



Capacity Building of Posyandu Cadres in Monitoring Toddler Growth in the Working Area of Puuwatu Health Center, Kendari City

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ARTICLE INFO

Keywords: Capacity Building, Growth, Posyandu Cadres, Toddlers.

Received : 20 November 2023

Revised : 29 November 2023

Accepted : 30 November 2023

ABSTRACT

Monitoring the growth of toddlers at the Posyandu is an activity to detect early the emergence of nutritional problems in toddlers. Posyandu is the center of community activities in health care and family planning efforts to meet health needs and improve the nutritional status of the community. Improper anthropometric measurements in toddlers can lead to misclassification of nutritional status and loss of important interventions. It takes Posyandu cadres who are trained and know the procedures for monitoring growth in toddlers. The purpose of this community service is to provide counseling and training on how to monitor toddler growth to Posyandu cadres in the working area of the Puuwatu Health Center, Kendari City. It was held on October 2023, at the Puuwatu Health Center hall, which was attended by 30 (thirty) Posyandu cadres. Conclusion: the knowledge and skills of cadres about anthropometric measurements in toddlers, how to fill out KMS books, and interpret the results of measuring the weight of toddlers have increased after counseling and practice. Suggestion: It is necessary to conduct training and mentoring activities for Posyandu cadres periodically, and the Puskesmas is expected to be able to monitor the work of Posyandu cadres by accompanying and providing education about monitoring toddler growth and correct anthropometric measurements.

INTRODUCTION

Malnutrition, defined as stunting, wasting, and underweight, affects millions of infants and children worldwide (Song et al., 2021). Likewise in Indonesia, the results of the Indonesian Nutrition Status Survey (SSGI) in 2022 showed that the national prevalence of stunting was 21.6%, which showed a decrease of 2.8% from 24.4% in 2021 but was still above the WHO standard ($\leq 20\%$) and the RPJMN target (14%). The prevalence of stunting in Southeast Sulawesi also showed a downward trend, which in 2021 amounted to 30.2% and 2022 to 27.7%, Kendari City also experienced a decrease from 24.0% (in 2021) to 19.5% in 2022 (SSGI, 2023).

Chowdhury & Chakraborty (2017) stated that undernutrition in children under five can be

reduced through intensive growth monitoring and appropriate action planning involving various stakeholders. This is also in line with the statement (Tengkawan et al., 2020) that routine child growth monitoring should be done especially for children under two years of age, given the importance of screening and monitoring child growth and development that can affect children in reaching their potential. Posyandu (Integrated Service Post) is one form of Community-Sourced Health Efforts (UKBM) implemented by, from and with the community, to empower and provide convenience to the community in order to obtain health services for mothers, infants and children under five (RI, 2012).

Research results (Minarsih, Nita Evrianasari, 2023) show that only 62.5% (n = 100) of

Posyandu cadres can weigh toddlers well, 63.8% (n = 102) can record the results of weighing well, and 68.8% (n = 110) of Posyandu cadres are less able to interpret or interpret the results of monitoring toddler growth.

Cadres are the spearhead of Posyandu implementation. Cadres are members of the community who are selected to assist health workers who work as volunteers, educated and trained to participate in the community in the field of implementing the Posyandu program (Depkes RI, 2006).

According to the Directorate of Community Nutrition, (2020) growth monitoring is one of the activities of the community nutrition improvement program that focuses on preventing and overcoming nutritional problems in children under five.

The series of activities in growth monitoring include 1. Regular assessment of child growth (monthly weighing, filling in KMS, determining growth status based on weight gain); 2. Following up on any cases of growth disorders through counseling and referral; 3. Following up in the form of policy and program development at the community level to increase family motivation and empowerment.

Research results (Hardiyanti et al., 2018) show that there is a relationship between toddler weight weighing knowledge on precision and accuracy, but there is no relationship between the length of service as a cadre, education, and training on precision and accuracy by Posyandu cadres in the Duri Kepa Puskesmas Work area. Training is not related because the training received by each cadre is only once, and even then it is not about precision and accuracy, only training on weighing. In addition, after receiving training, they were never coached or trained again. In terms of the accuracy of weighing results for children under five, cadres who have never attended the training are at risk of being 2.30 times less accurate than cadres who have attended the training. The percentage of cadres who have attended training is 36.6% better than those who have never attended training, which is 20%. Sunjaya et al., (2021) stated that inappropriate anthropometric measurements in infants and toddlers can lead to misclassification of nutritional status and loss of important interventions. Given that the practices in this

program are carried out in a country, the impact on millions of children must be considered.

