

Analysis of Diet Pattern Ability Setting in Hypertension Patients with Self-Care Theory Approach

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Abstract--- *The number of Patients with hypertension continues to increase every year. Hypertension is often referred to as " The Silent Killer " disease. The ability to regulate dietary patterns to prevent complications is needed. The purpose of this study was to analyze the ability to regulate dietary patterns in patients with hypertension. The design of this research was analytic observational with a cross-sectional approach. Samples were taken using a purposive sampling technique resulting in 92 respondents. Inclusion criteria are people with hypertension in Tegalsari Village, Kepanjen, Malang who are willing to be respondents and the exclusion criterion is a mental disorder. This study using a closed questionnaire (list of questions with answers provided by the researcher) which includes knowledge, attitude, health worker support and an ability questionnaire (regulation of dietary patterns for hypertension sufferers). Statistical tests used multiple linear regression analysis tests. The results of the multiple linear regression analysis test found that from the variables knowledge, attitude, support of health workers the attitude variable had the biggest influence on the ability to regulate dietary patterns with a significance value (p-value: <0.001), followed by knowledge (p-value: 0.227) and support of health workers (p-value: 0.969). Attitude is the most important factor that can influence the ability to regulate dietary patterns, so it is necessary to increase a positive attitude in someone to improve the ability to regulate diet and to prevent an increase in uncontrolled blood pressure or hypertension complications.*

Keywords--- *Hypertension; Ability to Regulate Diet; Knowledge; Attitude; Support of Health Workers*

I. INTRODUCTION

Hypertension (high blood pressure) is one of the most common diseases. Hypertension is a degenerative disease categorized as a silent killer (the silent disease or the silent killer) [1]. Hypertension patients need knowledge, attitudes and support of health workers who can affect the ability to regulate diet to prevent an increase in blood pressure. However, so far research shows that hypertension patients generally have not made good dietary patterns. This condition will increase the incidence of hypertension. Uncontrolled hypertension can cause complications, such as coronary heart disease, stroke, kidney and vision problems [2], [3].

Hypertension has become a global problem whose prevalence is increasing every year. Currently, it is estimated that the number of people with hypertension in the world is approximately 970 million. In 2025 it is estimated that

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this will increase to 1.56 billion people in the world. This condition can be caused due to a lack of ability in regulating dietary patterns which can affect the increase in blood pressure. In Indonesia, based on the results of Riskesdas [4], the number of people with hypertension in the Indonesian population aged > 18 years based on diagnosis by health professionals reached 9.4% and 25.8% based on blood pressure measurement results. Based on [5], the province of East Java ranks 6th for people suffering from hypertension with a total of 36.32% at the age of > 18 years. According to the Ministry of Health Republic of Indonesia's Basic Health Research [5], the incidence of hypertension in Malang Regency reached 39.2%. From the results of a preliminary study, data on hypertension sufferers in Tegalsari Village, Kepanjen District, Malang Regency counted approximately 120 patients.

The ability to regulate hypertension diets can be influenced by knowledge, attitudes and support of health workers who play an important role in increasing blood pressure. The previous research that correlated with this research is The Influence of Knowledge, Attitudes and Family Support on the Hypertension Diet of the Upper Village of Pancur Batu District [3], which shows that knowledge, attitudes, and family support can influence dietary regulation in hypertensive sufferers. Based on [6], there is a relationship between knowledge, family support and support of health workers to adhere to diet management in patients with hypertension. Based on the theory of Nursing Self-Care by Dorothea Orem humans can care for themselves; this is called the Self-Care Agency. This can change at any time which can be influenced by several factors, namely the predisposing factors which include knowledge, attitudes, beliefs, education and employment. The second factor is the enabling factor which includes infrastructure and distance from health services and the third is the reinforcing factor in the form of the role of family support and support of health workers [7].

