

Posyandu Cadres On Capacity Building: Prevent Stunting By Improving Nutrition During The First 1000 Days Of Life

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ARTICLE INFO

Article history:

Received : 21st June 2023

Revised : 21st June 2023

Accepted : 26th June 2023

Keywords:

Nutrition Improvement,
Posyandu Cadres,
Stunting,
The First 1000 Days Of Life.

ABSTRACT

The Indonesian Ministry of Health initiated the “The First 1000 Days of Life Program” to decline the prevalence of stunting and other malnutrition problems. However, it turns out that the society and Posyandu cadres still do not understand about stunting, the first 1000 days of life, and early detection of stunting. This community service program was carried out in July-August 2018 using the community relations method. The program participants were posyandu cadres in Ngara-arap Village, Ngarangan District, Grobogan Regency, totaling 25 people (22 people participated in the program until the end). The program includes advocacy and self-development activities, education to posyandu cadres regarding stunting, education to posyandu cadres regarding the first 1000 days of life in stunting prevention, training on measuring body length and height for toddlers, and evaluation monitoring. The results of the program include: 1) 88% of the target is participating in the program to the end, 2) There is an increase in cadres' knowledge about stunting and nutrition during the first 1000 days of life after participating in the program as measured by the pre-post test questionnaire (there is an increase in the average pre-test and post-test scores). test of 0.7 points), 3) As many as 60% of the cadres were able to practice how to measure body length and height of toddlers measured by observation, and 4) 40% of posyandu cadres were willing to transfer knowledge to society through posyandu.

I. Introduction

Stunting is a sign of chronic malnutrition or poor maternal health which can have both short and long term impacts. (World Health Organization, 2013; Lewit and Kerrebrock, 2019). The short-term impacts of stunting include increasing the risk of morbidity, mortality, delays in motoric and language development, and increasing health costs. The long-term effects of stunting include stunting in adults, decreased reproductive health, increased obesity and morbidity as adults, decreased work performance and work capacity. (World Health Organization, 2013)

Stunting also has an impact on financing. A country that has stunted children will need funds for intervention. Interventions on stunted children cost governments around \$2.2 billion – \$2.6 billion globally each year. (Shekar et al., 2017)

According to the National Center for Health Statistics/World Health Organization (WHO) Stunting is based on an index of Body Length for Age or Height for Age with a limit (z-score) of less than -2 SD (World Health Organization Working Group on Infant Growth., 1995; Lo et al., 2017). With this threshold, UNICEF data shows that in 2014, as many as 2/3 of children aged less than 5 years in lower middle-income countries were stunted (Unicef et al., 2015).

Stunting is a main problem in the fields of nutrition and health and is a top priority for the nutrition improvement program of the Indonesian Ministry of Health. The stunting intervention framework implemented by the Indonesian government is divided into 2, namely specific nutrition interventions and sensitive nutrition interventions. Sensitive nutrition interventions are carried out through development outside the health sector, while specific nutrition interventions are carried out



with the First 1000 Days of Life Program (Ministry of People's Welfare, 2013; National Team for the Acceleration of Poverty Reduction, 2017) (Ministry of People's Welfare, 2013; National Team for the Acceleration of Poverty Reduction, 2017).

Stunting is reported to be irreversible if it occurs after the child is 2 years old..(Lewit & Kerrebrock, 2019) Therefore, the first 1000 days of life program which focuses on the golden period at the beginning of human life for 1000 days (prenatal period of 270 days until the child is 2 years old) is the right period for stunting prevention/control. (Ministry of Health RI, 2014) The target groups of the first 1000 days of life program or what is known globally as the Scaling-Up Nutrition (SUN) Program are pregnant women, breastfeeding mothers, babies and toddlers (Scaling Up Nutrition Movement, 2016; Scaling Up Nutrition movement, 2016; National Team for the Acceleration of Poverty Reduction , 2017).

Nationally, based on 2013 Basic Health Research data, the prevalence of stunting in Indonesia is around 37% (nearly 9 million children under five). Grobogan Regency is one of the districts in Central Java Province which has a high prevalence of stunting (54.97%) or as many as 62847 toddlers experience stunting and is one of the priority districts for handling stunting (National Team for the Acceleration of Poverty Reduction, 2017).

Based on the results of a preliminary survey conducted in the area of Ngara-Arap Village, Ngarangan District, Grobogan Regency, it is known that in relation to stunting, all Posyandu cadres in Ngara-Arap Village do not know about stunting, the first 1000 days of life program and the importance of measuring Body Length and Height for toddlers for stunting screening. In addition, there is no data on the height of toddlers at the posyandu due to limited facilities and infrastructure for height monitoring, as well as the limited capacity of Human Resources (HR) at the posyandu so that screening for stunting nutritional status in toddlers cannot be carried out at the Posyandu. The results of the infrastructure screening for initial height monitoring also showed that some of the children under five who were measured had a lower height compared to their age standard .