Based on this background, we intend to apply science and technology through community service with the title Increasing the Capacity of Posyandu Cadres in Monitoring Toddler Growth at Puuwatu City Health Center Working Area Kendari.

METHODS

This community service program is carried out through several stages and methods, namely:

Preparation Stage

Methods conducted before the activity include:

1. Conduct a preliminary survey, situation analysis of the prevalence of stunting, and skills of Posyandu cadres in monitoring toddler growth in the work area Puuwatu Health Center.
2. Conducting socialization, advocacy, licensing, and coordination on the participation and duties of partners in community service activities with related parties, namely the Head of the Puskesmas, the Nutrition Executive Force (TPG) Coordinator, and Posyandu cadres related to the plan to implement community service activities.
3. Prepare the venue and equipment for PKM activities. Lectures/counseling and practice, using media including:
 - a. Audiovisual using laptop and LCD
 - b. A booklet on "Monitoring Growth in Toddlers"
 - c. Digital weight scale, micro toise, body length meter, tape measure LILA.
 - d. Practice by presenters and participants
 - e. Pre and post-questionnaires to determine the knowledge level of the target group before and after receiving counseling and training.

Target Audience

The target participants of the counseling were 30 (thirty) Posyandu cadres in the working area of Puuwatu Health Center, Kendari City.

Time and Place of Activity

Community Service activities were carried out in October 2023 at the Puuwatu Health Center Hall, Kendari City. The training participants were 30 (thirty) Posyandu cadres who had never received training in anthropometric measurements, how to fill out the Towards Health Card (KMS), and how

to interpret the results of measuring the nutritional status of toddlers in KMS.

Linkages with Other Agencies

This activity is in collaboration with the Puskesmas, Posyandu cadres, and community leaders.

Partner participation:

1. Provide secondary data needed for situation analysis.
2. Facilitate the activity venue.
3. Facilitate extension activities by preparing chairs, tables, blackboards, and other extension needs.

Evaluation Design

1. Evaluation Method. This community service activity was evaluated by assessing the knowledge and skills of Posyandu cadres before and after counseling and practice/training.
2. Evaluation Time. The evaluation was conducted before and after counseling and practice (pre-post test).
3. Success criteria, indicators, and benchmarks. This community service activity is said to be successful if the post-test results (knowledge and skills) show a score ≥ 60 .

RESULTS AND DISCUSSION

Counseling and Training on Monitoring Toddler Growth

Community service activities in the form of counseling and training on monitoring toddler growth, starting with filling out the attendance list and cadre biodata. After all cadres were present, the pre-test was continued to assess the level of initial knowledge about anthropometric measurements of toddlers, filling KMS, and interpreting the results of measuring the nutritional status of toddlers in KMS. The activity continued with the provision of material on how to monitor growth in toddlers. After receiving counseling, the resource person guides cadres in measurement practices, namely: measurement of weight with a step scale,

measurement of height with a stadiometer or microtoise, measurement of body length with a length board, measurement of upper arm circumference (LILA) using a lila tape, how to fill in the KMS book based on the results of measuring toddler weight, and interpreting the results.

To facilitate the Posyandu cadres in understanding the counseling material and the practice of anthropometric measurements, the service team distributed a booklet "Monitoring Toddler Growth".

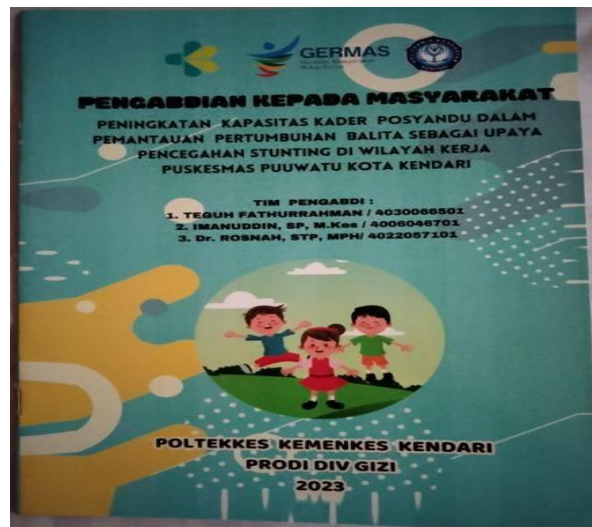


Figure 1. Providing material counseling to cadres Posyandu using pocket Monitoring Growth in Toddlers

