

The Effect Of Health Education On Blood Pressure Behavior Behavior In Hypertension Patients

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ABSTRACT

Based on the amount of data obtained from Bonto Bangun health center where in 2015 there were only 305 people suffering from hypertension, in 2016 there were 236 people, and in 2017 there was an increase in hypertension, namely 356 people and in 2018 for 3 months there were 70 people suffering from hypertension. The purpose of this study is to know the effect of health education on blood pressure reduction behavior in hypertensive patients in the work area of Puskesmas Bonto Bangun Kec, Rilau Ale, Bulukumba District. This type of research is a pre-experimental study with a pre-experimental approach: one group pretest-posttest design. With simple random sampling data collection techniques with the number of samples in this study as many as 36 respondents through questionnaire sheets. Data analysis using paired t test with significance level $\alpha = 0.05$. The results of data analysis showed that the behavioral variable $p = 0,000$, it can be concluded that there is an effect of health education on blood pressure reduction behavior in hypertensive patients in the work area of Puskesmas Bonto wake. Conclusion there is the influence of health education on blood pressure reduction behavior in hypertensive patients. Suggestions are expected to be given health education through regular counseling or other media by relevant agencies especially regarding hypertension

Keywords: Health Education, Blood Pressure, Reduction Behavior

INTRODUCTION

Hypertension is a condition where the increase in blood pressure exceeds the normal limit and the most optimal is 120 mmHg for systolic and 80 mmHg for diastolic. Hypertension that occurs in a long time continuously can usually cause a stroke, heart attack, pulmonary edema, blindness, and hearing decline. There are several risk factors for hypertension, such as an increase in age or a history of blood pressure in family members (Runtukahu, Rompas, & Pondaag, 2015). According to WHO (World Health Organization 2012), there are a total of 839 million cases of hypertension, and it is estimated that the prevalence of hypertension will increase in 2025 to 1.15 billion or around 29% of the total world population where women suffer 30% more than the sufferer's men 29%. About 80% of cases of hypertension will increase, especially in developing countries (Runtukahu, Rompas, & Pondaag, 2015).

Data obtained from the Bulukumba district health office regarding hypertension in 2016 showed that 10,430 were suffering from hypertension, with 3,828 men suffering from women and 6,602 women (Health Office 2016). Data from the Bonto Bangun Health Center on hypertension data recorded in 2015 there were 305 people suffering from hypertension, in 2016 there were 238 people, and in 2017 and increase in hypertension was 356 people and in 2018 for 3 months there were 70 people who suffered from hypertension. Various studies have proven that hypertension prevention measures among the public. The results of this study were previously conducted by Ainal Mardiah, Asnawi Abdullah, Hermansyah in 2016 with the title "Health Education in Increasing Knowledge and Family Skills with Hypertension. The purpose of this study was to analyze whether there is an influence of health education on the behavior of reducing blood pressure in hypertensive patients in the work area of the Rilau Ale, Bulukumba Regency.

MATERIAL AND METHODS

The design of this study is a pre-experimental study with a pre-experimental approach: one group pretest-posttest design, which aims to determine the effect of health education on the behavior of reducing blood pressure in hypertensive patients in the Bonto Bangun Puskesmas Puskesmas, Rilau Kab, Bulukumba. Population is a generalization area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions (Sugiyono, 2012).

The population in this study were all hypertension sufferers who came for treatment at the Bonto Bangun Health Center Work Area with a total of 70 people for 3 months in 2018. Sampling in this study uses nonprobability sampling with a purposive sampling method that is the technique of determining samples with certain considerations (Setiadi, 2013). The sample in this study were 36 people who suffered from hypertension. Based on the sampling formula according to Isaac and Michael.

In the variable of health education using counseling material about hypertension, the tools used are leaflet and brochure. On the blood pressure-lowering behavior variable using a Likert scale questionnaire consisting of 11 statement items with frequent answer choices (s) score 4, always (s) score 3 sometimes (k) score 2, never (tp) score 1. The research instrument (questionnaire) must meet the requirements of valid and reliable. Data were analyzed based on measuring scale and research objectives

using computerized program software. Data were analyzed by: (1). Univariate Analysis, Analysis is done to see the proportion. (2). Bivariate Analysis, Bivariate test was conducted to determine the effect of the independent and dependent variables with the test used was the paired t-test. and the accepted significance limit if $p < 0.05$.

RESULTS

Table 1. Distribution of Respondent Characteristics by Gender, Age, Last Education

Characteristics	n	Percentage (%)
Gender		
Male	5	1,9
Female	31	86,1
Age		
Late adulthood	4	11,1
Early Elderly	14	38,9
Late Elderly	8	22,2
Old man	10	27,8
Last education		
Elementary school	27	75,0
Middle School	6	16,7
High school	3	8,3
Amount	36	100,0

Based on table 1 the frequency distribution of the characteristics of respondents was 36 respondents with a female gender more than 31 people (86.1%), compared to the male gender of 5 people (1.9%). Whereas the distribution based on the criteria for the age of the beginning of the elderly was 14 more people (38.9%), compared to the criteria for the age of the late adult as much as 4 people (11.1%). Based on educational background, namely elementary school education more 27 people (75.0%) compared to high school education of 3 people (8.3%).

Table 2. Distribution of the Frequency of Hypertension Patient Behavior in the Working Areas of the Bonto Public Health Center before and after health education is given

Behavior	Pre		Post	
	n	%	n	%
Good	10	27,8	28	77,8
Not Good	26	72,2	8	22,2
Amount	36	100,0	36	100,0

Based on table 5.2 it is found that behavior in hypertensive patients before being given health education is not good behavior more than 26 people (72.2%), compared with good behavior as many as 10 people (27.8%). After being given health behavioral education in hypertensive patients, 28 people (77.8) had good behavior compared to 8 people (22.2).

