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Overview of Health Examination Results In The Group of Dasa Wisma Mawar RT.008 Bukit Pinang Village Samarinda In 2023

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ABSTRACT
Health is a primary need for everyone that allows a person to be able to live productively. According to Law Number 23 of 1992, health is a state of well-being of body, soul, and social life that enables everyone to live productively socially, and economically. A healthy condition will enable a person to achieve a high quality of life, whereas a sick condition will reduce a person's quality of life. When the health status is known, it will help to find out how good the primary needs for each person are that enable a person to be able to live productively. Most of the descriptions of the results of medical examinations, that health is divided into three conditions, namely positive health, health, and free from illness. The purpose of this study was to describe the results of health checks through weighing, checking blood pressure, and checking blood glucose levels while checking uric acid in the Dasa Wisma Mawar group RT 008 Kelurahan Bukit Pinang Samarinda in 2023. This research was a descriptive study conducted in the Dasa Wisma Mawar Group, RT 008, Bukit Pinang Village, Samarinda from September 2022 to February 2023. The population in this study was a group of mothers and fathers from 10 - 30 heads of households; The sampling technique used is total sampling. Data collection consisted of age, gender, weighing, checking blood pressure, blood sugar levels, and uric acid. The collected data is presented in the form of a frequency distribution and analyzed using descriptive statistics. prehypertension was 1 respondent (3.3%), hypertension stage 1 was 3 respondents (10.0%), hypertension stage 2 was 3 respondents (10.0%), For women, there were 19 respondents (63.4%) who had pre-hypertension, 8 respondents (26.8%), stage 1 hypertension, 5 respondents (16.6%), and stage 2 hypertension, 3 respondents (10.0%). The results showed that: (1) the number of male respondents was 11 people (36.6%), who experienced pre-hypertension pressure was 1 respondent (3.3%), hypertension stage 1 was 3 respondents (10.0%), hypertension stage 2 as many as 3 respondents (10.0%), for women, there were 19 respondents (63.4%) who experienced pre hypertension there were 8 respondents (26.8%), hypertension stage 1 as many as 5 respondents (16.6%)), and hypertension stage 2 as many as 3 respondents (10.0%); (2) There were 8 respondents (26.8%) who weighed 71 kg – 115 kg consisting of 6 male respondents (20.0%), and 2 female respondents (6.8%); and (3) there were 6 respondents (20.0%) who had a moderate increase in blood sugar; and those who experienced a bad rise in blood sugar were 4 respondents consisting of 3 male respondents (10.0%), and 1 female respondent (3.3%).

Keywords:*Health Examination, Dasa Wisma Mawar, Pinang Village, Samarinda*

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I. INTRODUCTION

Health is a primary need for everyone that allows a person to be able to live productively. According to Law No. 23 of 1992, health is a state of well-being of body, soul, and social life that enables everyone to live productively socially, and economically. Healthy conditions will enable a person to achieve a high quality of life, whereas illness will reduce a person's quality of life (Ventegodt, et al., 2005).

The 2030 Sustainable Development Goals have set targets to reduce mortality from non-communicable diseases such as diabetes, hypertension, and obesity. by a third, to achieve Universal Health Coverage (UHC) and provide access to affordable essential medicines by 2030.

The 2018 Basic Health Research (Riskesdas) shows that the trend of weight problems in Indonesian adults has almost doubled, from 19.1 percent in 2007 to 35.4 percent in 2018.

World Health Organization (WHO) data for 2015 shows that around 1.13 billion people in the world have hypertension, meaning that 1 out of 3 people in the world is diagnosed with hypertension. The number of people with hypertension continues to increase every year, it is estimated that by 2025 there will be 1.5 billion people affected by hypertension, and it is estimated that every year 9.4 million people die from hypertension and its complications.

The Riskesdas (2018) results show that the prevalence of diabetes mellitus in Indonesia based on a doctor's diagnosis at the age of 15 is 2%. This figure shows an increase compared to the prevalence of diabetes mellitus in residents 15 years old in the 2013 Riskesdas results of 1.5%. However, the prevalence of diabetes mellitus according to blood sugar examination results increased from 6.9% in 2013 to 8.5% in 2018. This figure shows that only around 25% of people with diabetes mellitus know that they have diabetes.

