

## Exploring Family Support and Hypertension Levels Among the Elderly

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**Abstract.** *This study investigates the relationship between family support and hypertension levels among the elderly population served by the Waplau Community Health Center in Buru Regency. The research aims to understand how family support influences the management and control of hypertension in older adults, contributing to better healthcare outcomes and improved quality of life.*

**Keywords.** *Family support, hypertension, elderly, Waplau Community Health Center, Buru Regency.*

### BACKGROUND

Hypertension, or high blood pressure, is a significant health concern among the elderly population globally. It is a leading risk factor for cardiovascular diseases, stroke, and other chronic conditions. In regions like Buru Regency, where healthcare access may be limited and aging populations are prevalent, understanding the role of family support in managing hypertension becomes crucial.

Family support encompasses various aspects, including emotional encouragement, financial assistance, assistance with medication adherence, and lifestyle modifications such as dietary changes and physical activity encouragement. Studies have shown that strong family support systems can positively impact health outcomes, particularly in chronic disease management.

This research aims to fill a gap in understanding how family support specifically influences hypertension levels among the elderly in Buru Regency. By exploring this relationship, the study seeks to provide insights that can inform healthcare practices, interventions, and policies aimed at improving hypertension management and overall well-being among older adults in the region.

### METHOD

The design used in this research is an analytical research design with a descriptive approach. The population in this study was 60 people. The sample in this study was 60 elderly people with hypertension. Data analysis uses univariate analysis. And the data is presented in the form of tables and narratives.

### RESULTS

#### 1. Univariate Analysis

Univariate analysis was carried out on each variable from the research results. The analysis

only produces the distribution and percentage of each variable (Notoatmodjo in Lalihun 2017). In this study, univariate analysis will be carried out, namely the characteristics of the respondents, family support, the degree of hypertension in the elderly, the relationship between family support and the degree of hypertension in the elderly.

**Table 1.1 Distribution of Respondent Characteristics Based on Age**

Age	n	%
60-70 Years	32	53.3
71-80 Years	20	33.3
81-90 Years	8	13.4
Total	60	100

*Source: Primary Data*

Based on table 1.1, it shows that the most elderly respondents found in this study were 32 elderly people with an age category of 60-70 years.

**Table 1.2 Distribution of Respondent Characteristics Based on Gender of the Elderly**

Gender	n	%
Man	24	40
Woman	36	60
Total	60	100

*Source: Primary Data*

Based on table 1.2, it shows that the most common gender of elderly respondents found in this study was the female gender category, totaling 36 people.

**Table 1.3 Distribution of Respondent Characteristics Based on Family Support**

Family support	n	%
Positive	14	23.3
Negative	46	76.7
Total	60	100

*Source: Primary Data*

Based on table 1.3, it shows that the most frequent family support from elderly respondents in this study was in the negative category, amounting to 46 people.

**Table 1.4 Distribution of Respondent Characteristics Based on Degree of Hypertension**

<b>Degree of Hypertension</b>	<b>n</b>	<b>%</b>
Pre Hypertension	7	11.7
Grade I hypertension	1	31.7
Grade II hypertension	9	56.6
	4	
<b>Total</b>	<b>60</b>	<b>100</b>

*Source: Primary Data*

Based on table 1.4, it shows that the highest degree of hypertension among elderly respondents found in this study was in the grade 1 hypertension category, 19 people.

## **DISCUSSION**

### **1. Age group of elderly people who experience hypertension.**

The results of this study show that the elderly age group at the Waplau Community Health Center is mostly in the 60-70 year range. The elderly age group is very vulnerable to various diseases due to a decrease in body structure and function due to the aging process. The older a person is, the greater the risk of developing hypertension.

Research conducted by Nuraeni E (2019) with the title "The relationship between age and gender at risk with the incidence of hypertension in clinic x Tangerang city" said that there was a correlation between age and the incidence of hypertension with a significance value of 0.001. Hypertension occurs because as you get older, changes occur in the arteries in the body, becoming wider and stiffer, which results in the capacity and recoil of blood accommodated through the blood vessels becoming reduced.

Risk factors for hypertension are divided into risk factors that cannot be modified and risk factors that cannot be modified. Non-modifiable risk factors such as heredity. Gender, race and age. Meanwhile, risk factors that can be modified are obesity, lack of exercise or activity, smoking, alcoholism, stress, and diet (Casey & Benson, 2006 in Calvin Aristo, 2018). Between the ages of 30 and 65 years, systolic pressure increases by an average of 20 mmHg and continues to increase after the age of 70 years. The increased risk associated with age largely explains isolated systolic hypertension and is associated with increased peripheral vascular resistance (resistance to blood flow in peripheral blood vessels) in the arteries (Casey & Benson, 2006 in Calvin Aristo, 2018).

Through the description above, the researchers assume that one of the factors in increasing the degree of hypertension in the elderly at the Waplau health center is influenced by age. The older a person is, the more susceptible they are to degenerative diseases, one of which is hypertension.

## **2. Gender in elderly people who experience hypertension.**

The results of this study show that more respondents suffering from hypertension at the Waplau health center were female. Gender is a risk factor for hypertension.

