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Original Article

Audiovisual Media Increases Stunting Prevention Knowledge Among Pregnant Women in The Working Area of Wani Health Center: Pretest, Posttest 1 dan Posttest 2

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ABSTRACT

Health education about stunting prevention using audiovisual media has never been done for pregnant women in the working area of the Wani Health Center. This study aims to Analyzing the effect of health education through audiovisual media on stunting prevention knowledge among pregnant women in the working area of the Wani Health Center. This study is a pre-experimental study with a one-group pretest posttest design. The population is all pregnant women in four villages in the working area of the Wani Donggala Health Center, Central Sulawesi. The sample consist of 43 respondents. The instruments used were pretest, posttest 1 and posttest 2 questionnaires, with 21 statement numbers. Pre, post 1 and post 2 data collection was carried out at the village office and auxiliary health centers in four villages. Health education materials through audiovisual media is related to stunting prevention. Audiovisual is self-made using animation with a duration of 8 minutes and 12 seconds. Univariate analysis is the frequency distribution and bivariate with the Friedman test. The results showed that the average value of the pretest: 52.18, posttest 1: 71.722 and posttest 2: 90.86. Friedman test obtained a value of ρ 0.000 (<0.05). The conclusions is health education through audiovisual media in posttest 2 significantly increases knowledge of stunting prevention in pregnant women. It is hoped that health workers will increase the use of audiovisual media as a preventive effort to prevent stunting.

Keywords : Health Education, Audiovisual Media, Knowledge, Stunting Prevention.

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INTRODUCTION

Until 2022, the prevalence of stunting in children under five years of age is still a problem in poor and developing countries in the world. This is indicated by the high prevalence of stunting in several countries. Research in Ethiopia found the prevalence of stunting in toddlers to be 39.5% [1]. Sub Saharan Africa 41% (2). Pakistan 50,7% [3], and Timor Leste 44,4% [4]. In Indonesia, the prevalence of stunting has decreased in the last 10 years. Prevalence of stunting in children under five years of age in 2013 was 37.2%, 2018 (30.8%)[5] dan 2022 (21,6%). In Central Sulawesi, although the prevalence of stunting under five in 2022 has also started to decrease to 28.2%, it is still high when compared to the national figure. The highest prevalence of stunting under five is Sigi Regency (36.8%) and Donggala ranks fourth (32.4%) out of 13 regencies/cities[6]. In the working area of the Wani Health Center, the stunting toddler data for 2020 was 28.2% and 2021 decreased to 21.7% [7]. Even though it has decreased, it has not reached the target of stunting cases in 2022, which is 18.4%.

Stunting in children under five years of age is not only caused by one factor but multifactors. Research by Widyaningsih et al (2022) shows that short mothers, low education, high household expenditure, unhealthy snacks, poor sanitation, good nutrition services are related to stunting[8]. A study by Yunitasari et al (2022) revealed that the determinants of stunting in the Covid 19 pandemic era were related to household sanitation facilities and household water treatment. Significant risk factors were male gender, older children, coming from social quintiles low economy, do not participate in prenatal care in health facilities[9]. Therefore, multi-sectoral interventions are needed to reduce the prevalence of stunting in children under five years of age.

Efforts to reduce stunting are carried out based on contributors and stunting intervention targets. Avula et al (2022) stated that the main contributors to reducing stunting include health and nutrition interventions, health education and health services[10,11]. Pregnant women are one of the target groups for stunting reduction interventions[12,13]. Health education can be implemented with various media. Research by Anggraini et al (2020) concluded that there were differences in knowledge before and after audiovisual media interventions in stunting prevention [14]. A study by Artikasari et al (2022) concluded that there were differences in the knowledge of pregnant women before and after being given tiktok media about nutrition during pregnancy[15]. Studies on stunting prevention through audiovisual media have been carried out by several researchers. However, it only measures the pretest and posttest. This study will measure respondents' knowledge about stunting prevention through pretest, posttest 1 and pottest 2.

