Health Education Using Leaflets Increases Diet Compliance in Hypertension Patients

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ABSTRACT

During the Covid-19 pandemic, the death rate has increased in patients with hypertension. This study aims to determine the effectiveness of health education using leaflets on dietary compliance of hypertension patients. This study used a pre-experimental research design with a pretest posttest one group design approach. The population in this study were 160 hypertension patients at the Heart Polyclinic of Gatoel Hospital, Mojokerto. The sampling technique used consecutive sampling. The sample size was 20 people. The research instrument used a questionnaire. Data analysis used the Wilcoxon Signed Ranks Test. The results showed that there was an increase in the number of respondents who were compliant with the hypertension diet, which previously had no compliant respondents, increasing to 16 compliant respondents from 20 samples. The results of the data analysis showed the effectiveness of health education using leaflets on dietary compliance of hypertension patients at the heart disease polyclinic of Gatoel Hospital, Mojokerto, as evidenced by the results of the Wilcoxon Signed Ranks test which showed that p value = 0.005 or $<\alpha$ (0.05) so that H1 was accepted. The conclusion of the results of this study is that health education using leaflets is effective. Hypertensive patients are expected to implement a hypertension diet so that blood pressure can be controlled.

Keywords: health education; leaflet; hypertension diet

INTRODUCTION

Hypertension is a disorder of the blood circulation system that causes an increase in blood pressure above normal values or systolic blood pressure above 140 mmHg and diastolic equal to or greater than 95 mmHg. (WHO, 2015). Hypertension is a major health problem in the world. According to data from the World Health Organization (WHO) in 2016, 26.4% of the world's population suffers from hypertension and is likely to increase to 29.2% by 2025. The results of the 2018 Basic Health Research showed that 34.11% of Indonesia's population suffers from hypertension and East Java is ranked sixth for hypertension in Indonesia, namely 36.32%. Data obtained from the Mojokerto Health Office, the number of hypertension sufferers increased in 2014, namely 285,674 to 426,981 cases.

According to a journal written by Bianti Nuraini, 2015 there are several causes of hypertension, namely genetics, obesity, gender, smoking habits, drinking alcohol and salt intake patterns in the diet. Those who have these risk factors should be more vigilant and take preventive measures earlier, the simplest example is to carry out routine blood pressure control and try to avoid factors that trigger hypertension (Baradiro, 2008). Based on research conducted by Sunarti Swastika Rini, 2011, it was shown that the increase in hypertension sufferers was caused by non-compliance with the diet in hypertension sufferers, namely from 60 samples, 34 people did not comply with the hypertension diet. This is supported by research conducted by Arista Novian, 2013, which showed that 53.8% of the sample did not comply with the hypertension diet. From this, it can be concluded that non-compliance with the hypertension diet is one of the main factors causing the increase in the number of hypertension patients.

According to Omeoo, 2017, which was written on the website of the Ministry of Health of the Republic of Indonesia, there are various ways to increase patient awareness regarding hypertension diet. The first way is to develop and strengthen early detection activities for hypertension actively (screening). The second way is to increase public access to early detection services through PTM posbindu activities. And the third is primary prevention, namely activities to stop or reduce the incidence of hypertension through health promotion through leaflets or posters. Seeing that there are still problems regarding the increasing number of hypertension sufferers due to non-compliance with hypertension diets, in addition to previous studies that prove that health education using leaflets is effective in reducing the number of hypertension sufferers, the author is interested in conducting research on the effectiveness of health education using leaflets on compliance with the diet of hypertension sufferers in the heart disease polyclinic of Gatoel Hospital, Mojokerto.

