Strengthening Management of Stunting in Toddlers through Training on Nutrition and Local Food Processing using Catfish for Posyandi Cadres and Mothers of Toddlers

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Abstract: Stunting is a condition that reflects failure to grow in children. Efforts to detect and prevent stunting by conducting training on local food processing made from catfish as an effort to increase knowledge and skills in providing nutrition for toddlers with the hope that the stunting rate in the Purbararatu area will decrease and turn into an improved and good nutritional status. The important role of posyandu cadres is that training is needed to increase knowledge and skills so that they can manage stunting appropriately. The implementation method used in this activity is by providing training to cadres, namely by explaining stunting management items, training in preparing food menus for toddlers to cadres and mothers of toddlers, and training in processing local food made from catfish. This research uses a One-Group Pre-test-post-test design, namely giving an initial test (Pre-test) before being given counseling, after being given counseling then giving a final test (Post-test) to determine whether there is an increase in knowledge. The total population in this study was 20 people consisting of cadre mothers and mothers of toddlers. Based on the calculation results, the average pre-test score is 66.00 and the average post-test score is 75.00. Based on the results of the difference test above, a p-value of 0.000 (< 0.05) was obtained, which means there is a difference between the pre-test and post-test scores or there is an influence of providing material on increasing cadre knowledge. It is hoped that from the results of this community service, cadres will be able to increase their knowledge regarding stunting management, prepare the correct food menu for toddlers, become skilled in processing local food made from catfish, so that it becomes a local product high in protein that can be used to cover nutrition for toddlers as well as their numbers. stunting cases are low.

Keywords: Stunting, Toddlers, Cadres, Local food.

INTRODUCTION

Stunting is a condition that reflects failure to thrive in children. This is the impact of chronic malnutrition, so that children become shorter than their age. The prevalence of stunting in the world has decreased from 32.7% to 22.9% since 2000-2016. The prevalence of stunting in Southeast Asia has also decreased from 51.3% to 35.8% in 2000-2016. Although in the world and in Southeast Asia there has been a decrease in the prevalence of stunting, it has not reached the WHO target of less than 20%. The results of the SSGI (Indonesian Nutritional Status Survey) show a stunting prevalence rate of 21.6% in 2022. Indonesia has a target of reducing stunting in 2024, which is

14%. To pursue a reduction in stunting in Indonesia, it must decrease by 3.8% for 2 consecutive years. In West Java, the results of the SSGI, the prevalence of stunting toddlers in West Java reached 20.2 percent in 2022. Tasikmalaya City still has yellow status and ranks 5th for the highest stunting in West Java. In November 2022, there has been a decrease in the stunting rate in Tasikmalaya City, namely from 14.58% to 12.87%. Factors that influence the quality of human resources are closely related to the nutritional intake obtained. This nutritional intake affects a person's intellectual ability and performance. Some symptoms that can be identified from the problem of malnutrition can be seen from the physical condition of toddlers, namely from low height and thinness. If malnutrition occurs during pregnancy, these symptoms can be identified through the estimated low fetal weight. The problem of low nutritional intake can also be identified from environmental factors and parenting patterns and the family's economic condition. Stunting has dire consequences for children's health. In the short term, it can reduce cognitive, motor, and verbal abilities, increase morbidity and even mortality due to infection, increase the risk of perinatal and neonatal death, increase the risk of chronic diseases in adulthood, and poor child development [9]. The Indonesian government has implemented specific nutritional interventions aimed at addressing the direct causes of stunting in the form of nutritional intake and infection, as well as sensitive nutritional interventions aimed at addressing indirect causes such as food security, access to health services, environmental health, and parental care.

According to Fitriani et al., in Cilandak Barat Village, South Jakarta, the low knowledge and skills of Posyandu cadres in anthropometric measurements. Starting from how to install and calibrate measuring instruments, weighing, measuring body length, and height of toddlers to recording measurement results have an impact on inaccurate data collection and reporting of nutritional status. At the Sukaraja Health Center in Bandar Lampung, the results of anthropometric training showed an increase in the understanding of Posyandu cadres with a good understanding from 2% to 82%. Posyandu cadres still have sufficient understanding of stunting and anthropometric measurement methods, namely 18%. The importance of the role of Posyandu caders, it is necessary to conduct training on local food processing using catfish as an effort to increase knowledge and skills in fulfilling Toddler Nutrition with the hope that the number of stunting in the Purbararatu area will decrease with increasing and good Nutritional Status. The results of meetings and discussions with partners represented by the Cadre coordinator from each Posyandu. It was agreed that the problem was the low knowledge and skills of cadres in managing stunted toddlers in processing local food.

