



The Effectiveness of Booklet Media on Increasing Knowledge and Attitudes of Mothers of Toddlers in Preventing the Risk of Stunting in Sibolga City in 2023

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ABSTRACT

Stunting is a condition of failure to thrive in children under the age of five due to chronic malnutrition and recurrent infections. Nagari Batang Barus has a stunting prevalence of 41.5% in Solok Regency in 2021. The purpose of this study was to determine the effectiveness of booklet media in increasing the knowledge and attitudes of mothers of toddlers in preventing the risk of stunting. This study is a mixed method study, qualitative research using exploratory case studies with in-depth interviews, informants in this study were mothers of toddlers, nutritionists and design experts. Quantitative research uses a quasi-experiment through a one group pretest and posttest approach through a questionnaire, the research sample was determined using nonprobability sampling with a purposive sampling type of 72 respondents. The research location was in Jorong Kayu Aro Nagari Batang Barus Solok Regency which was carried out in March - May 2023. The results of qualitative research produced booklet media that were in accordance with respondents using the P process steps. The results of quantitative research show that the average knowledge before and after intervention using booklets is 9.07 and 12.13, while the average attitude before and after intervention is 43.82 and 51.21. The results of the statistics showed a significant increase in knowledge (p -value = 0.001) and attitude (p -value = 0.001). The conclusion of the study is that there is effectiveness of booklet media in increasing the knowledge and attitudes of mothers of toddlers in preventing the risk of stunting. It is hoped that booklet media can be used as a learning medium in increasing the knowledge and attitudes of mothers of toddlers towards preventing the risk of stunting.

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1. Introduction

One of the characteristics of a developed nation is a nation that has a high level of health, intelligence and work productivity, all three of which are influenced by nutritional status. (1) A person's nutritional status depends on their body's nutritional intake, if the nutritional intake and their body's needs are balanced, then it will result in good nutritional status. The nutritional intake needs of each individual are

different, this depends on age, gender, activity, weight and height. Short or very short children are caused by nutritional intake that is not sufficient for the body's needs for a relatively long time. Children who lack nutritional intake from birth to toddlerhood are certain to have short height (stunting).

Stunting is a condition where a toddler has a length or height that is less than their age. This condition is measured by a length or height that is more than minus two standard deviations of the median of the World Health Organization (WHO) child growth standards. According to the Ministry of Health (2018), stunting is a chronic nutritional problem in toddlers characterized by a shorter height compared to children of the same age and children who suffer from stunting will be more susceptible to disease when they grow up.

In 2020, 22% or around 149.8 million toddlers in the world experienced stunting. However, this figure has decreased when compared to the stunting rate in 2000 of 32.6% and 2017 of 22.8% or around 150.8 million. Most of the stunted toddlers in the world come from the African continent at 31.7%, followed by Asia at 30.1% and the Eastern Mediterranean at 26.2%. (4) Of the 83.6 million stunted toddlers in Asia, the largest proportion comes from South Asia at 58.7% and the smallest proportion in Central Asia at 0.9% in 2017. (3) According to WHO data in 2021, Indonesia is one of the countries with the highest prevalence of stunting in the Southeast Asia Region (SEAR) with an average prevalence of stunted toddlers in Indonesia of 31.8%.

Based on the results of the 2018 National Basic Health Research, the prevalence data for stunting in toddlers in Indonesia was recorded at 30.8%. It can be said that the prevalence rate of stunting in Indonesia has increased for 3 consecutive years, namely from 2016 to 2018. It is known that the prevalence data for short and very short toddlers in West Sumatra province from the results of the 2018 Riskesdas was 30% and approaching the national prevalence of 30.8%. (6) According to the results of the Indonesian Nutritional Status Survey (SSGI) in 2021, the prevalence of stunting in West Sumatra province was at 23.3%. Solok Regency is the number one highest stunting prevalence area out of 19 regencies/cities in West Sumatra province, namely 40.1%, followed by Pasaman Regency at 30.2%.

From the monitoring of the Nutritional Status Recapitulation of the Solok Regency Health Service in 2021, there were 4134 cases of stunting in the Solok Regency area. The five villages with the highest prevalence of stunting in Solok Regency are Bukit Bais Village 42%, Batang Barus Village 41.5%, Aia Batumbiak Village 35.5%, Aia Luo Village 34.0% and Talang Babungo Village 32.4%. (8) Batang Barus Village is one of the villages in the Kayu Jao Health Center working area with the highest stunting prevalence rate in Solok Regency, namely in 2021 it was 41.5%, compared to 2020 which was only 28.8%. It can be concluded that there has been an increase in the prevalence rate of stunting incidents in Batang Barus Village by 12.7% within a period of one year.