Joint disease in Indonesia was based on the diagnosis of health workers (11.9%) and based on diagnoses and symptoms of 24.7%, while based on the area of diagnosis by health workers the highest was in Bali Province at 19.3% and the highest based on diagnoses and symptoms was in East Nusa Tenggara at 31.1%. The prevalence of joint disease in Central Java in 2013 was based on a health worker's diagnosis of 11.2% or based on diagnoses and symptoms of 25.5% (Riskesdas, 2013)

The results of research by Cyntia Ratna Sari, and Hanifah Maharani (2021) regarding the correlation of body image perceptions on the nutritional status of adults in Pancur Village, Mayong, Jepara shows that adult women and men have different perceptions of body image and nutritional status. Mature women are more concerned with the perception of their body image for themselves and in the eyes of others than adult men. The better the perception of body image, the closer the nutritional status is to normal.

The results of another study reported by Nurhayati abd Adriani (2017) regarding the relationship between diet and the occurrence of gout (gout) in Limran Village, Pantoloan Boya Village, Taweli District, show that there is a relationship between diet and the occurrence of gout (gout). This is in line with the research by Ida Untari and Titin Wijayanti (2018) showing a significant relationship between diet and gout in Pondok Hamlet, Mantingan District, Sragen, a significant positive relationship, the more often a person consumes food.

The health examination is an important support in helping to establish the diagnosis of a disease, including medical examinations including; body weight, blood pressure, blood glucose, and uric acid. Do routine health checks and don't just come to the hospital or health center when you're sick. This step has the benefit of being able to make it easier to detect diseases or health problems earlier.

The purpose of this study was to describe the results of health checks through weighing, checking blood pressure, checking blood glucose levels at the time, and checking uric acid in the Dasa Wisma Mawar group, RT 008, Bukit Pinang Village, Samarinda in 2023.

II. RESEARCH METHODS

A. Time and Place

The research was conducted from September 2022 to February 2023 at RT 008, Bukit Pinang Village, Samarinda

B. Type of Research

This research is a descriptive study to describe the results of health checks in the Dasa Wisma Mawar group RT 008 Bukit Pinang Samarinda in 2022.

C. Operational Description

The operational description of the variables in this study is presented in Table 1:

Table 1. Operational Definition of Research Variables Description of Health Examination Results in the Dasa Wisma Mawar Rt.008 Group, Bukit Pinang Village, Samarinda in 2023

Indicators	Operational Definition	Parameters of Measuring	Instruments and Scales
Dasa Wisma Mawar	The Dasa Wisma Mawar group is a group of mothers from 10 families (heads of families) of neighboring houses to facilitate the running of a program.	Age Gender	Ordinal Nominal
Health Check Weight	Weighing by using body scales to determine body weight and its development, help determine the treatment program (dose), determine nutritional status, and determine body fluid status.	Body Mass Index Underweight levels are severe < 17.0 Mild underweight 17.0 – 18.0 Normal18.5 – 25.0 A mild degree of overweight 25.0 - 27.0 Being overweight >27	Analog scales Nominal
Health Examination Blood Pressure Measurement	Blood pressure is the pressure exerted on the walls of the arteries when the blood is pumped by the heart throughout the body. The higher the blood pressure, the harder the heart works (World Health Organization, 2013).	Blood pressure Normal : Systole <120, Diastolic <80 Pre Hypertension : Systole 120-139, diastole 80-89 Hypertension stage 1: 140-159,	Tensimeter Nominal

		diastolic 90-99	
Health Check Blood Sugar Check	The blood sugar test is an examination to determine the level of sugar (glucose) in the blood. A person experiences hyperglycemia if the state of the sugar level in the blood is far above the normal value, whereas hypoglycemia is a condition a condition in which a person experiences a decrease in blood sugar values below normal (Rudi 2013).	Category : Fasting Blood Glucose (GDP): Good 80 – 109 mg/dl, Moderate 110-125 mg/dl, Bad ≥ 126 mg/dl Temporary Blood Sugar (GDS): Good 80 – 144 mg/dl, Moderate 145-179 mg/dl, Bad ≥ 180 mg/dl	Autocheck Blood Sugar Nominal
Health Examination Examination of Uric Acid	Uric acid is the result of catabolism (breakdown) of purine substances in the blood.	WHO: Normal Uric Acid Adult males 2-7.5 mg/dl Adult women 2-6.5 mg/dl	Autocheck uric acid Nominal

Source: Data Processed Results (2023)

D. Population and Sample

The population in this study are subjects who meet predetermined criteria (Nursalam, 2014). The population in this study was the Dasa Wisma Mawar group, consisting of mothers and fathers from 10 - 30 heads of households; The sampling technique used is total sampling.

