

Optimizing the Role of Posyandu Cadres in Providing Nutrition Education and Stimulation as Prevention and Handling of Stunting

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Abstract

The policy direction and action plan for the public health program in the period 2020-2024 includes a target to reduce the stunting rate from 27.7% in 2020 to 14% in 2024. Community health workers, known as cadres, are considered crucial in the implementation of Posyandu activities and are expected to mobilize community participation. Enhancing the capacity of Posyandu cadres is important in terms of their knowledge, understanding, and abilities, and one approach is through cadre empowerment activities. These activities aim to ensure early detection of stunting cases for prompt intervention. The PKM activities were conducted through a training session for six Posyandu cadres assigned to Environment V in Bailang Village, Bunaken Sub-district, Manado City. The training was provided to the cadres during the screening process for stunting cases through the PoT ASHANTI program in Bailang Village. The intervention activities were carried out from March 6th to 8th, 2023. A pre-test was conducted before the intervention, and a post-test was administered after the training. The results of the training indicate an improvement in the knowledge and skills of the Posyandu cadres. The implementation of nutrition education and stimulation as preventive and treatment measures for stunting proved to be effective. This is evident from the evaluation of the PKM activities conducted during the Posyandu schedule, where there was an increase in visits from February 2023 (before the intervention), with 13 visits, to March 2023 (after the intervention), with 18 visits. The provision of nutrition education and stimulation has increased the knowledge and skills of the cadres, which serves as an indicator for the prevention and management of stunting. The cadres now better understand their roles and can assist in early stunting detection in their respective areas.

Keywords: Nutrition education, stimulation, stunting

INTRODUCTION

Healthcare systems face major challenges as life expectancy is increasing, and a growing number of citizens are living with chronic diseases. Chronic diseases threaten the health and well-being of the affected individuals and their families and have significant economic consequences for societies by increasing healthcare costs and reducing productivity (Meetha *et al.* 2023). One of the policy directions and action plans for the 2020-2024 public health program is to reduce the stunting rate from 27.7% in 2020 to 14% in 2024 (Kemenkes RI, 2020). The results of the 2021 Indonesian Nutrition Status Survey (SSGI) conducted by the Ministry of Health, the stunting prevalence rate in Indonesia in 2021 was 24.4%, a decrease of 6.4% from the 30.8% rate in 2018 (Vice President of Indonesia, 2022). Reducing the stunting rate is one of the major projects that must be carried out together by cross-sectors, one of which is convergence with universities.

Several universities have conducted tri dharma activities related to reducing stunting. This can be seen from various publications on the topic of stunting including Prevention of stunting through community empowerment with information communication and education In the Candirejo Village area, West Ungaran District, Semarang Regency, it shows that participants, namely PKK mothers, are able to explain again about stunting prevention and implement Clean and Healthy Living behaviors through hand washing movements and making additional food (Haryani, 2021). In Jombang Regency, it also showed an increase in the knowledge and skills of health workers in terms of breastfeeding counseling to prevent stunting (Dinas *et al.*, 2022). Stunting education as a prevention movement in Muntoi Village,

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Universitas Muhammadiyah Manado on July 28, 2022 has also officially launched the Stunting Children Foster Parents Program (PoT ASHANTi) which was conducted by the Mayor of Manado City. The program was created on the basis of screening results that there were three cases of stunted children in Lingkungan V Bailang Village, Bunaken District, Manado City. The data became the basis for activities that support each other so that the stunting prevalence target in 2024 can be achieved.

