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# Description of Hypertension Management in The Elderly at PSTW Khusnul Khotimah Riau Province

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#### **Abstract**

Management of hypertension in the elderly often faces challenges, such as difficulties in monitoring blood pressure, compliance with treatment, and the presence of comorbidities. This study aims to determine the description of hypertension management in the elderly. This research is a quantitative research with a descriptive approach on 38 elderly people at PSTW Khusnul Khotimah Social Service of Riau Province with the criteria being elderly people aged 60-90 years. Respondents were in the elderly age category (60-74 years), namely 73.7% and 57.9% female, and the highest level of education was elementary school 28.9%. It was found that 68.4% of respondents did not have comorbidities and 73.7% of respondents did not have a family history of hypertension. The results of the research show that the picture of hypertension management in the elderly at UPT PSTW Khusnul Khotimah Social Service of Riau Province is that 52.6% of respondents have poor hypertension management, while 47.4% of respondents have good management.

Keywords: Hypertension, Elderly, Hypertension Management



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## **INTRODUCTION**

Hypertension is a condition when the blood pressure in the arteries increases, namely if the systolic blood pressure is ≥140 mmHg and/or diastole ≥90 mmHg. This condition causes the heart to work harder to pump blood to meet the body's oxygen and nutritional needs. If this condition is left unchecked, it can disrupt the function of other organs such as the heart, kidneys and brain (Roosihermiatie et al., 2023). Based on Riskerdas results in 2018, the incidence of hypertension increases with age. The prevalence of hypertension in Indonesia based on doctor's diagnosis has increased sharply in the elderly group, namely 78.28% (Riskesdas Team, 2019). Various risk factors influence the occurrence of hypertension, such as genetics, metabolism, and environmental or lifestyle factors. Elderly people who suffer from hypertension can live a healthy lifestyle as an effort to improve hypertension management with the aim of controlling blood pressure within normal limits (Yunianto, 2022). The elderly group has various obstacles in controlling hypertension. Elderly people who suffer from hypertension are generally worried about the recommendations given by doctors such as going on a hypertension diet, exercising, controlling stress, stopping smoking, not consuming alcohol and caffeine. In fact, by living a healthy lifestyle, it is likely that elderly people who suffer from hypertension can control their blood pressure. Hypertension sufferers are advised to manage hypertension well, this is to avoid various complications of hypertension such as heart failure, stroke, kidney failure, as well as circulation and death (Sustrani, 2016).

Generally, elderly people experience weakness, limitations and inabilities which will cause them to become dependent on other people. The elderly will experience physical and mental decline. Aging that will occur in the elderly can hinder the elderly in managing hypertension (Purnama, 2023). According to Ashari's research conducted at the Kebun Handil

Community Health Center, Jambi City on hypertension patients, poor hypertension management behavior was shown by 39% of respondents who had positive attitudes and 59.4% of respondents who had negative attitudes. Based on the research results, patients with a negative attitude are 1.523 times more likely to carry out poor hypertension management behavior than patients with a positive attitude. The majority of respondents showed positive attitudes and effective hypertension management behavior based on their answers to the questionnaire about hypertension. Meanwhile, poor hypertension management was seen in many respondents, who also showed negative attitudes towards hypertension management behavior (Ashari et al., 2021).

Ten elderly people suffering from hypertension were the initial research subjects at UPT PSTW Khusnul Khotimah, Riau Province Social Service to see the phenomena experienced by these elderly people. Based on the results of interviews, 4 elderly people (40%) knew about their history of hypertension, but found it difficult to manage hypertension such as a hypertension diet, doing activities or exercising, and not consuming caffeine because they felt their condition was fine, namely there were no symptoms of hypertension. Furthermore, 6 elderly people (60%) reported being able to comply with the hypertension diet that had been provided by UPT PSTW Khusnul Khotimah health workers even though 3 of them (30%) did not carry out daily activities and exercise according to schedule (Saturdays) because they felt tired and exhausted when daily activities or exercise. Based on the above phenomenon, researchers want to conduct research with the title description of hypertension management in the elderly UPT PSTW Khusnul Khotimah Social Service of Riau Province.

