The Influence of Education Level and Family Support on Diet in People at Risk of Hypertension Using the Self Care Theory Approach

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Abstract: Hypertension is one of the diseases that increases every year Diet at the risk of hypertension is still not carried out because many hypertensive patients still have poor dietary behavior. The purpose of this study was to analyze the effect of education level and family support on diet in people at risk of hypertension with the Self Care theory approach. This case report method uses analytic observation by taking data on the level of education and family support using a questionnaire sheet as many as 80 respondents in outpatient X Lampung Hospital. The results showed that the variable that most influenced diet in people at risk of hypertension was family support with a value of (0.001) with a coefficient of -.420. Based on this, it can be seen that family support can affect diet in people at risk of hypertension, so it is necessary to have family support in people at risk of hypertension to reduce the risk of hypertension in people with risk of hypertension.
Keywords : Education Level, Family Support, People at Risk of Hypertension

BACKGROUND

Dieting for the risk of hypertension sufferers is still not implemented because many hypertension sufferers still have poor dietary behavior (1). The risk diet for hypertension sufferers is essential to prevent complications (2).

In Southeast Asia, hypertension is in the third highest position, with a prevalence of 25% of the total population. Based on the prevalence of incidence in Indonesia, it is estimated at 11.4% or as many as 28.8 million people, the risk of hypertension sufferers in 2020 (3). A hypertension diet can be done by maintaining a lifestyle, exercising diligently, reducing salt consumption, reducing fat consumption, not smoking, reducing foods that contain high potassium, limiting caffeine, avoiding stress, and controlling blood pressure regularly (2). The prevalence of decubitus in Indonesia is still relatively high; research results in several government hospitals in Indonesia show that the incidence of decubitus in bed rest patients is 15.8% to 38.18% (4).

Low education is related to a lack of knowledge and awareness regarding implementing a hypertension diet compliance. In this study, the family provided good support so that respondents adhered to their hypertension diet. The family provided information about foods and drinks that should be avoided, took them to health services, paid for treatment, and facilitated the respondent's needs (5).

Based on the theoretical basis above, dietary compliance has several factors that can change patient compliance, namely compliance in carrying out the diet program, which is related to understanding the instructions, level of education and knowledge, pain in treatment, attitudes, beliefs, and the patient's personal and family support. This is the basis for researchers interested in analyzing and researching "The Influence of Education Level and Family Support on Diet in People at Risk of Hypertension Using the Self Care Theory Approach." This research was conducted in the outpatient setting of Hospital X Lampung on people at risk of hypertension.

METHODS

The research design used is an analytical survey with a cross-sectional approach. The population in this study was families of patients at risk of suffering from hypertension in outpatient care at X Lampung Hospital. Sampling in this study used purposive sampling, with a total of 80 people. The independent variables in this research are the level of education and family support. The dependent variable of this study is the family diet and risk of hypertension.

The method for collecting data in this study was using a questionnaire on the level of knowledge, family support and diet in families at risk of hypertension. The general data questionnaire in this study consists of the respondent's name (initials), age, address, gender, education, BMI, family history of suffering, length of time the family has had hypertension and classification of hypertension. The data analysis used is a Multiple Linear regression analysis test.

RESULT AND DISCUSSION

Patient Knowledge of Hypertension

The study's results showed that 31 respondents (40.8%) of hypertensive patients at the Ngambur Health Center UPTD, Pesisir Barat Regency in 2023 had insufficient knowledge of hypertension. Complete data can be seen in Table 1. Hypertension sufferers should increase their knowledge regarding hypertension so that they can treat recurrence early or try to prevent it to reduce the occurrence of complications.

Table 1. Sosio-demografi

Variable	N	%
Sex		
Male	33	41,3
Female	47	58,8
Age		
Young Adult (Age 18-40 years)	40	50
Middle (Usia 41-65 years	40	50
Old Adult (Usia >65 years)	0	0
IMT		
Underweight	32	40
Normal	27	33,8
Overweight	15	18,8
Obase	6	7,5
Education		
No	0	0
elementary school	0	0
Junior High School	40	50
Senior High School	40	50
University	0	0
Family History		
Yes	80	100,0
No	0	0
The Family Suffered for a Long Time		
< 2 Years	14	17,5
2-5 Years	16	20,0
> 6 Years	50	62,5

blood pressure		
Normal	78	97,5
Pre Hypertension	2	2,5
Hypertension step 1	0	0
Hypertension step 2	0	0

(Sumber Data: Kuesioner Penelitian, 2024)

Table 1 shows that most respondents were young adults (aged 18-40), with 40 respondents being middle-aged (aged 41-65). Based on gender, the majority of respondents were female, namely 47. Then, based on education, the majority had junior high school and vocational school education, with 40 respondents each. Based on BMI (Body Mass Index), most respondents were in the Underweight category, with 32 respondents. Based on a family history of suffering, there was a history of hypertension with a total of 80 respondents, while the most extended number of sufferers was in the range > 6 years with a total of 50 respondents. The results of the majority's blood pressure measurements students had blood pressure in the normal category with 78 respondents.

Tabel 2. results of descriptive analysis of categorical data

Variable	N	%
Education		
High	40	50
Low	40	50
Family Support		65,7%
Good	62	77,5
Enought	18	22,5
Diet	0	0%
Good	75	93,8
Low	5	6,3

(Sumber Data: Kuesioner Penelitian, 2024)

In Table 2, the educational level variable for people is equally in the high and low categories, with 40 respondents each. Regarding family support, most were in the good category, with a total of 62 respondents, and the diet data obtained was included in the good category, with a total of 75 respondents.