METHOD
The research design that will be used in this study is a pre-experimental one group pretest-posttest design, namely by observing a group then providing treatment, and the results are observed to determine the accuracy of the treatment (Sugiyono, 2018). The independent variable used in this study is health education using leaflets. The dependent variable in this study is the dietary compliance of hypertension patients in the heart disease polyclinic of Gatoel Mojokerto Hospital. The subjects of the population used in this study were hypertension patients in the heart polyclinic of Gatoel Mojokerto Hospital as many as 160 patients during August. The sampling technique used is consecutive sampling, namely a sampling determination technique where all subjects who come meet the selection criteria are included in the study until the number of subjects required is met.

This study was conducted by selecting respondents who met the inclusion and exclusion criteria, this study was conducted over a period of 2 days. The study was conducted by researchers visiting respondents and explaining the intent and purpose of the researcher, and asking for a WhatsApp number after the respondents agreed and signed the consent form, the researcher gave a pre-test questionnaire to take home. After the respondents filled out the pre-test questionnaire, the researcher then gave them a leaflet and explained the contents of the leaflet. The next step was that the next day the researcher contacted the respondents via WhatsApp to request the results of the post-test questionnaire photos. This study uses a statistical test, namely the Wilcoxon test and uses an ordinal data scale.

RESULTS

Table 1.
Respondent's Characteristic (n=20)

Respondent's Characteristic	f	%
Age		
< 30 years old	0	0
30 – 45 years old	6	30.0
>45 years old	14	70.0

Table 1 shows that the characteristics of respondents based on age are mostly > 45 years old, as many as 14 respondents (70%).

Table 2.
Distribusi Frekuensi Responden Berdasarkan Pendidikan Terakhir di RS Gatoel Kota
Mojokerto pada bulan Agustus 2021 (n=20)

Respondent's Characteristic	f	%
Education		
No school	1	5.0
Elementary school	8	40.0
Junior high school	4	20.0
Senior high school	7	35.0

Table 2 menunjukkan bahwa mayoritas responden memiliki riwayat pendidikan terakhir sekolah dasar sebanyak 8 orang (40%).

Table 3.
Frequency Distribution of Respondents Based on Last Education at Gatoel Hospital, Mojokerto City in August 2021 (n=20)

Respondent's Characteristic	f	%
Job		
Bussiness	9	45.0
Farmer	3	15.0
Housewife	5	25.0
Self employee	3	15.0

Table 3 shows that the majority of respondents worked as self-employed, as many as 9 respondents (45.0%).

Table 4.
Characteristics of Duration of Hypertension Sufferers at Gatoel Hospital, Mojokerto City in August 2021 (n=20)

Duration	f	%
<5 tahun	5	25%
>5 tahun	15	75%

Table 4 shows that the majority of respondents' work has suffered from hypertension for > 5 years, as many as 15 people (75%).

Table 5.
Frequency Distribution of Respondents Based on Diet Compliance of Hypertension Patients Before Being Given Leaflets (n=20)

Hypertension Diet Compliance	f	%	f	%
Not obey	20	100,0	4	20.0
Obey	0	0	16	80.0

Table 5 shows that before being given the leaflet, all respondents were not compliant with the hypertension diet, as many as 20 respondents (100%), then after being given the leaflet, 16 people (80%) of the respondents were compliant with the hypertension diet.

Table 6.
Wilcoxon Test Results (n=20)

		N	Mean Rank	Sum of Ranks
	Ranks			
Post Test - Pre Test	Negative Ranks	0[a]	.00	.00
	Positive Ranks	16[b]	8.50	136.00
	Ties	4[c]		
	Total	20		

Table 6 shows that the results of the Wilcoxon test showed that 16 respondents experienced an increase in compliance with the hypertension diet during the post-test, and there were 4 respondents whose level of compliance with the hypertension diet remained the same during the pre- and post-test.

Table 7.
Wilcoxon Test Results (n=20)

	Test Statistics[a]
	Post Test - Pre Test
Z	-4.000[b]
Asymp. Sig. (2-tailed)	.000

Table 7 shows that H0 is rejected and H1 is accepted, meaning that leaflets are effective in dietary compliance of hypertension patients at Gatoel Hospital, Mojokerto City, as evidenced by a p value of $0.001 < \alpha\ 0.05$.