One of the strategies in providing counseling about stunting prevention in pregnant women is through audiovisual media [16]. This media contains material on understanding, prevention, impact of stunting, breast care, early breastfeeding initiation (IMD), correct breastfeeding techniques and exclusive breastfeeding. Prevention of stunting is carried out from pre-conception, during a mother's pregnancy up to 1000 First Days of Life (FDL). Pregnant women in the villages in the working area of the Wani Health Center have not received optimal health education about stunting prevention. Health education on stunting prevention using audiovisual media was the first intervention carried out for pregnant women in the working area of the public health center. The aim of the study was to analyze the effect of Health Education Using Audiovisual Media on Knowledge of Stunting Prevention in Pregnant Women in the Working Area of the Wani Health Center.

METHOD

This study is a pre-experimental study with a one-group2 pretest posttest design. The study was conducted in the Work Area of the Wani Health Center, namely Wani Satu Village, Wombo Kalonggo, Wombo Induk and Wombo Mpanau, Donggala Regency, Central Sulawesi. The study lasted for three weeks from April 13 to May 3, 2022. The study population was all pregnant women who came to check their pregnancies in the working area of the Wani Health Center. The sample consists of 43 respondents. The sample is determined by consecutive sampling method. Pretest, posttest 1 and posttest 2 data were collected at the village office and auxiliary health centers in each village. The variable that is measured is the respondent's knowledge of stunting prevention. The results of measuring knowledge are considered good if the value of the respondent's answers is ≥76, considered sufficient if the value is 50-75, and considered poor if the value is ≤50. The intervention used was audiovisual media which contained material on stunting prevention. The instrument used to measure respondents' knowledge about stunting prevention was a questionnaire consisting of 21 statements. Knowledge is measured through pretest, posttest 1 and posttest 2 using the same questionnaire. Pretest and posttest 1 were measured on the same day, while posttest 2 was measured 1 week later. Health education through audiovisual media given to pregnant women contains materials related to stunting prevention. This audiovisual is self-made using interesting animations or pictures and has a duration of 8 minutes and 12 seconds. The analysis used is univariate and bivariate using the Friedman test with a confidence level of 95% (α=5%).

RESULTS

Table 1. Characteristics of pregnant women in the working area of the Wani Health Center (n=43).

Variable	Frequency (f)	Percentage (%)
Age		
<20 Years old	5	11.6
20-35 Years old	35	81.4
>35 Years old	3	7.0
Education		
Elementary	11	25.6
Secondary	28	65.1
High	4	9.3
Profession		
Working	7	16.3
Unemployed	36	83.7

Table 1 shows that the age group of 20-35 years is the largest age group, namely 35 people (81.4%), the most education is secondary education, namely 28 respondents (65.1%) and 36 respondents (83.7%) are unemployed.

Table 2. Frequency Distribution of Respondents' Characteristics.

Education	Pretest		Post test 1		Post test 2	
	F	%	**f**	%	**F**	%
Good	10	23,3	27	62.8	38	88.4
Sufficient	9	20.9	5	11.6	2	4.6
Poor	24	55.8	11	25.6	3	7
Total	**43**	**100**	**43**	**100**	**43**	**100**

Table 2 it shows that the respondents' knowledge before (pretest) being given stunting prevention health education was defic ient, namely 24 people (55.8%) and well knowledge able as many as 10 people (23.3%). In posttest 1, good knowledge increased to 27 people (62.8%) and those with poor knowledge became 11 people (25.6%), and 1 week later the respondents were given posttest 2 about stunting prevention health education, where the number of respondents who had good knowledge increased to 38 people (88.4%) and those with poor knowledge decreased to 3 people (7%).

Table 3. The effect of health education on stunting prevention before (pretest), after (posttest 1), and one week after being given (posttest 2) on increasing the knowledge of pregnant women in the working area of the Wani Health Center using the Friedman test.

