



THE RELATIONSHIP OF FAMILY SUPPORT TO THE PREVENTION OF HYPERTENSION COMPLICATIONS IN THE ELDERLY

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ABSTRACT

Introduction: Hypertension is a health problem that most often occurs in the elderly, because the elderly will experience a decrease in physiological function due to degenerative processes, one of the diseases of the cardiovascular system that most often occurs in the elderly due to aging and the cumulative impact of the lifestyle of the elderly in their youth. Hypertension in the elderly has the potential for complications such as coronary heart disease and kidney failure, so it requires routine treatment and several routine precautions that can prevent hypertension complications and support from the family is very influential.

Method: This study aims to analyze the relationship between family support and the prevention of hypertension complications in the elderly. This research is a correlational descriptive study using a cross sectional design with a quantitative approach. The sample was selected using accidental sampling technique with a total sample of 68 respondents. Statistical tests use the Spearman rho test.

Results: The results of the study show that there is a relationship between family support and the prevention of hypertension complications in the elderly with a positive correlation and very strong strength (p value = <0.001 ; $r = 0.859$).

Conclusion: there is a relationship between family support and the prevention of hypertension complications in the elderly. The recommendation from the results of this research is the importance of family support in preventing hypertension complications in elderly people with hypertension so that they are more confident and obedient in preventing hypertension complications.

Keywords: Hypertension, prevention of hypertension complications, family support, elderly

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INTRODUCTION

The elderly aggregate (elderly) is a group that is included in the vulnerable category. Vulnerable groups are groups that have an increased risk of experiencing health problems due to reduced ability to avoid disease and high exposure to risk factors (Stanhope & Lancaster, 2016). As a vulnerable group, the elderly are characterized by various changes occurring in all aspects of life which include physiological, psychological, social and spiritual changes. These changes can cause health problems in all body organ systems, especially the cardiovascular

system which plays an important role in human survival (Putri & Rekawati, 2020).

One of the diseases of the cardiovascular system that most often occurs in the elderly as a result of the aging process and the cumulative impact of the elderly's lifestyle when they were young is hypertension. Based on basic global cardiovascular information from the World Health Organization (WHO), it shows that 26.4% of the elderly population in 2019 experienced hypertension. Hypertension occurs highest in the elderly group compared to productive age, namely 69.5% in the age group 75 years and over, followed by the 65-74 year age group

at 63.2%, and 55-64 years at 55.2% (Aziza, 2017). This proves that physiologically, the older a person is, the greater the risk of developing hypertension (Riskseddas, 2021).

The prevalence of hypertension in the elderly according to data on visits to the Manyaran Health Center in 2022, there are 892 people aged 45-54, 760 people aged 55-59 years, 760 people aged 60-69 years, 1876 people aged > 70 years and 693 people aged > 70 years (Manyaran Community Health Center, 2022). Based on the data above, it can be concluded that elderly people with hypertension, according to health center visit data, are mostly elderly aged 60-69 years and do not know that they have hypertension or are receiving treatment.

The high prevalence of hypertension in the elderly demands public attention to controlling hypertension risk factors. Minarti et al., (2022) stated that controlling hypertension risk factors includes five main things, namely balancing nutrition, avoiding smoking, avoiding stress, monitoring blood pressure and exercising regularly. Ariyanti et al., (2020) also explained that the main indicators for assessing the success of controlling hypertension risk factors include having an appropriate diet, being able to minimize stressors that occur in life and showing normal blood pressure during a health check.

Hypertension is a non-communicable disease and is currently still a global health problem. Hypertension is defined as persistent blood pressure with systolic pressure >140 mmHg and diastolic blood pressure >90 mmHg. Someone who suffers from hypertension sometimes does not show signs and symptoms or is often referred to as a (silent killer). The main signs and symptoms that hypertension sufferers complain about include headaches, fatigue, nausea and vomiting, soreness in the nape of the neck, blurred vision, pounding chest, and ringing in the ears (Ariyanti et al., 2020). In the AHA Guideline (2017), hypertension is divided into 2 grades: 1. Grade 1 hypertension: systolic blood pressure 130-139 mmHg, diastolic 80-90 mmHg, 2. Grade 2 hypertension: systolic blood pressure >140 mmHg, diastolic >90 mmHg.

Controlling risk factors for hypertension in the elderly has been carried out by health workers through promotive, preventive, curative and rehabilitative efforts. This effort is carried out in all health service settings, both institutional and non-institutional. Efforts to prevent and control hypertension complications must start from the individual who experiences hypertension, so they require awareness and motivation in carrying out the therapy program. The process of monitoring, maintaining and preventing hypertension complications also requires the role and support of the family. Family support is the most important

element in helping individuals solve problems. Elderly people who receive family support will be able to increase their self-confidence and be motivated to face problems that occur (Stuart & Sundeen in Tamher & Noorkasiani, 2019).

