
RELATIONSHIP OF ATTITUDE, KNOWLEDGE AND FAMILY SUPPORT FACTORS TO CHI- SQUARE TEST-BASED HYPERTENSION CONTROL EFFORTS

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ABSTRACT

Hypertension is one of the big challenges in Indonesia. Hypertension is a type of dangerous disease. The urgency of this research is the number of hypertension patients at the Ngoresan Community Health Center, Surakarta which is increasing every year. The objective problem in this research is the increase in the number of hypertension patients every year so that research is needed on the relationship between knowledge, attitudes and family support to efforts to control hypertension. The importance of this research is as an effort to control hypertension which continues to increase every year by means of interviews and distribution of brochures and key chain. The aim of this research is to analyze the factors of knowledge, attitudes and family support towards efforts to control hypertension in patients at the Ngoresan Community Health Center, Surakarta. The stages of this research are cross sectional approach. The sample consisted of 86 respondents. The sampling technique uses the accidental sampling method. The statistical test used is Chi-Square with ($\alpha=0.05$). The results of this research are that there is a relationship between knowledge and efforts to control hypertension with a p -value = 0.003 ($<\alpha=0.05$), there is a relationship between attitudes and efforts to control hypertension with a p -value = 0.011 ($<\alpha=0.05$) and there is a relationship between family support and efforts to control hypertension with a p -value = 0.034 ($<\alpha=0.05$).

KEYWORDS

Hypertension, attitude, knowledge, support, Chi-Square



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INTRODUCTION

The background of this research is that global deaths are caused by non-communicable diseases (PTM). Hypertension is one of the Non-Communicable Diseases (PTM) which is the most serious health problem today (Ministry of Health, 2019). The prevalence rate of hypertension in people aged > 18 years in Indonesia (Basic Health Research / Riskesdas results) (Ministry of Health, 2021) is 34.1%. The prevalence was obtained by measuring blood pressure, namely >140/90 mmHg. This prevalence rate is higher than in 2019, which was 25.8%. The 2022 Central Java Province Health Profile (Central Java Provincial Health Service, 2021) recorded that the prevalence of hypertension in Central Java in 2022 was 41.6%, while the 2021 Riskesdas results (Kemenkes, 2021) were 39.6%, an increase compared to the 2019 Riskesdas results, namely 29.4% (Ministry of Health, 2019).

The city of Surakarta is included in the Province of Central Java with a prevalence of hypertension of 19.2% (Surakarta City Health Office, 2021). The highest prevalence of hypertension in the city of Surakarta occurs in the working areas of the Sibela Community Health Center (10.6%), Purwodiningratan Community Health Center (6.7%) and Ngoresan Community Health Center (5.8%), data from the Surakarta City Health Service for 2022 (Surakarta City Health Service, 2021). Among these health centers, Ngoresan Community Health Center experienced an increase in hypertension cases in 2019 by 3,115, in 2020 by 2,133, in 2021 by 318, in 2022 by 123 and in 2023 up to now there are 638.