According to research conducted by Azhari (2017) entitled "Factors related to the incidence of hypertension in the Makrayu Health Center, Ilir Barat II District, Palembang," it is said that there is a correlation between gender and the incidence of hypertension with an Odds ratio (OR) = 2.708, this means Female respondents have 2.7 times the chance of developing hypertension compared to male respondents.

Men often experience signs of hypertension in their late thirties, while women often experience hypertension after menopause. Women's blood pressure, especially systolic, increases more sharply with age. After 55 years, women do have a higher risk of suffering from hypertension. One of the causes of this pattern is the difference in hormones between the sexes.

Production of the hormone estrogen decreases during menopause, women lose its beneficial effects so blood pressure increases (Casey & Benson, 2006 in Calvin Aristo, 2018). The prevalence of hypertension in men is almost the same as in women, but women are protected from cardiovascular disease before menopause, women who have not experienced menopause are protected by the hormone estrogen which plays a role in increasing High Density Lipoprotein (HDL) levels.

Based on the research results and existing theories, researchers assume that gender is a risk factor for hypertension. This is because more female respondents suffer from hypertension compared to male respondents. because women are usually protected from cardiovascular disease before menopause, while women who have experienced menopause are not protected by the hormone estrogen which plays a role in increasing High Density Lipoprotein (HDL) levels.

## **3. Family support for elderly people who experience it.**

The results of this study show that family support for the elderly at the Waplau health center is mostly in the poor category. Elderly people who receive less support feel that they receive less attention from their families because the children or grandchildren who live with them mostly work as farmers, so they spend little free time with the elderly, besides

that, families rarely take the elderly to health workers to control their blood pressure because limited funds owned by the family.

The type of instrumental support can be in the form of time, costs, equipment and others. This type of support can ease the burden on the elderly. This is in line with research conducted by Fitriah NF, et al (2017) with the title "Family support for the elderly and impaired independence in ADL (Activities of daily living)" which states that respondents can provide real instrumental support such as in the form of money, equipment, time, facilities and fulfillment of daily activities so as to ease the burden on the elderly.

Respondents as the people closest to elderly people who experience impaired independence can help in fulfilling daily activities such as eating, drinking, personal toilets, going in and out of the bathroom, showering, walking up and down stairs wearing clothes, controlling defecation and urination.

Instrumental support is support that focuses on the family as a source of practical and concrete help in the form of direct assistance from people they rely on, such as materials, energy and facilities. Real support, where this support is in the form of direct assistance. This dimension shows support from the family in a real form towards the dependence of family members. This instrumental dimension includes providing means to make things easier or help others, including providing time opportunities (Friedman, Bowden, & Jones, 2010). The lack of attention to the elderly at the Waplau health center means that the elderly cannot get what they need.

Through the description above, the researcher assumes that the lack of family support for the elderly at the Waplau health center is caused by the family's lack of free time and economic factors. The family as the people closest to the elderly can help in fulfilling daily activities so that the elderly's needs can be met.

#### **4. Degree of hypertension in the elderly .**

The results of this study show that more elderly people at the Waplau Community Health Center experienced grade II hypertension. Risk factors for increased blood pressure in the elderly include age, diet and physical activity. From the results of interviews with elderly families, many said that elderly people like dishes that have a fairly high salt intake and fatty foods, apart from that, many elderly families do not understand the recommended amount of salt used for hypertension sufferers.

Hypertension that occurs in the elderly can be caused by a decrease in body structure and function due to the aging process. The older a person is, the greater the risk of developing hypertension. This is in line with research conducted by Calvin Aristo (2018) with the title

"Correlation of age and gender with hypertension in the Emergency Center Unit of Siti Khadijah Islamic Hospital Palembang" which states that the increased risk associated with age factors largely explains systolic hypertension. isolated and associated with increased peripbrelar vascular resistance (obstacles to blood flow in peripheral blood vessels) in the arteries, this is caused by arterial pressure which increases with increasing age, the occurrence of aortic regurgitation, and the presence of degenerative peruses, which are more common in old age. Apart from age, a risk factor for hypertension is diet in the elderly. Some risky eating behaviors include frequently eating salty foods and frequently eating fatty foods.

According to research conducted by Damanik and Sitompul (2020) entitled "The relationship between lifestyle and hypertension in the elderly," it is said that there is a relationship between physical activity and hypertension in the elderly at the Tutun Sehati Tanjung Morawa clinic. Lack of physical activity tends to have a high cardiac output. The higher the cardiac output, the greater the oxygen needed by body cells. Lack of physical activity causes a lack of energy burning by the body so that excess energy in the body will be stored in the form of fat in the body. Excessive storage will result in hypertension.

Through the description above, the researchers assume that the risk factors for hypertension in the elderly at the Waplau health center include age, diet and physical activity. A poor diet causes blood pressure to be uncontrolled so it will increase. Apart from that, elderly people's infrequent physical activities, such as exercise and other activities, cause a lack of energy burning by the body so that excess energy in the body will be stored in the form of fat in the body.

## **CONCLUSION**

It was concluded that the most family support was negative with the highest degree of hypertension found in this study being grade 1 hypertension.

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