

Knowledge And Attitude Relationship With Compliance Diet Of Type II Diabetes Mellitus Patients At Home Grandmed Hurt Of Lubuk Pakam

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ABSTRACT

Diabetes mellitus (DM) is the oldest disease in the world and is related to the metabolism of glucose levels in the blood. DM can be seen from several sets of aspects of symptoms that arise in a person due to an increase in blood sugar levels (hyperglycemia) due to insulin deficiency. The high prevalence of DM, which is mostly classified as type II DM, is due to the interaction between factors of genetic susceptibility and exposure to the environment. Factors that influence adherence to the type II DM diet include the knowledge and attitudes of people with type II DM. The diabetes mellitus diet is an important part of the comprehensive management of the Type DM diet. The purpose of this study was to determine the relationship of knowledge and attitudes with dietary adherence of people with type II diabetes mellitus. The type of research used is quantitative with analytical design and cross-sectional approach, the number of people in this study is 35 people. The technique of taking sampel in purposive sampling research. The results showed that there was a relationship of knowledge with dietary adherence of people with type II DM (p Value = 0.017) and there was a relationship of attitudes with dietary compliance of people with type II DM (p Value = 0.044). Suggested to the officer. Hospitals are expected to provide special education about diabetes mellitus to patients either in groups or individuals for patients and patients' families.

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1. INTRODUCTION

Non-communicable disease (PTM) is a health problem which has received national and global attention. Morbidity and mortality PTM is increasing in Indonesia. PTM is a leading cause of death most of the countries in the Americas, Eastern Mediterranean, Europe, Southeast Asia, and West Pacific. WHO states that there are several major causes of death in the world as of 2019 sequentially are ischemic heart disease, stroke, chronic obstructive pulmonary disease, lower respiratory infections, neonatal conditions, cancer of the trachea, bronchi and lungs, Alzheimer's and other forms of dementia, diarrhoea, diabetes mellitus, and kidney disease. Deaths from diabetes also increased by 70 percent from 2000 to 2019. There is an increase in deaths of up to 80 percent in men. The death rate from this disease has increased the most in Eastern Mediterranean [1].

The diabetes mellitus diet is an important part of the comprehensive dietary management of type II DM. Involvement of all team members including doctors, nutritionists, other health workers as well as patients and their families. For achieve the target of therapy should be given in accordance with the needs of each patient with DM. The principle of the rules for eating in people with DM is almost the same as the recommendations for eating in the general public, namely eating a balanced diet and according to the calorie and nutritional needs of each individual. DM sufferers need to be given knowledge about the importance of adhering to a meal schedule, type and amount of calorie content. Especially in DM sufferers who are taking drugs to increase insulin secretion or treat insulin themselves [2] Very necessary knowledge of the patient on the management of diabetes mellitus diet. Patients who have low knowledge of eating attitudes and adherence to diabetes mellitus treatment as well low. In addition to knowledge, a person's behavior is influenced by attitudes. Attitude is something related to behavior and actions that are based on beliefs based on the norms of society in general religious norms [3].

The diabetes mellitus diet is an important part of diet management DM type II comprehensively. Involvement of all team members is good doctors, nutritionists, other health workers and patients and their families. For achieve therapeutic goals should be given in accordance with the needs of each DM patient. The principle of the rules for eating in people with DM is almost the same as the recommendations for eating in the general public, namely eating a balanced diet and according to the calorie and nutrient needs of each individual. DM sufferers need to be given knowledge about the importance of adherence to schedules meal, type and amount of calorie content. Especially in DM sufferers who taking drugs to increase insulin secretion or insulin therapy itself [4].

Very necessary patient knowledge of dietary management of diabetes mellitus. Knowledgeable patient low eating attitude and adherence to the treatment of diabetes mellitus as well low. In addition to knowledge, a person's behavior is influenced by attitudes. Attitude It is something related to behavior and actions based on beliefs based on the norms of society in general religious norms [5].

