



The Effectiveness of the Stunting Prevention and Early Detection Module on Increasing Knowledge of Pregnant Women at the Mare Health Center

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Abstract

One indicator of the welfare of a nation can be seen from the human resources in the country, if human growth and development in a country is good, it will increase the productivity of human performance it self and will affect the welfare of the nation. Stunting is one of the nutritional problems that is currently in the spotlight because in addition to its impact on health, it also has an impact on socio-economic conditions. This research method is quantitative using Quasi Experiment (Pretest and posttest design). The sampling method in this study was purposive sampling. The total sample in this study was 40 pregnant woman who were in the working area of the Mare Health Center. Data analysis using Wilcoxon test. Form the results of the Wilcoxon test analysis, it was found that the p value= 0.101 ($p>0.05$), which means that the stunting prevention and early detection module is not effective in increasing the knowledge of pregnant women in the working area of the Mare conditions.

Introduction

Stunting is one of the nutritional problems of global concern. Stunting is often associated with stunted brain development and growth in children's height, and the long-term impact of stunting is a decrease in children's mental abilities and learning capacities, decreased productivity, and the risk of developing chronic nutritional diseases such as diabetes and obesity in children with stunting (Indriani & Retno, 2018). Stunting is currently the latest issue related to national and international nutritional deficiencies. According to the World Health Organization (WHO), stunting is closely related to the home environment, including: Insufficient supply of clean water, environmental sanitation, lack of nutrient intake, diseases caused by infection, lack of knowledge of mothers about child care patterns, related to with breastfeeding, lack of nutritional intake in the mother before pregnancy, during pregnancy and lactation (WHO, 2017).

According to (WHO, 2019) the highest incidence of stunting occurs in African countries with a presentation of 32.20%. Meanwhile, South to East Asian countries are in the second level with a stunting percentage of 31.10% (WHO, 2019).

According to (SSGI, 2021) the prevalence of stunting in Indonesia has decreased significantly in 2013 the incidence of stunting from 37.2% to 30.8% in 2018, and decreased again to 27.7% in 2019(KemenKes, 2021). However, the prevalence of stunting again increased in 2020 by 31.8%.(World Health Organization, 2022).

According to (Kemendagri, 2022) through monitoring data on the implementation of 8 convergence actions of integrated stunting reduction interventions carried out by each province, the stunting rate in South Sulawesi in 2020 from 584,481 children under five, there

were 9.0 babies who were stunted. And in 2021 out of 477,666 toddlers, there are 10.4 who are stunted (Kemendagri, 2022).

Bone Regency according to (e-PPGBM, 2022) in 2020 the incidence of stunting in Bone Regency is 6.30%. and in 2021 it will decrease to 6.17%. Of the 27 sub-districts in Kab. Bone, Mare District is ranked seventh in the incidence of stunting with a prevalence of 17.49% in 2020, and in 2021 it will decrease by 11.45% (E-PPGBM, 2022).

When viewed from the prevalence of stunting at the national level to the district level, there has been a fluctuating change. So that the stunting problem still needs further monitoring. Various government efforts have been made to prevent and overcome this stunting problem.

One of the efforts that can be done is by providing education to families, especially pre-conception mothers, pregnant women and mothers with toddlers. Education related to stunting is important for every mother, especially pregnant women, because lack of knowledge causes the baby in her womb to be at risk of stunting (Ramdhani et al., 2020).

When providing health education, of course, requires educational media to help the learning process. One of the educational media that is considered effective is the Module. The module is a form of teaching material that is packaged in a complete and systematic way, contains a planned learning experience and is designed to help students learn independently. the content of the module itself contains at least learning objectives, materials, and evaluations (Prayoga, 2016). According to research conducted (Dahniarty, 2020) that there is an effect of providing breastfeeding and complementary feeding education using modules to increase mother's knowledge.

