The Relationship Of Knowledge And Attitude Of The Elderly About Diet To Prevention Of Hypertension In Hutasoit I Village Lintongnihuta District, Humbang District The Hasundutan Year 2023

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Abstract

Diet is one of the human behaviors that is carried out every day in meeting the needs in dealing with hypertension sufferers so they can control their habits. This study aimed to determine the relationship between the knowledge and attitudes of the elderly about diet and the prevention of hypertension. This type of research is quantitative analytic research with a cross-sectional design. This research was conducted in April-July 2023. In Hutasoit I Village, Lintong Nihuta District. The population is elderly in Hutasoit I village, 70 people. The accidental sampling technique was taken and used the Slovin and Chi-square formulas with a total sample of 41 people. The results showed that there was a relationship between the elderly's knowledge about diet and the prevention of hypertension with a confidence level of 90% and df = 2, which obtained a chi-square count of 10.812 > chi-square table of 4.605. The attitude variable has a relationship with the prevention of hypertension by using chi-square with a confidence level of 90% and df = 1 obtained chi-square count 8.744 > chi-square table 2.705. It is expected that the respondents will get more information to increase their knowledge and attitudes in increasing the level of health regarding diet towards the prevention of hypertension

Keywords: Knowledge, Attitude, Diet for Prevention of Hypertension

INTRODUCTION

Hypertension from the World Health Organization (WHO) is where blood vessels have high blood pressure (systolic blood pressure $\geq$140 mmHg or diastolic blood pressure $\geq$90 mmHg) that persists. Data from the World Health Organization (WHO) in 2015 showed that around 1.13 billion people in the world have hypertension, meaning that 1 in 3 people in the world are diagnosed with hypertension. The number of people with hypertension continues to increase every year. affected by hypertension, and it is estimated that every year 9.4 million people die from hypertension and its complications.

Hypertension is a disease that can affect anyone, both young and old. Hypertension is one of the deadliest diseases in the world. An estimated 1.28 billion adults aged 30-79 years worldwide suffer from hypertension, the majority (two-thirds) live in low- and middle-income countries. An estimated 46% of adults with hypertension are not aware that they have the condition. Less than half of adults (21%) with hypertension can control it. Hypertension is the main cause of premature death worldwide. One of the global targets for non-communicable diseases is to reduce the prevalence of hypertension by 33% in 2010 and 2030 (WHO, 2021).

Based on data from the World Health Organization (WHO), hypertension affects 22% of the world's population. Meanwhile, in Southeast Asia, the prevention rate for hypertension was 36%. The prevalence of hypertension has increased significantly in patients aged 60 years and over. According to the American Heart Association (AHA), the American population aged over 20 years suffering from hypertension has reached up to 74.5 million people, but almost 90-95% of cases have no known cause (RI Ministry of Health, 2017).

Based on the 2018 Riskesdas data, the prevalence of hypertension in Indonesia using the measurement method in a population of 18 years was found to be (34.1%), in the age group 31-44 years (31.6%), in the age group 45-54 years (45.3 %), at the age of 55-64 years (55.2%). Those diagnosed by a doctor and taking the medication regularly (8.8%), diagnosed with hypertension but not taking medication (13.3%), and (32.3%) not taking the medication regularly. In North Sumatra

Province, the percentage of hypertension reached 29.19% (Ministry of Health RI, 2019). One of the coastal areas in North Sumatra Province is Tanjung Tiram District, Batubara Regency. The prevalence of hypertension in Coal reaches 25.06% (North Sumatra Health Office, 2019).

According to research by Hamzah B, et al 2021 with the research title "Analysis of the Relationship between diet and the Incidence of hypertension in the Elderly" based on the results of research conducted in the working area of the Molibagu Health Center, Bolang Uki District, South Bolaang Mongondow Regency, it can be concluded that most respondents suffer from hypertension with a diet that not good and there is a relationship between diet and the incidence of hypertension in the elderly with a p value of 0.000

The results showed that diet can have an influence on the incidence of hypertension. Hypertension can be prevented by avoiding the factors that cause hypertension by managing your diet, healthy lifestyle, avoiding alcohol and smoking, avoiding coffee, consuming less salt, and doing regular exercise or sufficient activity (Laura, 2020).). A diet that is high in red meat, instant food, foods containing fat and sweet foods (desserts) can cause blood pressure to increase (Firdaus, 2020).