Researchers conducted a survey at Grandmed Lubuk Pakam Hospital There were 150 patients with type II diabetes mellitus. Based on the description above, So the researcher wants to know the relationship between knowledge and attitudes Dietary adherence of type II diabetes mellitus patients at Grandmed Hospital Lubuk Pakam.

2. METHOD

This research is a descriptive cross-sectional study using an observational approach or sample data collection for a sample of the population, namely type II diabetes mellitus patients at Grandmed Lubuk Pakam Hospital using a questionnaire sheet. This population is inpatients with type II diabetes mellitus at Grandmed Lubuk Pakam Hospital as many as 150 type II diabetes mellitus sufferers. The sample in this study were 150 inpatients in the inpatient room at Grandmed Lubuk Pakam Hospital. Sampling used a purposive sampling method, namely the population and sampling, which met the inclusion and exclusion criteria, were included in the study until the required number of samples was met. data analysis in this research using Univariate Analysis and Bivariate Analysis

3. RESULTS AND DISCUSSION

Univariate Analysis

Overview of Respondent Characteristics

Table 1 Characteristics of Respondents Based on Age, Gender, Education, and Employment

Age	N	%
29-40	7	20,0
41-50	10	28,5
51-60	18	51,4
Amount	20	100
Gender	N	%
Man	14	40,0
Woman	21	60,0
Amount	35	100
Work	N	%
Doesn't work	14	40,0
Self-employed	10	28,6
Employee	2	5,7
Police	1	2,9
Farmer	5	14,3
civil servant	3	8,6
Amount	35	100
Education	N	%
Elementary school	5	14,3
JUNIOR HIGH SCHOOL	6	17,1
SENIOR HIGH SCHOOL	20	57,1

Bachelor	4	11,4
Amount	35	100

Based on Table 1 above, it can be seen that of the 35 respondents who being the subject of the study obtained frequency characteristics based on age most of the age category 51-60 years as many as 18 people (51.4%), type the sex of the majority of women, namely as many as 21 people (60.0%), type male sex as many as 14 people (40.0), most of the work is not employed as many as 14 people (40.0%), and most of them had high school education as many as 20 people (57.1%).

Frequency Distribution of Knowledge About DM Type II

Table 2 Distribution of Frequency and Percentage of Knowledge of DM sufferers Type II

Knowledge	N	%
Good	27	77,1
Enough	5	14,3
Not enough	3	8,6
Amount	35	100,0

Based on the table above it can be seen that of the 35 respondents showed that the knowledge of people with type II diabetes mellitus was partial small less category as many as 3 people (8.6%).

Distribution of Attitudes of Patients with Type II DM

Table 3 Distribution of Frequency and Percentage of Attitudes of Diabetics Mellitus Type II

Attitude	N	%
Positive	8	22,9
Negative	27	77,1
Amount	35	100,0

Based on the table above it can be seen that of the 35 respondents shows that the attitude of people with diabetes mellitus type II mostly negative category as many as 27 people (77.1%).

Distribution of dietary compliance in type II DM sufferers

Table 4 Distribution of Frequency and Percentage of Patient Compliance with Diet Diabetes Mellitus Type II

Dietary compliance	N	%
obey	8	22,9
Not obey	27	77,1
Amount	35	100,0

Based on the table above it can be seen that of the 35 respondents showed that the dietary adherence of type II diabetes mellitus patients was partial the compliant category was 19 people (54.3%), the non-compliant category was 16 people (45.7%).

Bivariate Analysis

The bivariate analysis carried out in this study was analyzing relationship of knowledge and attitudes with dietary adherence in type II DM DI patients Grandmed Lubuk Pakam Hospital. Statistical tests performed on the analysis bivariate, namely using the chi square statistical test. Results of bivariate analysis described as follows.

