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RELATIONSHIP BETWEEN KNOWLEDGE AND ATTITUDE TOWARDS HYPERTENSION INCIDENTS

Intan Puspita Martha*, Novika Andora, Febria Listina
Public Health Study Program, Universitas Mitra Indonesia, Jl. ZA. Pagar Alam No.7, Gedong Meneng, Bandar Lampung, Lampung 40115, Indonesia
*Intanpuspitamartha@gmail.com

ABSTRACT
Hypertension is one of the chronic diseases that is a global health problem today because it is a disease with a high prevalence and continues to increase. The survey results found that most patients had low knowledge about hypertension and showed a less supportive attitude in the prevention and management of hypertension. The purpose of this study was to determine the relationship between knowledge and attitudes towards the incidence of hypertension at Clinic X Teluk Betung in 2024. This study is a quantitative study that uses the cross-sectional method. The sample in the study were patients who visited the Clinic X Teluk Betung, totaling 99 people using the purposive sampling technique. The research instrument was a questionnaire with data analysis using the Chi-Square test. The results of the analysis showed that the majority of research respondents had good knowledge as much as 95% and those who still had poor knowledge were 4%. As for the attitude category, the majority of respondents had an unfavorable attitude as much as 58.6% and those who had a good attitude were 41.4%. The Chi-Square test results obtained a p-value (0.626), which means that there is no relationship between the level of knowledge and the incidence of hypertension and has a 0.610 times chance of not having hypertension. And the p-value (0.016), which means there is a relationship between attitude and the incidence of hypertension in respondents with a good attitude and has a 0.346 times chance of not having a history of hypertension. We recommend that health counseling related to hypertension and hypertension prevention measures, especially factors that can cause hypertension, be increased again as an effort to prevent the incidence of hypertension.

Keywords: attitude; hypertension; knowledge

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INTRODUCTION

Hypertension is an increase in systolic blood pressure of more than or equal to 140 mmHg and diastolic of more than or equal to 90 mmHg (Ministry of Health, 2021). Hypertension is one of the chronic diseases that is a global health problem today because it is a disease with a high prevalence and continues to increase. Death and morbidity of patients caused by kidney disease, heart disease and stroke (cardiovascular) one of the risk factors is hypertension (Simanjuntak et al., 2021). Most cases of hypertension as many as 90-95% are primary hypertension where the cause is unknown. Hypertension is also known as the silent killer, which is a disease that causes death without any visible symptoms (Hamidah, 2022).Based on the data from World Health Organisation (WHO) in 2021, an estimated 1.28 billion adults aged 30-79 years worldwide suffer from hypertension. Namely two-thirds of hypertension cases come from countries with lower middle economies. Meanwhile, in Southeast Asia, the incidence of hypertension in 2020 was 39.9%. According to data from the Basic Health Research, the increase in the prevalence of hypertension in Indonesia with a population of around 260 million was 34.1% compared to 27.8% in the 2013 Basic Health Research with the highest percentage in South Kalimantan Province with a percentage of 44.13% and the lowest in Papua with a percentage of 22.22% (Ministry of Health of the Republic of Indonesia. 2019).

According to data from the Lampung Provincial Health Office, the prevalence of hypertension in this province also shows a significant increase. Data shows that in 2019, the prevalence of hypertension reached 36.7% of the total population. According to Bandar Lampung City Health Profile in 2022, the prevalence of hypertension in residents aged ≥15 years old in Bandar Lampung is 16.71%.Knowledge is the result of knowing and this occurs after someone senses a certain object. Good knowledge about health, especially hypertension, includes information about the definition, causes, symptoms, prevention, and treatment of hypertension. Knowledge about hypertension is very important because it can influence a person's attitude and actions in preventing and managing this condition (Notoatmodjo, 2010). Research by Kim and Han (2020) shows that education about health which increases knowledge about hypertension can significantly reduce the prevalence and incidence of hypertension in the population studied (Kim & Han, 2020). Other research presented by (Neng Sunarti & Iin, 2019) with the title of the relationship between the level of knowledge and efforts to control blood pressure in hypertension sufferers in the work area of the Karangmulya Health Center, Karangpawitan District, Garut Regency, the results of the study showed that there was a significant relationship between the level of knowledge about hypertension and blood pressure control (Sunarti and Patimah, 2019).

