

DESCRIPTION OF HYPERTENSION SUFFERERS ON ELDERLY IN NURSING HOME RESIDENT

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ABSTRACT

Hypertension is one of the health problems in the world which is also referred to as the silent killer, Which is a deadly disease without any signs and symptoms beforehand as a warning of its dangers. The status of blood pressure will get higher as the function of the body's organs decreases. This type of research is quantitative descriptive. The sampling technique uses total sampling with a sample size of 30 people. The instrument used in the form of a tensimeter and blood pressure observation sheet. The results showed that the majority of respondents aged 60-74 years were 19 people (63.4%), the majority of respondents were female as many as 18 people (60%) and Blood pressure status in patients majority with hypertension grade 2 in Nursing Home Resident Medan is systolic blood pressure 140-159 mmHg, diastolic blood pressure 90-99 mmHg as many as 17 people (56.6%) It can be concluded that the majority of blood pressure status of hypertension sufferers on elderly in Panti werdha Graha Residen Senior Medan are in the category of Hypertension grade two.

Keywords: blood pressure; elderly; hypertension

INTRODUCTION

Hypertension is an increase in blood pressure in the arteries that occurs continuously for more than one period. WHO states that the normal limit for a person's blood pressure is 140 in systolic pressure and 90 in diastolic pressure, so a person is said to be hypertensive if their blood pressure is more than or equal to 160/95mmHg. Meanwhile, blood pressure that is between normotension and hypertension is called borderline hypertension. These limits do not differentiate between age and gender (Adam, 2019). According to the World Health Organization (WHO) and the International Society of Hypertension (ISH), currently there are 600 million hypertension sufferers throughout the world, and 3 million of them die every year. WHO estimates that in 2025 there will be an increase in hypertension cases of around 80%, in 2000 from 639 million cases to 1.5 billion cases in 2025 occurring in developing countries including Indonesia. 1 Hypertension is the third leading cause of death in Indonesia for all ages. (6.8%), after stroke (15.4%) and tuberculosis (7.5%). Meanwhile, only 9.4% of hypertension sufferers were successfully diagnosed by health workers in Indonesia. This shows that the majority of hypertension sufferers in the community (around 63.2%) are not diagnosed by health workers.

Several risk factors that can cause high blood pressure are old age and a family history of high blood pressure, obesity, high salt levels, and lifestyle habits such as smoking and drinking alcohol. Apart from that, there are also factors that can cause high blood pressure, namely being overweight followed by a lack of exercise, and consuming foods that are fatty and high in salt. Those who have these risk factors should be more alert and take preventive measures earlier, for example the simplest is routinely controlling blood pressure more than once, as well as trying to avoid factors that trigger hypertension (Hazwan, A. Pinatih, G.N.h.I. 2017). One of the risk factors for high blood pressure is the elderly. This occurs as a result of various physical setbacks that often occur in the elderly, including decreased muscle strength, balance problems, decreased visual acuity, decreased

hearing and so on. Meanwhile, in terms of physiological decline, an elderly person will be vulnerable to various degenerative diseases such as physical injury, diabetes mellitus, rheumatism, stroke, heart disease and hypertension (Sholekah et al., 2022). Based on the above phenomenon, researchers are interested in examining the characteristics of hypertension sufferers in the Nursing Home Resident.

METHOD

This research is a type Quantitative research with descriptive type to describe or provide an overview of the object under study based on the data obtained. The location used for this research is at Nursing Home Resident X ini Medan. This study was conducted in December 2023 until January 2024. The sampling technique in this study is total sampling there is 30 respondent with hypertension grade 1 and 2 of the total number of elderly people is 70 people. Data analysis used in this research is descriptive statistical techniques or univariate analysis. Descriptive statistics can also be called univariate analysis which is used to determine the frequency distribution of age, gender, smoking history, hereditary history of each respondent.