Patients with hypertension at the Ngoresan Health Center in 2023 (up to June 27 2023) consist of 5 age groups, namely the 20-44 year age group of 96 sufferers, the 45-54 year age group of 254 sufferers, 95 sufferers of 55-59 years, the age group 60-69 years were 120 sufferers and those aged > 70 years were 63 sufferers (Ngoresan Community Health Center, 2023). The age group that experiences the highest hypertension is the 45-54 year age group, which is included in the elderly (senior) category. An initial study conducted on 15 elderly people with hypertension at the Ngoresan Health Center found that 80% of the elderly had insufficient knowledge about the meaning, symptoms, causes and complications of hypertension, 60% of the elderly had attitudes that tended to be negative towards hypertension control, 53% of the elderly lacked get support from family, and 73% of elderly people have poor behavior in controlling hypertension. The behavior of controlling hypertension can be seen using individual behavior theory according to the Surakarta City Health Office (2021) which is influenced by 3 main factors, namely predisposing factors including age, gender, education, knowledge, and attitudes. Supporting factors (enabling factors) include affordability and availability of medicines. Reinforcing factors include family support and health workers. This is supported by research (Maharani et al, 2017; Anggreani, 2019; Delfriana et al, 2019; Sari et al, 2016; Sartik et al, 2017 and Artiyaningrum, 2016) which states that there is a significant relationship between knowledge about hypertension and control blood pressure in the elderly and research (Daeli, 2017; Maulidina et al, 2019; Jehani et al, 2022; Tumanduk et al, 2019; Saraswati et al, 2019; Septianingsih, 2018 and Kusumayanti et al, 2021) which states that there is a relationship significant relationship between the attitudes of hypertensive patients and efforts to control hypertension and research (Imran, 2017; Arisandi, 2020; Lisiswanti et al, 2016; Sunarti and Patimah, 2019; Naryati and Sartika, 2021; Masyudi, 2018; Oktaviani et al, 2022; Irianti et al. al, 2021 and Rahmadhani, 2021) which states that there is a relationship between family support and compliance with hypertension control in the elderly. Based on the description of the problem above, researchers are interested in conducting research on "Relationship of Attitude, Knowledge and Family Support Factors to Chi-Square Test-Based Hypertension Control Efforts".

The formulation of the problem to be studied is: What is the influence of knowledge, attitudes and family support on efforts to control hypertension? The general aim of this research is to analyze the factors that influence efforts to control hypertension in patients at the Ngoresan Community Health Center, Surakarta using the Chi-Square test. The specific objectives of this research are to determine the frequency distribution of respondents' characteristics, determine the relationship between knowledge and efforts to control hypertension, determine the relationship between attitudes and efforts to control hypertension and determine the relationship between family support and efforts to control hypertension.

RESEARCH METHOD

The first stage of this research is the stage of reviewing the results of previous research by researchers (Arini, 2020) which is initial research as an illustration for future research by researchers. The second stage of this research was to carry out observations and preliminary studies at the Ngoresan Community Health Center. From this second stage the researchers obtained data on the number of hypertension patients for the last five years (2019 -2023). To determine the population, the total number of hypertensive patients in 2023 (January-June) is 638, then by using the Slovin formula with a percentage of 10%, a sample of 86 is obtained. The third research stage is conducting research (quantitative descriptive). In the third research stage, the researchers collected primary data by interviewing 86 hypertensive patients using a cross-sectional design using an accidental sampling technique. The interview aims to approach the patient through small outreach and also provide brochures about hypertension. The fourth stage of the research is the chi-square test. The research data were analyzed univariately in the form of a frequency distribution table. The final stage is the bivariate test using the chi-square test at a significance level of 0.05. For the discussion stage of research results, researchers will use comparisons with the results of previous research (Arini, 2020) and also by comparing with the results of other studies.

This research was developed with a quantitative descriptive research, a correlational descriptive approach. The research design used cross sectional. The population in this study were all hypertension sufferers aged 45-54 years who were recorded in the medical records of the Ngoresan Community Health Center, Surakarta from January-June 2023, namely 638 sufferers. The sample in this study amounted to 86 respondents by accidental sampling technique. Primary data collection using interview method. The interviews that will be conducted also aim to approach patients through small outreach and also provide brochures about hypertension. The research data were analyzed univariately in the form of a frequency distribution table and bivariately using the chi-square test at a significance level of 0.05.

RESULT AND DISCUSSION

Characteristics of Respondents

Table 1. Frequency Distribution of Respondent Characteristics in the Ngoresan Community Health Center Work Area in 2023

No	Variable	f	%
a. Age			
1	45 years old	6	6,98
2	46 years old	13	15,12
3	47 years old	3	3,49

4	48 years old	12	13,95
5	49 years old	3	3,49
6	50 years old	14	16,28
7	51 years old	1	1,16
8	52 years old	15	17,44
9	53 years old	7	8,14
10	54 years old	12	13,95
	Total	86	100
b. Gender			
1	Man	23	26,74
2	Woman	63	73,26
	Total	86	100
c. Level of Education			
1	No school	6	6,98
2	Elementary school	20	23,26
3	Junior High School	30	34,88
4	Senior High School	26	30,23
5	College	4	4,65
	Total	86	100

Based on table 1, it can be seen that most of the respondents are aged 52 and the youngest is 51 years old. Most of the respondents were female and the last level of education of the respondents was dominated by the last level of education, namely SMA.

