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Research Article

Overview of the Lifestyle of Diabetics at the Padang Bulan Medan Health Center

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Abstract. Diabetes mellitus where there is a disruption in the process of blood sugar metabolism in the body, which results in increased blood sugar levels. One of the causes of high rates of diabetes mellitus is lifestyle, lifestyle is an individual's uniqueness that is used to achieve self-created goals. A lifestyle that can increase a person's risk of diabetes mellitus is an unhealthy lifestyle such as not maintaining a diet, never exercising, smoking and stress. This study aims to identify the lifestyle of diabetes mellitus sufferers at the Padang Bulan Medan Health Center. The research design used is descriptive. The sampling technique used is Purposive sampling with a total of 77 samples. Data collection using a lifestyle questionnaire. The study showed that most of the lifestyle categories were sufficient at 51.9%, the poor category was 42.9%, and the good category was 5.2%. It is expected that the head of the Padang Bulan Medan Health Center will involve health workers to provide counseling on a good lifestyle, always control and motivate diabetes mellitus sufferers to change their lifestyle for the better.

Keywords: Diabetes Mellitus; Lifestyle; Overview

1. Introduction

Lifestyle is a pattern of behavior related to health that is determined by the choices that individuals make based on the opportunities they have from the options available to a person according to their life opportunities. Bad habits such as smoking, lack of movement, irregular eating schedules and high stress are the main factors that contribute to the increase in the chronic disease diabetes mellitus.

Diabetes is a condition characterized by high blood sugar levels due to the body's inability to produce or utilize insulin, (Wahyuni, 2020). This disease is a chronic metabolic disorder where the patient is unable to produce enough insulin or the body is unable to use insulin efficiently, resulting in excessive blood sugar levels in the blood which are usually felt after problems arise in the organs of Yusnayanti & Nofitasari, (2022).

Diabetes Mellitus is a non-communicable disease that produces one of the most common health problems for the population at the world, regional, country, and regional levels, Fijianto et al., (2022). According to (WHO) in 2019, diabetes caused around 1.5 million deaths, 48% of which occurred in patients under the age of 70 (Ministry of Health, 2022)

The International Diabetes Federation estimates that in 2019, about 436 million people aged 20-70 years in the world will have diabetes mellitus, which is equivalent to a prevalence of 9.3% of the total population in that age range. Meanwhile, in Africa-Africa and the Western Pacific, it ranked first and second in the prevalence of diabetes mellitus among the population aged 20 to 79 years of age at 12.2% and 11%, respectively.

The IDF also estimates how many people with diabetes are among the population aged 20-79 years. In several countries with 10 countries that have the highest number of sufferers. Indonesia is ranked 7th in the list of 10 countries with the highest number of sufferers, which is 10.7 million. So that Indonesia is the only country in Southeast Asia to be included in the list, which shows the size of Indonesia's inclusion related to the prevalence of diabetes cases in the Southeast Asian region. (Ministry of Health of the Republic of Indonesia, 2020).

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2. Methods

The research design used is descriptive. The population in this study is all patients suffering from Diabetes Mellitus (DM Type 1, DM Type 2, Gestational DM) who routinely seek treatment at the Padang Bulan Medan Health Center and the number of population in this study is the number of Referral Patients (PRB) who every month come for treatment to the Health Center every month amounting to 200 people. Inclusion criteria: Aged 26 to > 65. Suffers from DM > 1 year and can read and write. The sampling technique used was Purposive sampling totaling 77 samples. The questionnaire was compiled based on the results of modifications from the previous research, namely Yusmawati in 2016. The lifestyle questionnaire consists of 15 questions using an ordinal scale with a choice of "Yes" and "No" answers. Positive questions consist of (2, 3, 10, 11) and what if the respondent answers Yes is given a score of 1, if the respondent answers not given a score of 0, negative questions (1, 4, 5, 6, 7, 8, 9, 12, 13, 14, 15) where if the respondent answers Yes is given a score of 0, what if the respondent answers not given a score of 1. The measurement result is equal to Poor = 0-4, Fair = 5-9, Good = 10-15.

The primary data used was data taken directly from the informant, namely about the lifestyle of people with diabetes mellitus, collected from respondents through questionnaires. In this study, secondary data was obtained from the medical records of the Padang Bulan Medan Health Center which contains the number of referral patients (PRB) who received treatment at the Padang Bulan Medan Health Center during November 2024.

This research has been tested for ethical feasibility with number No. 251/KEPK-SE/PE-DT/XI/2024

3. Results and Discussion

Tabel 1 Frequency Distribution and Presentation Based on Demographic Data of Diabetic Mellitus Patients at the Padang Bulan Health Center

Characteristics	Frequency *(f)*	Percentage (%)
Age		
26-35 Years	7	9.1
36-45 Years	16	20.8
46-55 Years	22	28.6
56-65 Years	13	16.9
>65 Years	19	24.7
Total	77	100
Gender		
Man	32	41,6
Woman	45	58,4
Total	77	100
Education		
SD	2	2,6
SMP	2	2.6
SMA	26	33.8
D3	11	14,3
S1	32	41.6
S2	4	5.2
Total	77	100
Work		
Farmer	1	1.3
IRT	23	29.9
Self employed	12	15.6
Private employees	9	11.7
Teacher	4	5.2
PNS	11	14.3
Pensioner	17	22.1
Total	77	100

