



Indonesian Journal of Community Development

Journal homepage: <https://ejournal.upi.edu/index.php/IJCD>



OPTIMIZING THE GROWTH AND DEVELOPMENT OF CHILDREN UNDER FIVE YEARS OLD AS A STUNTING PREVENTION

Nenty Septiana^{1*}, Sufriani², Nevi Hasrati Nizami³, Inda Mariana⁴, Nova Fajri⁵, Sri Agustina⁶

^{1,2,3,4,5,6}Pediatric Nursing Department, Faculty of Nursing, Universitas Syiah Kuala, Banda Aceh, Indonesia

Correspondence: E-mail: nenty.septiana@usk.ac.id

ABSTRACTS

Introduction : Stunting remains a significant health problem among children under five years old. If not addressed properly, it can lead to various other health issues. Enhancing the knowledge and skills of community health cadres in early detection of stunting through effective monitoring of children's growth and development is crucial to reducing its incidence. **Objective** : This activity aims to enhance the knowledge and skills of cadres in monitoring the growth and development of children under five years old to prevent stunting. **Method** : A community services activity include the preparation, implementation, and evaluation stages. The target of this community service activity is the cadres of Gampong Rumpet, Krueng Barona Jaya District, Aceh Besar, Indonesia. **Conclusion** : The results of the activity show that there is an increase in the knowledge and abilities of cadres in optimizing the growth and development of children under five years old to prevent stunting.

ARTICLE INFO

Article History:

Received 17 August 2024

Revised 20 November 2024

Accepted 29 November 2024

Available online 1 October 2024

Keyword:

Cadres, Children, Growth and development, Stunting.

1. INTRODUCTION

Stunting is a problem caused by chronic malnutrition in children under five years of age, characterized by a height that is not appropriate compared to their age. Stunting is caused by socioeconomic conditions, maternal nutrition during pregnancy, childhood illness, a lack of nutritional intake and a diverse diet, low visits to health services, and inadequate sanitation and access to clean water (Pusat Data dan Informasi Kemenkes RI., 2018). Stunting is one of the targets of the Sustainable Development Goals (SDGs) included in the 2nd sustainable development goal, namely eliminating hunger and all forms of malnutrition by 2030.

The World Health Organization (WHO) reported that in 2022, the prevalence of stunting in children under five years old in the world reached 22.3% or equivalent to 148.1 million people. The prevalence of stunting in Indonesia is very high, with 31% exceeding the world percentage (World Health Organization, 2023). Indonesian Ministry of Health in the 2022 Indonesian Nutritional Status Study (SGGI) showed that the percentage of stunting was 31.2% in Aceh Province (Kemenkes RI., 2022) and 27% in Aceh Besar Regency (Pemerintah Provinsi Aceh, 2022). Rumpet Village, Krueng Barona Jaya District, Aceh Besar, Indonesia, has a relatively high incidence of 15 stunted children under five years old. In this case, cadres as the front line must have adequate knowledge and skills in detecting stunting early and helping to improve toddler growth and development. However, in reality, cadres in Rumpet Village still need assistance from various sectors, especially in detecting early children growth and development so that the incidence of stunting can be reduced according to government direction.

Early detection of stunting is an important indicator of the prevention of stunting. Early detection can be achieved by monitoring the growth and development of children under five by cadres and health workers at integrated health posts. Integrated health post cadres act as motivators and distributors of information to the community to attend such activities. In addition, cadres also play a role in promoting the prevention and reduction of stunting in communities and increasing community awareness of stunting (Kementerian Desa Pembangunan Daerah Tertinggal, 2017). The active role of cadres greatly influences the success of the integrated health post-programme, especially monitoring the growth and development of children under five as an early detection of stunting.

Research by Adistie, F. et al., (2018) showed that there was a significant increase in cadre knowledge in the early detection of stunting and stimulation of growth and

development in toddlers after training. Another study by Rahyanti & Sriasih (2022) stated that cadre training had a significant influence on cadre readiness in preventing stunting. Training activities include proper stunting and measuring length and height. Currently, cadres carry out only weight and measuring measurements. However, the interpretation of early detection remains poorly understood. Therefore, optimizing toddler growth and development through education and training is important to prevent stunting. This community service activity improves the knowledge and skills of cadres in monitoring toddler growth and development to prevent stunting in Rumpet village.

2. METHODS

The method for this activity is divided into 3 preparation stages, implementation stage, and evaluation stage.

2.1 Preparatory stage

In the preparation stage, the team and cadres discuss technical matters such as target communities, preparing tools and materials, and then preparing materials.

2.2 Level of Implementation

The stages of implementing this activity program include anthropometric measurements of five-year-old babies, assistance with appropriate anthropometric examinations for cadres, stunting screening training for cadres, nutrition education for babies and toddlers, and education and demonstration of complementary foods for breast milk.