Based on the results of the 2021 Recapitulation of Child Nutrition Status at the Kayu Jao Health Center, there were 174 cases of stunting in the Batang Barus Village area. Of the 174 cases of stunting in the Batang Barus Village, the Kayu Aro hamlet is the hamlet with the highest number of stunting cases, namely 99 cases, followed by the Kayu Jao hamlet with 42 cases and the Lubuk Lasih hamlet with 33 cases. (10) In determining the target program of the Solok Regency Health Office which was written in the Solok Regent's Decree in 2022, there were 30,876 toddlers in Solok Regency. (11) The results of the Monthly Nutrition Development Report (LB3) data from the Kayu Jao Health Center in 2021 which has 3 hamlets in the Batang Barus Village, namely 739 toddlers, in the Kayu Aro hamlet 319 toddlers, Kayu Jao hamlet 241 toddlers, and Lubuk Lasih hamlet 178.

Based on a preliminary study conducted by researchers, it was found that Jorong Kayu Aro has 3 integrated health posts, namely the Kasih Ibu, Hasanah and Harapan Ibu health posts, whose activities are routinely carried out in the second week of each month with each integrated health post having 5 cadres. There are five main factors causing stunting, namely poverty, social and cultural, infection, food insecurity and community access to health services. Social and cultural factors include community knowledge about stunting, parenting patterns, behavior/practices and habits of feeding toddlers.

2. Methods

2.1 Types of research

a. Qualitative

This study uses a mixed method research method (a combination of qualitative and quantitative research). Qualitative research was conducted to identify the process of designing booklet media using in-depth interview methods. Data collection techniques use source triangulation with data analysis starting with the process of data reduction, data presentation, and drawing conclusions. The purpose of this qualitative research was to obtain detailed information about what is needed in the process of designing booklet media at the research location.

b. Quantitative

In quantitative research, a quasi-experimental design was used, with a one-group pretest-posttest design approach (initial test and final test), this approach aims to compare the results obtained by conducting a pretest before treatment and a posttest after treatment, so that the data obtained is more accurate. This study was conducted to test changes in knowledge and attitudes of mothers of toddlers before treatment until after treatment (experiment).

2.2 Time and Place of Research

a. Research site

This research was conducted in Jorong Kayu Aro, Batang Barus Village, Solok Regency, West Sumatra.

b. Research time

This research was conducted from March to May 2023.

2.3 Population and Sample

a. Qualitative

The informants in the qualitative research selected were 3 mothers of toddlers as the main informants, 3 nutritionists and 3 design experts as key informants. The information to be obtained from the informants was suggestions and input about the media designed by the research.

b. Quantitative

Population, The population in this study were mothers of toddlers in Jorong Kayu Aro, Nagari Batang Barus, Solok Regency as many as 256 mothers of toddlers. The sample was taken using a nonprobability sampling technique with a purposive sampling type, namely a sampling technique that is taken non-randomly.

2.4 data collection technique

a. Primary Data

Qualitative, For qualitative research, the results were obtained from in-depth interviews conducted with mothers of toddlers, nutritionists, and design experts regarding the development of booklet media to improve the knowledge and attitudes of mothers of toddlers in preventing the risk of stunting in Jorong Kayu Aro, Nagari Batang Barus, Solok Regency.

Quantitative, For quantitative research, primary data was obtained from the average value of respondents' knowledge and attitudes before and after being given education using booklet media.

b. Secondary Data

Secondary data is data that supports the completeness of primary data. In this study, secondary data includes geographic data, demographics and the number of integrated health posts in Jorong Kayu Aro.

2.5 Research Instruments

a. Qualitative

The instrument used in this type of qualitative research is a human instrument (the researcher himself) which is equipped with in-depth interview guidelines, a recording device, a notebook and a camera for documentation related to the development of stunting booklet media.

b. Quantitative

The instrument used in this type of quantitative research is a questionnaire with 15 questions related to knowledge and 15 questions regarding attitudes in preventing the risk of stunting.

Validity Test, Knowledge Validity test was conducted on 15 mothers of toddlers with the results of all questions related to knowledge in the questionnaire having a calculated r greater than the r table (0.514) which means that the questionnaire has been declared valid. Attitude, Validity test was conducted on 15 mothers of toddlers with the results of all questions related to respondents' attitudes in the questionnaire having a calculated r greater than the r table (0.514) which means that the questionnaire has been declared valid.

Reliability Test, Knowledge, In this study, a reliability test was conducted on the knowledge questionnaire with a Cronbach's Alpha value on knowledge of 0.843. These results indicate that the Cronbach's Alpha value of knowledge > 0.6 , so the questionnaire is declared reliable.

Attitude, In this study, a reliability test was conducted on the attitude questionnaire with a Cronbach's Alpha value on the attitude of 0.836. These results indicate that the Cronbach's Alpha value of the attitude is > 0.6 so that the questionnaire is declared reliable.

2.6 Data Processing and Analysis

a. data processing

Qualitative Research, In qualitative research, data processing is carried out by collecting all field notes from the results of in-depth interviews which will then be analyzed according to the media design needs in this research.

Quantitative Research, The data processing stage is carried out quantitatively with a computerized method using the SPSS program.

b. Data Analysis Stage

Qualitative Data, Data analysis in qualitative research is different from data analysis in quantitative research. The analysis used in qualitative research is using source triangulation to obtain data from various sources of informants using the same technique, namely identifying the results of in-depth interviews conducted with primary informants and key informants. Furthermore, the results obtained are used as a conclusion to produce educational media in the form of booklets.

