

The Influence of "PATUH"-Based Health Education on Health Management Efforts for Elderly Hypertension Sufferers in Sumberrejo Trucuk Village, Bojonegoro

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Hypertension is a condition in which blood pressure in the arteries continuously increases. High blood pressure can cause additional stress on the heart and blood vessels, which in turn can increase the risk of various serious health problems, including heart attack, stroke, kidney failure, and other problems. Blood pressure is measured with two numbers: systolic pressure (pressure when the heart contracts) and diastolic pressure (pressure when the heart rests between contractions). The aim of the research is to analyze the influence of "obedience"-based health education on efforts to manage the health of elderly people suffering from hypertension in Sumberrejo Trucuk Bojonegoro Village. The research method in this study was to use a pre-experimental approach with a one-group pre-posttest design. The sample used was 34 respondents using a total sampling technique, then the research data was tested using a paired t-test. The results of this research show that there is a significant influence from providing "PATUH"-based health education on efforts to manage the health of elderly people with hypertension with a value of sig.0.002. This shows that the health management of hypertensive elderly people must pay attention to cognitive and other aspects as a form of an adequate healthy lifestyle

Keywords: Health Education, PATUH, Health Management, Elderly, Hypertension

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1. Introduction

Hypertension is a condition in which blood pressure in the arteries increases continuously. High blood pressure can put additional strain on the heart and blood vessels, which in turn can increase the risk of various serious health problems, including heart attack, stroke, kidney failure, and other problems. Blood pressure is measured by two numbers: systolic pressure (the pressure when the heart contracts) and diastolic pressure (the pressure when the heart rests between contractions) [1]. Hypertension is a condition where systolic blood pressure is ≥ 140 mmHg and diastolic blood pressure is ≥ 90 mmHg [2]. The silent killer is a nickname for hypertension, a chronic disease with the highest incidence. There are several triggers for hypertension, including gender, heredity, and age. Aging is one factor contributing to cognitive changes. This phenomenon is common in the elderly. They experience cognitive changes, including changes in their thinking processes. Consequently, a decline in thinking processes leads to a decline in their knowledge[3].

According to the World Health Organization (WHO), in 2021, the estimated number of adults aged 30-79 years old worldwide with hypertension was 1.28 billion. Basic health research data shows that the prevalence of hypertension in Indonesia has increased by 34.1%. The prevalence of hypertension in East Java (Jatim) reached 36.3% in the population over 18 years old, with an estimated number of sufferers of around 11,596,351[4].

Health education plays a crucial role in hypertension management, as it is the first step in managing hypertension. Health education is a technique that can be used to improve health status in various forms. The public urgently needs to increase their awareness of implementing preventive and rehabilitative measures, such as routine blood pressure measurements to detect the risk of hypertension and its complications [5].

People suffering from hypertension need education about the prevention and management of hypertension [6]. The lack of public knowledge about hypertension prevention has led the government to create several programs, namely GERMAS (Healthy Community Movement) and PHBS (Clean and Healthy Living Behavior). The program currently being implemented is the PATUH program. This compliance program includes health checks, managing the disease with appropriate and regular medication, maintaining a balanced diet, striving for safe and comfortable physical activity, and avoiding cigarette smoke, all of which aim to ensure that people with hypertension can achieve optimal health [7]. Therefore, this study has an objective that focuses on analyzing the influence of "PATUH"-based health education on efforts to manage the health of elderly people with hypertension in Sumberrejo Trucuk Village, Bojonegoro.

2. Literature Review and Problem Statement

Literature Review: Many cases of hypertension are caused by lifestyle and lack of physical activity. Lifestyle choices to avoid include regulating a salt-restricted diet, not smoking, not drinking alcohol, and maintaining a healthy weight. Physical activity can include activities such as gardening, walking every 15 minutes, cycling, and exercising [8]. Untreated hypertension often leads to dangerous strokes and heart attacks. The risk of fatal strokes and heart attacks is twice as high in people with untreated hypertension compared to those with normal blood pressure of the same age [9].

Hypertension is a common problem in Indonesia, one of which is in Bojonegoro Regency. In 2022, the number of elderly people (over 60 years old) was 208,872, and 174,359 people, or 83.5%, received health services. The number of people with hypertension is estimated to increase every year. The Trucuk Community Health Center (UPTD) in Bojonegoro Regency has 8,587 male and 10,213 female hypertension patients [10]. Based on the data above, hypertension cases are highly concerning, necessitating the implementation of health education.

Problem Statement : A preliminary study conducted through interviews found that many people suffer from hypertension, including residents with the highest blood pressure of 200/98 mmHg [11]. The lowest blood pressure was 149/92 mmHg. If the community is less able to control health problems, especially hypertension, then health education based on PATUH is essential to obtain health information as a provision for self-management efforts for hypertension sufferers, especially in the elderly. It is hoped that with adequate health information, good behaviors will be created as a form of health management efforts for those with hypertension status.

3. Method

The research method in this study uses a pre-experimental approach with a one-group pre-post-test design. The sample used was 34 respondents using a total sampling technique, then the data was collected with a questionnaire conducted to measure the health management efforts of elderly people with hypertension in Sumberrejo Trucuk Bojonegoro Village both before and after being given health education based on "PATUH" then the research data was tested using a paired t-test.

