

Prevention of Stunting through Cadre Empowerment in the Mangkupalas Health Center Work Area in 2021

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ABSTRACT

Stunting is a chronic malnutrition problem caused by inadequate nutritional intake for a long time due to feeding that is not in accordance with nutritional needs. PKK cadres are one of the pioneers of social change. PKK cadres are often empowered to address various public health problems. The purpose of this community service activity is to carry out empowerment activities for health cadres to prevent stunting in the Mangkupalas Health Center Work Area. The target of the service is the Mangkupalas Health Center Health Cadre. The activity was carried out for 3 months with 2 meetings, namely on September 02 and October 06, 2021. The stages of activity are preparation, implementation, and evaluation. Preparation was carried out by conducting a preliminary survey to see conditions in the field and obtaining a permit for activities at the Mangkupalas Health Center. The implementation is carried out by delivering material on the prevention of stunting since pregnancy with the assistance of health cadres and early detection of stunting with appropriate anthropometric measurements and early detection of stunting under-five development. Evaluation of activities was carried out for each stage with a pretest and posttest. The results of the activity are the empowerment of health cadres in preventing stunting and increasing the ability of health cadres to detect stunting with appropriate anthropometric measurements. The implementation of the activity is done by a team of lecturers and students and assisted by the Mangkupalas Health Center.

Keywords: Community Service, Cadre Empowerment, Stunting

INTRODUCTION

The SDGs (Sustainable Development Goals) are a sustainable development program that has 17 goals with 169 measurable targets until 2030. Of the 17 goals in the SDGs, there are 2 goals in the 2nd goal, namely "Eradicating Hunger and Poverty" and "Ending hunger, achieving food security and improve nutrition, and promote sustainable agriculture. In goal 2, there is a 2030 target, namely ending all forms of malnutrition, including achieving the 2025 international target for reducing stunting and wasting in children under five and addressing the nutritional needs of adolescent girls, pregnant and lactating women, and the elderly (Bappenas, 2013), 2017).

Stunting shows the manifestation of nutritional deficiencies and infections that have been experienced since or before the birth of the child for a long period of time. Lack of nutrients before birth and during the first year of life can affect brain development. Children's brain development occurs rapidly in the prenatal period and continues after mass birth until early childhood. Research shows that a newborn baby has approximately one hundred billion brain cells. The process of maturation and the formation of neurological system connections occurs progressively after birth to early childhood. Malnutrition in the prenatal period to early childhood can cause neurological disorders and brain development disorders that affect motor, cognitive, language, socio-emotional and mental retardation abilities (HANANI, 2016). The decrease in motor function of stunted children without congenital abnormalities is related to the use of low mechanical abilities from the triceps surae muscle as a result of which the slow maturation of muscle function causes stunted children's motor skills to be hampered (Das Gracias Paiva et al., 2012).

Globally, in 2010 the prevalence of stunted children was 26.7% (171 million) of which 167 million occurred in developing countries (Mitra, 2015). According to the World Health

Organization (WHO) in 2010, the prevalence of stunting is said to reach a high number if it has reached the number of 30% - 39% and is said to be very high if the prevalence has reached 40%. Stunting is a feud that is often found in developing countries, one of which is Indonesia. According to the United Nations International Children's Emergency Fund (UNICEF), one in 3 children under five is stunted and approximately 40% of children under five in rural areas experience growth retardation. Currently, Indonesia is positioned as one of the top 5 countries experiencing stunting after India, China, Nigeria, and Pakistan with the percentage of children under 5 years of age experiencing stunting (Trihono, 2015).

The prevalence stunting in East Kalimantan based on data from the East Kalimantan Health Service as of March 2020 is high, namely 22.32% of the 11,610 total children under five. The percentage of stunting is still a health problem because it is still above the WHO standard, which is 20% (Dinas Kesehatan Kaltim, 2020).

The participation and attention of all parties is very important in handling this case. Therefore, the East Kalimantan Health Office (Dinkes) held a meeting on monitoring data and nutritional analysis as well as the utilization of Puskesmas in the district and city of East Kalimantan. This activity aims to coordinate the implementation of activities that gradually monitor children's growth and development. In addition, ePPGBM nutrition records and reports must be implemented as an increase in nutrition research activities, nutritional status analysis must be carried out based on the results of nutrition monitoring, and joint nutrition interventions across sectors and programs must be coordinated.

PKK cadres are often empowered to solve various social problems. One example is the empowerment of cadres to disseminate health information. The result of these activities is an understanding between PKK cadres about efforts to improve health through socialization and increased participation in health information. Structured and comprehensive executive empowerment activities can help improve health in the community (Rodiah, Lusiana, & Augustine, 2016)

The results showed that there was an increase in the knowledge of health cadres, namely before the activity, as many as 61.3% of cadres had good knowledge, and after the activity was carried out, activities increased to as much as 93.5%. In addition, the results of statistical tests showed that there was a significant increase in the knowledge of health cadres after the intervention ($p = 0.000$).

From the results of the study, it was found that out of 82 toddlers, 32 had developmentally doubtful traits and 7 had deviant development. In accordance with the results of the research and the direction of the East Kalimantan Health Office, the service team carried out community service activities to empower cadres in stunting prevention efforts.

The objectives to be achieved from this program are as follows:

1. Improving the ability of cadres to prevent stunting.
2. Improving the ability of cadres to detect stunting with appropriate anthropometric measurements.
3. increasing the ability of cadres to perform developmental screening.

Expected outputs are modules that are HAKI rights and scientific articles on community service.