RESULTS AND DISCUSSION

Table 1.
Characteristics of Respondents by Age (n=30)

Characteristics	f	%
45-59 age	3	10
60-74 age	19	63.4
75-90 age	8	26.6

Table 1 the majority of elderly people are in nursing homes, the majority are 19 respondents (63.4), aged 60-74 years, there are 3 respondents (10), with those aged 45-59 years there are 8 respondents (26.6%). According to Adam (2019), the older a person is, the more susceptible they are to hypertension. This is because the elderly will experience a decrease in the ability of the body's organs, namely the cardiovascular system, including the heart and blood vessels. This decrease in the ability of the cardiovascular system causes the blood vessels to become narrower and the walls of the blood vessels stiffen, causing blood pressure to increase and hypertension to occur. Aging also causes disruption of neurohormonal mechanisms such as the renin-angiotensin-aldosterone system and also causes increased peripheral plasma concentrations and also glomerulosclerosis due to aging and intestinal fibrosis resulting in increased vasoconstriction and vascular resistance, resulting in increased blood pressure (Pratama, 2020).

Table 2.
Characteristics of Respondents by Gender (n=30)

Characteristics	f	%
Male	12	40
Female	18	60

Table 2 the majority. According to Suryonegoro et al. (2021) one of the causes of hypertension when viewed from gender is menopause. In women, the risk of hypertension increases significantly when entering menopause, where a woman entering menopause will experience a decrease in the production of the hormone estrogen. Estrogen itself has many uses, namely it can increase vasodilation by increasing the plasma concentration of the relaxing factor nitric oxide which is derived from the endothelium so that it can inhibit the renin angiotensin system. With the onset of

menopause, it will affect the quality of life, one of which is an increase in the risk of developing degenerative diseases, namely hypertension and others. Some hormones during menopause can have an active effect on increasing blood pressure, such as a relative increase in androgen levels, activation of the atiological renin system, increased endothelial plasma levels, and increased insulin resistance. The presence of several physiological changes can cause hypertension in menopausal women

Table 3.
 Characteristics of Respondents by Hereditary History (n=30)

Characteristics	f	%
Yes	21	70
No	9	30

Table 3, Hereditary history factors showed that most of them had a hereditary history, 21 respondents (70%) and 9 people (30%) who did not have a hereditary history. This result is in line with research by Nuraini (2019) which states that in theory many genes play a role in the development of hypertension disorders. . Someone who has a family history of being a carrier (carrier) of hypertension has twice the risk of developing hypertension. The symmetric gene codes for the aldosterone synthase gene, resulting in ectopic production of aldosterone, mutation of the endothelial sodium channel gene resulting in increased aldosterone activity, suppression of plasma renin activity and hypokalemia, Damage causes mineralocorticoid excess syndrome. Increased aldosterone causes increased water retention, thereby increasing blood pressure. In this study, a small number of respondents did not have a hereditary history but suffered from hypertension, this was caused by lifestyle factors such as a history of alcohol consumption, uncontrolled stress, lack of activity, obesity and consumption of fast food.

Table 4.
 Characteristics of Respondents by Smoking History (n=30)

Characteristics	f	%
Yes	17	56.7
No	13	43.3

Table 2, smoking history category, it was found that the majority had a smoking history of 56.7%. This is in line with several theories such as those stated by WHO (2017) that smoking is one of the risk factors for hypertension which has become a public health problem in the world that continues to grow. More than 7 million deaths are caused by smoking, more than 6 million of these deaths are caused by active smoking while around 890,000 are caused by exposure to cigarette smoke (WHO, 2017). There is 5 respondent male gender have smoking history. When it comes to health risks, women are far more vulnerable than men. This can be understood because naturally, women's physiques are different from men. When it comes to smoking, women are more vulnerable and must receive extra medical attention. Smoking is a habit carried out by men and women for those who are addicted. Smoking causes many harm to both men and women. In women, smoking can harm the lungs and reproductive system (Ministry of Health, 2022).

Table 5.
Characteristics of Respondents by Blood Pressure (n=30)

Characteristics	f	%
140/90 mmHg-159/100 mmHg (Hypertension Grade 1)	17	56,6%
>160/110 mmHg (Hypertension Grade 2)	13	43,3

Based on the results of the research above, there were 17 respondents with grade 1 hypertension (22.1), 13 respondents with grade 2 hypertension (16.8) and 47 respondents with pre-hypertension (61.1). Age is one of the factors that influences the occurrence of hypertension. Blood pressure will increase with increasing age, especially after the age of 40 years. This is caused by structural changes in large blood vessels, so that the lumen becomes narrower and the blood vessel walls become stiffer, as a result of increasing systolic blood pressure (Rahayu, 2020).

CONCLUSION

The conclusion this study that the majority of blood pressure status of hypertension sufferers on elderly in Nursing Home Resident Medan are in the category of Hypertension grade 2.

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