Research Variable Data

Table 2. Frequency Distribution of Research Variable Data in the Ngoresan Community Health Center Working Area in 2023

No	Variable	f	%
a. Knowledge			
1	Not enough	58	67,44
2	Good	28	32,58
	Total	86	100
b. Attitude			
1	Negative	56	65,12
2	Positive	30	34,88
	Total	86	100
c. Family Support			
1	Not enough	57	66,28
2	Good	29	33,72
	Total	86	100
d. Hypertension Control Effort			
1	Not enough	65	75,58
2	Good	21	24,42
	Total	86	100

Description: Processed 2023 Research Data

Respondents who had less knowledge related to hypertension control were more than respondents who had good knowledge and respondents who had positive attitudes related to hypertension control were fewer than respondents who had negative attitudes and respondents who had less family support related to hypertension control more than respondents who have good family support.

Bivariate Analysis

Table 3. The relationship between knowledge, attitudes and family support and efforts to control hypertension in the elderly

Variable	Hypertension Control Enough		Effort Good		Total		p-value	OR	CI (95%)	
	f	%	f	%	f	%			Lower	Upper
Knowledge										
Not Enough	30	51,72	28	48,27	58	67,44	0,043	2,765	1,014	7,538
Good	18	64,29	10	35,71	28	32,56				
Total	48	55,81	38	44,19	86	100				
Sikap										
Negative	30	53,57	26	46,43	56	65,12	0,004	4,333	1,561	12,029
Positive	20	66,67	10	33,33	30	34,88				
Total	50	58,14	36	41,86	86	100				
Family Support										
Not enough	30	52,63	27	47,37	57	66,28	0,029	3,000	1,098	8,231
Good	18	62,09	11	37,93	29	33,72				
Total	48	55,81	38	44,19	86	100				

Description: Processed 2023 Research Data

Relationship between knowledge and efforts to control hypertension in the elderly
The results of the analysis show that there is a relationship between knowledge and efforts to control hypertension with a p-value = 0.043 ($\alpha=0.05$). The OR results obtained show that respondents with a less knowledge level are 2.765 times more likely to make efforts to control hypertension that are not good enough compared to respondents with a good level of knowledge.

Respondents' knowledge will influence the decisions taken regarding the efforts to control hypertension. Respondents who have good knowledge and actions occur because respondents already have good knowledge regarding hypertension so that it can be a means to assist respondents in controlling hypertension. The more the respondents understand about their disease, the more they will understand the actions that must be maintained or changed. Lack of knowledge about hypertension can occur due to lack of information obtained by respondents. From the majority of the last level of education of the respondents, namely high school where the higher the education of the respondents, the easier it will be to receive information and the more knowledge they have.

According to Notoatmodjo (2010), knowledge is an important aspect in the formation of individual behavior or actions. Respondents' high knowledge regarding hypertension control will influence respondents to take good action. Actions based on knowledge will be lasting and if an action is not based on knowledge then it will be temporary or not durable (Notoatmodjo, 2010). The results of this study support the theory used, where the respondent's knowledge is an important aspect in determining hypertension control measures. Knowledge is related to efforts to control hypertension. Judging from the results of the study, many respondents did not know the risk factors for hypertension and habits that can cause hypertension as well as checking blood pressure regularly so that many respondents did not make efforts to control hypertension properly. This lack of knowledge can prevent respondents from adopting a healthy lifestyle. This can trigger an increase in blood pressure and cause complications.

This research is in line with research conducted by Anggreani and Nasution (2019) which shows that there is a significant relationship between knowledge and hypertension control in the elderly with a p-value of 0.009 <0.05 . This is also in line with research

conducted by Daeli (2017), which states that there is a relationship between knowledge and efforts to control hypertension with a p-value of $0.001 < 0.05$.