Table 3. Results of Correlation Analysis of Person Variables Level of Education and Family Support in People at Risk of Hypertension Using the Self Care Theory Approach

Variabel	(r)	p-value
Education Level	-0,136	0,115
Family Support	-0,420	0,000

(Sumber Data: Kuesioner Penelitian, 2024)

Table 3 shows that the Pearson correlation analysis test produces a significant value for the education level variable 0.115. The considerable test value of 0.115 is greater than the p-value of 0.05, indicating no relationship between education level and diet on the risk of hypertension. The significant value for the family support variable is 0.001. shows that there is a relationship between family support for diet and the risk of hypertension.

Table 4. Interpretation of Regression Results from multiple regression analysis tests (coefficient).

	B	SE	B	T	*P*
(Constant)	35.828	2.223		16.119	.000
Dukungan keluarga	-.385	.094	-.420	-4.092	.000

(*Sumber:Data Primer kuisioner Penelitian 2024).*

Based on table 4 shows that model 2 is the best model with a p-value <0.05. It can be seen above that the p-value of the family support variable is 0.001, so it can be concluded that family support influences the dependent variable, namely the diet variable and hypertension risk. Equation of results from linear regression of diet (Y)= 35.828 + -.385* family support. The correlation coefficient of family support is -0.420. In theory, family support influences diet because the p-value of family support is 0.001<0.05 with a correlation value of -0.420.

DISCUSSION

The Influence of Education Level on Diet and Hypertension Risk

Based on the first hypothesis, it shows that education level has no significant effect on diet in people at risk of hypertension. This hypothesis can be proven from the results of multiple linear regression statistical tests using a computerized program showing a p-value of 0.115 > 0.05 and a coefficient value of 0.090, where it can be concluded that H1 is rejected, which means that the level of education does not significantly influence the diet of sufferers. People at risk of hypertension in the internal medicine clinic at the Hospital***.***

The significant test results in this study are from previous research where the level of education does not affect hypertension diet; other factors that may occur from health workers are constrained by socio-cultural background and barriers in communication (6). This is also in line with previous research where results were obtained that many educated respondents knew about the risk factors for hypertension, especially in terms of lifestyle such as consuming foods that contain high sodium, for example salted fish and eating foods that contain high cholesterol, such as fried foods, but still consumed them (5).

In this study, the level of education has no effect on the diet of people at risk of hypertension. Another factor that may occur is the distribution of information from health workers and cadres in the living environment who are rarely active in providing information about preventing hypertension to their residents and conveying the necessary information. The quality of information sources that must be taken into account, for example, education about hypertension and the dangers of hypertension and its prevention provided by officers so that it has an impact on healthy behavior/lifestyle.

The Influence of Family Support on the Diet of People at Risk of Hypertension

Based on the results of multiple linear tests to determine the independent variables (level of education and family support) affect the dependent variable (diet of people at risk of hypertension). The value obtained for family support (0.001) and level of education (0.115). It can be concluded that statistically, the most influential factor between family support and level of education is family support.

The significant test results in this study are from research conducted by Anisa, which states that there is an influence of family support on diet in people at risk of hypertension (7). According to family

support, it is the family's attitude, actions, and acceptance towards sick patients. A patient needs family support because someone sick certainly needs attention and love from the family. Family support is an important thing that must be present for every individual, both ill and healthy. With the support of the family, sick patients feel cared for, calm, and loved, thereby reducing the psychological burden and stress of the individual. Family members who receive this will all be encouraged to follow and adhere to their diet because some support healing, and many want the individual to be healthy (1).

Family support is important for every individual, both sick and healthy. With the support of the family, sick patients feel cared for, calm, and loved, thereby reducing their psychological burden and stress. Family members who receive this will all be encouraged to follow and adhere to the diet they are on because there are those who support healing, and many want the individual to be healthy.

Emotional support was obtained most often by families encouraging people at risk of hypertension to always carry out therapy such as diet exercise. In contrast, the support of appreciation was received by families providing praise for the efforts made by people at risk of hypertension to carry out diet, treatment, and exercise by recommendations, and information support was obtained. The family provides information about the risk of hypertension as well as instrumental backing, where the family does not mind paying for hypertension treatment or buying alternatives (fruit and vegetables) in the diet to reduce the risk of hypertension. In research at the Rajal Clinic, family support was in the Good category, totaling 62 respondents. Respondents received informational support in the form of a correct diet for people at risk of hypertension; the family also provided emotional support by reminding them not to eat foods high in sodium and encouraging them to exercise diligently. With this support, the BMI of respondents was in the overweight category at 18.8% and also in the overweight category at 7.5%. BMI is the indicator that has the most influence on blood pressure; both men and women with higher nutritional status have a 3.51 times risk of developing hypertension compared to people with normal nutritional status (8). Self-care theory is defined as a form of a person's behavior in maintaining life, health, development, and the life around them so that with self-care, humans can decide what is best for themselves (9-12).

Based on the facts and theories above, it can be shown that family support influences diet in people at risk of hypertension. With good family support, the risk of hypertension will decrease.

CONCLUSION

Education level does not have a significant effect on diet in people at risk of hypertension. This hypothesis can be proven from multiple linear regression statistical tests using a computerized program showing a p-value of 0.115 > 0.05 and a coefficient value of 0.090. Family support has a significant effect on diet in people at risk of hypertension. This hypothesis can be proven from multiple linear regression statistical tests using a computerized program showing a p-value of 0.001<0.05 and a coefficient value of -.420.

Based on the conclusions, the researchers can provide suggestions. It is hoped that the results of this research can complement data sources and be used as a reference in interventions for people at risk of hypertension in diet. To reduce the risk of hypertension, nurses should be educated to families that family support is very important and invited to support the diet of people at risk of hypertension.

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