

The Relationship Between Knowledge And Adherence To a Hypertension Diet In The Elderly

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ABSTRACT

Hypertension or high blood pressure is one of the non-communicable diseases caused by lifestyle. One prevention so that complications do not occur is to change lifestyle, food intake and routine blood pressure control. The purpose of this study was to determine the correlation of level knowledge and elderly hypertension Diet adherence in Nganjuk Regency. This research design used was correlative with a cross-sectional approach. The study population was all hypertensive elderly who actively participated in the elderly Posyandu of Cepoko Village totaling 28 people and the sample all of 28 people as taken by total sampling. The independent variable is the level of knowledge in hypertension, the dependent variable was Elderly Hypertension Diet Adherence. Data collection was carried out using questionnaires. The data were expressed in ordinal scales and analyzed with the Spearman Rank Correlation test with an alpha of 0.05. The results of the study found that 67.86% of respondents including compliant and 32.14% non-adherence, following the hypertension Diet and the results of the calculation of SPSS 25 significance value of 0.000, meaning was H_0 rejected. The conclusion of this study was there are The Correlation Of Level Knowledge And Elderly Hypertension Diet adherence In Nganjuk Regency. For this reason, it is hoped that the increasing role of families, cadres and nurses providing health education through interesting information such as using audiovisual such as social media content will be very capable of influencing knowledge that ultimately changes behavior and compliance with something.

Keywords: level of knowledge, Diet adherence, elderly hypertension

Background

Hypertension or high blood pressure is a non-communicable disease caused by lifestyle(1), if proper treatment is not immediately received, this disease will cause the emergence of other degenerative diseases such as kidney failure, heart failure and stroke. According to WHO, the doubling of hypertension in the last 30 years is mainly caused by population growth and aging(2). Hypertension cannot be cured but can be controlled, one way is by following a hypertension diet. WHO recommends the DASH (Dietary Approach to Stop Hypertension) diet to control blood pressure in hypertensive patients(3).

The incidence of hypertension is higher in the elderly, this is due to a decrease in the elasticity of blood vessels in old age. In addition, in old age, there tends to be a decline in memory and difficulty in accessing sources of knowledge on social media so that the knowledge gained may not be sufficient or may be forgotten. In Indonesia, the prevalence of people with hypertension increases from year to year. The prevalence of hypertension in Indonesia was 25.8%, while the 2018 increased to 34.1%(4). This increasing trend also occurred in various cities and districts in East Java Province, including Nganjuk Regency.

Acting Regent of Nganjuk H. Marhaen Djumaedi said that hypertension cases in Nganjuk reached 21 thousand cases (1).

Hypertension will trigger other complications if you don't immediately get the right treatment. One way to prevent complications from occurring is to change your lifestyle, food intake and routine blood pressure control(4), however, hypertension sufferers, especially the elderly, often have difficulty in knowing types of food limited by hypertensive patients. According to research conducted by Hilda, there is a relationship between the level of knowledge and adherence to a hypertension diet in the elderly. Hypertension sufferers are dominated by the elderly and pre-elderly(5). Many elderly people have limitations in reading or searching for appropriate information due to a decline in visual and cognitive function, which affects their level of knowledge. This phenomenon results in blood pressure that is not controlled and tends to increase, the effect of which is that the elderly are more susceptible to complications. Setting a diet low in salt and low in fat really helps hypertensive patients in controlling blood pressure. Apart from that, metabolism in the elderly decreases. A decrease in the elasticity of blood vessels in the elderly will also occur so that as they get older this is followed by an increase in blood pressure. This means that the diet of the elderly must reduce salt and preserved foods. It is recommended that the diet of the elderly be varied and meet the needs for protein, fiber and fluids. Protein is highly recommended to replace muscle strength and prevent pain easily. Foods high in fiber are also highly recommended for the elderly because this type of food can reduce constipation and can also reduce cholesterol levels and blood pressure. Consuming enough fiber can lead to a healthier heart (3)

Hypertension is a disease that is nicknamed the silent killer because patients often do not realize that they suffer from hypertension but suddenly experience complications or complications from hypertension(6). The impact of hypertension if proper treatment and appropriate diet is not carried out will result in an increase in blood pressure, which if it occurs in the brain can cause stroke and loss of consciousness or even death. Blood pressure that is above the normal threshold can also damage cells in the kidneys, causing kidney function to be disrupted. The above pathophysiology will worsen the performance of all the body's organs, leading to death if not treated properly. However, hypertension sufferers often seek treatment and take medication when their blood pressure is high but do not pay attention to their food intake so that high blood pressure is not controlled and even leads to complications.