DISCUSSION
Diet compliance of hypertension patients before being given leaflets
In this study, it was found that all 20 respondents (100%) were not compliant with the hypertension diet. Compliance is a change in behavior from behavior that does not comply with regulations to behavior that complies with regulations (Notoatmodjo, 2003). According to Sacket in Niven (2000) compliance is the extent to which patient behavior is in accordance with the provisions given by health professionals. According to Smeltzer & Bare (2002) various strategies have been tried to improve compliance, namely: Healthy behavior modification is very necessary for patients with hypertension, including: regulating diet through a hypertension diet.

According to Smeltzer & Bare (2002) various strategies have been tried to improve compliance, namely: Healthy behavior modification is very necessary for patients with hypertension, including: regulating diet through a hypertension diet. those with lower or moderate education. The lower the level of education, the more difficult it will be for them to receive counseling from health workers, the level of education determines how easy it is for someone to absorb and understand about the hypertension diet. (Notoatmodjo).

Based on this study, most of the respondents were >45 years old, totaling 14 people (70%). The older they are, the more mature and strong a person is in thinking and working (Notoatmodjo, 2012). From experience and maturity of the soul, as well as in terms of public trust, a more mature person is trusted than someone who is not yet mature. Where age is one of the factors that influences the maturity of thinking patterns in digesting information. However, the facts in the field found that most respondents were less interested in reading the leaflets provided in the heart polyclinic, besides that the leaflets in the heart polyclinic about hypertension did not provide information about the hypertension diet, therefore some respondents had minimal information about the hypertension diet.

Compliance with the diet of hypertension sufferers after being given leaflets
In this study, out of 20 respondents, after being given leaflets, most of the 16 respondents (80%) were compliant and as many as 4 respondents (20%) were not compliant. Almost all respondents experienced an increase in compliance with the hypertension diet from not compliant to compliant. It is known that most respondents have never received information about the hypertension diet. After being given health education about hypertension diet, there was an increase in the number of respondents in the category of complying with the hypertension diet. Providing information is expected to increase compliance.

According to the results of Rogers' research in Notoatodjo (2003), it is explained that behavior based on knowledge will be more lasting than behavior that is not based on knowledge. If knowledge is better understood, then an attitude and behavior will arise to participate in and implement the hypertension diet. Most respondents already know how to diet hypertension properly. The fact in the field is that there are 4 respondents who are not compliant with the hypertension diet because they have suffered from hypertension for >5 years where the respondents are already bored and desperate with the disease they suffer from. However, there are 16 respondents in the field, namely when given a leaflet about a complete hypertension diet, respondents can accept information from the leaflet because they understand that if they do not do a hypertension diet it will be fatal.

Effectiveness of health education leaflets on hypertension diet compliance in hypertension patients

The effect of health education leaflets on hypertension diet compliance in hypertension patients was analyzed using the Wicoxon statistical test, the results obtained were a p value of $0.001 < \alpha$ 0.05, which means that there is an effect of health education using leaflets on hypertension diet compliance in hypertension patients at Gatoel Hospital, Mojokerto City. According to Notoatmodjo, (2003) the health education method is essentially an activity or effort to convey health messages to the community, groups or individuals. With the hope that with this message the community, groups or individuals can gain better knowledge about health. In other words, with this education, it is hoped that it can have an impact on changing the target's attitude. According to Smeltzer & Bare (2002) various strategies have been tried to increase compliance, namely: Providing clear information to patients about the disease they are suffering from and how to treat it. According to Notoatmodjo (2003), health education aids are tools used by educators in delivering educational materials which are usually known as teaching aids which function to help and demonstrate something in the educational process.

CONCLUSION

There is an influence of leaflets on dietary compliance of hypertension patients at Gatoel Hospital, Mojokerto City, as evidenced by a p value of $0.001 < \alpha$ 0.05.

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