2.3 Evaluation Stage

At this stage an evaluation is carried out. Evaluation includes several aspects, including evaluate how to carry out appropriate anthropometric measurements by cadres and providing case examples to sharpen cadres' understanding of stunting screening and observe stunting screening re-demonstration activities by cadres.

3. RESULTS AND DISCUSSION

This activity was carried out in a village called "Gampong", located in Gampong Rumpet, Krueng Barona Jaya District, Aceh Besar, Indonesia with the target of the activity being 7 cadres and 30 mothers with stunted toddlers. The stages of this activity include:

- a. **Anthropometric measurements of children under five years and assistance with appropriate anthropometric examinations for cadres**



Figure 1. Anthropometric measurements

The anthropometric measurements of children under five years old will assess the nutritional status of children and toddlers so that parents can take preventive measures to prevent malnutrition in toddlers. Anthropometric measurements of children under five years old are important for monitoring their nutritional status and physical development. The community service team also assists cadre workers in performing anthropometric measurements, such as measuring the length and height of children. Good assistance to cadres can increase their capacity to identify and overcome stunting and malnutrition. Sari et al., (2023) found an increase in the knowledge and skills of cadres when conducting anthropometric measurements correctly after assistance and training (p -value = 0.044). The provision of appropriate assistance for cadres ensures accurate measurements and results can be used for appropriate interventions, thereby reducing the risk of nutritional problems and improving the health of children in the community.

b. Stunting screening training for cadres



Figure 2. Stunting screening training for cadres

This training activity is specifically given to cadres so that cadres can better understand how to see toddler growth and development through DDST and KPSP and cadres are trained to see the nutritional status of toddlers using a special table found in the KIA book. The service team directly practices how to fill out the TB/BB observation sheet and interpret the Z score graph. Then the cadres are given case examples to sharpen the cadres' knowledge and skills in stunting screening. Stunting screening training for cadres is important to detect stunting problems early, increase awareness in the community, and strengthen appropriate handling. With trained cadres, stunting prevention efforts and child growth and development monitoring programs can run more effectively, reduce the prevalence of stunting in the community, and help create a healthier and more productive generation (Bridge & Lin, 2024).

c. Nutrition education

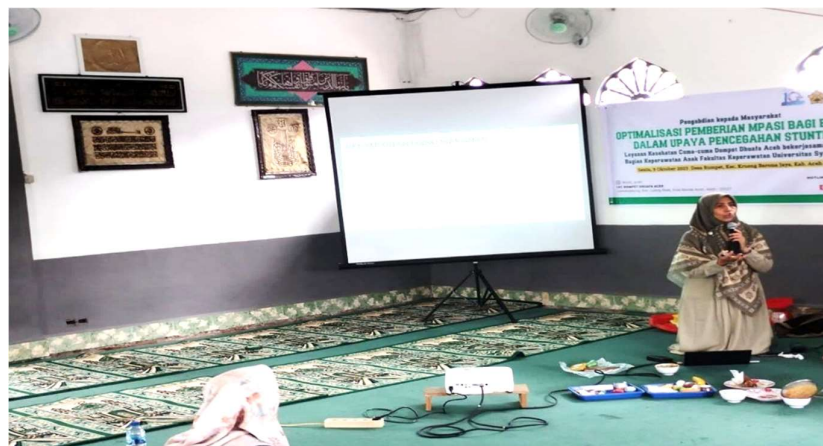


Figure 3. Implementation of activities nutrition education

Nutrition education activities for infants and toddlers are very important in supporting the optimal growth and development of children during their golden years. A child's health and development are directly impacted by receiving adequate nourishment during the infant and toddler years, which is a crucial time in their physical and mental development. A healthy diet promotes body and brain growth, which affects a child's social, physical, and cognitive skills. According to studies by Black, Trude, & Lutter (2020) inadequate nutrition during childhood can interfere with brain development, subsequently affecting a child's capacity for learning.

Proper nutrition education can help reduce the prevalence of stunting by providing parents with knowledge about the importance of breastfeeding and foods rich in protein, vitamins, and minerals during the critical periods of child growth and development. Nutrition education is essential for infants and toddlers because it has a direct impact on the child's long-term health. Through proper education, parents can ensure that their children receive the nutrients they need to grow and develop well and avoid health problems related to malnutrition. Therefore, comprehensive nutrition education programs are crucial for improving the quality of early childhood education (Fernández-Barrés et al., 2017).

d. Education and Demonstration of Complementary Foods (MPASI)



Figure 4. Education and Demonstration of Complementary Foods (MPASI)

The educational and demonstration activities for MPASI continued for 45 minutes. Cadres and mothers with children under five years old who were present demonstrated

considerable enthusiasm in attending to and absorbing the information provided by the service team. Beside education, the team conducted a demonstration on how to prepare complementary foods correctly based on the child's age. Parents in areas with limited access to information may be unaware of the necessary skills to prepare and serve safe and nutritious complementary foods. Healthcare workers and community health volunteers can participate in demonstrations to learn how to prepare nutritious meals and prevent unhealthy behaviors, including the use of unsanitary ingredients or giving solid foods to babies that are too difficult for them to eat (WHO, 2023).