Attitude according to Anggreani (2019) is a concept that is most important in social life that is closely related to character formation in individuals and between groups. Situmorang (2019) in his research stated that good individual attitudes occur because of the high awareness and desire of respondents in maintaining health, healing and improving health.Research by Wibowo, Perceka, Erlinwati, Muntasir, & Prameswari (2023) on the level of knowledge and attitudes with the incidence of hypertension in the community in the Cibiru Health Center work area showed a significant relationship between patients' attitudes and the incidence of hypertension. Patients who have negative attitudes tend to be at higher risk of developing hypertension than those who are not hypertensive.Based on data owned by the Clinic X Teluk Betung, whose patients are mostly bank's employees, in average, the number of patients in the last 3 years has continued to increase both from BPJS patients and independent patients. Based on the results of the clinic's records, the number of hypertension patients at the Clinic X Teluk Betung in 2022 was 75 cases, in 2023 it was 68 cases, and in 2024 it increased to 102 cases of hypertension sufferers and is the patient with the highest number at the Clinic X Teluk Betung. The Pre-Survey Data in this study was started by conducting a pre-survey on 10 hypertension patients at the Clinic X Teluk Betung.

From the results of the pre-survey, it was found that most patients had low knowledge about hypertension and showed less supportive attitudes in preventing and managing hypertension. For example, only 3 out of 10 patients knew about the importance of a low-salt diet to control blood pressure, and only 2 out of 10 patients checked their blood pressure periodically.Based on the results of the pre-survey data, it is assumed that knowledge and attitudes about hypertension could be one of the factors in the increasing incidence of hypertension at the Clinic X Teluk Betung. The purpose is to determine the relationship between knowledge and attitude towards the incidence of hypertension at the Clinic.

METHOD

This is a quantitative study with a cross-sectional approach that aims to determine the relationship between knowledge and attitudes towards the incidence of hypertension at the Clinic X Teluk Betung in 2024.The object of the study was patients who visited the Clinic X Teluk Betung. The variables in this study are knowledge and attitudes towards the incidence of hypertension. The population was 5,199 patients with a total sample size of 99 patients.

The sampling technique used was purposive sampling. Data instrument used in this research was by doing interview. Analysis was done using univariate analysis & bivariate analysis, which used the Chi-Square test. An ethical clearance letter was obtained from the Ethics Commission of Mitra Indonesia University No. S.25/226/FKES10/2024

RESULT

Respondent characteristic data in this study consisted of gender, age, last education and incidence of hypertension of patient samples visiting the Clinic X Teluk Betung as well as the relationship between knowledge and attitudes with the incidence of hypertension in the work area of the Clinic X Teluk Betung in 2024.

Table 1.
Distribution and Frequency of Respondents Based on Gender, Age, Education and Hypertension Incident Groups

Characteristic	f	%
Gender		
Male	36	36,4
Female	63	63,6
Age		
Teenagers	38	38,4
Adults	12	12,1
Elderly	49	49,5
Education		
Elementary-Junior High School	39	39,4
Senior High School/Vocational School	20	20,2
College	40	40,4
Hypertension Incident		
Not Having Hipertension	38	38,4
Having Hipertension	61	61,6

Based on the research results in table 1, it is known that the respondents in this research were 99 people and the majority of research respondents were 63 women (63.6%) and men were 36 people (36.4%). For the elderly age group (46-65 years) there were 49 (49.5%) respondents, then for the adolescent age group (12-25 years) there were 38 (38.4%) respondents and for the adult age group (26-45 years) there were 12 (12.1%) respondents. For the last education, where a total of 40 people were university graduates (40.4%), as many as 39 respondents were elementary-junior high school graduates (39.4%) and as many as 20 were high school graduates (20.2%). For the incidence of hypertension, it is known that 61 people (61.6%) suffer from hypertension and 38 people (38.4%) do not suffer from hypertension.

Table 2.
Distribution and Frequency of Respondents Based on Knowledge Regarding Hypertension Incidents

Knowledge	f	%
Good	95	96
Bad	4	4
TOTAL	99	100

Based on table 2, out of 99 people, the majority of research respondents who had good knowledge as many as 95 (95%) people, and those who still had poor knowledge were 4 (4%) people.

Table 3.
Distribution and Frequency of Respondents Based on Attitudes Regarding Hypertension Incidents

Attitudes	f	%
Good	41	41,4
Bad	58	58,6

Based on table 3, out of 99 people, the majority of research respondents had a bad attitude, as many as 58 people (58.6%) and those who had a good attitude were 41 people (41.4%).