## **RESEARCH METHODS**

The research design used in this research is quantitative with a descriptive approach. The sample in this study was the elderly at PSTW Khusnul Khotimah Social Service of Riau Province. The number of samples used in this research was 38 elderly people who were taken using the total sample technique. The inclusion criteria in determining the sample were elderly people aged 60 - 90 years who suffered from hypertension and were willing to become respondents by signing informed consent. Data collection in this study used a hypertension management questionnaire which consisted of 14 question components whose validity and reliability had been tested. The data analysis used in this research is univariate analysis with descriptive tests. This analysis is used to get an overview of the characteristics of respondents and the management of respondents' hypertension, and the data obtained after data collection is illustrated in the form of a frequency distribution table.

## RESEARCH RESULTS AND DISCUSSION

The research results will be explained based on the characteristics of the respondents and the variables studied. This research presents univariate analysis in the form of frequency distribution and percentages of the demographic variables and characteristics studied.

# **Respondent Characteristics**

Table 1. Frequency Distribution of Respondent Characteristics

Characteristics	Frequency (n)	Percentage (%)
Age 1. Elderly 2. Old	28 10	73.7 26.3
Gender		42.1
1. Man	16	57.9

2. Female	26	
Education		
1. Not going to school	9	23.7
2. Elementary school	11	28.9
3. Junior Hight School	8	21.1
4. Senior Hight School	6	15.8
5. College	4	10.5
Comorbid / Accompanying Diseases		
1. Diabetes	3	7.9
2. Heart	4	10.5
3. Strokes	5	13.2
4. None	26	68.4
Family History of Hypertention	10	262
1. Yes	10	26.3
2. None	28	73.7
Total	38	100

Based on table 1 regarding the characteristics of respondents from the research conducted, it can be concluded that almost all respondents have the elderly age category (60-74 years), namely 28 people (73.7%) and female gender as many as 26 people (57.9%), and the last education of the respondents was mostly found to be elementary school as many as 11 respondents (28.9%). Almost all respondents did not have comorbid diseases, namely 26 people (68.4%) and respondents who had a family history of hypertension were 10 people (26.3%).

# **Overview of Hypertension Management**

Table 2. Management of Respondents Hypertention Based on General Categories

Characteristics	Frequency (n)	Percentage (%)
Good	18	47.4
Not good	20	52.6
Total	38	100

Based on table 2 on the description of respondents' hypertension management based on general categories, it is known that most respondents, namely 20 people (52.6%) have poor hypertension management. This is due to several factors, including the lack of routine blood pressure monitoring, and the presence of comorbidities that complicate treatment. In addition, the difficulty of the elderly in complying with treatment, social isolation, and psychological factors such as stress or depression can worsen their condition.

Table 3. Management of Respondents' Hypertension Based on Components

Hymortongian Managament	Ne	ever	Sel	ldom	Some	etimes	0:	ften	Mean
Hypertension Management	n	%	n	%	n	%	N	%	
Participate in recommended sports	17	44.7	6	15.8	2	5.3	13	34.2	
Using strategies to reduce weight	31	81.6	2	5.3	2	5.3	3	7.9	
Maintain optimal body weight	30	78.9	6	15.8	2	5.3	0	0	
Follow the recommended diet	7	18.4	2	5.3	13	34.2	16	42.1	24.07
Limit salt intake	1	2.6	4	10.5	7	18.4	26	68.4	34,97
Limit high-calorie drinks	3	7.9	1	2.6	16	42.1	18	47.4	
Limit high-calorie snacks	2	5.3	10	26.3	20	52.6	6	15.8	
Reduce food portions	25	68.8	6	15.8	5	13.2	2	5.3	
Limit caffeine consumption	2	5.3	4	10.5	18	47.4	14	36.8	