Relationship between knowledge and dietary compliance in type II DM patients

Table 5 Analysis of the relationship between knowledge and patient dietary compliance Diabetes Mellitus Type II

Knowledge	Dietary Compliance	Total	P value
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	Obey		Not obey				Odd rasio	
	N	%	N	%	N	%		
Good	18	66,7	9	33,3	27	100,0	0,006	0,017
Enough	0	0,0	5	100,0	5	100,0		
Not enough	1	33,3	2	66,7	3	100,0		
Amount	19	54,3	16	46,7	35	100,0		

Based on table 5 it shows that the knowledge of DM sufferers type II mostly in the good category, namely 27 people (100.0%) have Dietary adherence is mostly in the obedient category, namely 18 people (66.7%) and dietary compliance in the non-adherent category of 9 (33.3%). Statistical test results as well shows the value of Odd Ratio (OR) = 0.006. Chi-square statistical test results shows that the value of p Value = 0.017 means that H_a is accepted so it is suspected that there is a relationship between knowledge and patient adherence to diet type II diabetes mellitus at Grandmed Lubuk Pakam Hospital.

Relationship between attitude and compliance with DM type II Table

Table 6 Analysis of the relationship between attitudes and adherence of DM type II sufferers

Attitude	Dietary Compliance				Total		Odd rasio	P value
	Obey		Not obey		N	%		
	N	%	N	%				
Positive	1	6,3	15	93,8	16	100,0	0,042	0,016
Negative	8	42,1	11	57,9	19	100,0		
Amount	9	25,7	26	74,3	35	100,0		

Based on table 6 shows that the attitude of diabetics type II mellitus mostly negative category that is equal to 19 people (100.0) have dietary adherence, most of the non-adherent categories are equal to 11 people (57.9%), and the compliant category was 8 people (42.1%). Chi-statistic test results square shows that the value of p Value = 0.016 means that H_a is accepted so It is suspected that there is a relationship between attitude and dietary adherence in DM sufferers type II at Grandmed Lubuk Pakam Hospital. The results of the analysis also show the Odd Ratio (OR) value = 0.042 which means that it has a positive attitude opportunity of 0.042 times to increase dietary adherence in type DM sufferers rather than a negative attitude.

DISCUSSION

Relationship between Knowledge and Dietary Compliance for Diabetics Mellitus Type II

Based on the results of the study showed that the patient's knowledge DM type II mostly in the good category, namely 27 people (100.0%) have Dietary adherence is mostly in the obedient category, namely 18 people (66.7%) and dietary adherence non-adherent category of 9 (33.3%). Statistical test results as well shows the value of Odd Ratio (OR) = 0.006. Chi-square statistical test results shows that the value of p Value = 0.017 means that H_a is accepted so it is suspected that there is a relationship between knowledge and patient adherence to diet type II diabetes mellitus at Grandmed Lubuk Pakam Hospital. In the opinion of Benjamin Bloom in Notoadmodjo, (2012) that the formation of new behaviors, especially in adults begins in the domain cognitive, in the sense that the subject knows in advance of the stimulus in the form of external material or object. Thus giving rise to new knowledge on the subject, and then generates an inner response in the form of an attitude subject to the known object. Finally the stimulus is the object already known and fully aware of it will lead to more responses further, namely in the form of action (action) against the stimulus or object earlier.

The results of this study are in accordance with the research conducted by Astuti (2021) The results of the study show that knowledge of diabetics type II mellitus mostly in the good category, namely 36 people (47%) had dietary adherence, most of the obedient categories were 26 people (34%) and diet compliance in the non-adherent category of 10 people (13%). Test results chi-square statistics show that the value of p Value = $0.000 < \alpha = 0.05$ means H_a is accepted so that it is suspected that there

is a relationship between knowledge and dietary adherence of type II DM sufferers at UPTD Pekan Heran Health Center.

The results of this study are in line with the results of research that has been carried out previously by Harahap, I. F. (2018) research results showed that there was relationship between knowledge and dietary compliance with diabetes mellitus in the work area Pustu Sigama, Padang Bolak District, North Padang Lawas Regency with p-value = 0.035.

