Lifestyle and Diabetes Mellitus in Urban Communities

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Abstract: - People with Diabetes can risk heart, stroke, kidney, eye, and nerve complications. Factor risk of Diabetes mellitus caused by factors that cannot change and factored possible risks like style life. Objective study This is For analyzing factor risk style life with diabetes mellitus disease. Type research used survey analytics with a Cross-*Sectional. D*ata collection method with interviews. Population in study This is patients taking care of the road diagnosed with DM in January 2022, with as many as 74 patients. The sampling technique used is *Total Sampling* data analysis using analysis univariate and bivariate. Research results obtained exist a significant relationship between activity physique *(p-value = 0.000)* and patterns Eating *(p-value = 0.000)* with DM disease; meanwhile, No There is a connection between style lifestyle smoke with DM disease *(p-value = 0.097)*. Recommended public pre-elderly can reap style life Healthy life every day with regular physical activity, changing patterns of lousy eating, and stopping smoking from preventing DM disease.

Keywords: Physical activity, pattern eating, smoking, Diabetes Mellitus.

I. Introduction

Diabetes Mellitus Disease (DM) is necessary to watch out for because it can attack all classes, ages, and social economy; urban society is more affected by Diabetes Mellitus than rural communities (I Putu ADH, 2021). Indonesia status diabetes alert because occupy 7th place out of 10 countries with high diabetes patients. The 2020 prevalence of Diabetes stands at 6.2 percent, which is significantly more than 10.8 million people who have Diabetes, figures This estimated increase to 16.7 million patients per year in 2045. The factor risk of Diabetes mellitus is most considerably caused by an unhealthy lifestyle (Murtiningsih et al., 2021).

According to the International Diabetes Federation (IDF), in 2022, around 19.46 million people in Indonesia have Diabetes, an increase of 81.8% compared to 2019. The IDF data positions Indonesia as the country with amount highest number of people with Diabetes, fifth in the world. Indonesia is the only one in Southeast Asia to enter the top 10 countries with the most diabetics (Eva ES, 2022).

The incidence of Diabetes Mellitus at Home Sick AM in 2018, as many as 141 people experienced a decline. In 2019 there were 130 people, and in 2020, patients as many as 125 people due to the Covid-19 pandemic. In 2021, awareness among patients For do control of DM disease started to increase the return with total patients as many as 350 people.

Based on results study previously showing that factor risk of Diabetes Mellitus is age, history of the family, and activities physique. In contrast, type, gender, history of hypertension, and obesity do not relate to the incidence of Diabetes Mellitus (Dewi ES., 2015). Other studies found that the habit eats more risk is five times bigger in pre elderly suffering from Diabetes Mellitus compared habit of eating enough. Activity physique light has a risk of 3 times more considerable on pre elderly suffering from Diabetes Mellitus compared with moderate activity physique. Genetic history owns risk 2.4 times more great suffering from Diabetes Mellitus compared with those that don't own genetic history (Febri Y, 2018). Objective study This is For analyzing factor risk style life with diabetes mellitus disease.

II. Methodology

Type research used survey analytics with design cross-sectional analysis. Variable free in the study: Physical activity, pattern Eating, and smoking. Where is the variable dependent in the survey. This is diabetes mellitus disease. Population in study This is the whole patient take care road with diabetes diagnosis Mellitus in Disease Poly In House Sick AM in January 2022 as many as 74 patients. The sampling technique used total sampling. Method data collection with the interview. Data analysis using an analysis univariate and analysis bivariate chi-square test.

III. Results

Table . 1. Distribution Frequency Activity Physical, Diet, and Smoking

Variable	Frequency	Percentage, (%)
Activity Physique		
Less Good	43	58.1
Good	31	41.9
Pattern Eat		
Less Good	48	64.9
Good	26	35.1
Smoke		
Smoke	43	58.1
No Smoke	31	41.9
Total	74	100

Based on table 1. shows that respondents who have a style of life activity physique are not Good enough; as many as 43 (58.1%) are significant in comparison with respondents who have activity body Good as many as 31 (41.9%). Respondents with style life patterns Eat not enough Good as much as 48 (64.9%) bigger than design Eat Good as many as 26 (35.1%). And respondents who have a style of life smoke as much as 43 (58.1%) bigger compared to those with the habit No smoke as many as 31 (41.9%).

Table 2. Relationship Between Physical Activities, Diet, and Smoking, with Diabetes Mellitus Disease

Variable	*Diabetes Mellitus*				Total		*P-Value*
	DM		No DM				
Activity Physique	n	%	n	%	n	%	
Less Good	37	86.0	6	14.0	43	100	
Good	15	48.4	16	51.6	31	100	0.000
Total	52	70.3	22	29.7	74	100	
Pattern Eat							
Less Good	42	87.5	6	12.5	48	100	
Good	10	38.5	16	61.5	26	100	0.000
Total	52	70.3	22	29.7	74	100	
Habit Smoke							
Smoke	27	62.8	16	37.2	43	100	
No Smoke	25	80.6	6	19.4	31	100	0.097
Total	52	70.3	22	29.7	74	100	

Table 2. shows that of the respondents who have a style life activity physique not Good enough there are 37 (86.0%) suffer from Diabetes Mellitus, and respondents who have a pattern activity physique Good there are 16 (51.6%) did not suffer from Diabetes Mellitus. The results of statistical tests are obtained, the p-value is 0.000, then There is a significant influence between activity physique with diabetes mellitus disease. Of respondents with the style life pattern Eat not enough good part considerably suffering

from Diabetes Mellitus there are 42 (87.5%), and respondents who have the habit pattern Eat Good part big there were 16 (61.5%) did not suffer from Diabetes Mellitus. Obtained a p-value of 0.000 (<0.05), there is a significant influence between pattern Eat respondent and diabetes mellitus disease. Respondents with a style of life smoke tall part considerable suffering from Diabetes Mellitus as many as 27 (62.8%), and respondents who have a habit of not smoking do not suffer from Diabetes Mellitus as many as 6 (19.4%). D obtained the p-value is 0.097, then no There is a significant influence between habit smoke with diabetes mellitus disease.