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Using strategies for stress management	12	31.6	16	42.1	6	15.8	4	10.5
Using relaxation techniques	22	57.9	11	28.9	5	13.2	0	0
Participate in smoking cessation measures	0	0	3	7.9	7	18.4	28	73.7
Get rid of cigarettes	0	0	3	7.9	8	21.1	27	71.1
Using strategies to maintain adequate sleep	20	52.6	10	26.3	4	10.5	4	10.5

Based on table 3 on the management of respondents' hypertension based on components, it was found that there were several aspects of management that were classified as good, although not entirely even. As many as 16 respondents (42.1%) often followed the recommended diet, while 26 respondents (68.4%) consistently limited salt intake, which is an important step in lowering blood pressure. In addition, 18 respondents (47.4%) often limited high-calorie drinks, and 20 respondents (52.6%) sometimes limited high-calorie snacks, indicating efforts by some elderly people to control unhealthy food intake. Another significant effort was smoking cessation, where 28 (73.7%) respondents often participated in the rules to stop smoking, and 27 respondents (71.1%) often got rid of cigarettes, which directly reduced the risk of hypertension complications. However, although some components showed good management, there is still much room for improvement in other aspects, such as exercise, weight management, stress management, and adequate sleep habits.

One of the components of major concern is the low participation in recommended sports, where 17 respondents (44.7%) answered that they never did it. In fact, regular physical activity is very important for maintaining heart health and lowering blood pressure. In addition, most respondents also did not use strategies to lose weight, with 31 respondents (81.6%) answering never, and 30 respondents (78.9%) never maintaining optimal body weight. This shows a lack of awareness of the importance of weight management in managing hypertension. Another bad habit is the low use of strategies to manage stress and relaxation. As many as 16 respondents (42.1%) only rarely use stress management strategies, and 22 respondents (57.9%) never do relaxation techniques. In fact, uncontrolled stress can significantly affect blood pressure. In addition, 25 respondents (68.8%) reported never reducing food portions, which contributes to difficulty in maintaining weight. Other strategies, such as limiting caffeine consumption, are also still not optimal, with 18 respondents (47.4%) only sometimes doing it.

## **Discussion**

The results of the study that have been conducted show that of the 42 respondents living in the UPT PSTW Khusnul Khotimah Social Service of Riau Province, it was found that the largest number of respondents were in the elderly group (elderly 60-74 years), which amounted to 28 respondents (73.7%), then the elderly age group old. The results of the study are in line with research conducted by Akbar et al. (2020) that the age group that experiences the most hypertension is the elderly group (elderly), which is 46 respondents (92%). Increasing age also increases blood pressure. After the age of 40, the degenerative process that naturally occurs more often in old age where the artery walls will thicken due to the accumulation of collagen in the muscle layer, causing blood vessels to narrow and become stiff (Amanda & Martini, 2019). In his study, respondents aged 259 years had a prevalence of hypertension 2.61 times higher than sufferers aged <59 years. Respondent characteristics based on gender, the largest in this study were women, namely 22 respondents (57.9%). This is in accordance with research conducted by Sugestina (2023) on hypertension sufferers at the Tlogosari Kulon Health Center, namely that 37 respondents (61.7%) were female. According to Falah (2019), gender is one of the risk factors for hypertension that cannot be changed or modified. According

to him, men tend to be more at risk of suffering from hypertension than women because of their lifestyle, but after women experience menopause, women have a higher tendency to suffer from hypertension than men due to hormonal factors.

