



The Relationship Between Knowledge Level and Efforts TO Reduce Blood Pressure in Patients with Hypertension in Tanara Village in 2022

Viki Indah Monika ¹, Antonius Rino Vanchapo ², Alpian Jayadi ³, Juandri Seprianto Tusi ⁴, Emanuel Suban Bala Lewar ⁵, Uwe Barroso ⁶, Amina Intes ⁷

¹ Sekolah Tinggi Ilmu Kesehatan Faathir Husada Tangerang, Indonesia

² Sekolah Tinggi Ilmu Kesehatan Faathir Husada Tangerang, Indonesia

³ Institut Kesehatan dan Bisnis Surabaya, Indonesia

⁴ Sekolah Tinggi Ilmu Kesehatan Maranatha Kupang, Indonesia

⁵ Sekolah Tinggi Ilmu Kesehatan Maranatha Kupang, Indonesia

⁶ University of Southern Denmark, Denmark

⁷ Isinki University of Helsinki Finland, Finland

Corresponding Author: Viki Indah Monika, E-mail: vikiindahmonika@gmail.com

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ABSTRACT

Hypertension is called the silent killer disease because it often occurs without complaints because it does not show symptoms. People with high blood pressure do not realize they have high blood pressure because they have no symptoms. Hypertension is also known as hypertension when the systolic blood pressure rises to 140 mmHg and the diastolic blood pressure increases by 90 mmHg. This disease can lead to complications and death if not treated immediately. Purpose: to determine the relationship between the level of knowledge and efforts to reduce blood pressure in patients with hypertension. Methods: using descriptive correlation with cross sectional design with total sampling technique with a total sample of 36 people. Results. Data collection using 2 questionnaires. The results of the analysis using the Spearman rank correlation test (ρ) obtained the results of $p = 0.000$ which means $p (<0.05)$ this shows that there is a relationship between the level of knowledge and efforts to reduce blood pressure in patients with hypertension in the work area of the village of Tanara in 2022.

Keywords: Blood Pressure, Knowledge Level, Reduction Efforts

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INTRODUCTION

Hypertension is often defined as a condition where systolic blood pressure is greater than 120 mm Hg and diastolic blood pressure is greater than 80 mm Hg (Groopman dkk., 2019). High blood pressure or hypertension is an increase in blood pressure in the arteries.

According to WHO (World Health Organization), about 972 million people worldwide or 26.4% of people worldwide have high blood pressure (Egan dkk., 2019). Of the 972 million people with high blood pressure, 333 million live in developed countries and the remaining 639 in developing countries including Indonesia which also ranks second in the top 10 diseases.

Based on preliminary data taken at the Tanara Health Center, data on people with hypertension who visited the last 3 years were 82 people, people with hypertension who visited the last 1 year were 36 people (Liang dkk., 2020). Factors that affect a person's high blood pressure are the first uncontrollable factors such as genetics, age, gender, and race (Lippi dkk., 2020). The second factor is controlled factors related to environmental factors in the form of behavior and lifestyle (obesity, lack of exercise, stress, food intake) for example eating salty foods, sweet foods, fatty foods and consumption of caffeine drinks.

In an effort to reduce blood pressure, this can be done by monitoring blood pressure, making lifestyle changes, and taking antihypertensive drugs (Jung dkk., 2020). Related to lifestyle, namely reducing salt intake or a low salt diet. A low-salt diet is necessary in the treatment of hypertension (Piva dkk., 2020). Restriction of sodium intake in the form of a low salt diet is one of the dietary therapies used to control blood pressure (Nuraini, 2016).

Early detection of hypertension and medication adherence are key to hypertension recovery, as early management of risk factors can prevent hypertension (Carr & Rowe, 2020). Knowledge and awareness of patients about hypertension are important factors in lowering blood pressure (Slivnick & Lampert, 2019). Individual knowledge about hypertension can help efforts to lower blood pressure because patients often visit medical facilities and adhere to hypertension management.