E. Data Collection and Analysis

Data collection consisted of age, gender, weighing, checking blood pressure, blood sugar levels, and uric acid. The collected data is presented in the form of a frequency distribution. Data analysis was performed using descriptive statistics.

III. RESULTS AND DISCUSSION

The results of the study regarding the condition of 30 respondents consisting of 19 women (63.40%) and 11 men (35.60%) are presented in Table 2 below:

Table 2. Characteristics of Respondents

No.	Variable	Male		Female	
		n	%	n	%
1	Total Respondents Age 36 years – 70 years	11	36,6	19	63.4
	1) 50 kg – 70 kg	5	16,6	17	56,8
	2) 71 kg – 115 kg	6	20.0	2	6,6
2	Blood pressure				
	1) Normal (systolic <120, diastolic <80 mmHg)	4	13,3	3	10,0
	2) Pre Hypertension (120-139 systolic, 80-89 mmHg diastolic)	1	3,3	8	26,8
	3) Stage 1 hypertension (140-159 systolic, 90-99 mm Hg diastolic)	3	10,0	5	16,6
	4) Stage 2 hypertension (systolic 160 or >160, diastolic 100->100 mmHg)	3	10,0	3	10,0
3	When blood sugar				
	1) Good 80 – 144 mg/dl	7	23,3	17	56,8
	2) Moderate 145 – 179 mg/dl	1	3,3	1	3,3
	3) Bad > 180 mg/dl	3	10,0	1	3,3

Source: Data Processed Results (2023)

A. Weight

Based on Table 2, there were 22 respondents (73.3%) who experienced a light level of body weight, and 8 respondents (26.7%) were overweight namely > 71 kg. According to the Ministry of Health (2014), Body Mass Index (BMI) can be calculated by comparing body weight with height. The criteria for mild overweight are 50 – 70 kg or BMI between 25.0 – 27.0, and severe overweight is > 71 kg (BMI > 27). According to Ermona and Wirjatmadi (2018) that the condition of obese people in the world has increased significantly every year. According to The GBD 2013 Obesity Collaboration 2014 that many developing and developed countries have

experienced an increase in the prevalence of obesity to reach 2-4 times. In 2010, it is estimated that being overweight and obese caused the death of up to 3.4 million people and a disability-adjusted life year (DALYs) loss of 3.8%.

According to Rahmi et al (2017) that in Indonesia there has been an increase in the number of people who are overweight and obese. In adulthood, the prevalence reached 19.8% in 2007 and increased to 23% in 2010. The highest percentage was found in women who were around 29.4% compared to men who were only around 17% in 2010. Many factors affect the increase in overweight and obesity such as socioeconomic factors, demographics, geography, lifestyle, and nutrition. In the age group children and adolescents are more susceptible to obesity than the old age group. Boys have a higher prevalence than girls. This will be inversely when entering the adult age group. At that age, women experience a higher increase in obesity than men. Weight gain becomes higher when women are married reaching almost 2 times that of unmarried women. In addition, women's work also affects the increase in obesity. Women who work as housewives tend to have a higher risk of children suffering from obesity than working women. In addition, the higher the level of family income, the higher the risk of being overweight and obese.

Increased body weight can also show signs of oxidative stress caused by an increase in free radicals in the body such as Reactive Oxygen Species (ROS and Reactive Nitrogen Species (RNS)) (Huang et al., 2015). Oxidative stress occurs due to an imbalance of free radicals that are produced by antioxidants in the body (Suryadinata et al., 2017) so it can cause systemic inflammation, endothelial cell proliferation, apoptosis, and increased vasoconstriction.These factors link oxidative stress and endothelial dysfunction with atherosclerosis and cardiovascular disease. CVD) (Mauley et al., 2014; Huang et al., 2015) Weight gain can also trigger various other diseases such as metabolic syndrome (Stanhope, 2016), Kidney (Wickman and Kramer, 2013), and Diabetes (Al- Goblan et al., 2014).So that the treatment of increased weight gain in patients must be done quickly and precisely.