Based on the theoretical basis above, the ability to regulate dietary patterns is needed to prevent an increase in blood pressure. The ability to regulate dietary patterns is also influenced by the role of nurses in increasing knowledge, attitudes and family support in patients with hypertension [3], [8]. The aims of this research are number of hypertension sufferers is more or less reaching 120 patients but the number of people with hypertension who have not implemented the ability to regulate diet patterns properly, so researchers are interested in an analysis of the Ability to Manage Diet Patterns in Hypertension Patients with Self-Care Theory Approach in Desa Tegalsari Kecamatan Kepanjen.

II. METHODS

The research design used was an observational analytic study with a cross-sectional approach. The variables are knowledge, attitude, support of health workers and the ability to regulate dietary patterns. Samples were taken using a purposive sampling technique resulting in 92 respondents. The inclusion criteria are people with hypertension in Tegalsari Village, Kepanjen, Malang who are willing to be respondents and the exclusion criterion is a mental disorder. Data taken in this study using a closed questionnaire (list of questions with answers provided by the researcher) including knowledge, attitude, health worker support and an ability questionnaire (regulation of dietary patterns for hypertension sufferers). The number of ethical clearance is 026/S.Ket/KEPK/STIKesKPJ/I/2020. Furthermore, the data obtained are analyzed using an univariate analysis (general data and special data) and then a Multiple Linear Regression Analysis Test with SPSS is performed.

III. RESULTS

The results of the study are displayed in table form that illustrates the frequency of respondents' socio-demographic characteristics. General description of independent and dependent variables and multiple linear regression analysis tables.

Table 1. Socio-Demographic Characteristics of Patients with Hypertension in Desa Tegalsari Kecamatan Kepanjen (N=92)

Respondents' Characteristics		N	%
Age	45-59 years old	49	53.3
	60-74 years old	37	40.2
	75-90 years old	6	6.5
Total		92	100
Gender	Male	16	17
	Female	76	83
Total		92	100
Education	No school	39	42.2
	Elementary school	39	42.2
	Middle School	12	13
	High school	0	0
	College	2	2.2
Total		92	100
Profession	Civil servants	0	0
	Entrepreneur	21	22.8
	Farmers	34	37
	Not Working / IRT	37	40.2
Total		92	100
Long suffered	<2 years	37	40.2
	2-5 years	51	55.4
	> 6 years	4	4.3
Total		92	100
Concomitant Diseases	Yes	31	33.7
	No	61	66.3
Total		92	100
Drug Therapy	Yes	61	66.3
	No	31	33.7
Total		92	100
Blood pressure	Stage 1 (140-159 / 90-99 mmHg)	58	63.0
	Stage 2 (≥ 160 / ≥ 100 mmHg)	34	37
Total		92	100

Based on Table 1, it can be seen that the majority of respondents were aged 45-59 years (53.3%), were female (83%), did not graduate elementary school (42.2%) and graduated elementary school (42.2%), daily activities days without work / IRT (40.2%), duration of hypertension most 2-5 years (55.4%), not accompanied by concomitant diseases (66.3%), undergoing drug treatment (66.3%), and most had blood pressure in stage 1 (140-159/90-99 mmHg) (63.0%).

Table 2. Distribution of Respondents Based on Knowledge, Attitudes, Support of Health Workers and Ability to Regulate Diet in Hypertension Patients In Desa Tegalsari Kecamatan Kepanjen (N=92)

Variable	Hypertension Score		
	Classification	N	%
Knowledge	Well	69	75
	Enough	21	22.8
	Less	2	2.2
Total		92	100
Attitude	Well	41	44.6
	Enough	51	55.4
	Less	0	0
Total		92	100
Support of Health Workers	Well	40	43.5

	Enough	51	55.4
	Less	1	1,1
Total		92	100
	Well	19	20.7
Ability to regulate diet	Enough	73	79.3
	Less	0	0
Total		92	100

(Source: Primary Data, 2020)

Based on Table 2, it can be seen that the respondents' knowledge is in the good category (75%), with the adequate attitude category (55.4%), the support of health workers in the sufficient category (55.4%) and the ability to regulate dietary patterns in the sufficient category (79, 3%).

