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## The Correlation of Family Support and Dietary Compliance of The Elderly With Hypertension at Sub-District Health Center Klurahan, Ngronggot District Nganjuk Regency



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### Abstract

Introduction: Current lifestyle triggers an increase in the incidence of hypertension, especially diet. Hypertension sufferers are expected to obey the predetermined diet. Family support should be a reinforcing factor that can influence the patient decision to adopt a hypertension diet. The purpose of this study was to determine the correlation of Behavior of Family Support with Dietary Compliance of The Elderly With Hypertension at Sub-District Health Center Klurahan, Ngronggot District, Nganjuk Regency. Methods: Design of the study was a correlation with a cross sectional approach. This study was conducted on February 23-24 July 2020. The population of this study was all elderly patient with hypertension at Sub-District Health Center Klurahan as many as 38 patients. The sample was 32 respondents taken by purposive sampling technique. The independent variables was The Family Support. The dependent variables was dietary compliance of The Elderly With Hypertension. The Data Collection used a questionnaire. The data analysis used the Spearman Rank with  $\alpha = (0,05)$ . Results: The results of the study showed almost half of them were 15 respondents (46, 2%) had good family support. Dietary compliance of the elderly most of the were respondents (51, 3%) Compliance to the hypertension diet. The test results obtained  $p\text{-value} = 0,000 \leq \alpha = (0,05)$  so  $H_a$  was accepted with  $r$  value was 0, 851 which meant had a very strong level of correlation. Conclusions: Family support is one of the important roles that can help improve care for people with hypertension, support make sufferers more motivated to a compliance hypertension diet.

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## INTRODUCTION

One of the degenerative diseases that is a health problem in the world is hypertension, which is a chronic disease caused by blood circulation disorders which results in an increase in blood pressure that exceeds normal (Ganong, 2008). Hypertension with an increase in systolic pressure without an increase in diastolic pressure often occurs in the elderly (age 60 years and over), because at that age there has been stiffness in the arteries and aorta (Darmojo and Martono, 2008). The phenomenon of increasing incidence of hypertension is related to the lack of compliance with hypertension sufferers, one of which is the hypertension diet. Changes in people's lifestyles globally have reduced the consumption of fresh vegetables and fiber, then the consumption of salt, fat, and sugar continues to increase (Runtukahu, 2015). Based on a preliminary study in the form of an interview conducted by researchers on June 28, 2020 at Sub-District Health Center, Klurahan Village, Ngronggot District, Nganjuk Regency, during an interview with the elderly 3 out of 5 elderly people are less obedient to low-salt hypertension diet by still consuming foods that contain salt and 2 elderly have tried obey to run a low-salt hypertension diet by asking his family to prepare food separately and the family to be able to provide low-salt foods.

WHO data in 2016, around the world around 836 million elderly or 21.7% of elderly people around the world have hypertension. There had been 972 million hypertension sufferers, 430 million had been in Europe and the remaining 306 had been in Asia, including Indonesia (Soetrisno, 2017). The prevalence of hypertension based on age 55-64 years was 55.2%, 63.2% at 65-74 years old and 69.5% at 75 years old (Infodatin Kemenkes RI, 2016). Riskesdas data for 2018, East Java Province, the prevalence of hypertension reached 26.2%. The highest prevalence of hypertension was in the 75 year age group, namely 62.4%. The prevalence of hypertension in the city of Surabaya was 22.0% (BPPK Ministry of Health, 2013). According to data from the Nganjuk District Health Office in 2019, hypertension is the first number of non-communicable diseases. Hypertension sufferers in Nganjuk district reached 50,360 people. The highest number of hypertensive patients at the Ngronggot Sub-Health Center was 873 people. Meanwhile, the number of hypertensive elderly at the Sub-District

Health Center Klurahan Village of Ngronggot District was 38 people.