B. Blood Pressure

Based on Table 2, the frequency distribution of body weight shows that there is blood pressure with Pre-Hypertension Criteria (systolic 120-139, diastolic 80-89 mmHg), namely 1 male (3.3%) and 8 female (26.8%), Stage 1 hypertension (systole 140-159, diastole 90-99 mmHg) namely 3 men (10.0%), and 5 women (16.6%); and, Stage 2 hypertension (systolic 160 or >160, diastolic 100->100 mmHg) was found in 3 males (10.0%), and 3 females (10.0%). According to Ferayanti, & Rizky (2017) that hypertension is a condition in which a person's blood pressure increases or exceeds normal limits, namely systolic pressure of more than 140 mmHg and diastolic pressure of more than 90 mmHg.

According to Riskesdas in 2018 it showed that the prevalence of hypertension according to a doctor's diagnosis was 8.36%. While the prevalence of diabetes mellitus according to a doctor's diagnosis is 1.5% (Ministry of Health RI, 2018). The prevalence of hypertension will continue to increase and it is predicted that by 2025 around 29% of adults worldwide will suffer from hypertension (Ministry of Health RI, 2012). Hypertension is a risk factor for damage to important organs such as the brain, heart, kidneys, retina, large blood vessels (aorta), and peripheral blood vessels (Perhi, 2019)

Hasana and Harfe'I (2019) reported that 81% of hypertension patients studied had a poor quality of life. The results of Baroroh and Fathonah's research (2017) concluded that the average total direct medical costs were between Rp. 142,516.00 to Rp. 927,207.00, influenced by drug costs. Due to its impact on the quality of human resources and the impact on increasing health costs which is quite large, it is hoped that all parties, both the community and the government, should actively participate in efforts to manage chronic diseases, especially in prevention efforts.

C. Blood Sugar Levels

Based on Table 2, the frequency distribution of blood sugar levels shows that there are 2 people (6.7%) whose sugar levels are classified as moderate, 24 people (80%) have normal sugar levels, while 4 people (13.3%) have blood sugar levels that are classified as bad. According to WHO provisions, blood sugar levels between 80-144 mg/dl are considered good, blood sugar levels between 145-179 mg/dl are classified as moderate, and blood sugar levels > 180 mg/dl are classified as bad. According to Muflihatin (2010), the increasing number of people with diabetes mellitus is due to rising blood sugar levels which can be caused by many factors, including heredity/genetic factors, obesity, lifestyle changes, wrong eating patterns, and drugs. affect blood glucose levels, namely, lack of physical activity, the aging process, pregnancy, smoking, and stress.The results of research by Trisnawati et.al (2013) stated that age has a relationship to blood sugar levels because it increases the incidence of type 2 DM because aging can decrease insulin sensitivity thus affecting glucose levels in the blood that cannot be metabolized optimally.The results of another study reported by Sholikhah (2014) that there is no relationship between age and blood sugar levels during (GDS).

The results of Boku's research (2019) show that there is a relationship between obesity and blood sugar levels, the higher the BMI (Obesity) category, the worse blood sugar levels in the body. Obesity can lead to insulin resistance. Clare and Crawford (2007) explained that fat tissue is also an active "endocrine" network that can relate to the liver and muscles (two insulin target tissues) through the release of intermediaries which will affect insulin action and the high accumulation of fatty tissue can end with the onset of insulin resistance. Insulin resistance that occurs in the obese group then results in a decrease in insulin action on target tissues, making it difficult for blood sugar levels to enter cells. This situation increases blood sugar levels.

IV. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusion

1. The number of male respondents was 11 people (36.6%), who experienced pre-hypertension pressure was 1 respondent (3.3%), stage 1 hypertension was 3 respondents (10.0%), stage 2 hypertension was 3 respondents (10.0%), for women there were 19 respondents (63.4%) who experienced pre-hypertension there were 8 respondents (26.8%), hypertension stage 1 as many as 5 respondents (16.6%), and hypertension stage 2 as many as 3 respondents (10.0%).
2. There were 8 respondents (26.8%) who weighed 71 kg – 115 kg consisting of 6 male respondents (20.0%), and 2 female respondents (6.8%).
3. There were 6 respondents (20.0%) who experienced a moderate increase in blood sugar, and those who experienced a bad rise in blood sugar were 4 respondents consisting of 3 male respondents (10.0%), and 1 female respondent (3.3%).

B. Suggestion

Subsequent research should be carried out in more detail and depth, especially to explore further the factors that most influence the results of the health examination in the Dasa Wisma Mawar group, RT 008, Bukit Pinang Village, Samarinda.

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