

The Relationship Between Knowledge Level and Prevention of NT Type DM Complications at Perdagangan Hospital, Simalungun Regency

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ABSTRACT

Diabetes Mellitus (DM) is a collection of symptoms that arise in a person caused by an increase in blood glucose levels due to a progressive decrease in insulin secretion against the background of insulin resistance. The prevalence of diabetes mellitus is always increasing every year. This increase is inseparable from the lifestyle that is being lived by the world's population today. This research is descriptive in nature. This study aims to describe the behavior of type II diabetes mellitus patients in preventing complications of diabetes mellitus in the working area of the Trading Health Center in 2021. Sampling in this study using fatal sampling, namely 33 respondents who suffer from type II DM. Of the 33 respondents, 16 respondents (49%) were aged 51-60 years, the majority were female, 21 respondents (64%), the majority had high school education, 13 respondents (40%), and the majority had diabetes for a long time, namely 1-4. years as many as 29 respondents (88%). The results showed that of the 33 respondents who visited the Commercial Health Center in 2021, the majority had good knowledge as many as 22 respondents (67%), the majority had a positive attitude as many as 21 respondents (64%), and the majority had bad behavior as many as 22 respondents (67 %). It is hoped that the community will further improve behavior regarding diabetes mellitus in order to avoid or prevent complications that can arise from diabetes mellitus.

Keywords:

Patient Behavior, Prevention, DM II, Complications

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1. INTRODUCTION

Diabetes Mellitus is a collection of symptoms that arise in a person caused by an increase in blood sugar (glucose) levels due to insulin deficiency both absolute and relative [7]. DM is a disease that becomes a public health problem. Therefore DM is listed in the fourth national research priority for degenerative diseases after cardiovascular, cerebrovascular, rheumatic and cataract diseases [9].

Diabetes is one of the non-communicable diseases that will increase in number in the future. Diabetes is one of the main threats to human health in the 21st century. WHO estimates that in 2000 the number of people with diabetes over the age of 20 is 150 million people and within 25 years later, in 2025 that number will swell to 300 million people. [7]. Diabetes Mellitus (DM) in geriatrics occurs due to the emergence of insulin resistance in old age which is caused by 4 factors: first there is a change in body composition, body composition changes to 53% water, 12% solid cells, 30% fat, while bones and minerals decrease 19 % so that remains The second factor is the decrease in physical activity which will result in a decrease in the number of insulin receptors that are ready to bind with insulin so that the speed of GLUT-4 (glucosetransporter-4) translocation also decreases. The third factor is changes in diet in old age caused by reduced teeth so that the percentage of carbohydrate food ingredients will decrease. The fourth factor 3 is neurohormonal changes, particularly Insulin Like Growth Factor-1 (IGF-1) and plasma dehydroepiandrosterone (DHEAS) [15].

Knowledge and attitude are absolutely needed in preventing this complication of diabetes mellitus. Good knowledge and attitude towards diabetes mellitus will certainly provide positive things to DM sufferers, because with knowledge and good attitude, patients with DM will have a much better control over their diet and quality of life. This clearly can provide excellent conditions for their health, and able to carry out normal activities without any complaints caused by DM disease. And they also understand better what risks will be caused if they do things that are not maintained related to DM disease.

Action is an effort or effort made to prevent or control DM disease. Measures to prevent defects must, of course, start with early detection of complications of DM so that complications can then be managed properly as well as of course management to control blood glucose levels. And steps for type 1 DM are treated with exogenous insulin, using mixed preparations and injection schedules. Treatment of type 2 diabetes ranges from dietary and exercise modifications to the use of oral drug mixtures. Combined regimens and oral hypoglycemic drugs are recommended for patients with difficult-to-control DM. 2 diabetes patients may require exogenous insulin if oral medications fail to maintain all glucose levels [19].

Formulation of the Problem

The research problem formulated based on the background above is: "how is the behavior of type II diabetes mellitus patients in preventing complications of diabetes mellitus at the Trade Hospital of Simalungun Regency in 2021"

2. METHOD

Types of research

This type of research is descriptive in nature which aims to determine the relationship between knowledge level and prevention of complications of type II DM at the Trade Hospital of Simalungun Regency in 2021.

Location and Time of Research

Research Location This research will be conducted at the Trade Hospital of Simalungun Regency in 2021.

