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Case Report Paper

The Effect of Banjar Language-Based Education on Hypertension Knowledge Level

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Abstract: Uncontrolled hypertension makes the results worse. Knowledge of hypertension is a strong predictor of preventing complications. Increased knowledge can be provided through education. Language that is difficult for the public to understand when delivering information affects the success of education. So that the provision of education needs to pay attention to cultural aspects, one of which is the local language used by the community. This study aims to identify the respondent's characteristics of the history of hypertension, identify the influence before and after the provision of banjar language-based education on increasing knowledge of hypertension. The type of research design is Pre-Experimental one group pretest-posttest. The sample in this study amounted to 12 people. Sampling using total sampling technique. Data collection using the CAHE questionnaire with data analysis using the Wilcoxon statistical test. The results showed that before the intervention was given the level of knowledge was mostly not good 50.0% after being given the intervention there was an increase in knowledge of hypertension to 83.3%. Wilcoxon test results show that the value of = 0.002 < 0.05 so that H1 is accepted. The conclusion that nurses act as educators can make banjar language-based education one of the methods of health education in an effort to increase knowledge in hypertension sufferers.

Keywords: Banjar Language-Based Education, COVID-19, Hypertension.

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1. Introduction

Hypertension is now a non-communicable disease but is a very serious health problem. Hypertension is an increase in systolic blood pressure and diastolic blood pressure of at least 90 mmHg and 140 mmHg, respectively [1]. According to estimates from the WHO (World Health Organization) the highest hypertension as much as 27% is in Africa and Southeast Asia is in the 3rd position with a prevalence of 25% of the total population [2].

In Indonesia, the highest prevalence of hypertension based on results is in South Kalimantan (44.1%). Based on data from the Banjar District Health Office in 2018, the highest prevalence of hypertension was at Sungai Tabuk 2 Health Center (34.04%) [3]. Preliminary study data obtained from the Sungai Tabuk II Health Center in Banjar Regency, patients with hypertension in 2021 amounted to 147 people with the most sufferers in Paku Alam Village, which was 75%. Based on tabulated data from the practice of Nursing Profession students at Sari Mulia University, Banjarmasin in Paku Alam Village, RT 02 in October-November, the highest incidence of disease was hypertension (59%).

Uncontrolled hypertension makes health outcomes worse by increasing the risk of complications such as stroke, dementia, heart failure, rniocardial infarction and kidney failure [4]. Knowledge of hypertension is a strong predictor of prevention practices, treatment and medication adherence among hypertensive patients [5]. Good knowledge is needed in handling hypertension so that it does not have a bad impact and cause other comorbidities, because it has good compliance [6]. Factors that affect the level of knowledge of people with hypertension, one of which is the provision of health education.

According to Brune et al [7], providing education or health education to people with hypertension must also pay attention to the cultural aspects that exist in society. One of the cultural aspects in society is the language used. Language that is difficult for the public to understand when delivering information will affect the success of education. Based on the results of research by Ningsih et al [8], it shows the influence of culture-based hypertension education with the use of the Makassar regional language in increasing knowledge of hypertension sufferers. Based on the results of Lolo [9] research, it also shows that the impact of local language health education Tae'.

The results of interviews conducted with the community, it was found that the people in the area were almost entirely Banjarese, so that in their daily life they always interacted using the Banjarese language. Information was obtained that they said that they sometimes had difficulty understanding the explanations of health workers regarding diseases and treatment if the explanations used language that was difficult to translate into their daily language.

2. Literature Review

Hypertension or high blood pressure is defined as abnormally high arterial blood pressure. Normal blood pressure is systolic blood pressure < 120 mmHg and diastolic blood pressure < 80 mmHg [10]. Hypertension is diagnosed when a person's systolic blood pressure is 140 mmHg and diastolic blood pressure is 90 mmHg [11]. Hypertension that is not controlled properly can cause various complications including heart failure, stroke, kidney failure, retinopathy and peripheral vascular disease. Hypertension is one of the diseases that cannot be cured but can be controlled to reduce symptoms and worsening of the disease by means of non-pharmacological and pharmacological hypertension management [12].

