
**THE RELATIONSHIP OF KNOWLEDGE ATTITUDE AND
DIETARY COMPLIANCE WITH BLOOD SUGAR
LEVELS IN DIABETES MELLITUS PATIENTS IN
THE INTERNAL DISEASE CLINIC OF VITA
INSANI PEMATANGSIANTAR HOSPITAL**

Arsiaty¹, Yulia Delfahedah²
Universitas Efarina^{1,2}

Abstract

Diabetes Mellitus (DM) is a chronic metabolic disorder caused by impaired insulin secretion, insulin resistance, or a combination of both. Controlling blood sugar levels is the main thing for DM sufferers, one of which is with diet/nutrition therapy. Correct diet therapy is based on basic knowledge and attitudes. good for controlling blood sugar This study aims to determine the relationship between knowledge, attitudes and dietary compliance with blood sugar levels in DM patients at the Internal Medicine Polyclinic at Vita Insan Hospital in 2019. This research is an analytic study with a cross-sectional design, carried out from July 2019. the sample used a purposive sampling technique consisting of 52 DM patients. The data taken included aspects of knowledge, attitudes.diet adherence (primary) and blood sugar levels (secondary) Computerized data processing using Chi Square test Univariate analysis results showed 69.2% of patients had uncontrolled blood sugar levels, 59.6% of patients had insufficient knowledge but 59.6% patients had a positive attitude towards efforts to control blood sugar and 53.8% of patients were disobedient to the diet given. From Bivariate analysis there was a significant relationship between knowledge, dietary adherence and blood sugar levels ($p < 0.05$), but for attitudes there was no significant relationship ($p > 0.05$) Suggestions for health workers to further improve patient understanding of the DM diet so that patient's blood sugar levels are controlled by providing education and developing information provision,for the family it is necessary to provide support and motivation so that the patient is on a diet.

Keywords: Knowledge, Attitude, Diet Compliance, Blood Sugar

INTRODUCTION

Along with the times and increasing population, the increase in the number of sufferers of a disease is also higher. One of the diseases that has experienced a high increase in the number of sufferers is degenerative diseases. Degenerative diseases are chronic chronic diseases that affect a person's quality of life and productivity. According to the America Diabetes Association (ADA) 2014, Diabetes is a group of metabolic diseases characterized by hyperglycemia that occurs due to defects in insulin secretion, insulin action, or both. Hyperglycemia is defined as high blood sugar levels from the normal fasting range of 80-90 mg/100 ml, or the non-fasting range of 140-160 mg/100 ml of blood (ADA, 2014).

According to data from the International Diabetes Federation (IDF) in 2012, more than 371 million people in the world suffer from diabetes. Based on these data, 8.3% of the world's population has diabetes mellitus (WHO International working group on diabetic foot (IWGDF) estimates that by 2030 the number of DM sufferers will increase to reach 438 million people. The most DM in the world with a total of 7.6 million people (IDF

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Atlas, 2012) This figure is expected to continue to increase to 21,257 000 people in 2030. prevention (CDC) 2012.

Based on Basic Health Research (RISKESDAS) data in 2013, the prevalence of DM from 1.1% in 2011 increased to 2.4% in 2013. The lowest DM prevalence was in Lampung province, namely 0.7%, and the highest DM prevalence was in the DI Yogyakarta province, namely 2.6% West Sumatra is included in the largest DM prevalence, which ranks 7th out of 33 provinces with a prevalence of 1.3%.

Formulation of the problem

Based on the above background, the formulation of the problem determined in this study is "Is there a relationship between knowledge, attitudes and dietary compliance with blood sugar levels in Diabetes Mellitus patients at the internal medicine clinic of Vita Insani Hospital, Pematangsiantar City in 2019?"

METHODS

Research design

This study is analytic in nature with a cross-sectional design. The independent variables are knowledge, attitudes and dietary adherence of the patients. The dependent variable is blood sugar levels

Location and Time of Research

This research will be conducted on DM patients who seek treatment at the Internal Medicine Polyclinic Installation of Vita Insani Hospital, Pematangsiantar City. The time of research and data collection will be carried out in July-August 2019.

RESULTS AND DISCUSSION

Research result

Overview of Respondents Age Based on a study conducted on 52 patients. Obtained the age category of the patient.