Variable	N	Mean	Minimum	Maximum	SD	*ρ*
Pretest	43	52.19	19	90	21.87	0,000
Posttest 1	43	71.72	24	95	21.86	
Posttest 2	43	90.86	33	100	16.73	

Table 3 shows that the average value of knowledge of pregnant women before (pretest) health education is carried out, namely 52.19. After being given counseling (posttest 1) the average value was 71.72 and one week after being given treatment (posttest 2) the average value was 90.86. This means that there is an increase in the average pretest, posttest 1 and posttest 2 for health education about stunting prevention among pregnant women in the Wani Health Center work area, with a minimum score of "19" in the pretest and a maximum pretest score of 90. Then the minimum score in the posttest 1 is 24 and the maximum value is 95. While the minimum score in posttest 2 is 33 and the maximum value is 100.

DISCUSSION

This study analyzed differences in respondents' knowledge about stunting prevention through audiovisual media interventions with pretest, posttest 1 and posttest 2. The number of respondents was 43 respondents taken from four villages in the working area of the Wani Health Center. The results of the study showed that there was an increase in the knowledge of respondents in the "good" category by 38.7% from pretest to posttest 1. Respondents' knowledge in the "sufficient" and "poor" categories decreased by 9.1% and 29.5% from pretest to posttest 1. Based on the mean value, there was an increase of 19.53 from pretest to posttest 1. The statistical test results showed a significant value. Thus, the intervention using audiovisual media significantly increased the respondents' knowledge about stunting prevention before (pretest) and after (posttest 1) the intervention.

Meanwhile, a very significant increase in respondents' knowledge was obtained from pretest to posttest 2. In the "good" category there was an increase of 63.7%. The knowledge of respondents in the "sufficient" and "poor" categories from pretest to posttest 2 decreased by 16% and 47.7%. Based on the mean value, there was also a significant increase of 38.67 from pretest to posttest 2. The statistical test results also showed a very significant value. Compared to the increase in respondents' knowledge in posttest 1, the increase in respondents' knowledge in posttest 2 is very high. So that the measurement of the increase in respondents' knowledge in posttest 2 is better than posttest 1. The very significant increase in posttest 2 can be caused by respondents' exposure to stunting prevention material through audiovisual media repeatedly so that they can store information and remember this information well.

Audiovisual media is a work designed by combining audio and video technology that can be heard and seen. Audiovisual media includes video presentations that can be watched and studied by someone[17]. Audio-visual learning media is a teaching tool and educational tool that can activate the eyes and ears of students when learning and teaching activities occur[18]. Several studies have shown that educational media is very effective in increasing pregnant women's knowledge and attitudes towards stunting[19]. A study by Suryani et al (2022) found that audiovisual media was more effective in increasing pregnant women's knowledge of nutritional issues compared to booklets[20]. This happens because respondents prefer to watch compared to reading and opening booklets sheet by sheet.

Prevention of stunting is very important not only when a mother is experiencing pregnancy, but can be started during preconception[21]. During preconception, knowledge about reproductive health, nutrients for the needs of the mother and fetus, growth and development of the fetus in the womb and after the baby is born is very important to be known by prospective pregnant women[22]. Nutritional interventions for pregnant women to prevent stunting are supplementary feeding to reduce chronic energy and protein deficiencies. In addition, it is important to overcome deficiencies of folic acid, iron, iodine, calcium, malaria and intestinal worms. Nutrition for breastfeeding mothers, exclusive breastfeeding for babies up to six months, immunization, prevention of infectious diseases, zinc supplementation and iron fortification are also things that need attention in preventing stunting[23].

CONCLUSION

Health education through audiovisual media in posttest 2 significantly increased knowledge of stunting prevention in pregnant women in the working area of the Wani Health Center. It is recommended that health workers increase the use of audiovisual media in preventing stunting.

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CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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