-187

IDF.(2021). Data International Diabetes Federation (IDF) Atlas

I Gede, A.S.R. Mertha, I.M. Wedri, N.M. 2022. Hubungan Selfcare Dengan Kualitas Hidup Pada Pasien Diabetes Melitus Tipe II. Jurnal Gema Keperawatan Volume 15 Nomor 2

Imelda, D. Sigalingging, V.Y.S. Samosir, K.L. 2024. Hubungan Self Care Dengan Kualitas Hidup Pasien Diabetes Melitus Tipe 2. Jurnal Keperawatan Jiwa (JKJ): Persatuan Perawat Nasional Indonesia Volume 12 No 2, Mei 2024, e-ISSN 2655-8106, p-ISSN2338-2090 FIKKes Universitas Muhammadiyah Semarang bekerjasama dengan PPNI Jawa Tengah

Khoiroh, S.M., & Audia, Y. (2018). Hubungan Kepatuhan Diet dengan Kualitas Hidup Pasien Diabetes Mellitus Tipe II di Wilayah Kerja Puskesmas Juanda Samarinda. Jurnal Ilmu Kesehatan, 6(1), 76–83

Kemenkes RI. (2020). Infodatin 2020 Diabetes Melitus Pusat Data dan Informasi Kementerian Kesehatan RI

Kementerian Kesehatan Ri. (2020). Infodatin Tetap Produktif, Cegah, Dan Atasi Diabetes Melitus 2020. In Pusat Data Dan Informasi Kementerian Kesehatan Ri (Pp. 1–10)

Kriyantono, R. (2020). Teknik praktis riset komunikasi kuantitatif dan kualitatif disertai contoh praktis Skripsi, Tesis, dan Disertai Riset Media, Public Relations, Advertising, Komunikasi Organisasi, Komunikasi Pemasaran. Rawamangun: Prenadamedia Group

Lestari, Zulkarnain, & Sijid, A. (2021). Diabetes Melitus: Review etiologi, patofisiologi, gejala, penyebab, cara pemeriksaan, cara pengobatan dan cara pencegahan. Prosiding Seminar Nasional Biologi, 7(1), 237–241

Luther, M., Haskas, Y., & Kadrianti, E. (2022). Hubungan Self Care Dengan Quality Of Life Penderita Diabetes Melitus TIPE II. Jurnal Ilmiah Mahasiswa & Penelitian Keperawatan, 2(3), 401–407. http://www.jurnal.stikesnh.ac.id/index.php/jimpk/article/view/946

Luthfa, I. (2019). Implementasi Selfcare Activity Penderita Diabetes Mellitus di Wilayah Puskesmas Bangetayu Semarang. Buletin Penelitian Kesehatan, 47(1), 23–28. https://doi.org/10.22435/bpk.v47i1.779

Mahendra, 2019. “Analisis Pelaksanaan Rekam Medis Pasien Rawat Inap Di Rumah Sakit Umum Daerah Dr. Rasidin Padang Tahun 2018.” Fakultas Kesehatan Masyarakat Universitas Andalas. Padang 7–15

Mardawani. (2020). Praktis Penelitian Kualitatif Teori Dasar dan Analisis Data dalam Perspektif Kualitatif. Yogyakarta : Deepublish Publisher

Masturoh, I., dan N. Anggita. 2018. Metodologi Penelitian Kesehatan. Kementerian Kesehatan RI. Jakarta

Miles, Matthew B. & A. Michael Huberman. 2018. Analisis Data Kualitatif. Jakarta: UI-Press