Frequency Distribution of Respondents by Age at the Internal Medicine Polyclinic at Vita Insani Hospital Pematangsiantar in 2019

It can be seen that more than half of the Diabetes Mellitus patients at the Vita Insani Hospital Polyclinic are aged 50-64 years (59.6%) Previous research by Sri Trisnawati (2013), revealed that 61.4% of DM patients were over 50 years old. One of the risk factors for DM is age > 40 years, because at this age humans generally experience a rapid decline in physiological function, resulting in a deficiency of insulin secretion due to disturbances in the pancreatic beta cells and insulin resistance.

Gender

Based on research conducted on 52 patients, the gender category of the patient was obtained in table 52 Frequency Distribution of Respondents by Gender at the Internal Medicine Polyclinic at Vita Insani Hospital Pematangsiantar 2019 Year

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Level of education

Based on research conducted on 52 patients, the category of patient education level was obtained

Frequency Distribution of Respondents by Education Level at the Internal Medicine Polyclinic, Tabun Vita Insani Hospital 2019

It is known that Diabetes Mellitus patients at the Internal Medicine Polyclinic at Vita Insani Hospital, for the level of education, 40.4% are college graduates, the rest are SD-SLTA graduates. Education level is one of the most important elements that can affect one's acceptance of information. limited to make an impact.

Knowledge

The results of the research for the category of patient knowledge level can be seen in table 58 Table 5.8 Frequency Distribution of Respondents According to Respondents' Knowledge at the Internal Medicine Polyclinic of Vita Insani Hospital Frequency Distribution of Respondents' Aspects of Knowledge at the Internal Medicine Polyclinic of Vita Insani Hospital.

Discussion

Blood Cave Levels

Based on the results of the study obtained from 52 patients, more than half, namely 69.2%, had uncontrolled fasting blood sugar levels. Meanwhile, for measuring blood sugar levels 2 hours PP, more than half of 67.3% were uncontrolled. This shows that more than half of patients have controlled blood sugar levels

Knowledge

The results showed that more than half of the patient's knowledge of 59.6% was in the less category. This can be seen in table 13, where patients who were able to answer questions correctly were more than 50% in aspects of how to deal with DM. causes of DM, normal blood sugar levels, diet for DM sufferers, amount of consumption of protein sources/day, and the importance of diet. This research is in line with Yulia Rahmi's research (2014) which stated the same thing, more than half (69.6%) of DM sufferers had a low level of knowledge. Anwar Sumenep that more and half of patients (55%) have less knowledge of DM disease. Lack of patient knowledge is probably due to lack of exposure to information about DM,

Attitude

Based on the results of the study, it showed that more than half (59.6%) of patients had a positive attitude towards efforts to control blood sugar. Then in terms of the attitude assessment aspect, 55.8% of patients felt burdened with a diet based on the recommended amount, and 57.7% of patients also feel burdened with diet by type

Dietary Compliance

In accordance with the management of DM in the 4 main pillars, one of which is nutritional therapy Nutrition therapy for DM sufferers has a diet called 33, where the schedule, type and amount must be according

Based on the results of research conducted at Vita Insani Hospital, it was shown that more than half of the patients, namely 53%, did not comply with the recommended diet. because of the lack of exposure to information received by patients, and the low level of education

The Relationship between Attitude and Blood Sugar Levels

Based on the results of the study, it was shown that blood sugar levels were not controlled more (71.0%) in DM patients who had a positive attitude than patients who had a negative attitude (66.7%). The results of statistical tests showed that there was no significant relationship between attitude and blood sugar levels. Patients ($p > 0.05$) Relationship of Diet Compliance with Blood Sugar Levels Based on the results of the study showed more uncontrolled sugar levels (89.3%) in patients who were diet adherents compared to patients who adhered to the recommended diet (45.8%)). Statistical test results showed that there was a relationship between diet adherence to the respondent's blood sugar level ($p < 0.05$)

CLOSING

Conclusion

1. More than half (59.6%) of patients had uncontrolled sugar levels.
2. More than half (59.6%) of patients have less knowledge.
3. More than half (59.6%) of patients have a positive attitude towards efforts to control sugar
4. More than half (53.8%) of patients did not comply with the recommended diet
5. There is a significant relationship between patient knowledge and blood sugar levels in diabetes mellitus patients, with $p < 0.05$
6. There was no significant relationship between patient attitudes and blood sugar levels in diabetes mellitus patients, with $p < 0.05$
7. There was a significant relationship between patient dietary adherence and blood sugar levels in diabetes mellitus patients, with $p < 0.05$.

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