To find out the relationship between the independent variables and the dependent variable a Pearson analysis test was performed; to find out the independent variables that influence the dependent variable a multiple linear regression analysis test was performed with the results as listed in Tables 3 and 4. In table 3 we found 2 variables related to the ability to regulate dietary patterns, namely knowledge and attitude, with p-values of 0.007 and <0.001. Furthermore, in Table 4 we see that from the results of the multiple linear regression tests the most influential variable on the dependent variable (ability to regulate dietary patterns) is the attitude variable with p-value of <0.001.

Table 3. Pearson Test Analysis Results Relationship between Knowledge, Attitude, Support of Health Workers and the Ability to Regulate Diet Patterns in Patients with Hypertension in Desa Tegalsari Kecamatan Kepanjen

Variable	Ability To Regulate Diet		
	R	N	p-value
Knowledge	.277	92	0.007
Attitude	0.535	92	<0.001
Support of Health Workers	0.004	92	0.969

(Source: Primary Data, 2020)

Table 4. Results of Analysis of Multiple Linear Regression Tests to determine the most influential independent variables (knowledge, attitudes and support of health workers) on the dependent variable (ability to regulate dietary patterns)

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	12,685	3,223		3,935	.000
Duknakes	-,021	.73	-.026	-.285	.776
Knowledge	.175	.141	.122	1,243	.217
Attitude	.476	.91	.495	5,217	.000
2 (Constant)	12,109	2,499		4,846	.000
Knowledge	.165	.135	.114	1,218	.227
Attitude	.479	.090	.497	5,292	.000
3 (Constant)	12,339	2,498		4,939	.000
Attitude	.515	.86	.535	6,006	.000

(Source: Primary Data, 2020)

IV. DISCUSSION

The ability to regulate dietary patterns in hypertensive patients can be influenced by several factors including knowledge, attitudes and support of health workers. This study found that there is one factor that mostly affects the ability to regulate dietary patterns, that is the attitude variable with p-value <0.001 ($p < 0.05$).

Attitude is something that has not been implemented, but one of the predisposing factors of a particular action. According to [9], attitude is something that can not be seen directly, but can be interpreted first. With a positive attitude, indirectly positive behavior will also be implemented well. Vice versa, a different attitude (negative) will affect someone to act in maintaining health status. The ability to regulate dietary patterns in patients with hypertension can be influenced by positive attitudes such as having an interest, motivation to recover, the presence of these supporting factors can help improve one's ability to go on a hypertension diet [10], [11].

Attitude is one of the most influential factors on the ability to regulate dietary patterns in patients with hypertension, this is same with research conducted by [11], that states that there is a significant influence between attitude and diet implementation in hypertension sufferers with p-value: 0.008 ($p < 0.05$). The results of this multivariate statistical test mean that respondents who have a positive attitude towards diet can have positive behavior in implementing dietary patterns for hypertension.

The results of this study are in accordance with the theory of self-care, where the ability to regulate dietary patterns can be influenced by conditioning factors which include predisposing factors (knowledge, attitudes, beliefs, beliefs, values, etc.), enabling factors (enabling health facilities and distance from services) and reinforcing factors (support of health workers, support of family and friends, etc.). The ability to regulate dietary patterns that are carried out properly can prevent uncontrolled blood pressure increases and complications that occur in people with hypertension [7], [12].

V. CONCLUSION

From the results of this study it can be concluded that the variable that most influences the ability to regulate dietary patterns in hypertension patients in Tegalsari village, Kepanjen sub-district is the attitude variable. The implication of the results of this study indicates the need for an increase in positive attitudes such as having an interest, motivation to recover. A positive attitude can improve one's ability to go on a hypertension diet including reducing salt consumption, limiting consumption of meat and high-sugar foods, reducing consumption of fatty foods, increasing consumption of vegetables and fruits, consuming fish, poultry, and nuts.

CONFLICT OF INTEREST

No conflict of interests have been declared.

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