Tabel 3. Analysis of the Effects of Health Education on Behavior in Decreased TD

	Paired Differences				<i>P Value</i>	
	95% Confidence Interval of the Difference				t	df
	Mean	Std. De	Lower	Upper		
Decline_TD_Pre and Post behavior	0.500	0.507	0.328	0.672	5.916	35
						0.000

Based on table 3 it was found that the behavior of hypertensive patients after being given health education to the behavior of BP pre-behaviors decreased by 26 people (72.2%) and those who behaved well as many as 10 people (27.8%). Whereas the decrease in post BP behavior that behaved unfavorably was 8 people (22.2%) and well behaved 28 people (77.8%). Based on paired t test results obtained p value <0,000 with a significant level value <0.005 so it can be concluded that there is an influence of health education before and after health education on the behavior of BP reduction in hypertensive patients in the work area of Bonto Wake Health Center.

DISCUSSION

Lifestyle behavior is a risk factor that influences the incidence of hypertension because it is influenced by unhealthy lifestyles, modern lifestyles tend to reduce physical activity (exercise), alcohol consumption, drinking coffee, smoking and prolonged stress. All of these behaviors are triggers for high blood pressure. This research had previously been conducted by Rendi, Tavip Dwi Wahyuni, Warsono with the title "The Effect of Health Education About Hypertension on Changes in Lifestyle Behavior of Clients in Health Centers in Malang District" in 2017. The sample in this study was 20 respondents who were known before being given behavioral health education is more than 18 people (90%) compared with less behavior (2% (10%)).

Whereas research conducted by Riana D. Jurwari, Hendro Badjuni, Abram Babakal with the title "The Effect of Health Education on Knowledge of Hypertension Client Behavior in Manado Shoulder Health Center" in 2014. The sample in this study was 59 respondents, before being given health education less good behavior more 33 people (56%), compared with 26 good people (44%). The researchers' assumptions are related to the study that the behavior of hypertensive patients before the provision of health education, was found to be less good behavior 26 people (72.2%), compared with good behavior as many as 10 people (27.8%) where hypertension pasien seldom do sports, do not avoid eating restrictions that cause increased blood pressure, and do not limit

foods that contain high salt. Because of the lack of information they get related to health problems.

After being given health education behavior in hypertensive patients changed were 28 people (77.8%) good behavior, compared to 8 people (22.2%) less good behavior. Based on table 5.3 the results of the analysis using a paired t-test with a significant level ($\alpha = 0.05$) based on the test results obtained p-value $< \alpha$ ($0,000 < 0.005$) so it can be concluded that there is an effect of health education on the behavior of reducing blood pressure in hypertensive patients in the working area of the public health. Behavior formation begins with the smallest social group that starts with the family. Achieving a healthy family behavior must be started from each family. Because a person's behavior or a healthy community can be influenced by several factors both internal and external, one of which is influenced by the level of knowledge (Hadi, 2015).

This is supported by the results of research conducted by Rendi, Tavip Dwi Wahyuni, Warsono with the title "The Effect of Health Education About Hypertension on Lifestyle Behavior Changes in Hypertensive Clients in Dau District Health Center Malang" in 2017. Samples in this study were 20 people known after behavioral health education is more than 13 people compared with 6 people with good behavior and 1 person who behaves less. While research conducted by Ainal Mardhiah, Aswani Abdullah, Hermansyah with the title "The Effect of Health Education in Increasing Knowledge, Behaviors and Family Skills with Hypertension" In 2016 the samples in this study were 59 respondents, after being given health education there was a change in behavior where good behavior was found 59 people (100%). The researchers' assumptions are related to the study that the behavior of reducing blood pressure in patients after being given health education, changes in behavior where good behavior by 28 people and bad behavior by 8 people, where patients avoid food restrictions that cause increased BP and do sports, walk casually

With information or health education is very important because it can improve the degree of health by changing a person's behavior from unhealthy to healthy ones. From the results of studies that have been carried out the behavior of hypertensive patients before and after the provision of health education, the results of the analysis using a paired t-test with a significant level ($\alpha = 0.05$) based on the test results obtained p-value $< \alpha$ ($0,000 < 0.005$) so it can be concluded that there is an effect of the provision of health education on the behavior of reducing blood pressure in hypertensive patients in

the Bonto Bangun Health Center Work Area. This indicates that the provision of health education will improve a person's behavior in intervening in the disease by controlling and preventing an increase in blood pressure that exceeds normal limits.

This research was previously conducted by Rendi, Tavid Dwi Wahyuni, Warsono with the title "The Effect of Health Education About Hypertension Against Changes in Behavior of Lifestyle Clients in Malang Health Center in 2017". With the results of statistical tests indicate there is an influence of health education about hypertension on the increase in lifestyle behavior with $p\text{-value} = 0.001 < \alpha 0.005$. While research conducted by Ainal Mardiah, Aswani Abdullah, Hermansyah with the title "The Effect of Health Education in Improving Knowledge, Attitudes, Behaviors and Family Skills". The results of this study show that there is an influence of health education on increasing knowledge (0,0001), behavior (0,0001), and skills (0,0001). The researchers' assumptions are related to research that the behavior of reducing blood pressure in hypertensive patients before health education there is a change in behavior from bad behavior to good behavior in which hypertensive patients can control their blood pressure by avoiding food that can cause increased blood pressure

CONCLUSIONS

Based on the results of the study above, it was concluded that there was an effect of providing health education on the behavior of reducing blood pressure in hypertensive patients in the Work Area of the Bonto Bangun Puskesmas, Rilau Ale, Kab, Bulukumba. The results of this study are expected to provide information and can be used as a guide in providing health education or health promotion and improving work programs related to hypertension

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