Relationship between Attitude and Hypertension Control Efforts in the Elderly, The results of the analysis show that there is a relationship between attitudes and efforts to control hypertension with a p-value = $0.004 (< \alpha = 0.05)$. The OR results obtained show that respondents with a negative attitude are 4.333 times more likely to make less efforts to control hypertension than respondents with a positive attitude.

Notoatmodjo (2010) stated that attitude is a closed response from a person to a certain stimulus or object. Indirect attitude can be seen, it can only be interpreted through closed behavior. More information can influence and increase knowledge, thereby creating awareness which will ultimately act in accordance with the knowledge gained from learning and experience (Masyudi, 2018).

Attitudes arise from the knowledge gained by respondents. The more information obtained about hypertension can raise respondents' awareness so that they are willing to take a positive attitude in responding to their disease condition. Respondents with negative attitudes tend to have poor efforts to control hypertension and do not want to change their behavior, this can happen because the knowledge they obtain is still lacking and they do not understand the importance of information about hypertension, namely as a provision in changing their behavior because they realize that there is a need for prevention and control measures. hypertension so that blood pressure can be controlled and minimize the occurrence of complications.

The results of this study support the theory used, where respondents' attitudes can determine hypertension control measures. Attitudes related to efforts to control hypertension can be seen from the results of research that many respondents are still closed and lack awareness about checking blood pressure, taking antihypertensive drugs and managing stress so that many respondents do not make efforts to control hypertension properly. This negative attitude can make respondents not want to change their attitude to do routine blood pressure checks and take medication according to doctor's recommendations and manage stress.

This research is in line with research conducted by Septianingsih (2018) showing that a p-value of $0.000 < 0.05$ has a significant relationship between respondents' attitudes and efforts to control hypertension. Another study conducted by Anggreani and Nasution (2019) also stated that there was a relationship between attitudes and blood pressure control in the elderly with a p-value of $0.004 < 0.05$.

Relationship between family support and efforts to control hypertension in the elderly The results of the analysis show that there is a relationship between family support and efforts to control hypertension in the elderly with a p-value = $0.029 (< \alpha = 0.05)$. The OR results obtained show that respondents with poor family support are 3,000 times more likely to make less efforts to control hypertension than respondents with good family support.

According to the Indonesian Ministry of Health (2016), there are several roles of family members towards the elderly, including providing love and providing time and attention, being patient and wise towards the behavior of the elderly. As a family, give the elderly the opportunity to live together without considering it as a burden, remind and accompany the elderly in having regular health checks at health services, provide healthy food with balanced nutritional principles, help meet their needs such as recreation and finances and communicate frequently with parents and family.

Family support is an important factor in the process of controlling hypertension to prevent complications. This can be seen from the research results, many respondents did not receive assistance when undergoing health checks at health services and were not

invited to exercise regularly. This can trigger the action of not checking blood pressure and exercising regularly because they don't get enough attention from their family. This poor family support can result in respondents not routinely checking their blood pressure at health services so that this action causes respondents not to know their health condition and not to carry out prevention and control which can result in uncontrolled blood pressure and complications.

Family support is very helpful in increasing enthusiasm for life so that respondents have a high commitment to undergoing hypertension treatment as well as support and encouragement from the family. Respondents were able to do regular exercise as a form of effort to control hypertension. Providing support from the family is a motivation for respondents to control their illness and can also help in maintaining their health.

This research is in line with research conducted by Imran (2017) which states that there is a relationship between family support and compliance with hypertension control in the elderly with a p-value of $0.004 < 0.05$. This is also in line with research conducted by Saraswati, Abdurrahmat and Novianti (2018) which states that the p-value is $0.012 < 0.05$, meaning there is a relationship between family social support and hypertension control.

CONCLUSION

There is a relationship between knowledge and efforts to control hypertension in the elderly with a p-value = $0.043 (< \alpha = 0.05)$, there is a relationship between attitudes and efforts to control hypertension in the elderly with a p-value = $0.004 (< \alpha = 0.05)$ and there is a relationship between family support and efforts to control hypertension in the elderly with a p-value = $0.029 (< \alpha = 0.05)$. There is a relationship between knowledge, attitudes and family support with efforts to control hypertension in the elderly.

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