Differences in Elderly Knowledge After Counseling on Bay Leaf Therapy to Reduce Hypertension Using Video in Ngapainia Village, North Konawe Regency

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Abstract. *The elderly often experience various health problems due to the aging process. Problems that often occur in the elderly include hypertension, impaired uric acid levels, and cholesterol. Hypertension is the most common disease in the elderly, both due to organ changes due to the aging process and an unhealthy lifestyle. Health care for the elderly is advised to use herbs that have minimal side effects. This study aims to determine differences in the knowledge of the elderly after counseling on bay leaf therapy to reduce hypertension using video in Ngapainia Village, North Konawe Regency. This study uses a type of quantitative research with pre-experimental research methods, with a one-group pre-test post-test design approach. The sample of this study was 55 people aged> 60. Data analysis used the Wilcoxon test with significant criteria α (0.05). The results showed that before being given counseling on bay leaf therapy to reduce hypertension using video, the mean value was 5.1091 and the standard deviation was 1.65185. After being given counseling on bay leaf therapy to reduce hypertension using a video, the mean value was 8.0364 and the standard deviation was 1.66626. So the p-value is 0.000. That there is a difference in the knowledge of the elderly before and after being given bay leaf therapy counseling to reduce hypertension using video in Ngapainia Village, North Konawe Regency.*

Introduction

Hypertension is a condition in which systolic and diastolic blood pressure increases 140/90 mmHg more than 2 times the blood pressure measurement in resting conditions.[1]. According to WHO 2020, between 2015 and 2020, around 1.13 billion people worldwide will be diagnosed with hypertension or one in three people worldwide. According to Riskesdas (2018), there were 135,472 cases of hypertension in the Indonesian population over the age of 60 in 2018. 9,441 cases of hypertension were reported in Southeast Sulawesi in 2020[2]. According to data from the Kendari City Health Office, the prevalence of hypertension in the elderly over 60 years was 2,340 cases in 2018, 2,332 cases in 2019, and

2,530 cases in 2020.[3]. Health care for the elderly is advised to use herbs that have minimal side effects[4]. Hypertension is a disease that can be treated using bay leaves (Sizyumpolyanthum) herbal therapy.[5]. Essential oils, eugenol, tannins, and flavonoids found in bay leaves are thought to reduce blood pressure. Bay leaves work by stimulating bile secretion which causes fat to be removed from the intestines and reduces fat clots that accumulate in the blood vessels so that blood flows easily and blood pressure remains normal[6]. Previous research stated that there was an effect of giving bay leaf boiled water to people with hypertension[5].

Knowledge is needed by the elderly to be able to care for themselves or agree to be treated with a method including the application of lowering blood pressure using bay leaves[7]. Health education is an effort to provide information to the elderly regarding healthcare methods that were not known before[8].

Method

This study uses a quantitative pre-experimental research method that aims to determine differences in the knowledge of the elderly after counseling on bay leaf therapy using video in Ngapainia Village, with the approach of one *group pretest-posttest design*. Study*pre and post-design* is a study that uses one group of subjects with an explanation of the difference in knowledge of the elderly before and after the intervention.

Research result

Table 1 Frequency distribution by age

Characteristics Of Respondents	N (%)
Age	
60-65 Years (Elderly)	46 (83,6)
66-74 Years (Young Old)	5 (9,1%)
75-80 (Old)	4 (7,3)
Gender	
Man	24(43,6%)
Woman	31(56,4%)
Education	
Sd	22(40,0%)
Junior High School	21(38,2%)
Sma	12(21,8%)
Religion	
Islam	55 (100%)
	55 (100%)

Source: primary data, 2022

Table 1 shows that there are 46 respondents (83.6%) aged 60-65 years. The sex of most respondents was female as many as 31 people (56.4%). All respondents are Muslim as many as 55 people (100%).

Table 2 Knowledge of the elderly about bay leaf therapy to reduce hypertension using video media

Elderly Knowledge	Well	Less
Before counseling	26 (47,3%)	29 (52,7%)
After counseling	50 (90,9%)	5 (9,1%)

Source: primary data, 2022

Table 2 shows that the research variable is the knowledge of the elderly before being given counseling on bay leaf therapy to reduce hypertension using video, 26 elderly people (47.3%) have good knowledge, and 29

elderly people (52.7%) have less knowledge. After being given knowledge counseling, the elderly experienced an increase, with 50 elderly people who had good knowledge (90.9%), and 5 elderly people who had less knowledge (9.1%).