Research time

This research will be conducted from May 2021 to August 2021

Data processing

The data that has been collected is processed through the following stages:

1. Editing: checking the data that has been collected and if there are errors or deficiencies in data collection, it will be corrected by research or data collection again.
2. Coding: Providing a code or mark on each data that has been collected can make it easier to enter data into tables.
3. Tabulating: processing data into the form of a frequency distribution table so that it is easier to

3. RESULTS AND DISCUSSION

The 33 respondents, the majority of those with good knowledge were aged 41-50 years as many as 3 respondents (9%) and the less knowledgeable minority were aged 41-50 years as many as 0 respondents (0%). The majority of respondents who have good knowledge are aged 51-60 years as many as 13 respondents (40%), the minority of respondents who have good knowledge are aged 51-60 years as many as 3 respondents (9%). And the majority of respondents with good knowledge aged 61-70 years were 6 respondents (18%), a minority of respondents with less knowledge aged 61-70 years were 24 (8%).

The 33 respondents with good knowledge, 15 were female (46%), the least knowledgeable were 6 respondents (18%). And the majority with good knowledge are male as many as 7 respondents (21%), the less knowledgeable minority are male as many as 5 respondents (15%).

The 33 respondents with good knowledge, 4 (12%) had elementary school education, the majority had less knowledge, 5 (15%). The majority with good knowledge with junior high school education were 6 respondents (18%), a minority with less knowledge was 1 (3%). The majority have a high school education level of 8 (25%), a minority of 5 (15%). And the majority have good knowledge of PT education as many as 4 respondents (12%), a minority of knowledgeable less educated PT as much as 0 (0%).

The 33 respondents, the majority had good knowledge with a duration of DM 1-4 years, 18 respondents (55%), a minority with good knowledge with a duration of DM 1-4 years, 11 respondents (33%). And the majority had less knowledge with a long history of DM 8-11 months as many as 4 respondents (12%), a minority of less knowledgeable with a long history of DM 8-11 months as many as 0 (0%).

Characteristics of Age, Gender, Education and Length of Suffering from DM with Attitudes of Type II Diabetes Mellitus Patients

The following are the results of research on the characteristics of age, gender, education and duration of DM based on attitude. Out of the 33 respondents, the majority of respondents had a positive attitude of the female type, 12 respondents (376), a minority of negative attitudes were female, as many as 9 respondents (2272). And the majority had a positive attitude of the male sex as many as 9 respondents (2796), a minority had a negative attitude of the male sex as many as 3 respondents (956).

The 33 respondents, the majority were positive with elementary school education, 4 respondents (12%), a minority (15%). The majority had a positive attitude with a junior high school education of 8 respondents (15%), a minority of 2 (6%). The majority have a positive high school education attitude of 8 (25%), a minority of 5 (15%). And the majority are positive about PT education as many as 4 respondents (12%), the minority is 0 (0%).

The 33 respondents, the majority had a positive attitude with a duration of suffering from DM 1-4 years, as many as 17 respondents (52%), a minority of 12 respondents (36%). And the majority have a positive attitude with a long history of DM 8-11 months as many as 4 respondents (12%), a minority of 0 (0%).

4. CONCLUSION

1. Based on the patient's knowledge about the prevention of complications of type II DM, out of 33 respondents it was good that the majority had good knowledge aged 1-60 years as many as 13 (40%) and a minority with good knowledge were aged 41-50 years as many as 3 (976). Meanwhile, the majority with less knowledge aged 61-70 years was 8 (24%) and a minority with less knowledge aged 41-50 years was 0 (0%). In terms of gender, 15 (46%) had good knowledge of women, while 5 (15%) had less knowledge of men. From the level of education, the majority with good knowledge of 8 (25%) are senior high school students and the minority with less knowledge is PT as much as 0 (0%). Meanwhile, from the duration of suffering from DM the majority had good knowledge for 1-4 years as many as 18 (55%), and a minority with less knowledge was for 8-11 months as much as 0 (0%).
2. Based on the attitude of type II patients towards the prevention of complications of DM, of the 33 respondents it was shown that the majority had a positive attitude, aged 51-60 years, with 11 (34%) and a minority with a negative attitude, aged 41-50 years, with 0 (0%). In terms of gender, the majority with a positive MA attitude were 12 women (37%) and a minority with a negative attitude were 3 men (9%). From the level of education, the majority with a positive attitude were 8 (25%) SMA and the minority with a negative attitude were 0 (0%) PT. Meanwhile, from the duration of suffering from DM, the majority had a positive attitude for 1-4 years as many as 17 (52%) and a minority had a negative attitude for 8-11 months as much as 0 (0%).
3. Based on the patient's actions in preventing type II DM, out of 33 respondents the result was that from the level of knowledge the majority had bad actions, namely 12 (36%) years of age 61-70. Of the sexes, the majority who had bad actions were women as much as 13 (40%). From the level of education, the majority who had bad behavior were high school students, 10 (31%). And from the long time suffering from DM, the majority have had a rush for 1-4 years as many as 21 (64%).

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