One of the factors that influence the prevention and good management of the disease process is knowledge. Knowledge is the accumulation of similar information, and is the abstraction and generalization of information to help achieve certain goals [13]. According to Yuliana [14], one of the variables that affect knowledge is mass/source of information such as education obtained. Providing education is very important for patients to provide motivation and increase patient knowledge of the therapy they are carrying out. Health education is an effort made to increase health knowledge about the risk factors of disease and healthy lifestyle choices to improve the health status of participants, stop disease progression, and accelerate recovery. There are two kinds of media for health education, namely print media and electronic media. Media that can be used are leaflets, brochures, banners, posters, flipcharts, filler in the form of CD/DVD, radio television, and video [15]. Factors that influence the success of an education include teaching and learning methods and language [16].

According to Brune [7] the language approach in education or health education is also very influential regarding the recipient's understanding of what we convey. The language approach in education or health education regarding language-based cultural education is very influential in increasing control of hypertension. All of Kalimantan, especially South Kalimantan, speak the

Banjarese language. Banjarese and Indonesian are Malay languages that have been adapted to the culture, phonetics, and geographical location of the Banjarese [17].

3. Methodology

This study uses a research method with a pre-experimental one group pre-test-posttest design. In this method, there is one experimental group then given a pretest to determine the initial state of the experimental group, then the experimental group is given treatment of hypertension education based on Banjarese language with poster media that has been modified into Banjar language, and the educational method used is FGD (Focus Group Discussion) divided into 6 groups with 2 members in one group.

For the flow of the research implementation stage as follows:

(1) The first meeting the researcher gave a statement of informed consent to the respondent. The intervention consisted of 2 sessions, namely session 1 education on basic knowledge about hypertension, session 2 on hypertension management.
(3) In the second meeting, participants filled out a pre-test questionnaire on the level of knowledge of hypertension, then gave an educational intervention in session 1 and at the end of the intervention was given a post-test of the level of knowledge of hypertension about basic knowledge of hypertension.
(4) The third meeting at 3-day intervals from the previous meeting, participants filled out a pre-test questionnaire on the level of hypertension knowledge about hypertension management then provide educational intervention session 2 and at the end of the intervention will be given a post-test level of knowledge of hypertension.

Sampling with total sampling technique, where the sample used as many as 12 people with hypertension who have been diagnosed with hypertension and ethnic Banjar. Data collection using a Culturally Adapted Hypertension Education (CAHE) questionnaire which has been modified into the Banjar language. In this study, the data analysis used the Wilcoxon statistical test.

4. Finding and Discussion

4.1. Characteristics of Respondents

Table 1 shows the Frequency Distribution of Respondents Characteristics in Paku Alam Village RT 02.

Table 1. Frequency Distribution of Respondents Characteristics in Paku Alam Village RT 02

Characteristics	Frequency (n)	Percentage (%)
Age(Years)		
26-35	1	8.3
36-45	3	25.0
46-55	3	25.0
58-65	5	41.7
Gender		
Man	3	25.0
Woman	9	75.0
Last education		
SD/Madrasah	5	41.7
SMP/MTS	5	41.7
Work		
Doesn't work	5	41.7
Farmer	3	25.0
Family History of Hypertension		
There is	6	50.0
There isn't any	6	50.0
History of Hypertension Education		
Once	9	75.0
Never	3	25.0

Based on the Table 1, most of the respondents were aged 58-65 years as many as 5 people (41.7%). Most of the respondents were women with a total of 9 people (75%). The last educational background of the most dominant respondents was at the SD/Madrasah level as many as 5 people (41.7%) and SMP/MTs 5 people (41.7%). In this study, most of the respondents did not work as many as 5 people (40.7%). Respondents who have a family history of hypertension are 6 people (50%) most of them have also received counseling on hypertension are 9 people (75%).