Table 3 Distribution of Wilcoxon test results

Research variable	Mean	std. Deviation	Max-Min	P Value
Pre-test	5.1091	1.65185	800-200	0.000
Post-test	8.0364	1.66626	1000-500	

Source: primary data, 2022

Table 3 shows the values *Value* = 0.000 where the value of p < α (0.05), then HO is rejected, meaning there is influence between the dependent and independent variables. Before giving counseling the mean value was 5.1091 with a standard deviation of 1.65185 and after giving counseling it increased to 8.0364 with a standard deviation of 1.66626. The results of the analysis of the effect of providing counseling on bay leaf therapy to reduce hypertension using video obtained values *value.*

Discussion
1. **Elderly Knowledge Before and After Counseling on Bay Leaf Therapy to Reduce Hypertension Using Video**

Before being given counseling, 26 elderly people had good knowledge who were in the elderly age bracket, namely aged 63-74 years and those who had less knowledge were 29 people who were in the 60-80 year age range. Respondents who had good knowledge were 12 women and 14 men, and respondents who had less knowledge were 18 women and 11 men. The education of respondents who had good knowledge was 15 junior high schools and There were 11 SMAs, and the education of the respondents who had less knowledge was 23 SDs, 5 SMPs, and 1 SMA.

After being given counseling, 50 elderly people who had good knowledge were in the elderly age bracket, namely 60-75 years old and 5 people who had less knowledge were in the 76-80 year age range. Respondents who had good knowledge were 26 women and 24 men, and respondents who had less knowledge were 3 women and 2 men. The education of respondents who had good knowledge was 15 elementary school students. as many as 28 people and high school as many as 12 people, and the education of respondents who have less knowledge, namely elementary school as many as 4 people, junior high school as much as 1 person.

Age is one of the factors that can affect knowledge, with increasing age a person will experience changes in the physical and psychological aspects[9]. The older a person's ability to receive or remember knowledge will decrease[10]. A person's education affects the level of knowledge, the higher a person's education the easier it is to receive information and the more knowledge he has[11]. Conversely, someone with a low level of education will hinder the development of one's attitude towards acceptance and the values to be introduced[12].

Gender has a direct or indirect relationship to the level of knowledge, the level of knowledge of men tends to be better than the level of knowledge of women[13]. The level of knowledge of women will begin to decline at an advanced age, this is because women will experience menopause which will experience physical changes that will affect their psychological health.[14]. Previous research that age can affect one's knowledge is in the research of Syamsi & Asmi, (2019)[15]. The level of education will affect one's knowledge by Hidayat, et, al, (2022)[16]. According to Putri's research, (2021) that the knowledge level of men is better than the level of knowledge of women because of a decrease in the hormone estrogen in

menopausal women so they experience changes in brain function.[17].

2. Differences in Elderly Knowledge After Counseling on Bay Leaf Therapy for Reducing Hypertension Using Video

The pre-test and post-test values have an effect, where before being given bay leaf therapy counseling to reduce hypertension using a video the mean value is 4.7455 with a standard deviation of 1.58953 and after being given bay leaf therapy counseling to reduce hypertension using a video the mean value is 8.2727 with a standard deviation of 1.61537. So *p value* of 0.000 the results of the analysis show that there is influence, which means that counseling affects the knowledge of the respondents.

Counseling aims to provide information or provide knowledge through various media including print media or electronic media such as video media[18]. The advantage of counseling through video media is that it provides good visualization it facilitates the process of absorbing knowledge[19].

Knowledge is something that is obtained or obtained from various information such as from electronic media or health education (counseling).[20]. Knowledge is a very important dominant, with sufficient knowledge it is hoped that it can have a good influence on people's attitudes in dealing with problems, especially in the health sector[21].

In this study, 55 respondent data (100%) were obtained, who experienced a lack of knowledge about bay leaf therapy because they had not been given counseling on bay leaf therapy to reduce hypertension using video. After being given counseling on bay leaf therapy, the knowledge of the elderly in Ngapainia Village increased by 90.9%. This research is similar to the research of Rani et al (2021), which stated that there was a significant effect on respondents' knowledge after counseling using video media[21].

Conclusion

There is a difference in the knowledge of the elderly after counseling on bay leaf therapy to reduce hypertension using video, it was found that the Wilcoxon test was $0.000 < \alpha$ (0.05), so HO was rejected meaning there was an influence between the dependent and independent variables.

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