Family support is behavior or actions as well as information that aims to help someone in a certain situation, so that he or she is loved and cared for, appreciated and respected and is part of the communication network and reciprocal obligations of kinship units related to marriage or blood (Muthmainah, 2022). The four benefits of social support according to Johnson & Johnson, namely social support connected to work will increase productivity, improve psychological well-being and personal adjustment by providing a sense of belonging, clarifying self-identity, increasing self-esteem and reducing stress, improving and maintaining physical health, and managing against stress and pressure. The family has an important role in the process of monitoring, maintaining and preventing complications of hypertension at home (Pamungkas et al., 2020). There is a strong relationship between family and the health status of family members.

In the family support service process, the nurse's role as a case finder is to look for cases or find cases of hypertension starting from the family, cadres, nearest health services or local residents. The nurse's role as a case finder is to carry out physical examinations, anamnesis to find cases and family health history of hypertension sufferers (Utami, 2019). Based on the results of observations made by researchers, it was found that case findings were obtained from the Manyaran Community Health Center, the cases found were processed and recorded by researchers as a form of the role of case finder nurses.

The results of a preliminary study at the Manyaran Community Health Center for 5 elderly respondents using a family support questionnaire and a questionnaire for preventing hypertension complications, family support influenced patient actions in preventing hypertension complications. When researchers administered a questionnaire regarding family support given to 5 elderly respondents, it was found that 5 elderly respondents received good emotional support, namely 80% of respondents, 60% good assessment support, less instrumental support, while informational support was still lacking, only 40% of respondents. And also 5 elderly respondents had not properly prevented hypertension complications, only 20% of respondents. Therefore, the role of the family is very important in every aspect of health services provided by family members, starting from the stage of

providing health promotion to the rehabilitation stage.

METHOD

Researchers used quantitative research methods with a cross-sectional approach. The population in this study were hypertensive elderly who had not experienced any complications during Prolanis activities on April 26 2023 and May 10 2023 at the Manyaran Community Health Center. Researchers took samples using the Accidental Sampling method and obtained 68 respondents. This research was conducted at the Manyaran Community Health Center during Prolanis activities on April and May 2023.

RESULTS

Table 1
Frequency Distribution of Respondents Based on Respondent Characteristics
(n=68)

Variable	Frequency (f)	Presentase (%)
Gender		
Man	18	26,5
Woman	50	73,5
Total	68	100,0
Age		
Age 60-74 years	64	94, 1
Age 75-90 years	4	5,9
Age > 90 years	0	0,0
Total	68	100,0
Job		
Working	12	17,7
Not Working	56	82,4
Total	68	100,0
Education Level		
Not School	4	5,9
Elementary School	27	39,7
Junior High School	20	29,4
Senior High School	14	20,6
Diploma/ Bachelor	3	4,4
Total	68	100,0
Blood Pressure		
Stage I:140-159 / 90-99	31	45,6
Stage II: ≥ 160 / ≥110	32	47, 1
Isolated Systolic Hypertension	5	7,4
Total	68	100,0

Based on table 1, it was found that the majority of respondents were female, amounting to 50 respondents (73,5%). Almost all respondents were in the 60-74 year age group, amounting to 64 respondents (94,1%). Most of the respondents did not work, 56 respondents (82,4%). A small proportion of respondents had at least elementary school education, 27 respondents (39,7%). Almost half of the respondents were in stage II hypertension, 32 respondents (47,1%).

Table 2
Frequency Distribution of Respondents Based on Family Support for the Elderly
(n=68)

Support	Frequency	Presentase
Poor	0	0,0
Average	3	4,4
Good	65	95,6
Total	68	100,0

Based on table 2, it was found that almost all respondents received good family support, 65 respondents (95,6%).

Table 3
Frequency Distribution of Respondents Based on Prevention of Complications in the Elderly
(n=68)

Prevention	Frequency	Presentase
Prevention is poor	0	0,0
Prevention is average	4	5,9
Prevention is good	64	94, 1
Total	68	100,0

Based on table 3, it was found that almost all respondents were in the good complication prevention group, 64 respondents (94.1%).