The Humbang Hasundutan District Health Office in 2019 noted that the hypertension morbidity rate in Humbang Hasundutan District is something that needs attention and needs early treatment, in the past three years the prevalence of elderly people with hypertension has increased due to non-compliance in regulating diet, Most of the main causes of hypertension occur in the elderly due to lack of knowledge about good diet. (Humbang Hasundutan Health Office, 2019).

RESEARCH METHODS

This type of research is quantitative analytic research using a cross-sectional design where the independent variables and dependent variables are examined together to find out "The relationship between knowledge and attitudes of the elderly about diet and prevention of hypertension in Hutasoit I Village, Lintong Nihuta District, Humbang Hasundutan Regency in 2023" the time of implementation The research started from March to July in Hutasoit I Village, Lintong Nihuta District, Humbang Hasundutan District. The sample in this study was all 41 elderly people in Hutasoit I Village.

RESULTS AND DISCUSSION

Univariate analysis

Table 1 Frequency Distribution of Respondents based on Knowledge, attitudes, and Prevention of Hypertension in Hutasoit I Village, Lintong Nihuta District, Humbang Hasundutan Regency in 2023.

	Variable	Amount	percentage (%)
1.	**Knowledge**		
	Good	2	4,9
	Enough	19	46,3
	Not enough	20	48,8
	Total	**41**	**100,0**
2.	**Attitude**		
	Positive	15	36,6
	Negatives	26	63,4
	Total	**41**	**100,0**
3.	**Hypertension Prevention**		
	Done	13	31,7
	Not Done	28	68,3
	Total	**41**	**100,0**

Based on Table 4.1, it is known that out of 41 respondents who had good knowledge, 2 people (4.9%) had sufficient knowledge, 19 people (46.3%) had sufficient knowledge, and 20 people had less knowledge (48.8%).

Based on attitude, it is known that out of 41 respondents who had a positive attitude, 15 people (36.6%) had a negative attitude, and there were 26 people had a negative attitude (63.4%).

Based on hypertension prevention, it is known that out of 41 respondents who did hypertension prevention, there were 13 people (31.7%), respondents who did not do hypertension prevention, there were 28 people (68.3%).

Table 2. The Relationship between Elderly Knowledge about Diet and Prevention of Hypertension. In Hutasoit I Village, Lintong Nihuta District, Humbang Hasundutan District in 2023.

	Hypertension Prevention								
No	**Knowledge**	**Done**		**Not Done**		**Total**		**Df**	**X^2**
		n	**%**	**n**	**%**	**N**	**%**		
1	Good	2	4,9	0	0	2	4,9		
2	Enough	9	22,0	10	24,4	19	46,3	2	10,812
3	Not enough	2	4,9	18	43,9	20	48,8		

Based on Table 4.2, it can be seen from the 41 respondents with the majority having poor knowledge did not prevent hypertension as many as 18 people (43.9%), while the minority with good knowledge who did prevention of hypertension were 2 people (4.9%).

By using the chi-square test with a confidence level of 90% and df = 2, it is obtained that the chi-square count is 10.812 > the chi-square table is 4.605, then Ha is accepted, Ho is rejected, meaning that there is a relationship between elderly knowledge and hypertension prevention in Hutasoit I Village, Lintong Niuta District Humbang Hasundutan Regency in 2023.

Bivariate Analysis

After the univariate analysis was carried out, further analysis was carried out in the form of bivariate analysis. The data obtained from both variables are categorical data, with the chi-square statistical test which aims to determine whether these variables have a relationship or not with the comparison of the chi-square table.

a. The relationship between elderly knowledge about diet and hypertension prevention in Hutasoit I Village, Lintong Nihuta District, Humbang Hasundutan Regency in 2023.

