

## Compliance Of Diabetes Mellitus Patients In Controlling Blood Sugar Levels In Dahana Village, Sub-District Bawolato 2021

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### ABSTRACT

Diabetes mellitus is a metabolic disorder that occurs due to hyperglycemia that occurs due to abnormalities in insulin secretion, insulin work, or excess. Diabetes mellitus is a collection of symptoms that arise in a person caused by an increase in blood glucose levels. This research aims to see an overview of the level of Diabetes Mellitus patients in controlling blood sugar levels in Dahana village, Bawolato sub-district in 2021. The sampling technique was total sampling. With a total of 30 respondents. The measuring tool is a questionnaire. The results showed that the most respondents who suffered from diabetes mellitus aged 40-45 years were 14 people (46.7%). the most female respondents were 16 people (53.3%). most of the respondents were disobedient as many as 18 people (60.0%). From this research,

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## 1. INTRODUCTION

Diabetes mellitus (DM) is a serious public health problem facing the world. The incidence of diabetes has increased drastically in developing countries, including Indonesia (Dewi, 2017). Diabetes mellitus is a chronic condition that occurs when the body cannot produce enough of a polypeptide hormone that regulates metabolism. Diagnosed by observing elevated levels of glucose in the blood (Azis et al., 2020). Diabetes mellitus is one of the most common diseases suffered by the population worldwide and is the fourth of the national research priorities for degenerative diseases. The increasing number of Diabetes Mellitus will indirectly result in morbidity and mortality due to complications from DM itself (Trisnadewi NW, adiputra, im, 2018).

Data from *International Diabetes Federation (IDF)* said that the number of people with DM in the world in 2017 was 426 million people. Europe 13.6% people, West Pacific 37.3% people and in Southeast Asia as much as 19.2% people, where the World Health Organization predicts an increase in the number of people with Diabetes Mellitus (DM) in Indonesia from 8.4 million in 2000 to around 21.3 million by 2030. The number of diabetes mellitus in Indonesia reached 2.4%, an increase from 2007 of 1.1%. The four provinces with the highest prevalence according to doctor's diagnosis are Yogyakarta (2.6%), DKI Jakarta (2.5%), North Sulawesi (2.4%), and East Kalimantan (2.3%). Riskesdas data states that the prevalence of DM sufferers tends to increase in women compared to men and there is an increase in the prevalence of diabetes mellitus according to age, but starting at the age of 65 years, it tends to decrease for patients who live in rural areas compared to urban areas (Kemenkes RI, 2013 in Wake up, 2018).

Factors that make non-compliance in undergoing diabetes mellitus treatment are unhealthy eating patterns, lifestyle shifts in terms of food consumption, mainly due to increased income, high workload, physical activity and stress, where stress will cause an increase in the hormone epinephrine which can cause glucose mobilization. Finally, it causes high consumption of saturated fat, sugar, low fiber and low micronutrients. This situation causes obesity problems and an increase in free radicals that cause diabetes mellitus (Nanda et al., 2018).

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## 2. METHOD

This study uses a descriptive research design. The population in this study were patients with diabetes mellitus in Dahana village, Bawolato sub-district with a total of 30 patients. The sampling technique in this study is the total sampling technique. The sample in this study were patients with diabetes mellitus in Dahana village, Bawolato sub-district.

The data collection technique that will be used in this thesis is to use a questionnaire given to the respondents. Data collection was carried out by distributing questionnaires about compliance with diabetes mellitus patients directly and complying with health protocols by wearing masks, measuring body temperature, washing hands, and maintaining distance.

## 3. RESULTS AND DISCUSSION

**Table 1. Frequency Distribution of Respondents Based on Demographic Data of Respondents in Dahana Village, Bawalato District in 2021 (n=30).**

Characteristics	Frequency	%
<b>age (Years)</b>		
40-45 years	14	46.7
46-55 years	9	30.0
56-65 years	7	23.3
<b>Gender</b>		
Male	14	46.7
Female	16	53.3
<b>Long suffering</b>		
Acute (< 5 years)	20	66.7
Chronic (>5 years)	10	33.3
<b>Total</b>	<b>30</b>	<b>100.0</b>

Based on table 1. Distribution of the frequency of respondents that 30 respondents, data on the average age of respondents was 40 years old as many as 3 people (10.0%) with the majority aged 40-45 years as many as 14 people (46.7%), at the age of 46 -55 years as many as 9 people (30.0%) and minorities aged 56-65 years as many as 7 people (23.3%). Data on the sex of the respondents, the average female with elementary school, 0.50724 the majority of women as many as 16 people (53.3%) and the male minority as many as 14 people (46.7%). and duration of suffering from diabetes mellitus from <5 years as many as 20 people (66.7%) and >5 years as many as 10 people (33.3%).

Based on the results of the study that of the 30 respondents of diabetes mellitus patient compliance in the village of Dahana, Bawolato sub-district, obedient and non-compliant were obtained where the majority were non-compliant as many as 18 respondents (60.0%), and obedient as many as 12 respondents (40.0%). A person's compliance is influenced by many factors, both internally and externally. In the patient himself has a very strong desire but is not supported by external factors, this is very decisive once the founder is obedient or disobedient to taking medication. For example, the absence of family support both psychologically and financially, difficult demographic conditions so that it is very difficult to get medicine and in the end the treatment is not routine and makes the patient not comply with taking medicine with health recommendations related to taking medicine and low desire to go to the doctor or other place. health services (Agustine et al., 2018)

The author assumes that during research in the field, it was found that people with diabetes mellitus rarely control their blood sugar or only some patients take regular treatment such as checking blood sugar every month or when blood sugar rises. Researchers found that non-compliance with diabetes mellitus sufferers, one of which is the low economy, which affects the low desire to go to health care providers and self-care in diabetes management so that it is difficult to reach health

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services at low costs so that there is a lack of information and support for health workers in the management of diabetes mellitus. Researchers also found that people with diabetes mellitus only took drugs from the puskesmas or advice from doctors and diabetics also used herbal medicines such as cherry leaves or cherry leaves which were boiled and then drunk. Researchers assume that family support for people with diabetes mellitus is very lacking because the education of the family is very minimal so that it is difficult to receive information.

#### 4. CONCLUSION

Based on the results of a study with a sample of 30 respondents regarding the compliance of diabetes mellitus patients in controlling blood sugar levels in the village of Dahana, Bawolato sub-district in 2021, it can be concluded that, patients with diabetes mellitus based on the age of majority aged 40-45 years were 14 people (46.7%) , based on gender the majority of women were 16 people (53.3%) and based on the duration of suffering from diabetes mellitus <5 years as many as 20 people (66.7%). Patients with diabetes mellitus who have compliance in controlling blood sugar levels are 12 people (40.0%) and people with diabetes mellitus who are not obedient in controlling blood sugar levels are 18 people (60.0%)

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