Long Suffering		
1-2 years	10	13.0
2-3 years	18	23.4
3-5 years	28	36.4
>6 years	21	27.3
Total	77	100

Tabel 2. Distribution of Lifestyle Descriptions of Diabetic Mellitus Patients at the Padang Bulan Health Center in Medan

Lifestyle	**Frequency *(f)***	**Percentage (%)**
Not Good	33	42.9
Enough	40	51.9
Good	4	5.2
Total	**77**	**100**

4. Discussion

Based on the data, a picture of the lifestyle of people with diabetes mellitus was obtained in the poor category as many as 33 people (42.9%), the moderate category as many as 40 people (51.9%), the good category as many as 4 people (5.2%). The researcher assumes that based on the research that has been carried out, the researcher found that at the Padang Bulan Medan Health Center, the majority of people aged 46-55 yearsas many as 22 people (28.6%) suffer from Diabetes Mellitus because the older they get, the more vulnerable or at risk of developing Diabetes Mellitus.

This assumption is supported by research (Rosita, et al., 2022) Increasing age causes changes in carbohydrate metabolism and changes in insulin release affected by glucose in the blood and inhibition of glucose release into cells because they are affected by insulin. If viewed from the age of the respondents when they first suffered from diabetes mellitus, it can be seen that the older a person is, the greater the incidence of type two diabetes mellitus.

Type 2 diabetes mellitus in the elderly because the age group of 45 years and older is a group at high risk of developing diabetes mellitus with increasing age will cause changes in the body's metabolic system so that it results in inhibited glucose release. The findings in the field in addition to being at an age at risk of suffering from diabetes mellitus were also found to have an unhealthy lifestyle and a family history of previous diabetes mellitus in the elderly, in the long term this can make diabetes mellitus occur in a person because of an unhealthy lifestyle and genetic history are risk factors for diabetes. Before the pandemic, health counseling/promotion was carried out regarding diabetes mellitus and its risk factors, although not often, since the pandemic the health counseling/promotion is no longer carried out because it is to avoid crowds of people.

The researcher's assumption regarding the length of time they suffer from Diabetes Mellitus affects the quality of sleep of patients as well as the data obtained by the researcher in this study, the majority of 5-8 years as many as 28 people (36.4%) of the respondents are disturbed in their sleep hours where if they have Diabetes Mellitus, they will often urinate at night, then the respondents' sleep hours will often be disturbed. This assumption is supported by research (Luselya, et al., 2023) that the relationship between long-suffering and sleep quality of DM patients is caused by typical symptoms of DM, namely Polyuri, polydybsy and polyphagia that cause patients to experience sleep disorders. Frequent urination or polyuria that occurs at night in DM patients can cause patients to wake up often at night so that the frequency of patients will increase, patients will have difficulty falling back asleep and sleep dissatisfaction which ultimately results in a decrease in sleep quality Poor sleep quality in DM patients generally occurs due to complaints of nocturia and pain.

Based on the research that has been carried out, the researcher assumes that the lifestyle picture of Diabetes Mellitus patients at the Padang Bulan Medan Health Center in 2024 has a lifestyle with a sufficient category, where the respondents at the Padang Bulan Health Center have quite good physical activity, where when traveling to a place that is not too far away, they do not often use a motorbike but often walk. Meanwhile, the minority of respondents

had a good lifestyle as many as 4 people (5.2%). Where in this study lifestyles such as diet, physical activity, stress and smoking are still in the category of being quite good. The lifestyle was not good for 40 people, where in this study the average respondent had a lifestyle that tended to be poor, still often consuming sweet foods.

The researcher's assumption is supported by research by Hirahatake (2019) and Veridiana (2019) which shows that the consumption of sugary drinks is the dominant factor in the occurrence of diabetes mellitus in young adults. Pathophysiologically, the consumption of sugary drinks can cause obesity which can increase the risk of developing type 2 diabetes mellitus. Consumption of sugary drinks tends to contribute to the accumulation of dipositos and an increased risk of developing diabetes in the future. Increased inflammation is known to be exacerbated by excess adiposity in the body, but consumption of sugary drinks can worsen the consequences of inflammation because the amount of added sugar is absorbed in the body more.

According to the researchers' assumptions, the respondents' poor lifestyle was caused by an irregular diet, where in the study it was still in the category of many respondents with a bad lifestyle because their diet was more than 3 times a day and did not limit their portions of food and consumed too many carbohydrates. Often consume instant snacks such as canned food, noodles, packaged drinks, and cakes so that it can cause blood sugar levels to increase and easily become obese.

This is in line with research by Azis et al, in 2022, many people with DM still lead an unhealthy lifestyle and lead to a negative lifestyle. The cause is due to diet and physical activity. The diet in question is that there are still many people with DM who eat irregular and consume less fruits and vegetables. As well as not doing physical activity regularly or not exercising.

5. Conclusions

Based on the results of the study with a total of 77 respondents regarding the Overview of the Lifestyle of Diabetic Mellitus Patients at the Padang Bulan Medan Health Center in 2024, from the results of the study, it can be concluded that most of the lifestyle categories are in the sufficient category.

It is hoped that it can be used as a reference for future research, it is also hoped that future researchers will further develop research in knowing the lifestyle of people with diabetes mellitus.

Conflicts of Interest: The authors declare no conflict of interest

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