The results of collecting knowledge data and its relationship to the prevention of hypertension were collected through questionnaires which were distributed to respondents through research using primary data and can be seen as follows:

Table 3. Relationship between Elderly Knowledge about Diet and Prevention of Hypertension. In Hutasoit I Village, Lintong Nihuta District, Humbang Hasundutan District in 2023.

	Hypertension Prevention								
No	**Knowledge**	**Done**		**Not Done**		**Total**		**Df**	**X^2**
		N	**%**	**n**	**%**	**N**	**%**		

1	Good	2	4,9	0	0	2	4,9		
2	Enough	9	22,0	10	24,4	19	46,3	2	10,812
3	Not enough	2	4,9	18	43,9	20	48,8		

Based on Table 4.2, it can be seen from the 41 respondents with the majority having poor knowledge did not prevent hypertension as many as 18 people (43.9%), while the minority with good knowledge who did prevention of hypertension were 2 people (4.9%).

By using the chi-square test with a confidence level of 90% and df = 2, it is obtained that the chi-square count is 10.812 > the chi-square table is 4.605, then Ha is accepted, Ho is rejected, meaning that there is a relationship between elderly knowledge and hypertension prevention in Hutasoit I Village, Lintong Niuta District Humbang Hasundutan Regency in 2023.

b. The relationship between the elderly's attitudes about eating patterns and the prevention of hypertension in Hutasoit I Village, Lintong Nihuta District, Humbang Hasundutan Regency in 2023

The results of collecting data on attitudes and their relationship to the prevention of hypertension were collected through questionnaires which were distributed to respondents through research using primary data and can be seen in the following table:

Table 4. The relationship between the attitude of the elderly about eating patterns and the prevention of hypertension. In Hutasoit I Village, Lintong Nihuta District, Humbang Hasundutan District in 2023.

		Hypertension Prevention							
No	Attitude	Done		Not Done		Total		Df	X^2
		n	%	n	%	N	%		
1	Positive	9	22,0	6	14,6	15	36,6	1	8,744
2	Negative	4	9,8	22	53,7	26	63,4		

Based on Table 4.3, it can be seen from the 41 respondents with the majority having a negative attitude did not prevent hypertension as many as 22 people (53.7%), while the minority who had a positive attitude who did not prevent hypertension were 6 people (14.6%).

By using a square test with a confidence level of 90% and df = 1, a chi-square count of 8.744 > 2.705 is obtained, then Ha is accepted, and Ho is rejected, meaning that there is a relationship between the attitude of the elderly and the prevention of hypertension in Hutasoit I Village, Lintong Niuta District, Humbang Hasundutan Regency in 2023.

Discussion

From the results of the study entitled "The relationship between the knowledge and attitudes of the elderly about diet towards the prevention of hypertension in Hutasoit I Village, Lintong Niuta District, Humbang Hasundutan Regency in 2023", the discussion is made as follows.

The relationship between the knowledge of the elderly about diet and the prevention of hypertension in Hutasoit I Village, Lintong Niuta District, Humbang Hasundutan Regency in 2023

By using a square test with a confidence level of 90% and df 2, a chi-square count of 10.812 > a chi-square table of 4.605 is obtained, then Ha is accepted, Ho is rejected, meaning that there is a relationship between elderly knowledge about diet and hypertension prevention in Hutasoit I Village, District Lintong nihuta Hasundutan Regency in 2023. In Table 4.2 based on the knowledge

category that out of 41 respondents, the majority had less knowledge as many as 20 people (48.8%), and a minority with good knowledge as many as 2 people (4.9%) regarding hypertension prevention.

Knowledge is the result of knowing someone about an object through the senses they have. People's knowledge will vary depending on how each senses an object (Notoatmodjo, 2014).

Research conducted by Erwin Wahyuni, et al 2021 with the research title "Relationship of Knowledge, Attitudes, and Diet with the Incidence of Hypertension in the Working Area of the Banjarmasin Indah Health Center, Banjarmasin City in 2021". The results of this study were obtained from 93 respondents, the majority of respondents experienced hypertension as many as 54 people (58.1%), had less knowledge as many as 39 people (41.9%), had negative attitudes as many as 48 people (51.6%), eating patterns that were not good as many as 49 people (52.7%), statistical test using the chi-square test there is a relationship between knowledge and the incidence of hypertension p-value = 0.000 (p<a), there is a relationship between attitude and the incidence of hypertension p-value = 0.000 (p<a), there is a relationship between diet and the incidence of hypertension p-value = 0.000 (p <a). It is hoped that the results of the puskesmas research will be able to work together with the closest cross-sectors in an effort to program hypertension counseling in preventing hypertension.