4.2. Univariate Analysis for Hypertension Knowledge

Table 2 indicates that there is an increase in knowledge of hypertension in all values. The mean value of pre-test is 59.85 and post-test is 94.65 with an increase of 34.8.

4.3. Bivariate Analysis for Differences in Knowledge Levels before and after Giving Education

Table 3 shows the results of the Wilcoxon test with SPSS. It can be seen that the p-value of the Wilcoxon test (0.002) is smaller than ($p<0.05$) this data indicates that there is an increase in knowledge of hypertension by providing Banjar language-based education. The results of the pre-test Knowledge of hypertension, with the majority of respondents having a poor level of knowledge as many as 6 people (50%).

Table 2. Results of Hypertension Knowledge Level Before and After Giving Education to Respondents

Knowledge level	(n)	Minimum	Maximum	Mean	Std. Deviation
Pre-Test	12	36.36	81.82	59.85	13,68431
Post-Test	12	72.73	100.00	94.69	10,58531

Table 3. Wilcoxon Sign Test Results on Knowledge Level Variables

Knowledge level	*Pre-test*		*Post-test*	
	Frequency (n)	Percent (%)	Frequency (n)	Percent (%)
Well	1	8.3	10	83.3
Enough	5	41.7	2	16.7
Not enough	6	50.0	0	0
Total	12	100.0	12	100.0
Wilcoxon Sign Test	*P-Value= 0.002*			

4.4. Characteristics of Respondents

Table 1 indicates that the most dominant sufferers of hypertension are respondents aged 58-65 years as much as 41.7%. Age is associated with hypertension. The older a person is, the greater the risk of developing hypertension. This is in accordance with the research conducted Nuraeni [18], shows that respondents with old age (≥ 45 years) are 8.4 times more at risk (95% CI: OR 2.9-24.2) suffering from hypertension when compared to younger respondents (<45 years) with BP Value Variable OR 95CI). In terms of gender, most of the respondents were 75% female. Women experience more adverse effects of hypertension after menopause, this occurs as a result of a decrease in hormones that cause a decrease in body homeostasis. This is in accordance with research Wahyuni & Anindit [19], that most of the respondents' gender at Anwar Medika Hospital were women, more than 62 respondents (58.49%) of 108 respondents.

Table 1 also shows that the most dominating respondents with the last education are SD/Madrasah 41.7% also, SMP/MTs 41.7%. Low-level education has a high risk of non-adherence in undergoing treatment due to lack of knowledge. This is in accordance with research Agustina & Umar [20], said

the higher the education, the lower the risk of hypertension (p value 0.016) with an OR value of 0.270. In this study, respondents who dominate are not working 40.7%. A person's type of work also greatly affects family income which will affect their daily lifestyle, including the use of food and health services [21]. Which states that the absence of physical activity increases the risk of developing hypertension because it increases the risk of being overweight.

Most of the respondents who have a family background with a history of hypertension 50%. When the defective gene is the dominant gene, the result is that a family history of hypertension plays a 1.25 greater role in causing hypertension than someone who does not have a genetic history of hypertension. This is in accordance with Setiadari's [22] study, which showed the p-value test of 0.005, that is, respondents who have a family (genetic) history of hypertension, the more dominant they are with the disease. Respondents with a history of ever getting hypertension counseling were 75%.

This is supported by external factors that affect one's information. External factors, one of which is socio-cultural, that exists locally can influence the perspective of receiving a statement or information.

4.5. Differences in Knowledge Levels before and after Giving Education

Based on Tabvle 3 the results of the study before the provision of Banjar language-based education. The results of the pre-test showed that most of the respondents were in the category of low level of knowledge. This can be seen from the characteristics of respondents such as recent education and history of hypertension counseling. From the characteristics of education, the most dominating respondents are SD/MI and SMP/MTS. Research conducted on the community in Kemiri village in October - November 2016 showed that the level of education also affects a person's knowledge, one of which is related to health knowledge.