Based on the analysis situation, it is known that the nutrition and health problems that occur are also related to the lack of knowledge and skills of Posyandu cadres who are the main drivers of Community Based Health Efforts in Ngara-Arap Village. Cadres still do not know and understand the problem of stunting nutrition and its prevention during the critical period of human life, namely the first 1000 days of life.

Increasing the capacity of posyandu cadres is a priority because posyandu cadres are volunteers who have high concern for the community in the health sector. Posyandu cadres can play a role in the process of transferring health information and skills to the community. Posyandu cadres can help the community identification and respond to health needs independently. (Iswarawanti, 2010) Posyandu cadres also take part in the process of bringing basic health services closer, especially with regard to maternal and child health in the first of 1000 days of life program to the community.

This program aims to increase the knowledge, understanding and skills of posyandu cadres regarding the importance of the first 1000 days of life program as an effort to prevent stunting and other malnutrition problems as well as improve nutrition and health (ealy breastfeeding initiation practices, exclusive breastfeeding, and provision of complementary food) in this program through empowerment Posyandu cadres. Increase collaboration with several related parties (Village Head, Village Midwife, and Posyandu cadres). The output of this program is capacity building (knowledge and skills) of posyandu cadres regarding stunting and its prevention by improving nutrition in the first 1000 days of life program (during pregnancy and 2 years of age). The mandatory output of this program is in the form of training modules and additional outputs, namely publications.

II. Methods

This program involves strategic target groups, namely :

1. Representative of Ngarangan District.
2. Headman of Ngarap – Arap
3. Chief of Family Empowerment and Midwives in Ngarap – Aerap Village.
4. Posyandu Cadres of 6 hamlets in Ngarap – arap village

This program was implemented in Ngara-Arap Village, Ngarangan District. The program will be held from July 10th to August 20th 2018. The program implementation method is community relations through 5 activities, namely:

1) Advocacy and atmosphere building by meeting stakeholders to obtain permits and support for program implementation

2) Education about stunting for posyandu cadres;

Includes presentation of material on stunting, the causes of stunting, factors contribute to the incidence of stunting, ways to prevent stunting, and the role of cadres in stunting prevention. The media used are power point slides and posters, the methods used are lectures and group discussions. Before and after the activity is carried out a test (pre and post test). Education on the Importance of Nutrition in the First 1000 Days of Life

3) Training on measuring Body Length for babbies and Body Height for toddlers

4) Monitoring and evaluation of the program by observing and interviewing posyandu cadres regarding the commitment to transfer knowledge through the posyandu.

III. Result and Discussion

The participants who took part in community service program to the end were 22 of the 25 participants (88%). Participants came from : Kagok, Jetis, Tahunan, Brengkolo, Krajan I, and Krajan II. The following are the achievements of the program "Increasing the Capacity of Posyandu Cadres: Preventing Stunting by Improving the Nutrition of the first 1000 days of life":

a. Advocacy and atmosphere building.

Conducted by meeting stakeholders to obtain permission and program implementation support. Stakeholders met included the Head of Ngarangan Sub-District, Head of Ngara-Arap Village, Ngara-Arap Village Midwife, Chief of Family Welfare Empowerment of Ngara-Arap Village, Coordinator of Posyandu in each hamlet in Ngara-Arap Village. Advocacy and atmosphere building went smoothly and received support for the implementation of education and training for posyandu cadres in the Ngara-arap Village area. Evaluation of advocacy and atmosphere building activities based on SWOT analysis, namely the existence of strengths (S) in the form of support from the village, opportunities (O), namely the participation of stakeholders in mobilizing the community, but there are still weaknesses (W), namely there is still a need for stimulus and approach in quite a long time and threats (T), namely the need to be careful in conveying the aims and objectives of the program so that there are no misinterpretations.

1. Education about stunting for Posyandu Cadres.

The media used is video, the methods used are lectures, simulations, and group discussions. Participants were enthusiastic about the material presented regarding stunting, the causes of stunting, factors that can influence stunting, ways to prevent stunting, and the role of cadres in stunting prevention. In addition, there are training modules distributed to participants so that they can be read back and at home.

Education about stunting emphasizes several aspects, especially emphasizing that stunting is not a hereditary disease as believed by the local community. However, mothers who are malnourished tend to have children with malnutrition. This is because, chronic malnutrition can occur due to cycles between generations or hereditary. (Aguayo et al., 2016). Stunting can be prevented even if the parents are stunted, as long as nutrition can be optimized.

The success rate of the program is 100% because an agreement has been formed with the cadres to attend the program "Increasing the Capacity of Posyandu Cadres: Preventing Stunting by Improving Nutrition for 1000 HPK". In addition, 100% of the participants attended education about stunting. Based on the SWOT analysis, stunting education activities for posyandu cadres have strengths (S), namely the

support from the village midwife and the willingness of female cadres to listen to the material presented, the opportunity (O), namely human resources (posyandu cadres) who are open-minded in receiving learning. However, there is still a weakness (W), that is, a stimulus is still needed to be able to mobilize cadres in UKBM activities other than routine activities in posyandu and there is still a threat (T), namely that it is feared that cadre mothers will say that a child is stunted only from one factor and forgets about other factors. Like just looking at height based on age without looking at other factors, actually height based on age is the initial detection of stunting.

