

## Efforts to Increase Community Knowledge about Stunting through Community Counseling Activities

Andriyani Risma Sanggul<sup>1\*</sup>, Riswan Gumilang Bagaskara<sup>2</sup>, Ago Harlim<sup>3</sup>, Elisabeth Armandina Gabriel<sup>4</sup>, Irma Tania Daniella<sup>5</sup>, Adelia Winanda Suryana<sup>6</sup>, Yosephine Sepriliani Yamin<sup>7</sup>

<sup>1</sup>Departemen Ilmu Kedokteran Komunitas, Fakultas Kedokteran, Universitas Kristen Indonesia

<sup>2,4,5,6,7</sup>Fakultas Kedokteran, Universitas Kristen Indonesia

<sup>3</sup>Departemen Ilmu Kesehatan Kulit dan Kelamin, Fakultas Kedokteran, Universitas Kristen Indonesia

**Corresponding Author:** Andriyani Risma Sanggul [andriyani.risma@uki.ac.id](mailto:andriyani.risma@uki.ac.id)

### ARTICLE INFO

*Keywords:* Stunting, Counseling, Community Service

*Received :* 23, December

*Revised :* 25, January

*Accepted:* 27, February

©2025 Sanggul, Bagaskara, Harlim, Gabriel, Daniella, Suryana, Yamin:

This is an open-access article distributed under the terms of the [Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



### ABSTRACT

Stunting causes obstacles in achieving children's physical and cognitive potential, therefore it is very important to understand from the start about stunting, the causal factors, and also preventive and curative steps in dealing with stunting. Therefore, this Community Service activity takes the theme of the activity, namely Counseling about Stunting to the Community. The location for this Public Health Service activity is Cibunar Village, Sumedang Regency, West Java. The method of implementing the activity is in the form of a presentation by the resource person, question and answer discussion, concluding. Counseling participants are parents (father and/or mother). Measuring the increase in participants' knowledge about stunting is carried out by distributing pre and post-questionnaires.

## **INTRODUCTION**

The advancement of a nation's development is significantly influenced by the presence of high-quality human resources (HR). This encompasses individuals who possess not only robust physical attributes and strong mental resilience but also excellent health, alongside a thorough understanding of science and technology. Children of school age represent the future generation of the nation; thus, the future quality of the nation hinges on the quality of today's youth. According to the 2007 Riskesdas findings, there are alarming rates of nutritional issues among school-age children (ages 6-14) in Indonesia. Specifically, the prevalence of wasting among male school-age children exceeds the national average in 16 provinces, while in 19 provinces, female school-age children exhibit a prevalence of wasting that is also above the national average. . According to WHO, children's physical growth is characterized by increasing anthropometric measurements. Anthropometric measurements that are widely used are body weight (BB) and height (TB). BB is an anthropometric measurement that provides an overview of body mass (bones, muscles, and fat). Body mass is very sensitive to sudden changes, for example, due to illness, a person's appetite decreases, and food consumption decreases, resulting in a decrease in body weight. The body weight index for age (WW/U) better describes current nutritional status. TB describes bone or skeletal growth. Under normal conditions, TB increases with age, but is less sensitive to short-term nutritional deficiencies. The effect of nutritional deficiencies on TB will only be visible in the long term. Thus, the TB|U index describes past nutritional status, so a low TB|U value (stunting) is used as an indicator of chronic malnutrition

Editing is a condition characterized by failure to thrive in children under the age of five, primarily due to chronic malnutrition, which results in the child being shorter than the expected height for their age. Malnutrition can begin during pregnancy and continue in the initial days following birth; however, the manifestation of stunting typically becomes evident only after the child reaches two years of age. Toddlers classified as short (stunted) or very short (severely stunted) are those whose body length (PB/U) or height (TB/U) is assessed against the WHO-MGRS (Multicentre Growth Reference Study) standards. According to the Ministry of Health (Kemenkes), stunting is defined as a condition in children under five with a z-score of less than -2 standard deviations (stunted) and less than -3 standard deviations (severely stunted).

Stunting has immediate effects on brain development, intelligence, physical growth, and metabolic health, while its long-term consequences include diminished cognitive abilities, reduced learning outcomes, weakened immunity leading to increased susceptibility to illness, and a heightened risk of chronic conditions such as diabetes, obesity, cardiovascular diseases, cancer, stroke, and disabilities in later life. In 2019, the global prevalence of stunting among children under five years old was recorded at 21.3%. In Indonesia, the rates of very stunted and stunted children aged 0-59 months were 12.8% and 17.1%, respectively, reflecting an increase from the previous year, 2018, when the figures were 11.5% for very stunted and 19% for stunted children. In 2018, the Ministry of Health reported that approximately 30% of Indonesian children are affected by stunting.

This condition poses a significant risk to the overall quality of the Indonesian population and undermines the nation's competitiveness. Stunting not only impairs physical growth, resulting in shorter stature, but also adversely affects cognitive development. Consequently, this disruption can severely impact children's academic performance, productivity, and creativity during their productive years.