Knowledge is a product of information that when the information is analyzed, processed and placed in its place, what is called knowledge emerges.

Based on the background above, the formulation of the problem in this study is whether there is a "Relationship between the Level of Knowledge with Efforts to Reduce Blood Pressure in Patients with Hypertension in Tanara Village in 2022" The general objective of this study "Analyzing the Relationship between Level of Knowledge with Efforts to Reduce Blood Pressure in Patients with Hypertension in Tanara Village in 2022".

RESEARCH METHODOLOGY

This study uses Quantitative research with descriptive correlation, which explains the relationship between variables using a crosssectional design (Huang dkk., 2020),

namely the approach of making measurements or observations at the same time (one time) between the independent variable (level of knowledge of hypertension) and the related variable (efforts to reduce hypertension).

The variables studied in this study were the level of knowledge and efforts to reduce blood pressure (Guan dkk., 2020). The population of this study were people with hypertension in Tanara Village totaling 36 people (Yao dkk., 2020). Determination of sampling in Tanara Village using Total Sampling with a population sample of 36 people. Inclusion criteria in the study were respondents who were willing to be studied, people with hypertension in the last 1 year who visited the Tanara Health Center, located in Tanara Village (Adams & Walls, 2020). This study uses the Spearman Rank Correlation statistical test. This study was measured using a questionnaire conducted on May 4, 2022 to May 11, 2022 in Tanara Village.

RESULT AND DISCUSSION

Assessment of the level of knowledge of respondents in Tanara Village obtained the following data:

Table Identification of the level of knowledge of respondents in patients with hypertension in Tanara Village in May 2022.

	Frequency	Percent
Good	14	38.9
Simply	11	30.6
Less	11	30.6
Total	36	100.0

Source: Primary Data, 2022

Based on the table above, it shows that respondents who have good knowledge are 14 people (38.9%), 11 people (30.6%) have sufficient knowledge, 11 people (30.6%) have poor knowledge.

Assessment of respondents' blood pressure reduction efforts in Tanara Village obtained the following data: Table Identification of efforts to reduce respondents' blood pressure in patients with hypertension in Tanara Village in May 2022.

Efforts to Reduce	Frequency	Percent
Good	11	30.6
Cukup	16	44.4
Simply	9	25.0
Total	36	100.0

Based on the table above, the results of the questionnaire on efforts to reduce blood pressure that have been filled in by respondents with good values as many as 11 people (30.6%), 16 people (44.4%), 9 people (25.0%) are less good.

Analysis of the relationship between knowledge level and efforts to reduce blood pressure in hypertensive patients in Tanara Village in May 2022 obtained the following data:

Table Analysis of the relationship between level of knowledge and efforts to reduce blood pressure in patients with hypertension in Tanara Village in May 2022.

Knowledge Level		Efforts_to_Lowe r_TD	
S p Level_ e Knowledge r m a	Correlation Coefficient	1.000	.623*
	Sig. (2tailed)		*
	N		.000
	Correlation Coefficient	36	36
Efforts to Reduce	Sig. (2tailed)	.623**	1.000
	N		
		.000	.
an			
TD h		36	36
o			

hypertension itself, including hypertension and its self-treatment (Egan dkk., 2019). The overall information obtained can improve both the knowledge and behavior of people with hypertension.

This is proven by Dewi and Wawan that knowledge is closely related to education. People with high education are expected to have extensive knowledge (Alatab dkk., 2020), but people with low education do not mean they have no knowledge at all.

Correlation is significant at the 0.01 level (2-tailed).

From the results of the analysis with the Spearman Rank correlation (rho) using the SPSS 21.0 for windows application, the results of the correlation coefficient between the level of knowledge and efforts to reduce blood pressure in people with hypertension amounted to 1.000 (Baabdullah dkk., 2019). With the results of p value = 0.000, it means that the p value <0.05, this shows that there is a relationship between the level of knowledge and efforts to reduce blood pressure in people with hypertension in Tanara Village in 2022.