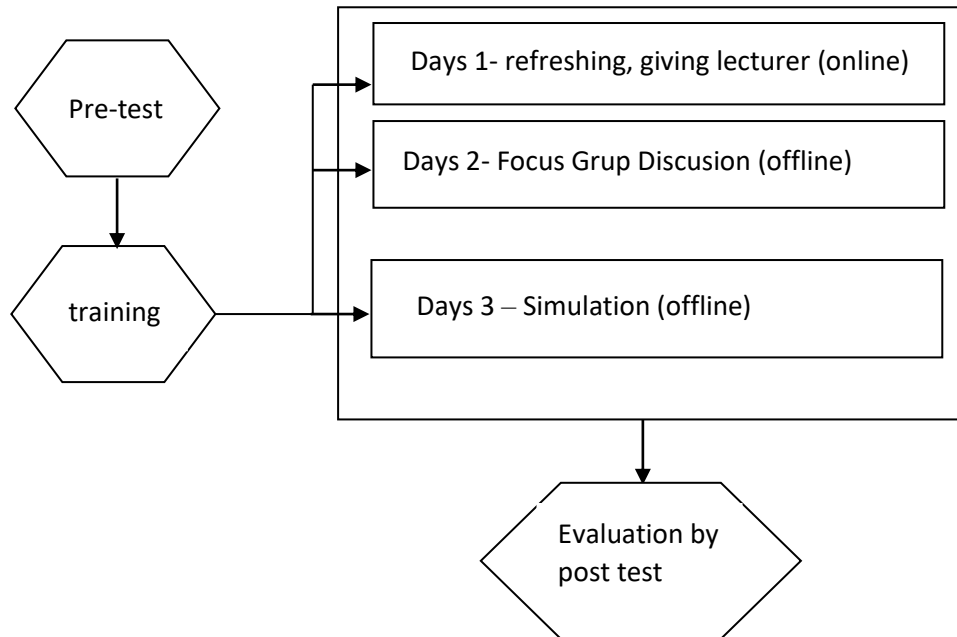
Community engagement (CE) is an essential component in primary health care (PHC) and there have been growing calls for service providers to seek greater CE in the planning, design, delivery and evaluation of PHC services (Erku, 2023). CE or Posyandu cadres are people who are willing to volunteer, both have time and are able to organize posyandu activities. The success of posyandu activities is supported by the role of cadres. Posyandu is a health effort managed by, from, for and with the community in order to empower and provide convenience in health services with a promotive and preventive approach.

Posyandu activities consist of main activities and development/option activities. The main activities include: maternal and child health, family planning, immunization, nutrition, prevention and control of diarrhea (RI, 2012). situation of several important indicators of risk factors for stunting in Indonesia, namely: Low Birth Weight (LBW), short birth length, complete basic immunization coverage, complete vitamin A coverage, exclusive breastfeeding, anemia in pregnant women and diarrhea in toddlers (Ministry of Health RI, 2018) These indicators can be minimized if activities at Posyandu are maximized. Cadres who are the central point in the implementation of posyandu activities. the participation and activeness of cadres are expected to mobilize community participation. Therefore, it is important to increase the capacity of posyandu cadres both in terms of knowledge, understanding and the ability of cadres to provide education. An approach that is educative and focuses on the active participation of cadres is important while still prioritizing the problems and needs as well as the potential of the region and the customs of the target community (Adhi et al., 2021).

Stunting is failure to grow, failure to develop and failure to metabolize. Apart from nutritional intake which can be intervened by providing education and training related to balanced nutrition, stimulation also plays a role in the occurrence of stunting, one of which is failure to develop. Stimulation is a stimulation carried out by parents from the fetus in the womb until the child is born, which aims to stimulate all sensory systems such as: hearing, sight, touch, smell, taste, including foot and finger movements, and inviting communication (Tampubolon et al., 2021). Developmental detection and growth and development stimulation have also not been carried out in posyandu activities (Adistie et al., 2018), with this cadre empowerment activity it is hoped that early detection related to stunting and the presence or absence of child development deviations can be carried out immediately so that the incidence of stunting and / or developmental deviations can be resolved immediately.