Table 1. Pre-Post Cadre Knowledge Score Training Test

No	Topic	Pre Test		Post Test	
		B	S	B	S
1	Differences ingrowth and development	17	13	21	9
2	Why toddlers should be monitored forgrowth	15	15	22	8
3	What needs tobe monitored in toddler growth	19	11	23	7
4	When is monitoringdone	25	5	30	0
5	Tools used for growth monitoring	23	7	26	4
6	The flow of implementation of toddler growth monitoring at Posyandu	15	15	20	10
7	Things to noteon KMS	14	16	21	9
8	KMS filling steps by cadres	12	18	20	10
9	How to determine growth status through KMS	11	19	18	12
10	Interpretation of growth status	10	20	17	13
Total		161	139	218	82

From the results of community service activities that have been carried out, 30 cadres take part in counseling and training activities on growth monitoring in toddlers. The following are the results of the pre-test and post-test scores of Posyandu cadres on knowledge in monitoring toddler growth. The maximum score of the cadre knowledge questionnaire answer is 10 questions x 30 cadres = 300, the average score of the cadre pre-test value of growth monitoring in toddlers is $161 / 300 = 0,54 \times 100\% = 54\%$ with the category "Correct" and 46% answered with the wrong category.

After counseling, the average post-test score of Posyandu cadres increased to $216/300 = 72.7\%$ answered correctly and 27.3% answered incorrectly. The results of the increase in the average pre-test and post-test scores of Posyandu cadres at the time before and after counseling Posyandu cadres can be seen in Table 2.

Table 2. Mean Pre-Knowledge Score Cadre Test and Post-Test Posyandu

Variables	Mean ± SD	<i>p-value</i>
Pre-test Score	16.10 ± 4.977	0,000
Post-test Score	21.80 ± 3.824	

After the explanation of the counseling material and practice by the service team, the participants were given a post-test with the same questions as the pre-test related to the material that had been explained. This is to see the extent of the cadres' understanding of the material that has been

explained. It can be seen from Table 1 that the participants did not know how to determine growth status through KMS and interpretation of growth status. Whereas after counseling and training, the results of the post-test showed that cadres' knowledge of how to determine growth status through KMS and interpretation of growth status of toddlers, has increased. This can be seen from the cadre score at the time of the post-test increased from the pre-test score.

Training is one way to improve cadres' knowledge and skills. This result is in accordance with research (Nurul Azizan et al., 2023). The provision of material and practice as a whole is given to Posyandu cadres, specifically for practical implementation there are focused on several points on how to measure anthropometry (weight and height), how to fill in the results of measuring the weight of toddlers in the KMS book and how to interpret the results of these measurements.

The results of counseling and training for Posyandu cadres showed an increase in pre-test to post-test scores. It can be concluded that the training given to Posyandu cadres in anthropometric measurements has succeeded in improving the skills of Posyandu cadres.



Figure 2. Explanation of how to fill in the KMS book based on weighing result data under five weights and how to do interpretation of result measurements

The results of observations on measuring body length or height are quite good. Before measuring, cadres have first explained the purpose of weighing and preparing the equipment to be used. The results of measuring upper arm circumference in toddlers have been carried out well. All cadres have carried out the Lila measurement procedure properly and correctly. For the interpretation of the measurement results, there are still some cadres who still cannot do it.

Based on the results of all training activities, it can be concluded that the skills of cadres in conducting anthropometric measurements of the nutritional status of children under five still need to be improved. Because there are still cadres who are less skilled at weighing and measuring height, such as not trying to get children weighed with the minimum possible clothing. In addition, another corrective action taken is that each cadre should be equipped with a pocketbook containing guidelines on how to take anthropometric measurements and how to read nutritional status. The use of pocketbook media can increase cadres' knowledge in interpreting nutritional status.



Figure 3. Measurement practice anthropometry



Figure 4. Measurement practice anthropometry

CONCLUSION

Knowledge of Posyandu cadres about toddler growth monitoring, with anthropometric measurements on toddlers experienced an increase after conducted counseling with pocketbook assistance. Posyandu cadre skills in the measurement of nutritional status by anthropometry in toddlers, how to KMS book filling, and interpretation of toddler weight measurement results have increased. It is necessary to conduct training

and mentoring activities for Posyandu cadres periodically, and the Puskesmas is expected to always monitor the work of Posyandu cadres by accompanying and providing education about monitoring toddler growth and correct anthropometric measurements.

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