Education and demonstrations regarding complementary feeding have a significant impact on the health of infants and toddlers. This educational program is very important for increasing parents' knowledge about providing healthy food, preventing malnutrition, and supporting children's physical and cognitive development. Through proper education, parents can provide complementary feeding that meets the nutritional needs of their children, which will optimally support their growth and development (Berti & Socha, 2023; Gatica-Domínguez et al., 2021).



Figure 5. Implementation of activities optimizing growth and development children under five years old

4. CONCLUSION

Community service activities to optimize toddler growth and development as an effective strategy for preventing stunting through children under five years old anthropometric measurement activities, mentoring and training cadres in Aceh Besar to improve the knowledge of cadres and the community, especially in understanding stunting

with early detection of children growth and development and improving cadre skills in ensuring that accurate measurements so that prevention and handling of stunting can be carried out properly. In addition, nutrition education and education and demonstration of MPASI are also important so that cadres and mothers of children under five years old can provide healthy, balanced nutritious food to children under five years old so that stunting incidents can be prevented and handled properly.

5. REFERENCE

- Adistie, F., Lumbantobing, V., & Maryam, N. (2018). Pemberdayaan kader kesehatan dalam deteksi dini stunting dan stimulasi tumbuh kembang pada ballita. *Media Karya Kesehatan.*, 1(2), 173-184.
- Berti, C., & Socha, P. (2023). Infant and young child feeding practices and health. *Nutrients.*, 27(15), 1184. <https://doi.org/10.3390/nu15051184>.
- Black MM, Trude ACB, L. C. (2020). All children thrive: Integration of nutrition and early childhood development. *Annu Rev Nutr*, 3(40), 375–406. <https://doi.org/doi:10.1146/annurev-nutr-120219-023757>
- Fernández-Barrés, S., García-Barco, M., Basora, J., Martínez, T., Pedret, R., & Arija, V. (2017). The efficacy of a nutrition education intervention to prevent risk of malnutrition for dependent elderly patients receiving home care: A randomized controlled trial. *Int J Nurs Stud*, 70, 131–141. <https://doi.org/doi:10.1016/j.ijnurstu.2017.02.020>
- Gatica-Domínguez, G., Neves, P., Barros, A., & Victora, C. (2021). Complementary feeding practices in 80 low-and middle-income countries: Prevalence of and socioeconomic inequalities in dietary diversity, meal frequency, and dietary adequacy. *J Nutr.*, 1;151(7), 1956-1964. <https://doi.org/doi:10.1093/jn/nxab088>.
- Kemendes RI. (2022). *Buku saku studi status gizi indonesia (SGGI)*. Kementerian Kesehatan Republik Indonesia.
- Kementerian Desa Pembangunan Daerah Tertinggal. (2017). *Buku saku desa dalam penanganan stunting*. Direktur Jendral Pembangunan dan Pemberdayaan Masyarakat Desa.
- Pemerintah Provinsi Aceh. (2022). *Prevalensi stunting di aceh turun sebanyak 4,7 persen*. <https://jdih.acehprov.go.id/news/post/prevalensi-stunting-di-aceh-turun-sebanyak-47-persen>
- Pusat Data dan Informasi Kemendes RI. (2018). *Buletin jendela data dan informasi kesehatan*. www.pusdatin.kemkes.go.id
- Rahyanti, N. M., & Sriasih, N. K. (2022). Pengaruh pelatihan kader terhadap kesiapan kader dalam pencegahan stunting. *Jurnal Menara Medika*, 5(1), 46–52.
- Sari, S. M., Yusnita, Y., Huda, N., Ernawati, K., Maharsi, E. D., Zakiyah, Z., Widiyanti, D., & Farras, R. M. (2023). Capacity building of integrated health post cadres on stunting prevention in Pandeglang Regency Locus Area. *Abdimas: Jurnal Pengabdian Masyarakat Universitas Merdeka Malang*, 8(2), 278–287. <https://doi.org/10.26905/abdimas.v8i2.9236>

World Health Organization. (n.d.). *WHO Guideline for complementary feeding of infants and young children 6-23 months of age*. <https://www.who.int/publications/i/item/9789240081864>

World Health Organization. (2023). *Levels and trends in child malnutrition: UNICEF/WHO/World Bank Group joint child malnutrition estimates: Key findings of the 2023 edition*. <https://www.who.int/publications/i/item/9789240073791>.