METHOD

PHC activities are carried out through training for Posyandu cadres. Training was given to Posyandu cadres in the area where stunting cases were screened through the PoT ASHANTI program, namely in Bailang Village. The method of this training describe from flowchart below :



The questions in the questionnaire were given to describe the knowledge and ability of cadres in detecting early stunting. The questionnaire consisted of 12 questions for the description of knowledge (good knowledge if the number of correct questions is 9-12, sufficient knowledge if the number of correct questions is 5-8 and poor knowledge if the number of correct questions is 0-4). The questionnaire consists of 15 statements to see indicators of the ability to detect early stunting. (Good ability if the number of statements answered correctly is 11-15 statements. Ability is sufficient if the number of statements answered correctly is 6-10 statements, ability is lacking if the number of statements answered correctly is 0-5 statements).

RESULTS

This activity (intervention) was carried out on March 6-8, 2023. This activity consisted of 6 cadres assigned to Neighborhood V Bailang Village, Bunaken District, Manado City. Subjects or cadres or participants in this activity are domiciled in accordance with their duties as cadres. The distribution of subject characteristics can be seen in Table 1.

Table 1. Distribution of Subject Characteristics

Characteristics	Quantity (n)	Percentage (%)
Last education		
Elementary School	1	16,67
Junior High School	1	16,67
High School	4	66,66
Length of time as a cadre		
≤ 1 year	3	50
1-3 years	2	33,33
≥ 3 years	1	16,67
Training that has been attended		
Never	5	83,33
≤ 1 year	0	0
1-3 years	0	0
≥ 3 years	1	16,67

Table 1 shows that the last education of the subjects is mostly at the high school level with a total of 4 cadres (66.66%). The length of time being a cadre there are 3 cadres (50%) new or ≤ 1 year, there are 33.33% cadres with long status as cadres 1-3 years and only 16.67% of cadres who have been cadres ≥ 3 years. Most or 83.33% of cadres have not attended training related to cadre competence and only 16.67% have attended training ≥ 3 years ago.

Table 2. Cadre Knowledge Distribution

Knowledge	Pre-test		Post-test	
	Quantity (n)	Percentage (%)	Quantity (n)	Percentage (%)
Good	0	0	4	66,67
Fair	1	16,67	2	33,33
Less	5	83,33	0	0

Table 2 shows that before the intervention, no cadres had good knowledge, 16.67% of cadres had sufficient knowledge and 83.33% or most cadres had poor knowledge. After the intervention, the distribution of knowledge categories became 66.67% had good knowledge, 33.33% had sufficient knowledge and no cadres had poor knowledge.

Table 3. Distribution of Cadres' Ability to Detect Stunting

Knowledge	Pre-test		Post-test	
	Quantity (n)	Percentage (%)	Quantity (n)	Percentage (%)
Good	0	0	3	50
Fair	0	0	3	50
Less	6	100	0	0

Table 3 shows that the ability of cadres to detect early stunting children before the intervention that all cadres (100%) have the ability with the category less while after the intervention there is a change where cadres who have good and sufficient ability each 50%.

Table 4. Number of Posyandu Visits in Neighborhood V Bailang Village

Number of Posyandu Visits in February 2023	Number of Posyandu Visits in March 2023
13 visits	18 visits

Table 4 shows an increase in posyandu visits in February 2023 (pre-intervention) 13 visits and in March 2023 (post-intervention) 18 visits.

DISCUSSION

Based on the results showed that there was an increase in knowledge (Table 2) and the ability of posyandu cadres (Table 3) in neighborhood V of Bailang village, Bunaken sub-district, Manado City. Knowledge in the good and sufficient categories increased after the intervention. Interventions that have been carried out both providing education in lectures and simulations and even conducting FGDs. This is supported by various journals about providing education that affects the knowledge of posyandu cadres to increase about stunting (Hamzah & B, 2020) and also journals about the existence of socialization and mentoring will affect the skills of cadres who are getting better (Rinayati et al., 2022).