IV. Discussion

Research results show a significant influence between activity physique and diabetes mellitus (p-value 0.000). Research results This is in line with several results studies previously, including Hamdan Hariawan's research et al., who stated that exists a connection between activity physique and the incidence of Diabetes Mellitus (Hariawan et al., 2019) and research Balqis Saroh et al. (2019), which shows exists a connection between activity physique with the incidence of Diabetes Mellitus in Puskesmas Janti Malang City (Saroh et al., 2019) There is a connection between activity physique and incident hypertension (p = 0.042) condition. This possible part of significant respondents has aged continue, so no activity-heavy body is capable (Herawati et al., 2020).

Activity physique is every movement body that happens due to the contraction of skeletal muscle that can increase expenditure energy, from on-site activity work, on the go, at home, and in free time (Anggunadi & Sutarina, 2017). Factor risk activity is not enough related to the covid-19 pandemic, which has become a barrier for people to exercise or engage in outside activities (Herawati et al., 2022). According to Fatmah (2010), sports activity physique done with regular can absorb or remove precipitate cholesterol in the vessel's blood pulse, so it can avoid happening complications of hypertension. Type possible sport performed by older people includes walking, gymnastics, swimming, cycling, exercise light load, and running according to the ability elderly. Research results Still, fewer respondents do active physiques, as much as 58.1%; according to the researcher, this is a vital problem to handle immediately because it is a factor risk occurrence of Diabetes Mellitus. Should do an activity physique routine with exercise 3 times in one Sunday with a duration of not enough than 20 minutes for every sport (Harsa, 2020).

Research results This found a significant influence between pattern eating and the incidence of Diabetes Mellitus (P value 0.000). Research results in This are in line with several results study previously, among them results study Suryanti S et al., who showed exists a connection between the pattern of eating with the incidence of Diabetes Mellitus with a p-value of 0.010 (Suryanti, 2021)and in line with results research by Hamdan Hariawan et al. which shows exists a connection between pattern Eat with the incidence of Diabetes Mellitus (Hariawan et al., 2019). There is a significant relationship between the design Eat with disease heart in the era of the covid-19 pandemic (p-value 0.018) (Cucu Herawati et al., 2022).

Diet healthy is defined as pattern Eat with 3 J planning, i.e., amount, type, and regular schedule. An unhealthy diet is beneficial and causes no balance between carbohydrates and other ingredients the body needs. Consequently, the sugar inside the body exceeds the pancreas' capacity, resulting in Diabetes Mellitus (Herawati et al., 2022; Setyawan & Masnina, 2018). Diet healthy with reduced consumption of glucose in food and recommended for can reproduce consume food like low-fat dairy products, fish, and chicken as well as nuts at a time reducing consumption of meat red, sugar and or sugar-containing drinks. On the results study still, there is a connection between pattern eating with the incidence of Diabetes Mellitus, in diabetics there are two problems mainly related to insulin, i.e., insulin resistance and disorders in insulin secretion. Response insulin secretion against enhanced concentration glucose blood gives mechanism bait essential back For arrangement concentration blood glucose (Setyawan & Masnina, 2018).

Diabetes Mellitus Disease is a degenerative disease and is not purely the damaged pancreas but a disease caused by a style of life that doesn't stay healthy; for example, often consume foods high in sugar, carbohydrates, and fizzy drinks. Diabetes Mellitus disease more lots appears on pre elderly because pre elderly happen to decline function one's body function of the pancreas organ, where the pancreas organ produces insulin. Insulin is central to the arrangement of glucose in the blood, and the pre-elderly are more prone to experience enhanced blood sugar levels (Setiyorini et al., 2018).

Research results showed no significant influence between habit smoke and the incidence of Diabetes Mellitus (P value 0.097). Research results in this align with the results study Anggita Mutia Fajriati No there is a connection between habit smoking and the incidence of Diabetes Mellitus in Surakarta City and line with results Nor Latifah's research, et al. No, there is a connection between the habit smoke with the incidence of Diabetes Mellitus (Harefa et al., 2023).

According to Ainurafiq IZ and Maindi EJ., smoking status is no factor significant risk to the incidence of Diabetes Mellitus. Smoking status can change the ability to prevent the incidence of Diabetes Mellitus, accordingly to the level of smoking status that is owned, both at the level of smoking and no smoking, because behavior smoke is considered a modification effect to the incidence of Diabetes Mellitus (IZ et al., 2015). Exposure to nicotine cause happening hyperglycemia and intolerance of glucose. Nicotine

cause enhancement of basal insulin secretion and stimulates insulin secretion glucose, so the effect of hyperglycemia induced by nicotine is not caused by a decrease in insulin secretion (Eko Supriyono, 2015; Harsa, 2020).

V. Conclusion

There is influence activity less physically (P value 0.000), and patterns Eat (P value 0.000), which is not Healthy for diabetes mellitus disease. No, there is an influence smoke with diabetes mellitus disease (P-value 0.097). The public is expected to apply a healthy lifestyle and regular physical activity, change lousy eating patterns to eat more suitable, and stop smoking. For House, It hurts to get increased education to patients about factors of the risk of Diabetes Mellitus. Stage blood sugar checks for free, making posters about Diabetes Mellitus.

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