According to a preliminary study conducted by researchers at the Posyandu for the elderly in Cepoko Village, Berbek District, Nganjuk Regency, 28 people suffered from high blood pressure, and 27 people (96.4%) of them paid little attention to the food they consumed. Some of the reasons given by the elderly and posyandu cadres were confusion about the food intake to be consumed because there were many taboos that were prohibited. From these data, researchers were interested in examining the extent of knowledge of elderly people regarding hypertension diet compliance.

Methods

The research design in this study is correlational with a cross-sectional approach, namely research that emphasizes measuring/observing data on independent and dependent variables only once at a time, elderly level knowledge and hypertension diet adherence were measured 1 time The purpose of this study was to determine the correlation of level knowledge and elderly hypertension diet adherence in Nganjuk Regency. The study population was 28 hypertensive elderly who actively participated in the elderly Posyandu of Cepoko Village in Mei 2023 and the sample all of 28 people as taken by total sampling. The independent variable is the level of knowledge in hypertension and the dependent variable was elderly hypertension diet adherence. Demographic data was collected using a questionnaire, an also elderly level

knowledge Data collection was carried out using questionnaires. The data were expressed in ordinal scales and analyzed with the Spearman Rank Correlation test with an alpha of 0.05. This research has passed the ethical test at KEPK Stikes Ganesha Husada Kediri with Number: 27/SGH/KEPK/V/2023

Results

Table 1. Characteristics of Respondents

Characteristics of Respondents	Frequency	Percentage (%)
Gender		
Woman	22	78,6
Man	6	21,4
School level		
Elementary school	19	67,86
Junior high school	7	25
Senior high school	2	7,14
Age		
45 th-55 th	7	25
>55 th	21	75
Working as		
Housewife	21	75
farmer	4	14,29
Bussines	3	10,71

From table 1 it is known that the majority (78.6%) of the respondents were female, namely 22 respondents, and 21.4% male respondents. Most of the respondents had at least elementary school education, namely 67.86%. Meanwhile, respondents with a junior high school education were 25% and those with a high school education were 7.14%. Most of the respondents were over 55 years old, namely 75%, and respondents with an age range of 45 years to 55 years were 25%. Most of the respondents work as housewives, 21 respondents (75%).

Table.2 Elderly Level Knowledge of Hypertension Diet

Level of Knowledge	Frequency	Percentage (%)
Good	5	17,9
sufficient	15	53,5
less	8	28,6
Amount	28	100

From table 2 it can be known elderly level knowledge of hypertension, the largest percentage of respondents have sufficient knowledge about hypertension diet, namely 53.5%. Only 17.9% of respondents had good knowledge and 28.6% had less knowledge about hypertension diet.

Table.3 Elderly Hypertension Diet Adherence

Level of Knowledge	Adherence	
	Adher	Didn't adhere
Good	5	0
Sufficient	12	3
Less	2	6
Spearman Rank Correlation 0,000, Correlation Coefficient 0,671		

Based on table 3, it can be seen that, all respondents who have a good level of knowledge adhere to the hypertension diet, namely 5 respondents, while those who have sufficient knowledge, the majority adhere to the diet and a small portion do not comply, namely the 3 respondents who comply have the highest percentage who have knowledge. which is sufficient, namely 12 respondents. Meanwhile, there were 6 respondents with less knowledge and non-compliance.

The results of the Spearman Rank test using the SPSS 25 application showed a significant value of $P = 0.000. < 0.05$ which means H_0 is rejected. Analysis of the results of these calculations states that there is a relationship between the level of knowledge and compliance with hypertension diets in elderly people at the Posyandu for the elderly in Cepoko Village, Berbek District.

Discussion

Elderly Knowledge Level About Hypertension Diet

Based on the research results, it is known that the majority of elderly people (53.5%) have a sufficient level of knowledge about hypertension diet, this is supported by the age characteristics of the elderly with the largest percentage being over 55 years old, namely 75%. This finding is in accordance with the theory which states that as someone gets older, they become more capable and wiser in searching for, processing and analyzing the information they obtain(7). As people get older, they have a lot of experience and information, so the more activities they undertake, the more knowledge they gain. As people get older, their knowledge and awareness of the food they consume increases. This phenomenon is caused by the desire to pay more attention to health in old age(8).