Table 4.
Cross Tabulation of the Relationship between Knowledge and Hypertension Incidence

Knowledge	Hipertension Incidence				Total		*P Value*	*OR*
	Not Having Hipertension		Having Hipertension					
	f	%	f	%	f	%		
Good	59	62,1	36	37,9	95	100	0,626	0,610
Bad	2	50	2	50	4	100		

Table 4 shows that respondents' knowledge of the incidence of hypertension in the Clinic X Teluk Betung work area shows that the majority of respondents have good knowledge of 95 people with 59 people (62.1%) are suffering from hypertension. The results of the Chi-Square test obtained a p.value = 0.626> 0.05, which means there is no relationship between the level of knowledge and the incidence of hypertension at the Clinic X Teluk Betung in 2024 and based on the OR results, the results were 0.610, meaning that respondents with a good level of knowledge have a 0.610 times chance of not having hypertension.

Table 5.
Cross Tabulation of Relationship between Attitude and Hypertension Incidence

Attitude	Hipertension Incidence				Total		*P Value*	*OR*
	Not Having Hipertension		Having Hipertension					
	f	%	f	%	f	%		
Good	31	75,6	10	24,4	41	100	0,016	0,346
Bad	30	51,8	28	48,2	58	100		

Table 5 shows that the attitude of respondents to the incidence of hypertension in the Clinic X Teluk Betung work area shows that the majority of respondents have bad attitude, namely 58 people with the majority of non-hypertension incidents of 30 people (51.8%). The results of the Chi-Square test obtained a p.value = 0.016 <0.05, which means that there is a relationship between attitude and the incidence of hypertension at the Clinic X Teluk Betung in 2024 and the OR result = 0.346 which means that patients with good attitudes have a 0.346 times chance of not having hypertension.

DISCUSSION

Knowledge about Hypertension

Each individual has different knowledge, some have good knowledge and some have bad knowledge. Based on table 4, it is known that the majority of respondents in the study have good knowledge, as many as 95 people (95%) and those who still have poor knowledge are 4 people (4%). Knowledge is influenced by education, experience, and culture. Knowledge is all the results that are known after someone observes a particular object (Carsel, 2018). Knowledge is not only obtained formally but also through experience. In addition, knowledge is also obtained through information media available at home, such as radio and television. Most Knowledge management is obtained through the eyes and ears so that the use of the five senses for information is very important.

In the past five years, studies have provided deep insights into why individuals with good knowledge about hypertension remain at high risk for developing the disease. Although a good understanding of the causes, prevention, and management of hypertension is an important factor, it is not enough to avoid the disease.

Experts argue that there are several factors that contribute to this phenomenon. First, even though a person has adequate Knowledge about hypertension, this Knowledge is often not followed by the necessary behavioral changes. For example, unhealthy eating habits, lack of physical activity, and smoking are some of the behaviors that are maintained by many people, even though they are aware of the risks involved. In addition, psychological aspects also play an important role. Chronic stress, which cannot always be overcome with medical Knowledge alone, can trigger or worsen hypertension. Several studies have shown that even if a person knows how to manage stress, they may not have effective strategies to do so, which ultimately leads to increased blood pressure. In addition, environmental and social support are very important in implementing health knowledge. A person may know that reducing salt intake is important, but if the surrounding environment does not support the change, for example through the availability of healthy foods, then the knowledge will not have much impact. Finally, there is also a gap between Knowledge and action caused by individual attitudes and beliefs. A person may have good Knowledge, but false beliefs or apathy towards their own health can hinder the implementation of that Knowledge. Therefore, although Knowledge is a key component in preventing hypertension, it must be balanced with behavioral changes and environmental support to be truly effective in preventing this disease.

Attitudes regarding the incidence of hypertension

Based on table 5, it is known that the majority of respondents as many as 58 respondents in the study had a bad attitude (58.6%) and those who had a good attitude were 41 people (41.4%)Attitude is a person's perception or belief towards an object with certain feelings and provides a basis for that person to react or behave in their own way (Indah & Siswanto, 2022). Research at the Clinic X Teluk Betung in Bandar Lampung revealed that most respondents who had a good attitude towards hypertension still suffered from the condition. This highlights the complexity of hypertension risk factors which are not only influenced by attitudes or healthy lifestyles.In the past five years, various theories have emerged to explain this phenomenon. One theory is that good attitudes, although contributing positively, cannot completely offset other risk factors such as genetics, environment, and chronic stress. Genetics may play a significant role in determining an individual's susceptibility to hypertension, despite their efforts to live a healthy lifestyle.On the other hand, some people with poor attitudes and unhealthy lifestyles do not develop hypertension. This may be due to natural protective factors, such as a more efficient metabolism or the presence of genetic protective factors that are not yet fully understood. Recent studies have shown that the multifactorial nature of hypertension requires a more comprehensive approach to its management and prevention, given the complex role of various interacting factors.