Hypertension is a public health problem in the world, and is closely related to the behavior patterns of people's lives. Hypertension is a major factor in cardiovascular diseases which is the leading cause of death in Indonesia (Tumenggung, 2013). Factors that cause hypertension include lifestyle changes, irregular exercise and consuming foods that trigger hypertension (Yuliarti, 2011). Risk factors that lead to increased blood pressure such as high salt intake, smoking and drinking alcohol. If hypertension is not treated or treated promptly, blood pressure that exceeds 180/100 mmHg has a 5 times greater risk of developing coronary heart disease than someone with a blood pressure of less than 140/80 mmHg. Hypertension is categorized as a disease of the silent disease. Hypertension that occurs for a long time and continuously can trigger strokes, heart attacks, heart failure and is a cause of chronic kidney failure. Lack of information and low awareness to check blood pressure regularly, having an unhealthy diet and lack of knowledge are triggers for an increase in cases of hypertension (Hamid, 2013). Notoadmojo (2013) in Devita (2014) adherence has several factors that influence patient decisions including adherence in doing the program, namely understanding of instructions, level of education and knowledge, pain in medication, beliefs, patient attitudes, and family support. Family support is one factor that cannot be ignored, because family support is one of the factors that has a significant contribution and as a reinforcing factor that influences patient decisions. Currently, many efforts are being made to overcome the increasing problem of hypertension. The Ministry of Health has formulated a national policy and strategy for prevention and control of disease, namely surveillance of hypertension, promotion and prevention of hypertension and management of hypertension disease services.

Family support needed to increase self-confidence and motivation to face problems and increase hypertension diet compliance. The role of the family must be involved in fulfilling needs, knowing when the family should seek help and supporting adherence to reduce the risk of recurrence and complications. Families can help in treating hypertension by arranging a healthy diet, inviting exercise, accompanying and reminding of

regular checkups in blood pressure checks (Susriyanti, 2014). Health workers, especially nurses, can also provide intensive education and counseling to families and people with hypertension about the importance of hypertension control so that complications do not occur by obeying the advice of health workers. Based on the above background, the researchers are interested in conducting research on the relationship between family support and adherence to elderly hypertension diabetes.

## RESEARCH METHODS

This research design used correlation with cross sectional approach. This research was conducted on 23-24 July 2020 at the Sub-District Health Center Klurahan, Ngronggot District, Nganjuk Regency. The population in this study were 38 elderly patients with hypertension in the Sub-District Health Center Klurahan, Ngronggot District, Nganjuk Regency. The sampling technique used was purposive sampling. The sample used was 32 people. The statistical test used the Spearman rank with a significant  $\alpha = 0.05$ . The independent variable in this thesis is family support, and the dependent variable in this thesis is the compliance diet of the elderly patient with hypertension. The measuring instrument in this research is the independent variable using a questionnaire and the dependent variable using a questionnaire.

## RESULTS

1. Family Support at Sub-District Health Center Klurahan, Ngronggot District, Nganjuk Regency

**Table 1 Distribution of Frequency of Family Support at Sub-District Health Center Klurahan, Ngronggot District, Nganjuk Regency on July 23-24, 2020**

No.	Family Support	Frequency (f)	Percentage (%)
1.	Good Support	15	46,9
2.	Sufficient Support	10	31,2
3.	Lack of support	7	21,9
Total		32	100,0

Based on Table 1, it can be seen that of the 32 elderly respondents with hypertension at Sub-District Health Center Klurahan, Ngronggot District, Nganjuk Regency, almost half have good family support, namely 15 respondents (46.9%).

2. Compliance diet of the elderly patient with Hypertension at Sub-District Health Center, Klurahan, Ngronggot District, Nganjuk Regency

Based on Table 2, it can be seen that of the 32 respondents with hypertension sufferers at Sub-District Health Center Klurahan, Ngronggot District, Nganjuk Regency, most of them obedient in doing the hypertension diet, namely 18 respondents (51.3%).