2. Education on the importance of nutrition in the first 1000 days of life.

Educational material is given because based on the results of intervention research at the first 1000 days of life will support the process of human growth and development until the age of 2 years effectively, while failure to develop during the first 1000 days of life period will result in a child's immune system being weak, tending to be less active, growth and development less than optimal, and can result in disruption of the body's metabolism (National Team for the Acceleration of Poverty Reduction, 2017; Chang et al., 2010; Grantham-McGregor et al., 2007). Participants were enthusiastic about the material regarding the first 1000 days of life and the importance of the first 1000 days of life in preventing stunting in toddlers.

The success rate of the program can be seen from the data: 88% (22 out of 25 participants) attended the first 1000 days of life education and there was an increase in cadres' knowledge about stunting and nutrition the first 1000 days of life after participating in the program as measured by the pre-post test questionnaire. The test results show that there is a significant difference in knowledge before and after the program is executed. Comparison of pre-test and post-test values shows an increase in the average pre-test and post-test scores of 0.7 points. These results indicate that posyandu cadres have better knowledge about the importance of the first 1000 days of life period as an effort to prevent stunting and other malnutrition problems as well as improve nutrition and health (Early initiation of breastfeeding practices, exclusive breastfeeding, and provision of complementary food) after education.

Education about the first 1000 days of life based on the SWOT analysis it has strengths (S), namely the support from midwives and posyandu cadres who are enthusiastic, opportunity (O) namely the ease of obtaining permits and support from village officials and village midwives in implementing the program, weaknesses (W) namely the need for further practice as direct output (eg practice of making complementary food according to age, storage of expressed breast milk, etc.). Several female cadres (3 people) were not present at the first 1000 days of life counseling, and the threat (T) of the level of ability of the different activity targets in capturing information was feared that it could lead to misperceptions or even not being able to understand at all.



Picture 1. Pre - test

3. Training on measuring Body Length for babbies and Body Height for toddlers and stating the nutritional status for toddlers.

The training for measuring the length and height of toddlers went smoothly, the activities were followed by the enthusiasm of the training participants. Most of the women (> 60%) who participated in the Posyandu cadres in Ngara-Arap Village were able to practice how to measure the length (PB)

and height (TB) of toddlers by means of observation. However, most of the participants could not determine nutritional status using nutritional status tables. Evaluation using SWOT analysis shows that there is strength (S), namely support from village midwives and female cadres who are enthusiastic in measuring body length and height in children under five, there is opportunity (O), namely this activity can be the first step to find out stunting in children toddlers, but there are still weaknesses

(W) namely the scale on the microtoise looks small so there can be discrepancies in reading if it is not careful enough, and there is a threat (T) namely there are some female cadres who think the measurement method is too complicated, and there is still a lack of public awareness to come to Posyandu so that measurements of height and body length in toddlers still cannot screen all toddlers (only toddlers who come to posyandu).

4. Monitoring dan evaluation program

It is carried out during the program until the next week to find out the impact of the program after it is implemented. Monitoring and evaluation is carried out by observing and interviewing posyandu cadres. As much as 40% of posyandu cadres are willing and committed to applying the knowledge gained and transferring knowledge to the surrounding community through the posyandu. The commitment of posyandu cadres has a positive value for program sustainability. This is in line with previous research which reported that the credibility of posyandu cadres will have an impact on community participation in health programs. The character and attractiveness of posyandu cadres have a real impact on community participation. (Dewi & Anisa, 2018)



Picture 2. Organizing committee and participants

IV. Conclusion

An agreement has been formed between the community service team and the village of Ngara-Arap, and posyandu cadres to attend the program "Increasing the Capacity of Posyandu Cadres: Preventing Stunting by Improving Nutrition for the first 1000 days of life periode". 88% of the target is to participate in the "Capacity Building of Posyandu Cadres: Prevent Stunting by improving nutrition for the first 1000 days of life" until the end. There was an increase in cadre knowledge regarding stunting and nutrition for the first 1000 days of life after participating in the program as measured by a pre-post test questionnaire. As many as 60% of the cadres present were able to practice how to measure body length for babbies and height for toddlers by observation. As many as 10 cadres (40%) are willing and committed to applying the knowledge gained and transferring knowledge to the surrounding community through posyandu.

To maintain the sustainability of the program, there should be material enrichment (knowledge updates) for health cadres on a regular basis. The implementation of stunting screening for toddlers at Posyandu should also be supervised by the local midwives or other health workers. In addition, it is necessary to assist pregnant women and breastfeeding mothers to support the optimization of the first 1000 days of life program.

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