METHOD

Study design and participants

The implementation method used in this activity was to conduct training for cadres, namely by explaining stunting management items, training in preparing food menus for toddlers to cadres and mothers of toddlers, and training in processing local food using catfish.

Intervention description

The implementation method used in this activity was to conduct training for cadres, including:

1. Presenting material on fulfilling nutrition which is very important for the growth and development of toddlers.
2. Explaining the procedure for processing local food using catfish.
3. Presenting material on the preparation and provision of the right food menu for toddlers to fulfill toddlers' nutritional needs.
4. Being able to disseminate information to the community regarding stunting management through local food processing with the potential in the community.

Activities that will be carried out to support the implementation method, the following are carried out:

1. Preliminary study to the Purbaratu Health Center.
2. In-depth Interview with the head of the health center, nutrition officers, village midwives and integrated health post cadres.
3. Determining topics for intervention.
4. Making materials for training.
5. Conducting a pre-test on stunting and nutrition
6. Conducting training for integrated health post cadres
7. Conducting a post-test/evaluation on stunting and nutrition
8. Provision of health equipment and supporting food processing equipment

Data collection

Demographic data is measured once at the beginning including knowledge through before and after counseling.

The details of the questionnaire are as follows:

1. For knowledge questions in the form of multiple choices using the Guttman Scale (True = 1 and False = 0)

Ethical Approval

The Research Ethics Committee of the Faculty of Public Health, Diponegoro University, Indonesia, approved this study (Protocol Number: 39 / EA / KEPK-FKM / 2020).

Statistical analysis

Raw data was entered into excel 2019. Statistical analysis was carried out using the Statistical Package for Social Science (SPSS) version 26.0. Categorical data are presented in a frequency distribution table, while numeric data are presented in the form of mean (SD To determine the effect of providing material before and after counseling using the Paired Sample T-Test.

RESULTS

Community service activities in the form of KIA nutrition counseling and training practices for making catfishrolls. Providing practical skills in processing catfishrolls made from catfish is expected to make mothers more creative in innovating catfish processing so that mothers can improve healthy living behaviors by improving the culture eat fish to their toddlers. This means that in the long term toddlers will be protected from the dangers of stunting.

This training began with the provision of counseling materials related to KIA nutrition and continued with the showing of a video of the practice of making catfishrolls. Before the counseling, the cadres and mothers of toddlers were given a pre-test first to determine the extent of the knowledge of the cadres and mothers of toddlers regarding the material to be delivered. Furthermore, a post-test was given after the counseling material was delivered. The results of the percentage of knowledge scores of the cadres and mothers of toddlers can be seen in the following

Tabel 1. Distribution of result pre-test and post-test

Measurement	Mean	SD	SE	P *value*	N
Pre-test	66,00	7,881	1,762	0,000	20
Post test	75,00	6,262	1,400		

DISCUSSION

Based on the results of the calculation, the average pre-test score is 66.00 and the average post-test score is 75.00. Based on the results of the difference test above, a p-value of 0.000 (<0.05) was obtained, which means that there is a difference between the pre-test and post-test values or there is an effect of providing material on increasing cadre knowledge.The lecture and

discussion methods are quite effective in delivering counseling materials to posyandu cadres and mothers of toddlers by displaying many images rather than writing to attract attention.

Community health development is a joint task that cannot be carried out by medical personnel alone, community participation is also needed. The existence of posyandu cadres can be an extension of the health center to assist in community health development efforts. Counseling and training for posyandu cadres and mothers of toddlers should be carried out continuously.

CONCLUSION

Based on the calculation results, the average pre-test score is 66.00 and the average post-test score is 75.00. Based on the results of the difference test above, a p-value of 0.000 (<0.05) was obtained, which means that there is a difference between the pre-test and post-test values or there is an effect of providing materials on increasing cadre knowledge.

Acknowledgement

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Conflict of Interest

We declare that we have no conflict of interest for this study.

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