Methods

Method The research used in this research is quantitative using a Quasi Experiment research design with a design (One group pre test and post test design). This research was carried out for approximately two months in the working area of the Mare District Health Center. Bones. The sample in this study amounted to 40 pregnant women who entered the working area of the Mare Health Center. The sampling method in this study uses purposive sampling which is included in the criteria that have been determined by the researcher. Collecting data in this study using a questionnaire. Data analysis in this study used the Wilcoxon test using a significance level of 95% ($p = 0.05$).

Results and Discussion

Table 1. Frequency distribution of respondent characteristics in the working area of the Sibulue and Mare Health Centers, Kab. Bone

Characteristics	Frequency	Presentation (%)
Age (Years)		
<20	4	10
20-35	34	85
>35	2	5.0
Education		
Elementary/Junior High	17	42.5
Senior high school	14	35
College	9	22.5
Work		
Doesn't work	38	95.0
Working	7	5.0

Source: Primary Data, 2022

Based on table 1. above shows that from 80 respondents, there are 4 respondents with age <20 years (10%), respondents aged 20-35 years as many as 34 people (85%), and respondents with age > 35 years as many as 2 people (5.0%). Respondents with the latest education SD/SMP as many as 17 people (42.5%), respondents with the last education SMA as many as 14 people (35%), respondents with the latest education in Higher Education (PT) as many as 9 people (22.5%). The average occupation of the respondents in this study was 38 people (95.0%) and 7 people (5.0%).

Table 4. The effectiveness of the stunting prevention and early detection module on increasing knowledge of pregnant women in the Mare District Health Center Work Area.
Bone

		N	Mean Rank	Sum of Ranks	P= Value
Posttest – Pretest	Negative Ranks	13a	12.69	165.00	0.101
	Positive Ranks	18b	18.39	331.00	
	Ties	9c			
	Total	40			

Source: Primary data, 2022

Based on table 2. Shows the results of the Wilcoxon test analysis of 40 respondents, there are 18 respondents with positive ranks, which means that the post-test value is greater than the pre-test. respondents with negative ranks as many as 13 people, which means the post test value is smaller than the pre test value. The significance value is $p > 0.05$, i.e. $p = 0.101$, which means that the stunting prevention and early detection module is not effective in increasing the knowledge of pregnant women.

Stunting is a major condition of failure to thrive in children under five years of age (toddlers) caused by chronic malnutrition, repeated infections and inadequate psychosocial stimulation (Yarmaliza et al., 2021). Stunting tends to be thought to occur in the first 1000 days of life because growth fails during pregnancy and continues at 2 years of age and is difficult to overcome thereafter. (Prendergast & Humphrey, 2014). So that it is needed Efforts to overcome stunting by preventing and reducing interference directly, namely intervening pregnant women by providing education on the fulfillment of maternal nutrition because the lack of awareness of the importance of nutrition for mothers will have an impact on the absence of efforts to prevent stunting. Inadequate knowledge and inappropriate practices are barriers to nutrition improvement. (Ekayanthi & Suryani, 2019).

From the results of this study the majority of respondents aged 20-35 years as many as 34 people (85%). The majority of the respondents' last education was elementary/junior high school as many as 17 people (42.5%), and the majority of respondents in this study did not work as many as 38 people (95.0%).

From the results of the statistical analysis test using the Wilcoxon test module for preventing and early detection of stunting in the working area of the Mare Health Center, it was found that the value of $p = 0.101$ (p value > 0.05) which means that the module for preventing and early detection of stunting is not effective in increasing knowledge of pregnant women.

This study is not in line with research conducted by (Ningsih D.A, 2020) after statistical test was carried out using the *paired sample test*, the result showed that there was a significant effect of the module on increasing knowledge of pregnant women after being given health education interventions using the module (Ningsih dewi andariyah, 2020). According to Murtiani. 2020 Based on the results of the t-test, it was found that there was an effect of training using module duke media on the level of knowledge (Ani et al., 2020)

Conclusion

From the results of research conducted in the working area of the Mare Health Center, the stunting prevention and early detection module was not effective in increasing the knowledge of pregnant women. It is hoped that further researchers will conduct research related to the development of more innovative modules.

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