The results of research in the field are in accordance with the theory in the field that the knowledge of the elderly about diet greatly influences the level of prevention of hypertension. Based on the results of the study where the respondents had good knowledge (4.9%). This shows that the knowledge of the elderly is classified as lacking and it is necessary to increase the knowledge of the elderly by conducting counseling to the elderly in Hutasoit I Village, Lintong Niuta District, Humbang Hasundutan Regency about dietary patterns for preventing hypertension.

The relationship between the elderly's attitudes about eating patterns and the prevention of hypertension in Hutasoit I Village, Lintong Niuta District, Humbang Hasundutan Regency in 2023

By using a square test with a confidence level of 90% and df 1, it is obtained that the chi-square count is 8.744 > the square-test table is 2.705, so Ha is accepted, Ho is rejected, meaning that there is a relationship between the attitude of the elderly about eating patterns towards the prevention of hypertension in Hutasoit I Village, Lintong District nihuta Humbang Hasundutan Regency in 2023. In table 4.3 based on the attitude category of the 41 respondents, the majority had a negative attitude of 26 people (63.4) and a minority of positive attitudes of 15 people (36.6) towards hypertension prevention.

Attitude is a reaction or response of a person who is still close to object stimuli and is not immediately visible, which means that a person has readiness to act, but has not carried out activities caused by appreciation of an object (Notoadmojo, 2014).

Research conducted by Erwin Wahyuni, et al 2021 with the research title "Relationship of Knowledge, Attitudes, and Diet with the Incidence of Hypertension in the Working Area of the Banjarmasin Indah Health Center, Banjarmasin City in 2021". The results of this study were obtained from 93 respondents, the majority of respondents experienced hypertension as many as 54 people (58.1%), had less knowledge of as many as 39 people (41.9%), had negative attitudes as many as 48 people (51.6%), eating patterns that were not good as many as 49 people (52.7%), statistical test using the chi-square test there is a relationship between knowledge and the incidence of hypertension p-value = 0.000 (p<a), there is a relationship between attitude and the incidence of hypertension p-value = 0.000 (p<a), there is a relationship between diet and the incidence of hypertension p-value = 0.000 (p <a). It is hoped that the results of the puskesmas research will be able to work together with the closest cross-sectors in an effort to program hypertension counseling in preventing hypertension.

The results of research in the field obtained actual data during the research process, there were still many elderly people who had negative attitudes. Not many respondents refused to be interviewed or filled out a questionnaire provided by the researcher. Based on the results of the researchers where 22 elderly people had a negative attitude towards diet for the prevention of hypertension. And it is necessary for health workers to provide socialization/counseling in order to improve the attitude of the elderly for the prevention of hypertension in Hutasoit I Village.

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CONCLUSION

After conducting research and discussion of the relationship between knowledge and attitudes of the elderly about diet towards preventing hypertension in Hutasoit I Village, Lintong Nihuta District, Humbang Hasundutan Regency in 2023, the following conclusions are drawn:

a. There is a relationship between elderly knowledge about diet and hypertension prevention in Hutasoit I Village, Lintong Nihuta District, Hasundutan Regency in 2023. Using a square test with a confidence level of 90% and df 2, a calculated chi-square is $10.812 > $ chi-square table 4.605, then it can be concluded that the level of knowledge affects the diet of the elderly on the prevention of hypertension

b. There is a relationship between the elderly's attitudes about eating patterns and the prevention of hypertension in Hutasoit I Village, Lintong Niuta District, Humbang Hasundutan Regency in 2023. Using a square test with a confidence level of 90% and df 1, a calculated chi-square is $8.744 > $ a table-square test of 2.705, it can be concluded that attitudes affect the diet of the elderly in the prevention of hypertension.

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