3. Relationship between Family Support and Compliance diet of The Elderly Patient with Hypertension at Sub-District Health Centers, Klurahan, Ngronggot District, Nganjuk Regency

**Table 2 Distribution of Frequency of Compliance diet of The Elderly Patient with Hypertension at Sub-District Health Center Klurahan, Ngronggot District, Nganjuk Regency on July 23-24, 2020**

No.	Compliance Diet of The Elderly Patient with Hypertension	Frequency (f)	Percentage (%)
1.	Obedient	18	56,2
2.	Less obedient	14	43,8
Total		32	100,0

Based on Table 3, it can be seen that of the 32 elderly respondents with hypertension at Sub-District Health Center Klurahan Ngronggot District, Nganjuk Regency, almost half, namely 15 respondents (46.9%) have good family support and

are obedient to hypertension diet. The results of the spearman rank statistical test showed that the value of  $\rho$  value =  $0.000 \leq (\alpha = 0.05)$ , which means that  $H_a$  is accepted so that it can be concluded that there is a relationship between family support and

**Table 3** Cross Tabulation of the Relationship between Family Support and Compliance diet of the Elderly patient with Hypertension at the Sub-District Health Center Klurahan, Ngronggot District, Nganjuk Regency, 23-24 July 2020

Family Support	Compliance diet of the Elderly Patients with Hypertension				Total	
	Obedient		Less obedient		Σ	Percentage (%)
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)		
Good Support	15	46,9 %	0	0%	15	46,9 %
Sufficient Support	3	9,3 %	7	21,9 %	10	31,2%
Lack of Support	0	0	7	21,9%	7	21,9%
<b>Total</b>	<b>18</b>	<b>56, 2 %</b>	<b>14</b>	<b>43, 8 %</b>	<b>32</b>	<b>100%</b>

*Spearman rank test,  $\rho$  value = 0,000 ≤  $\alpha$  = 0,05 r = 0, 851*

compliance with the analysis of hypertension sufferers at Sub-District Health Center, Ngronggot District, Nganjuk Regency with a value of  $r = 0,851$  which means it has a very strong level of relationship.

## DISCUSSION

### 1. Family Support at Sub-District Health Center Klurahan, Ngronggot District, Nganjuk Regency

The results showed that of the 32 elderly respondents with hypertension at the Sub-District Health Center Klurahan Ngronggot District, Nganjuk Regency, almost half, namely 15 respondents (46.9%) had good family support. The research results tabulated demographic data from 15 respondents who had good family support, almost all of them had junior high school education, namely as many as 13 respondents (86,7%). These results are supported by the results of the Spearman rank test with  $\tilde{n}$  value of education =  $0.009 \leq \alpha = (0.05)$ . So that family support is significantly influenced by education.

Education is a process of adding to the development of all human abilities and behavior through knowledge, so that in education it is necessary to consider the client's development process and the relationship with the learning process. The level of education is also one of the factors that affect a person's perception or are more receptive to ideas and technology. Education includes an important role in determining human quality. With human education, it is considered that they will acquire knowledge of the implications (Notoatmodjo, 2011).

Based on the results of this study, the researcher argues that family support at Sub-District Health Center Klurahan, Ngronggot District, is in a good category. Humans have a basic urge to want to know, to seek reason, and to organize their experiences. Education is learning for the community to be willing to take actions to maintain and overcome every problem. Education can affect the way a person views the new information they receive. Education is a teaching and learning process, so it can be said that the higher the education, the easier it is to behave well in supporting a sick family member.

### 2. Compliance diet of The Eldery Patient With Hypertension at Sub-District Health Center Klurahan, Ngronggot District, Nganjuk Regency

From the results of the study, it can be seen that of the 32 respondents with hypertension sufferers at Sub-District Health Center Klurahan Ngronggot District, Nganjuk Regency, most of them 18 respondents (51.3%) obedient in doing hypertension diet. The results of the research on tabulation of demographic data from 18 respondents who had obedient to hypertension diet, almost all of them had received information about the elderly diet with hypertension as many as 16 respondents (88.9%). These results are supported by the results of the Spearman rank test with  $\rho$  value of information =  $0,011 \leq \alpha = (0.05)$ . So that obedient to the diet of elderly patient with hypertension had influenced by having received significant information.

According to Pranoto (2007) in Devita (2014) states that obedience is liking to orders, obeying orders, while obedience is behavior according to the rules. Respondents compliance with hypertension dosage is in line with Notoatmodjo's (2007) opinion which states that there are factors that influence the formation of behavior, one of which is the knowledge factor that can be obtained from various information.