Table 4

Relationship between family support and prevention of hypertension complications in the elderly (n=68)

Family Support	Prevention of Hypertension Complications			Total	Correlation Coefficient	p Value
	Poor	Average	Good			
Poor	0 (0,0%)	0 (0,0%)	0 (0,0%)	0 (0,0%)	0,859	<0,001
Average	0 (0,0%)	3 (4,4%)	0 (0,0%)	3 (4,4%)		
Good	0 (0,0%)	1 (1,5%)	64 (94,1%)	65 (95,6%)		
Total	0 (0,0%)	4 (5,9%)	64 (94,1%)	68 (100,0%)		

Based on table 4, it was found that almost all respondents were in the good family support and good hypertension prevention group, 64 respondents (94.1%). The p value is <0.001, so it can be concluded that there is a relationship between family support and the prevention of hypertension complications in the elderly at the Manyaran Community Health Center. The correlation coefficient value is 0.859 so it can be concluded that the relationship is very strong in a positive direction.

DISCUSSION

The results of the study showed that the group of elderly people who had the most hypertension was the elderly category in the range of 60-74 years, namely 64 respondents (94.1%). The results of this study are in line with the results of research (Akbar, 2020) which shows that hypertension is dominated by elderly people aged 60-74 years. The older you get, the more risk a person has of experiencing hypertension, aged 60-64 years, the risk of hypertension increases by 2,18 times, aged 65-69 years 2,45 times and aged > 70 years 2,97 times. This happens because at that age the large arteries lose their flexibility and become stiff, therefore the blood with each heart beat is forced to pass through narrower blood vessels than usual, which causes blood pressure to rise (Novitaningtyas, 2014).

The results of the study showed that 50 respondents (73.5%) experienced hypertension more often than men. Women are at greater risk of developing hypertension than men due to the instability of the estrogen hormone which plays a role in regulating circulation after entering menopause. Women who have not yet gone through menopause are protected by the hormone estrogen which plays a role in increasing High Density Lipoprotein (HDL) levels. Low HDL cholesterol levels and high LDL cholesterol (Low Density Lipoprotein) influence the

process of atherosclerosis. This shows the relationship between gender and blood pressure in the elderly. Elderly women are more likely to suffer from hypertension than men (Noviningtyas, 2014).

The research results showed that the majority of respondents did not work, namely 56 respondents (82.4%). The results of someone's research explain that housewives (housewives) or those who don't work tend to cause severe hypertension due to stress (Handayani in Akbar, 2020). Work also has an influence on a person's physical activity, by working it is hoped that the person will have more physical activity compared to people who do not work. In people who do not work, there is little activity, which increases the risk of hypertension because of the risk of being overweight (Handayani in Akbar, 2020).

The research results showed that the majority of respondents had completed elementary school education, namely 27 respondents (39.7%). In line with research by Yuwono, Ridwan, and Hanafi (2017), some respondents had low or elementary school education. One of the influencing factors on health behavior is the level of education. The results of education help shape thinking patterns, perception patterns and the best decision-making attitudes for him. However, a low level of education will not always prevent someone from learning from the media, such as television, newspapers, magazines, radio, and other people's experiences which can be used as references for themselves. Research conducted by Rasajati et al (2015) explains that respondents with high education and those with low education both want to recover from illness so that the level of education cannot influence compliance with treatment. Awareness through the learning process and also support from a good family can be important in preventing hypertension complications (Purwanto in Pakaya, 2021). Education is needed to obtain information that can ultimately influence a person. In

general, the higher a person's education, the easier it is to receive information (Mujiran, 2019).

Based on research conducted by researchers, it was found that the majority of respondents received family support, the number of respondents who received good support was 65 people (95.6%). Family support is a form of service carried out by the family, in the form of emotional support in the form of attention and giving affection, providing appreciation and positive responses, providing informational support in the form of suggestions, advice and information and instrumental support in the form of assistance with energy, money and time (Nita & Oktavia, 2018).

This is in line with research conducted by Isroin (2019) entitled the relationship between family support and diet compliance among hypertension sufferers in Demangan village, Siman District, Ponorogo Regency, which said that 55.3% of respondents had good family support. The family acts as a support system for other family members. Family members are of the opinion that support from the family is very necessary when facing a problem, especially when sick, support from the family is useful in providing encouragement in speeding up the process of recovering from hypertension.

CONCLUSION

Based on the results of statistical analysis using the Spearman rho test, the p value = 0.001 (p value < 0.05) was obtained, which means that H_a is accepted so it can be concluded that there is a relationship between family support and the prevention of hypertension complications in the elderly. The correlation coefficient value is 0.859, meaning that the relationship is very close to a positive direction, which means that the better the family support, the more compliant they will be in preventing hypertension complications

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