Most of the respondents' education in the study was elementary school, namely 11 respondents (28.9%) and a small portion of the respondents' education was college, namely 4 respondents (10.5%). This is in accordance with research conducted by Pertiwi (2021) on elderly people with hypertension, namely there were 41 respondents (37.27%) with elementary school education. Knowledge is closely related to education where it is expected that someone with higher education has broad knowledge. However, it should be emphasized that someone with low education does not necessarily mean that they have low knowledge. Increased knowledge is not absolutely obtained from formal education, but can be obtained from non-formal education. This is also supported by references that state that the higher a person's education, the more oriented they will be towards preventive actions and know more about health problems and have a better health status (Purba, 2021). Respondents who have comorbidities are 12 respondents (31.6%) smaller than respondents who do not have comorbidities, which are 26 respondents (68.4%). The results of a study conducted by Petrie et al., (2018) showed that patients who have comorbidities such as diabetes mellitus have a higher likelihood of causing an increase in the incidence of hypertension. According to the researcher's assumption, someone who does not have comorbidities may experience hypertension due to various other risk factors that trigger hypertension such as age, gender, lifestyle, and psychosocial.

Based on the results of the study, respondents who had a family history of hypertension, namely 10 respondents (26.3%), were smaller than respondents who did not have comorbidities, namely 28 respondents (73.7%). A family history of hypertension is an important non-modifiable factor among several risk factors for hypertension (Ranasinghe et al., 2015). Family history (parents, grandparents, and siblings) that shows high blood pressure is the strongest risk factor for the emergence of hypertension in a person. The cause of hypertension due to family history factors is known to be caused by poor lifestyle, associated with diet (Yeni et al., 2020). The results of the study showed that 24 respondents (57.1%) had poor hypertension management. The researchers found that the elderly at the PSTW Khusnul Khotimah Social Service of Riau Province are often less than optimal due to various interrelated factors. One of them is limited physical activity, where many elderly are not stimulated enough to exercise, with around 44.7% of respondents never exercising. This lack of physical activity contributes to increased blood pressure and difficulty in controlling weight, which further worsens hypertension. In addition, poor weight management is also a problem, with 78.9% of respondents not trying to maintain optimal body weight. Unhealthy diets, such as excessive salt consumption and large portion sizes, also play a role in worsening hypertension, although some elderly people try to reduce their intake of salt and high-calorie drinks. In addition, unmanaged stress, which is experienced by many elderly people due to feelings of loneliness or anxiety, can increase blood pressure, but only a small proportion implement stress management strategies or relaxation techniques.

In this study, researchers found that the elderly's diet was regulated by officers. However, monitoring and control of consumption patterns were only adhered to by the elderly when monitored by PSTW officers. Outside the monitoring of PSTW officers, the elderly lose control to comply with recommendations for food consumption, especially foods that have the potential to cause hypertension such as high salt, salted fish, and coffee. Even some elderly people are not interested in the food served so that the elderly buy food outside the PSTW. This is in line with research conducted by Sapitri et al. (2023) on the level of dietary compliance with

the degree of hypertension in the elderly, it was found that 23 respondents (62.2%) were not compliant in undergoing the hypertension diet that had been provided. The main problem that can occur in the management of hypertension in the elderly is the attitude of the elderly towards their disease who tend to be non-compliant in carrying out self-care. This is believed to be because the elderly have different concepts and beliefs such as the elderly who gain knowledge about disease management who do not always implement the desired behavioral changes (Romadhon et al., 2020).

Not all elderly people with hypertension come to the clinic to check their health as an effort to control hypertension. This is acknowledged by the elderly because according to them, health checks are not very important because there are no symptoms felt by the elderly. According to Wandira et al. (2023) elderly people with hypertension who live in nursing homes are often lazy to check themselves at the available clinics due to several factors. Lack of understanding of the importance of hypertension management is a major barrier, because many elderly people are not aware of the consequences of uncontrolled high blood pressure. Based on his research, it was found that as many as 24 respondents (70.6%) of the control group did not utilize the health facilities available in the hypertension management effort. Modifiable lifestyle risk factors for the most likely management of hypertension include: obesity, sodium intake, height, lack of physical activity and excessive alcohol consumption. According to the researcher's assumption, the large number of elderly people who do poor hypertension management can be seen that most elderly people sometimes maintain optimal body weight. This proves that elderly people maintain optimal body weight to reduce the risk of hypertension. Excessive body weight (obesity) is one of the risk factors for hypertension. Excessive accumulation of fat under the skin will make blood circulation not smooth, so obesity is often an indication that someone is suffering from hypertension. Most elderly people sometimes limit their salt intake. Hypertension diet/low salt diet is done by reducing salt consumption in the form of low-salt foods (fruits and vegetables), avoiding fast food, refraining from adding salt.