The increase in knowledge occurred because the education provided was made as interesting as possible by using illustrated powerpoint templates, showing videos every 15 minutes, giving cadres the opportunity to refute every time information was delivered, then given leaflets about stunting information. this is also in addition to the provision of interventions, most of the last education is high school (Table 1) so that it is still good enough to absorb the information conveyed.

The ability of cadres also increased although the percentage of good ability and sufficient ability after the intervention had the same percentage. The intervention is not only education but also simulation, activities carried out with movement will be easier to absorb to remember, so that there is an increase in the ability of cadres to detect early stunting starting from the ability to measure nutritional status, making local-based food menus and stimulating child growth and development. The same percentage in the good and sufficient knowledge groups can also be due to the characteristics of the subjects, namely the length of time most cadres have been ≤ 1 year, so there is not much experience and most have never attended training related to improving the ability of posyandu cadres (Table 1). The ability of cadres is also not well honed seeing the facilities and infrastructure provided during the implementation of posyandu which is minimal and based on PoT ASHANTi data which is the background for carrying out this activity also supports that body length measuring instruments are not available and also weight measuring instruments that are washed away at the posyandu because the posyandu location is prone to flooding so that it provides an opportunity in the future there will be new cases of stunting and even malnutrition. At the end of the activity the team provided anthropometric measuring instruments to assist in the implementation of posyandu activities.

After the intervention and measurement of intervention results including knowledge and ability using questionnaires, the team evaluated the PkM activities that had been carried out during the next posyandu schedule to see the number of visits (Table 4), which showed that there was an increase in visits from February 2023 (before the intervention) which was 13 visits to 18 visits in March 2023 (after the intervention). It can be assumed that the kadrc have better understood their role in posyandu activities resulting in an increase in visits and are expected to pass on the information obtained during the PkM activities.

CONCLUSIONS And RECOMMENDATIONS

The implementation of providing nutrition education and stimulation as prevention and handling of stunting is quite effective as seen from the results of the activities carried out that there is an increase in the knowledge and skills of cadres which can be an indicator of stunting prevention and handling of stunting because cadres can better understand their role and can help in early detection of stunting in their area. Community engagement (CE) is an essential component in a primary health care (PHC) and there have been growing calls for service providers to seek greater CE in the planning, design, delivery and evaluation of PHC services.

It is hoped that the government, especially the Manado City Health Office, can facilitate posyandu activities in Manado city such as procuring measuring instruments for toddlers to reduce the incidence of stunting and malnutrition and can provide workshops or training for posyandu cadres so that cadres can refresh their knowledge and abilities.

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APPENDIX



Figure 1. Nutrition Education

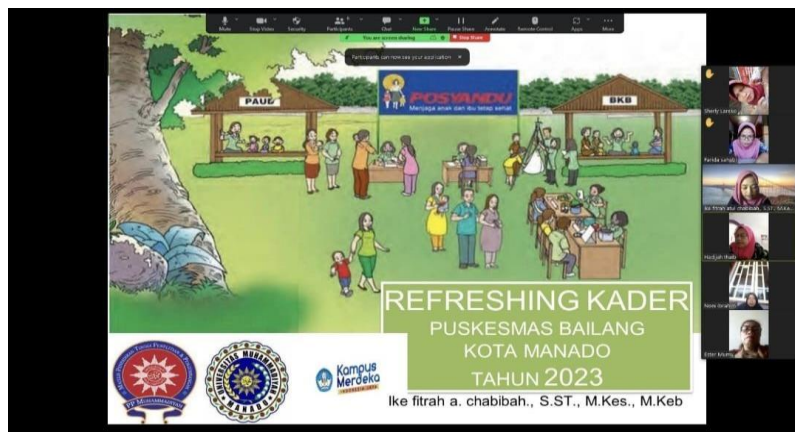


Figure 2. Educate Cadre Role



Figure 3. Simulation of menu creation for toddlers based on local