The results of this study are in line with the results of research that has been carried out previously by Jaya (2019) research results obtained by test statistic (chi square) obtained a value ($p=0.000 \leq \alpha=0.05$) which means that there significant relationship between knowledge and dietary adherence to type 2 diabetes mellitus in the working area of the Sudiang Raya City Health Center Macassar.

The Relationship between Attitude and Compliance in Type II Diabetes Mellitus Patients

Based on the results of the study showed that the attitude of diabetics type II mellitus mostly negative category that is equal to 919 people (100.0) have dietary adherence, most of the non-adherent categories are equal to 11people (57.9%), and the compliant category was 8 people (42.1%). Chi-statistic test results square shows that the value of p Value = 0.016 means that H_a is accepted so It is suspected that there is a relationship between attitude and dietary adherence in DM sufferers type II at Grandmed Lubuk Pakam Hospital. The results of the analysis also show the Odd Ratio (OR) value = 0.042, which means that there is a positive attitude opportunity of 0.042 times to increase dietary adherence in type DM sufferers rather than a negative attitude.

According to Sutja (2019) the patient's attitude factor is greatly influenced by knowledge, and related dietary adherence which is a form of therapy main problem in DM, then every sufferer should have a positive attitude (support) on dietary adherence to prevent complications. Respondents who have a bad attitude tend not to adhere to the diet while Respondents who had a good attitude mostly adhered to a good diet doctor recommended.

The results of this study are in accordance with the research conducted by Astuti (2021) The results of the study showed that the attitudes of type II DM sufferers were partial the large negative category, namely 57 people (75%) had dietary adherence most of the non-compliant categories were 44 people (57.9%) and categories obedient by 13 people (17.1%). The results of the chi-square statistical test show that $p \text{ Value} = 0.012 < \alpha = 0.05$ means that H_a is accepted so it is suspected that there is relationship between attitude and dietary adherence in type II DM sufferers at the UPTD Pekan Wonder Health Center. The results of the analysis also show the value of the Odd Ratio (OR) =3.69 which means that a positive attitude has a chance of 3.69 times can increase dietary adherence in type II DM sufferers compared to attitudes negative.

The results of this study are in line with the results of research that has been carried out previously by Harahap, I. F. (2018) research results showed no relationship between attitude and dietary compliance with diabetes mellitus in the work area of Pustu Sigama, Padang Bolak District, North Padang Lawas Regency with a score $p=0.254$.

The results of this study are in line with the results of research that has been carried out previously by Jaya (2019) From the research results obtained based on the test statistics (chi square) obtained a value ($p=0.003 \leq \alpha=0.05$) which means the relationship significant relationship between motivation and dietary adherence in diabetics type 2 mellitus in the Working Area of the Sudiang Raya Health Center, Makassar City.

Researchers assume that attitude is one of the factors that influencing and closely related to dietary adherence so that Providing appropriate information about the management of this disease is very important This is important to do as an effort to reduce the number of people with diabetes mellitus.

4. CONCLUSION

The characteristics of the respondents consist of the ages of most categories aged 51-50 years as many as 18 people (51.4%), partial sex Most women are as many as 21 people (60.0%). Part work large, namely not working as many as 14 people (40.0%), and education some high school students as many as 20 people (57.1%), The knowledge of type II DM sufferers is mostly in the good category, namely by 27 people (77.1%), The attitude of type II DM sufferers is mostly in the very agree category, namely

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as many as 16 people (45.7%) Dietary compliance of type II DM sufferers is mostly in the compliant category as many as 19 people (54.3%), The results of the chi-square statistical test show that the p value = $0.017 < \alpha = 0.05$ means that H_0 is accepted so it is suspected that there is a relationship between knowledge with dietary compliance of type II diabetes mellitus patients in Grandmed Lubuk Pakam Hospital. The results of the chi-square statistical test show that the p value = $0.016 < \alpha = 0.05$ means that H_0 is accepted so it is suspected that there is a relationship between attitudes towards dietary adherence of type II DM sufferers in the hospital Grandmed Lubuk Pakam.

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