METHOD

Steps to solve the problems faced by partners. The solutions offered consist of training courses (coaching and mentoring) which are carried out in stages to increase the capacity of health cadres to prevent stunting. collectedThis activity started with:

1. A preliminary study of the working area of the Mangkupalas Health Center Data were
To estimate the number of targets recruited to be given counseling on stunting and training on how to measure status, the Mangkupalas Health Center asked for the number of cadres, pregnant women, and mothers who have children under five in the working area of the Mangkupalas Health Center. Nutrition for toddlers
2. Making licensing

3. Implementation strategy meeting of the Community Service Team with the Puskesmas
4. Preparation of facilities and infrastructure
5. counseling on stunting for cadets, pregnant women, and mothers with toddlers. By giving a pretest and a posttest
6. Conduct training with demonstrations of anthropometric measurements to find out data on weight, height, and age to determine the nutritional status of toddlers.
7. Performance of Toddler Development Screening
8. Conducting an evaluation and a follow-up plan

Preparation of service activities includes coordination with partners for the implementation of service activities and discussions with the leadership of the Mangkupalas Health Center to provide time and place for us to carry out activities. To solve the problems faced by partner groups in this service activity, structured activities were designed, which included not disturbing the scheduled program at the Mangkupalas Health Center.

RESULTS

The population in this activity were health cadres in the Mangkupalas Community Health Center, with a sample of 30 participants consisting of cadre representatives from the Masjid Village, pregnant women, and mothers of toddlers. This activity was carried out at the Mangkupalas Health Center on September 02 and October 06, 2021. In connection with the COVID-19 pandemic, the activity began with measuring the temperature, washing hands with hand sanitizer, changing masks, and filling out the attendance list at the registration desk. Participants are asked to fill out the pre-test first. After all the participants were present, the opening session of the activity was carried out. The opening session was attended by the Head of the Mangkupalas Community Health Center, the Deputy Director for Academic Affairs, Poltekkes Kaltim, the Community Service Team and Health Center staff for nutrition and MCH.

After the opening was completed, the next activity was the delivery of material on cadre empowerment in preventing stunting using the lecture method. This was followed by a question and answer session, which ended with a post-test and the closing of the event. The material was delivered by the Head of Puskesmas and lecturers from Poltekkes Kaltim as activity partners.

The first activity was held on September 2, 2021. The materials presented at this meeting were Empowerment of Health Cadres on Prevention of Stunting in Toddlers by Dr. Deasy Nursanti Natsir and materials on Prevention of Stunting since Pregnancy with the assistance of health cadres by Nursari Abdul Syukur, M.keb.

The second activity was held on October 6, 2021. The material presented at this meeting was Early detection of stunting with precise anthropometric measurements by Saibatul, Amd.Gz and material on early detection of stunting under-five development by Nursyahid Siregar, M.Keb.

The instrument used to measure knowledge includes the domain of knowledge about nutrition, stunting and stunting prevention. The criteria for the level of knowledge are that the knowledge is good if the score is 75–100%, sufficient knowledge if the score is 60–75%, and knowledge is lacking if the score is 60. To measure the skills of cadres in measuring anthropometry and developmental screening, it is done after the presentation of the material by assessing the accuracy of the measurements.

Table 1. Knowledge and skills of cadres before and after training

Variable	Before Training		After Training	
	Presentasi	Kategori	Presentasi	Kategori
Knowledge	50%	Bad	96,6%	Good
Anthropometric Measuremen	40%	Not true	93,3%	True
Developmental Screening	10%	Exact	90%	Coorrect

The results in the table above show that before training, the knowledge of cadres, the ability to take anthropometric measurements, and the ability to screen developments have a presentation

of 50%, 40%, and 10%, respectively, which means that the cadres have less knowledge, the ability to take anthropometric measurements is not correct, and the screening ability is not appropriate. After the training, the knowledge of cadres, the ability to take anthropometric measurements, and the ability to screen developments have all increased, each having a presentation of 96.6%, 93.3%, and 90%, which means that the cadres have good knowledge, are able to take anthropometric measurements correctly, and are able to carry out screening properly.

DISCUSSION

The results of this activity are in accordance with several previous studies conducted by Adistie et al., (2018), Astuti (2018), Megawati & Wiramihardja (2019), Hendrawati (2018), dan Wijayanti & Sariani (2020) that found a significant increase before and after training activities. This shows that health cadres can prevent and treat stunting in children. This activity is also in accordance with previous community service activities. Stunting prevention includes health checks for children under five, education on stunting prevention at posyandu and strengthening of stunting prevention/control policies with Regent Regulations (Sukmana, 2019). This community service concludes that training can improve the knowledge and skills of Posyandu cadres in detecting stunting (Prabandari & Putri, 2008). The results of community service activities through the activation of UKS activities showed the distribution of protein energy adequacy levels in grade 4-6 students, where it was found that 67.8% and 42.7% of students had a moderate to severe deficit in protein energy sufficiency levels, besides 54.9% and 75.2% of students had adequate levels of fat and carbohydrates with mild to severe deficits (Novianti & Utami, 2021).

CONCLUSIONS And RECOMMENDATIONS

1. Knowledge and skills of cadres are increased in preventing and detecting stunting and they are able to screen children's development.
2. Knowledge of stunting prevention in pregnant women and mothers of children under five has increased.
3. Stunting in the Mangkupalas Community Health Center can be detected accurately.

It is hoped that with the support and active participation of the Mangkupalas Health Center, we will continue to be able to carry out the process of mentoring and fostering health cadres on an ongoing basis, preventing and detecting stunting. It is hoped that this capacity building will be done as continuous training that is periodic and well programmed.

It is hoped that the cadres will continue to disseminate information to the public about the efforts that can be made to prevent stunting during the first 1000 days of life. And it is hoped that cadres will actively participate in anthropometric measurement activities for toddlers in order to detect and overcome stunting from an early age.

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