Status as a housewife is the most common job characteristic at 75%. This type of work, allows you to interact with many people because basically housewives have a series of activities which are usually more than one, both formal and non-formal, starting from reciting the dasawisma groups. This is in accordance with the statement that the environment influences a person's acquisition of knowledge, either directly or indirectly(9). Types of work that frequently interact with people can increase a person's knowledge more than types of work that do not interact with people. Good knowledge will encourage a person to behave appropriately, especially in preventing hypertension with diet, where behavior is usually influenced by the individual's response to a stimulus, depending on how the individual reacts to a stimulus in an action.

Adherence of Elderly Hypertension Diet

The results of the study showed that 67% of the elderly adhered to the hypertension diet, and 75% of the elderly were over 55 years old. The results of this research show that the older a

person gets, the greater the awareness of maintaining body health. The research who stated that the older a person gets, the more knowledge and awareness about living a healthy life increases(10). However, several findings such as the latest education figure which is dominated by elementary school at 67.8% seem to contradict the theory presented by Niven which states that the higher the education, the higher a person's compliance. Differences in opinion and reality in this research can occur due to environmental factors, in this technological era, all information is easily accessed using various media. One of the easiest media to disseminate information is social media(11). Currently, social media not only provides information about someone's personality or communicates with colleagues or friends, but is also a means of sharing knowledge and knowledge, including about hypertension diets. Ownership of Android-based cell phones is not only limited to adults, but everyone from children to the elderly now own smartphones. This fact contributes to increasing respondents' compliance with the hypertension diet. In implementing the diet, a person is said to be disobedient if the person neglects his or her obligation to limit sodium intake, thereby hampering the healing process and making the situation worse(12).

The Correlation of Level Knowledge and Elderly Hypertension Diet Adherence

The results of the analysis using SPSS 25 with the Rank test showed that the value $p = 0.000 < 0.05$, meaning that H_0 was rejected, the conclusion was that there was a relationship between the level of knowledge and adherence to the hypertension diet in the elderly at the elderly posyandu in Berbek village. The correlation coefficient shows 0.671, which means there is a strong relationship with a positive or unidirectional relationship, the higher the level of knowledge, the better the person will comply with the hypertension diet. Research proves that behavior that is based on knowledge will be more lasting than behavior that is not based on knowledge(10). Knowledge is an important domain for carrying out one's actions, because experience and research prove that behavior is based on knowledge(5). Knowledge about elderly diets is not only obtained from health education carried out by health workers, but can also be obtained from social media or from the experiences of people around them. However, as the amount of information comes in, it often creates confusion and ultimately becomes too afraid, so assistance from local health workers is still needed. This good knowledge will underlie the elderly's level of compliance in accordance with the theory presented by Niven that one of the factors that influences compliance is a person's level of knowledge(13).

Hilda in her research stated that increasing knowledge through health education can also increase a person's compliance (5). It is hoped that the role of nurses who are also educators is to be able to play a role so that the elderly are able to maintain their health in their twilight years. Apart from that, providing interesting educational information such as using audiovisuals such as social media content will be very capable of influencing knowledge which ultimately changes behavior and compliance with something.

The results of this study are supported by research by Putri & Supartayana which states that there is a relationship between knowledge and adherence to a hypertension diet in elderly people who experience hypertension in nursing homes (14). Influence analysis shows that there is a positive correlation, meaning that if the level of knowledge is high then the level of compliance is also high. Respondents who are highly knowledgeable will be able to know and understand the meaning, benefits and objectives of following a hypertension diet regularly. This research is also in line with research conducted which revealed a positive relationship between knowledge and adherence to a hypertension diet, respondents with good knowledge had a 45 times better chance of following a hypertension diet compared to respondents whose knowledge was poor(13). A good level of knowledge about hypertension will make a person understand about the disease which will then encourage changes in behavior in a positive direction,

especially how a person will try to respond to stimuli such as reducing the causes of the disease by implementing an appropriate hypertension diet.

Conclusion and Recommendation

Most elderly people have a sufficient level of knowledge about hypertension diet. Almost all elderly people in the Cempoko Village Elderly Posyandu adhere to the hypertension diet. There is a relationship between the level of knowledge and adherence to the hypertension diet in the elderly at the Posyandu for the elderly in Cepoko Village, Berbek District. It is hoped that the public will realize the importance of increasing knowledge about the hypertension diet to maintain health and prevent further complications. Nurses as educators can carry out health education as an effort to increase adherence to diet. Health institutions continuously carry out health screening, health education and provide consultation facilities regarding hypertension diets. It is hoped that further research will be able to develop the area of factors that influence diet adherence.

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