From the characteristic data, 75% of respondents with a history of hypertension counseling or have received hypertension education before are shown in table 1 Based on the results of interviews with the community that so far, health education regarding hypertension has often been carried out to hypertensive patients, but public understanding is still lacking in the use of the language used by the speakers..Health education uses Indonesian and medical language which may be difficult for listeners to understand, which can lead to misinterpretations by the public or health workers in providing interventions [8].

Based on the results of the research on the level of knowledge of hypertension sufferers in Paku Alam Village, RT 02, the Banjar language-based education provided showed a significant effect on hypertension knowledge. This can be seen in table 2, the results of the analysis of the average value before and after the provision of education obtained a difference of 34.8 with the results of the statistical test value (P-Value = 0.002 <0.05) using the Wilcoxon Sign Test can be seen in table 2 Health education is the process of acquiring knowledge and skills to improve individual and community health (Hasanica et al., 2020). In this study, the implementation of hypertension education was carried out based on the Banjar language. Banjar language is a regional language used by the people of Paku Alam Village RT 02 in carrying out their daily activities. Regional language is the language used for communication and cooperation purposes between local individuals from clans or groups in areas within the territory of the Unitary State of the Republic of Indonesia [9].

The cultural aspect is able to make it easier for people to understand the material presented. In addition, the level of public enthusiasm for providing education using local languages is much higher than using Indonesian [8]. This is in accordance with research Lolo & Sumiati [9], which shows that there is an effect of health education in regional languages in the prevention of hypertension in the elderly with the Wilcoxon test, obtained a p value of 0.000. Based on table 4, the results of the study after being given Banjar language-based education, from the post-test results, all respondents showed an increase in hypertension knowledge, namely after being given Banjar language-based hypertension education, as many as 83.3% of respondents were in the good knowledge level category. Based on the results of the research analysis, the answers to the post-test questions were obtained from the Culturally Adapted Hypertension Education (CAHE) questionnaire which had been modified in the Banjarese language. Of the 11 questions contained in the questionnaire,

Although the data on the most recent education characteristics of respondents are SD/MI and SMP/MTS, this has no significant effect on the reception of information from Banjar language-based hypertension education. Higher education levels do not guarantee to influence one's knowledge. This is in accordance with the research by Lolo & Sumiati (2019), which shows that the predominant initial knowledge is the low knowledge above (86.1%) with respondents not in school, elementary, and

junior high school. Knowledge after the most dominant is high knowledge (91.7%). Education does not significantly affect knowledge after being given education.

From the results of this study, based on table 3 that 16.2% of respondents are in the category of sufficient level of knowledge after the intervention, this can be caused by one of the factors that affect knowledge. Where the previous respondents were in the category of low knowledge level, and had increased to a sufficient category, although they did not experience an increase in knowledge in the top category, namely good. If it is associated with the characteristic data obtained, indeed these two respondents are in the elderly, namely 62 years old and 65 years old. This is due to biological changes, namely a decrease in brain cell function which results in a decrease in short-term memory. Old age will affect changes in cognitive aspects,

5. Conclusion

Based on the research conducted, the results showed that there was a relationship between respondents' characteristics and the incidence of hypertension. Characteristics that include age, gender, last education, occupation, family history of hypertension and history of hypertension health education. Based on the results of the interventions that have been described, that the use of the Banjar regional language when providing education to hypertensive individuals is able to attract attention in the hypertension education process, so it can be assessed that the use of regional languages in educating the community can affect the level of effective knowledge. It can be seen from the results of the pre-test that most knowledge is in the poor category, the post-test results have a significant increase namely the majority of respondents are in the good category.

From the results of this study, it can be concluded that nurses acting as educators can make banjar language-based education one of the methods of health education in an effort to increase knowledge in patients with hypertension.

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