Data Presentation, Qualitative, In qualitative results, data that has been processed from in-depth interviews with informants will be reduced and presented in narrative form.

Quantitative, Data from the results of the questionnaire on the knowledge and attitudes of mothers of toddlers regarding the prevention of stunting risks using booklet media have been processed, analyzed and presented in the form of tables and narratives.

3. Results and Discussion

3.1 Booklet Media Development

In the process of making health promotion media this time the researcher used the "P" Process method with in-depth interview techniques, the media development process begins with conducting needs analysis, problem identification, trials and evaluations, resulting in a research product in the form of a media produced according to suggestions and input from related informants, namely mothers of toddlers, nutritionists and design experts. In-depth interviews were conducted by asking questions related to the content of the material, the design of the media form, and the feasibility of using the booklet media to be produced, so that the message or information in the booklet media can be

conveyed properly and accurately to respondents. The following are the results of in-depth interviews with informants related to the process of developing health promotion media in the form of booklets.

3.2 Media development plan

The process of designing the results of the media needs analysis carried out activities to develop messages according to the needs of the target. Before carrying out these activities, the researcher designed the booklet media first before conducting in-depth interviews with key informants to find out the information in the booklet media and the form of media that can be used to educate mothers of toddlers in preventing the risk of stunting before being produced. Based on the results of interviews with nutritionists and design experts, it was found that there were several improvements and additions to the content of the material related to preventing the risk of stunting in the booklet media design.

The researcher conducted an interview with YS as a nutritionist regarding the process of designing the booklet media, the informant said that the sentence "providing complementary foods" in the booklet should be added with "providing complementary foods that are not appropriate when children are 6 months and above.

3.2 Discussion

a. Media development

This study began with the process of analyzing the needs of appropriate media for mothers of toddlers through in-depth interviews with mothers of toddlers, health workers and design experts. After analyzing the problem, it was found that during their visits to the integrated health post, mothers of toddlers never received health information media that could be taken home by the mothers of toddlers. Therefore, a media is needed that can be taken home by mothers of toddlers and the information included in the media is complete and easy to understand.

Booklet is a media in the form of a book that is used to convey health messages in the form of a book, either in writing or pictures. Booklet media must be aimed at the right target, so that the message can be conveyed well and be interesting to the target. In this case, booklet media is very appropriate for conveying health information, in addition to the information listed being complete and easy to understand, booklet media can also be carried anywhere and everywhere by the target. (17) The next process that the researcher did was to identify the problem, based on data that the researcher obtained from the Solok Regency Health Office and the Kayu Jao Health Center, Nagari Batang Barus became the area with the 2nd highest number of stunting cases in Solok Regency where the highest number of stunting cases occurred in the Jorong Kayu Aro area.

The problem of stunting is generally caused by several factors, including lack of nutritious food intake and infectious diseases, other causes are low maternal knowledge of fulfilling children's nutrition, wrong parenting patterns, poor availability of sanitation and hygiene, and low health services received.

Most of the factors causing stunting are caused by poor lifestyle and low public knowledge regarding the fulfillment of children's nutrition. Given these factors, stunting cases in Indonesia are likely to always occur or even increase if there are no real efforts in the community in preventing and overcoming stunting.

This is also supported by Media, et al. (2021) who said that there is still limited public knowledge about the causes and prevention of stunting, inadequate understanding of the importance of nutritional needs in toddlers, and the existence of behavior and habits of feeding toddlers that do not support efforts to prevent and overcome stunting in toddlers in Solok Regency. (13) After analyzing the needs and identifying the problems, the next step is to design a media booklet. In the process of designing the media booklet, the researcher designed the media booklet first before testing it with informants regarding the content of the material and the form of the media, after which the researcher conducted in-depth interviews with mothers of toddlers, nutritionists and design experts.

The results of the interview showed that the booklet media needed to be improved based on suggestions and input from mothers of toddlers, nutritionists and design experts to improve the

contents of the booklet media. Furthermore, the researcher conducted an intervention by using the booklet media that had been improved based on suggestions and input from informants with a target of 72 respondents.

4. Conclusion

Based on the results of the study and discussion, the following conclusions were obtained: A health promotion media has been produced that is in accordance with the needs of mothers of toddlers, namely a booklet on preventing the risk of stunting. The average knowledge of respondents in preventing the risk of stunting before and after being given intervention with a booklet was from 9.07 to 12.13. The average attitude of respondents in preventing the risk of stunting before and after being given intervention with a booklet was from 43.82 to 51.21. The effectiveness of booklet media in increasing the knowledge of mothers of toddlers with a p-value = 0.001 ($\alpha < 0.05$) Jorong Kayu Aro Nagari Batang Barus Solok Regency in preventing the risk of stunting. The effectiveness of booklet media in increasing the attitude of mothers of toddlers with a p-value = 0.001 ($\alpha < 0.05$) Jorong Kayu Aro Nagari Batang Barus Solok Regency in preventing the risk of stunting.

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