In addition, Yunianto (2022) stated that limited physical mobility and declining health often make them reluctant to go to the clinic, even though facilities are available in nursing homes. Lack of social support or external motivation also plays a role, because the elderly may not have enough encouragement to check themselves without support from family or nursing home staff. Another factor that plays a role is anxiety about medical examinations, which can arise from negative experiences in the past. Some elderly people also consider treatment to be ineffective or no longer necessary, especially if they feel there is no significant change in their condition. Finally, the problem of inadequate access or quality of health services in nursing homes can also be a barrier. Based on research conducted by Agustiani, et al. (2023) on the relationship between obesity, smoking habits and physical activity with the incidence of hypertension in the elderly, it was found that 31 respondents (75.6%) had a smoking habit. This was also found in the respondents in this study. Researchers found directly that many elderly people smoked along the PSTW Khusnul. Khotimah hallway. Smoking behavior in the elderly also increases the risk of hypertension in the elderly.

At the Khusnul Khotimah Social Welfare Home (PSTW), the elderly receive education and health services from the health workers on duty, especially regarding hypertension management. The elderly are also given advice by officers to control their salt, caffeine, and smoking consumption. However, most of the elderly have difficulty in continuously complying with these recommendations. Previous studies have also shown that difficulty in controlling salt and caffeine consumption among the elderly is a common problem. For example, a study conducted by Pratiwi (2019) found that around 65% of elderly people diagnosed with

hypertension had difficulty reducing salt consumption even though they had been educated. This is due to long-standing habits and decreased taste bud function which reduces sensitivity to taste. Although various components of elderly hypertension management at PSTW Khusnul Khotimah are classified as less than good, there are still several components of elderly hypertension management that are running well. Most elderly people participate in efforts to stop smoking and are committed to eliminating cigarettes from their lives. In addition, some elderly people also often limit their consumption of high-calorie drinks and follow the recommended diet to support their health. Although not evenly distributed in all aspects, these steps reflect the awareness of some elderly people to carry out behaviors that support hypertension management. This is in line with research conducted by Oktarida et al. (2022) where respondents in their study generally participated in efforts to stop smoking and committed to getting rid of cigarettes. Quitting smoking and getting rid of cigarettes can help manage hypertension because smoking increases blood pressure by narrowing blood vessels and increasing heart rate. Nicotine also damages blood vessel walls, worsens atherosclerosis, and increases the risk of complications such as stroke and heart attack. By quitting smoking, blood vessels can relax again, blood flow becomes smoother, and blood pressure tends to decrease. In addition, quitting smoking is often accompanied by other healthy lifestyle changes, such as a better diet and increased physical activity, which also support overall hypertension management.

## **CONCLUSION**

Based on the research conducted, it was found that almost all respondents were in the elderly age category (60-74 years), namely 28 people (73.7%) and female gender as many as 22 people (57.9%), and the last education of the respondents was mostly elementary school (SD) as many as 11 respondents (28.9%). Almost all respondents did not have comorbid diseases, namely 26 people (68.4%) and respondents who did not have a family history of hypertension, namely 28 people (73.7%). The results of the study related to the description of hypertension management in the elderly at the UPT PSTW Khusnul Khotimah, Riau Province Social Service concluded that most respondents, namely 20 people (52.6%) had poor hypertension management, while 18 respondents (47.4%) had good management.

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