According to Notoatmodjo (2011), information is the whole meaning that can be interpreted as someone's notification of new information for the formation of an attitude towards this. Sources of information can be obtained through mass media (newspapers, magazines). electronic media (television, radio, internet) and information can be obtained from health workers by means of health education which can be presented in various ways, for example by distributing leaflets, seminars, counseling and so on.

Based on the results of this study, the researcher argues that a person's adherence to hypertension is influenced by hypertensive elderly individuals in achieving recovery and the elderly's belief in the benefits of hypertension diet such as avoiding fatty foods, eating high salt content which of course can be obtained from information. The more information you get, the better you understand how to manage the disease, maintain a lifestyle, and diet in order to achieve an optimal degree of health

### 3. Relationship between Family Support and Compliance diet of the Elderly Patient with Hypertension at Sub-District Health Centers Klurahan, Ngronggot District, Nganjuk Regency

The results of the spearman rank statistical test showed that the value of  $\rho$  value =  $0.000 \leq \alpha = (0.05)$ , which means that  $H_a$  is accepted and  $H_0$  is rejected, so it can be concluded that there is a relationship between family support and compliance diet of the elderly patient with hypertension at Sub-District Health Center Klurahan, Ngronggot District, Nganjuk Regency with the value of  $r = 0,851$  which means it has a very strong level of relationship.

According to Bomar (2004) in Dewi et al (2016) family support is a form of service behavior carried out by families, both in the form of emotional support (attention and affection), family support (appreciating and providing positive feedback), information

support (suggestions, advice, information) as well as instrumental support (assistance of manpower, money and time).

Support from the nuclear family (father, mother, child) is an important factor affecting sufferers while undergoing diet. With the provision of good support, the sufferer will feel comfortable and cared for, so that it can increase motivation which will create behavior to obey the diet (Friedman, 1998). In addition, giving poor support will lead to feelings of lack of affection which will reduce motivation in running the diet. this greatly affects the continuing complications that will be experienced by the sufferer.

Based on the results of this study, the researcher argues that there is a relationship between family support and compliance diet of the elderly patient with hypertension at the Sub-District Health Center Klurahan, Ngronggot District, Nganjuk Regency because of the provision of support which includes attention support such as helping to provide information related to hypertension and diet, giving advice, and understanding. The family support needed in order to reduce elderly non-compliance with the currently running hypertension program. In addition, community nursing care also has an important role in producing professional nursing service interventions, one of which is by providing health education about healthy lifestyles to the community related to hypertension, especially for elderly patient with hypertension, inviting the elderly patient to do heart exercise regularly, making regular home visits. Schedule to monitor the health and surveillance of hypertension so that it will create confidence and motivation in the elderly to be able to recover and be able to manage their disease properly.

## CONCLUSION

Family support at Sub-District Health Center Klurahan, Ngronggot District, Nganjuk Regency, almost half of them have good family support, namely 15 respondents (46.9%). The compliance diet of the elderly patient with hypertension at sub-district health center, Ngronggot subdistrict, Nganjuk district, most of them obedient in doing the hypertension diet, namely 18 respondents (51.3%). There is a relationship between family support and compliance diet of the elderly patient with hypertension at Sub-District Health Center Klurahan Ngronggot District, Nganjuk Regency. The results

of the spearman rank statistical test showed a significant value, namely  $p \text{ value} = 0.000 \leq (\alpha = 0.05)$  with a value of  $r = 0.851$  which means that it has a very strong level of relationship.

## SUGGESTION

It is suggested for Institution to develop the results of this research by providing health education in collaboration with sub district health center, so that this research can be used as one of the basic guidelines for learning materials for elderly patient with hypertension. For health workers, it is advisable to organize health education on a scheduled basis regarding hypertension diet for the elderly or also to provide nutritional counseling to control the health of elderly people with hypertension when they go to the posyandu or sub district health center. For the community, it is recommended, especially elderly families with hypertension, to increase support for the elderly so that they can control diet on an ongoing basis so as to prevent complications. And for further researchers it is suggested that this research be used as a basic guide in the development of further research to examine more deeply to measure the level of compliance in running the diet with the semi-quantitative FFQ (Food Frequency Questionnaire) form giving method.

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