Assessment of Knowledge Level

This is in accordance with the research of Sunarti and Patimah with the results of 40 out of 57 respondents having good knowledge but of the 40 respondents there were 9 people who were concluded in the hypertension control efforts in the unfavorable category (Kumar dkk., 2019). Knowledge is one of the factors that influence a person's

compliance, knowledge is a product of information, and knowledge related to hypertension is a collection of information related to hypertension.

Assessment of Blood Pressure Reduction Efforts

This is in accordance with Siswati's research with the results of respondents in the good category there were 33 people (68.8%), while the poor category was 15 people (31.2%).

Efforts to reduce blood pressure can be done by controlling risk factors. Eating healthy foods, reducing salt in food, refraining from alcohol, smoking, controlling stress, and physical activity.

Lack of physical activity often increases heart rate (Pierce dkk., 2020), thus stimulating the heart muscle to work harder when contracting, this affects the ability of the heart muscle to pump blood (Saha dkk., 2020), if the pressure is too high it can strain the arteries and increase heart rate, blood pressure heart rate (Li dkk., 2021). Exercise is also recommended for people with high blood pressure such as walking, running, jogging and cycling for 20 minutes to 25 minutes 3 times to 5 times a week.

This is proven according to Budi S. Pikir that nonpharmacological therapy in the form of lifestyle changes can reduce blood pressure. Several studies have shown that changes in lifestyle and diet can reduce blood pressure (Al-Ansi dkk., 2019). Limiting salt intake, regular exercise, smoking cessation, weight loss, and limiting alcohol consumption are some of the recommendations in many guidelines.

Analysis of the Relationship between Knowledge Level and Blood Pressure Reduction Efforts in Hypertension Patients in Tanara Village in 2022.

This is in accordance with research that people with hypertension who are more knowledgeable can control their blood pressure because they use their knowledge to lower their blood pressure. Inexperienced hypertensive patients usually cannot control their blood pressure (blood pressure does not drop).

Good knowledge is the initial capital that must be carried by hypertensive patients to understand the next treatment program (Pierce dkk., 2020). In addition, sufficient knowledge is needed for patients to understand how to lower blood pressure and implement it into daily life. apply it to daily life.

This study is in accordance with research (Sunarti and Patimah, 2019) which conducted research on the relationship between the level of knowledge and efforts to control blood pressure in patients with hypertension in the working area of the Karangmulya Health Center (Hult dkk., 2019), Karangpawitan District, Garut Regency, the results obtained showed that the results of the analysis $p = 0.00$ ($p = 0.05$) with a coefficient (r) of 0.609 which means that there is a significant relationship between the level of knowledge about hypertension and efforts to control blood pressure in patients with hypertension in the working area of the Karangmulya Health Center, Karangpawitan District, Garut Regency.

Garut Regency.

This study is also in accordance with the research of Mujiran et al. who conducted research on the relationship between the level of knowledge about hypertension and attitudes in preventing complications of hypertension in elderly prolans participants UPT Puskesmas Jenawi Karanganyar, the results obtained showed that the p value = 0.000 and the p value <0.005 with the coefficient $r = 0.994$ which means that there is a strong relationship between the respondent's level of knowledge about hypertension disease and the attitude of preventing complications of hypertension in elderly Prolanis participants at UPT Puskesmas Jenawi Karanganyar Regency. The higher the respondent's level of knowledge about hypertension, the better the respondent's attitude in preventing complications of hypertension.

CONCLUSION

There is a relationship between the level of knowledge and efforts to reduce blood pressure in patients with hypertension. Where hypertensive patients with good knowledge often apply a good lifestyle to lower blood pressure, on the other hand hypertensive patients with a lack of knowledge, apply less activity to lower blood pressure.

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