4. Results and Discussion

Results

Distribution of respondent demographic data

Tabel 1 age characteristics

Age	F	Presentation
45-59 years	10	29,4%
60-74 years	20	58,8%
75-90 years	4	11,8%
Amount	34	100,0

Based on table 1, it shows that of the 34 respondents, more than half were aged 60-74 years, namely 20 respondents (58.8%).

Table 2 gender characteristics

Gender	F	Presentation
Male	14	41,2%
Female	20	58,8%
Amount	34	100

Based on table 2, it shows that of the 34 respondents, more than half were female, namely 20 respondents (58.8%).

Table 3 characteristics of education

Education	F	Presentation
Not in school/did not finish elementary school/Islamic elementary school	0	0,0%
Elementary school/Islamic elementary school	20	58,8%
Junior High School/Islamic Junior High School	14	41,2%
High School, Islamic High School, Vocational High School	0	0,0%
College	0	0,0%
Amount	34	100

Based on table 3, it shows that of the 34 respondents, more than half had elementary school/Islamic elementary school education, namely 20 respondents (58.8%).

Frequency distribution of the influence of "PATUH"-based health education on health management efforts for elderly hypertension sufferers in Sumberrejo Trucuk Village, Bojonego

Table 4 Health efforts before education

Health efforts before education	F	Presentation
Good	3	8,8%
Sufficient	11	32,4%
Less	20	58,8%
Amount	34	100

Based on table 4, it shows that of the 34 respondents, more than half of them made inadequate health management efforts, namely 20 respondents (58.8%).

Table 5 Health efforts after education

Health efforts after education	F	Presentation
Good	5	14,7%
Sufficient	16	47,1%
Less	13	38,2%
Amount	34	100

Based on table 5, it shows that of the 34 respondents, the majority had sufficient health management efforts, namely 16 respondents (47.1%%).

Table 6 The influence of education on health management efforts

Paired Samples Test									
Paired Differences									
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	Df	Sig. (2-tailed)
			n		Lower	Upper			
Pair 1	Upaya_Pre - Upaya_Post	.26471	.44781	.07680	.10846	.42095	3.447	33	.002

Based on table 5.6, it shows that there is a significant influence of providing "PATUH"-based health education on health management efforts for elderly people with hypertension with a sig. value of 0.002 in the results of the paired t-test analysis.

Discussion

The Influence of "PATUH"-Based Health Education on Health Management Efforts for Elderly People with Hypertension

Table 4 shows that out of 34 respondents, more than half (58.8%) reported inadequate health management efforts. This research aligns with a study conducted by [12], which emphasized the importance of individuals experiencing health problems to consistently maintain healthy lifestyle behaviors to maintain their current pathological status. Failure to properly manage even minimal health issues can lead to serious consequences later on. This study shows that many elderly people still lack the resources to adequately manage their current health condition, namely hypertension. This could be due to the demographic, which still has a low level of education, with most having only elementary school education, which may lead to minimal exposure to health information. Therefore, it is crucial for elderly people with hypertension to have access to appropriate health information to maintain and manage their health.

Table 5 shows that of the 34 respondents, 16 (47.1%) indicated that the majority of them had adequate health management efforts. This study also supports the findings of a study by [13] that found that individuals who have received health education experience changes in adopting a healthy lifestyle. These health practices tend to be more adequate and structured, resulting in more proportionate daily health management. This study demonstrates that health management efforts in elderly people with hypertension (HT) demonstrate more adaptive progress, enabling them to effectively implement all aspects of their health behaviors. This approach must be implemented carefully to maintain their health status and prevent the risk of worsening their hypertension. Furthermore, it is important for elderly people

with hypertension to be more open to all sources of health information that can support their health in old age, which can ultimately serve as a foundation for long-term health.

Table 6 shows a significant effect of "PATUH"-based health education on health management efforts for elderly people with hypertension, with a significant value of 0.002 in the paired t-test analysis. Health management efforts are a series of activities carried out in an integrated and continuous manner to improve the health of each individual. Health management efforts can be carried out by the government, local governments, and the community, including: promotive, preventive, curative, rehabilitative, and palliative [14]. Therefore, these health management efforts can be emphasized, one of which is through a promotive-educational approach, because education provides basic stimulation that becomes the foundation for health. Health education itself is a process to increase the community's ability to maintain and improve health. Health education is carried out by providing knowledge, willingness, and skills to individuals, groups, and communities [15]. This illustrates that health management will be formed and maintained simultaneously on an adequate health foundation, namely through the stimulation of health education. This is because health education encompasses a foundational element in the form of health knowledge, how-to methods, and encouragement to adopt healthy behaviors, which should then be implemented gradually by both individuals and the community.

5. Conclusion

Based on the research results, it was concluded that out of 34 respondents, more than half had inadequate health management efforts before being given education, namely 20 respondents (58.8%), and 16 respondents (47.1%) had adequate health management efforts after being given education. There was also a significant influence of providing "PATUH"-based health education on health management efforts for elderly people with hypertension with a sig. 0.002 value in the paired t-test analysis results. In addition, it is hoped that the results of this study can be used by health workers as a source of programs to reduce the morbidity and mortality rates of hypertension by providing a more comprehensive approach, for village governments it can be used as a reference for determining policies in making the degenerative disease eradication program a success and can be used as material for further research on other aspects that have not been studied by researchers related to health management efforts in the aggregate of elderly people with hypertension.

6. Referensi

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