Relationship between Knowledge and Hypertension Incidence

Based on the results of research conducted at the Clinic X Teluk Betung, Bandar Lampung, it shows that the Knowledge of respondents with the incidence of hypertension in the Clinic X Teluk Betung work area shows that the majority of respondents have good knowledge as many as 95 people with the incidence of not having hypertension as many as 59 people (62.1%).The results of the Chi-Square test obtained a p.value = 0.626> 0.05 which means there is no relationship between the level of knowledge and the incidence of hypertension at the Clinic X Teluk Betung, Bandar Lampung in 2024. In addition to the P Value results, the OR results were obtained = 0.346 which means that patients with a good attitude have a 0.346 times chance of not having hypertension.This study is in line with Wulandari's (2021) research which shows the relationship between knowledge and hypertension prevention behavior obtained a p-value of 0.383 and the relationship between attitudes and hypertension

prevention behavior in adolescents with a P-value of 0.1000> 0.05. So it can be concluded that there is no significant relationship between Knowledge and attitudes in preventing hypertension in adolescents at SMAN 24 Bandung in 2021.Another study by Chindra, et al. (2021) found that based on the results of the Spearman Rank calculation, the p-value = 0.642> (0.05) was obtained (the p-value is greater than α = 0.05). This means that there is no significant relationship between the level of knowledge about hypertension and hypertension prevention measures in the elderly at the Budi Luhur Bantul BPSTW.

According to Septianingsing's research (2018), good knowledge will be able to change lifestyle by quitting smoking as early as possible, exercising regularly, improving diet, avoiding stress and avoiding unhealthy lifestyles. The better the respondent's knowledge about hypertension, the better the respondent's efforts to control the hypertension they suffer from.The conclusion of this study is that there is no relationship between the level of knowledge and the incidence of hypertension at the Clinic X Teluk Betung, Bandar Lampung.Where respondents who have good Knowledge tend not to experience hypertension. Based on the explanation above, the researcher suggests maintaining health promotion activities regarding hypertension control and health promotion regarding information regarding the incidence of hypertension. This is expected to reduce the incidence of hypertension at the Clinic X Teluk Betung, Bandar Lampung

Relationship between Attitude and Hypertension Incidents

Based on the results of the study, it shows that the attitude of respondents to the incidence of hypertension in the Clinic X Teluk Betung work area shows that the majority of respondents have a less than good attitude, namely 58 people with the majority of non-hypertension incidents of 30 people (51.8%).The results of the Chi-Square test obtained a p.value = 0.016 <0.05, so Ho is rejected, which means there is a relationship between attitude and the incidence of hypertension at the Clinic X Teluk Betung in 2024. In addition to the P Value results, the OR results were 0.346, meaning that respondents with good attitudes have a 0.346 times chance of not having a history of hypertension compared to respondents who have bad attitudes.This study is in line with Sapard and Hamdayani's (2022) which states more than half of the respondents (55.7%) of pregnant women have a negative attitude about the occurrence of hypertension in pregnancy. There is a relationship between the attitudes of pregnant women and the occurrence of hypertension in pregnant women (pvalue = 0.047). Another study by Shinta Bunga (2022) based on the results of her research found that there was a significant relationship between attitudes and hypertension control, obtained a P value = 0.000 (P <0.05).

The theory according to Notoatmodjo (2010) states that attitude is an assessment or opinion of an individual towards an object. In this case the problem is hypertension. After someone get the knowledge about hypertension, the next process is to assess or behave, whether it is positive (prevention of hypertension) or something that leads to health.The conclusion of this study is that there is a relationship between attitude and the incidence of hypertension where it is known that respondents were found to have more bad attitudes than good attitudes. Respondents with good attitudes tend not to experience hypertension and conversely patients who have bad attitudes tend to experience hypertension.Based on the explanation above, researchers suggest that patients are encouraged to be more proactive in preventing hypertension, such as routinely checking blood pressure, following healthy diet recommendations, and maintaining body weight. Clinics can provide information about the importance of routine check-ups and health consultations to patients.

CONCLUSION

Based on the results of the study, the majority of respondents had good knowledge of 95% and those who still had poor knowledge were 4%. As for the attitude category, the majority of respondents had poor attitudes of 58.6% and those who had good attitudes were 41 people 41.4%. So it can be concluded that there is no relationship between the level of knowledge and the incidence of hypertension (p-value = 0.626) with a 0.610 times chance of not having hypertension. And there is a relationship between attitudes and the incidence of hypertension of respondents with good attitudes (p-value = 0.016) and have a 0.346 times chance of not having a history of hypertension.

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