Stunting that has occurred if it is not balanced with catch-up growth (catch-up growth) results in decreased growth. The problem of stunting is a public health problem that is associated with an increased risk of illness, death, and obstacles to both motor and mental growth. Stunting is formed by growth faltering and inadequate catch-up growth which reflects an inability to achieve optimal growth. This reveals that groups of toddlers born with normal weight can experience stunting if their subsequent needs are not met properly.

### *Activity Objective*

This activity aims to increase public knowledge about Stunting.

### *Benefits Activities*

1. Increasing public knowledge about stunting
2. Increased public insight and knowledge about how to take action to prevent and handle stunting.

## **IMPLEMENTATION AND METHODS**

### **Activity Targets**

The people who are the target of community service activities through education about stunting are parents consisting of fathers and/or mothers in Cibunar village, Sumedang Regency, West Java.

### **Implementation Method**

Implementation of activities is carried out in the form of counseling with a series of activities as follows:

1. Presentation by resource persons (experts from UKI)
2. Pre-post test regarding community knowledge regarding stunting

### **Time and Place of Activities**

This activity was carried out by the Village Health Center of Cibunar Village, Sumedang Regency, West Java. Activities will be carried out from June to August 2023

## **RESULTS AND DISCUSSION**

A community service initiative conducted by a team from the Faculty of Medicine focused on the residents of Cibunar village in Sumedang Regency, West Java. The theme of the initiative was "Counseling about Stunting to the Community," and it was successfully executed, attracting a total of 38 participants, which included both fathers and mothers. The series of activities are carried out in stages starting with the preparation, implementation and evaluation stages, as the achievements are described as follows:

*Results of Evaluation of Preparation Stage Achievement*

**Table 1. Achievements of the Preparation Stage**

No	Type of Activity	Achievement	
		Implemented	Not Implemented
1	Survey of the location of Cibunar Village activities	100%	-
2	Arranging permits and administration both from the local government and from higher education institutions	100%	-
3	Preparation of outreach materials and evaluation instruments for increasing knowledge	100%	-

The implementation of preparations by the Public Health Service Team went very well with the achievements as described in Table 1 above. Achievement of preparation was very good with 100% implementation achieved. This is of course a very good starting point for the next steps in implementing this Public Health Service activity, because good preparation is of course a strong foundation for the successful implementation of an activity. The achievement of this good preparation stage is of course inseparable from a clear division of tasks among the Team, the team's responsibilities in carrying out their respective duties, as well as full support from universities, specifically the UKI Faculty of Medicine and also the regional government of Cibunar Village, Regency. Sumedang, Community Health Center. Poskesdes, Village Head, and also other village officials. The collection of raw materials or business inputs is obtained from the local community's goats purchased without prior processing by the business owner, namely IDR 6,500/sack. The more goats the local community owns, the more goat manure will be produced, and with this, the more raw materials or inputs the business owner will obtain.

***Frequency Distribution of Participant Characteristics***

Participants who took part in the counseling activities were 38 parents (fathers and mothers) with distribution based on gender as in Table 2 below:

**Table 2. Distribution of Participants Based on Gender**

<b>Gender</b>	<b>number (n)</b>	<b>Percentage (%)</b>
<b>Female</b>	28	73.7
<b>Male</b>	10	26.3
<b>Total</b>	38	100

Participants who took part in the counseling were dominated by women with 28 participants (73.7%), compared to only 10 men (26.3%). Based on the results of the team's interviews with village officials, the number of male participants was less than female because, during the implementation of Public Health Service activities, the fathers carried out more work activities, whether farming, selling, or other work. Apart from that, there is an assumption that matters of maintaining family health are usually more of the responsibility of the mother, which of course this assumption is wrong because family health problems must be known by all family members, including father and mother.

***Evaluation of Increased Knowledge Post Counseling***

Based on the results of pre and post-test instrument data analysis regarding the knowledge of the Cibunar village community about stunting, the results obtained are as described in Table 3 below:

**Table 3. Evaluation Results of Increased Participant Knowledge**

<b>Indicator</b>	<b>Post test-Pre test</b>	
	<b>Number (n)</b>	<b>Percentage (%)</b>
<b>Knowledge</b>		
Increase	28	73.7%
No Change	7	18.4%
Uncategorized	3	7.9%
<b>Total</b>	<b>38</b>	<b>100</b>

From the results of data analysis, as described in Table 3, the results obtained were that of the 38 participants who took part in the counseling, there were 28 participants (73.7) who experienced an increase in knowledge as measured by pre-test and post-test scores, and 7 (18.4%) participants did not experience an increase or in other words, their pre and post-test scores remained the same; Meanwhile, 3 participants could not be categorized because they did not attend the counseling full time and during the post-test they did not fill out the instrument sheet. From obtaining these results, where there was an increase in knowledge about stunting for 28 participants (73.7%), it can be stated that this outreach activity was successful, where there was a difference between the Pre-

test and Post-test results for 28 participants, which means that there was an influence of counseling on increasing knowledge about stunting.

This health education has been proven to increase the knowledge of the younger generation in preventing stunting. Likewise, Rachmah et al. al said that providing nutrition education to mothers had a significant influence on increasing mothers' knowledge about preventing stunting in the golden period. Health education influences changes in knowledge about stunting. One of the risk factors for stunting is the mother's low level of education and knowledge. So it is recommended to carry out health education activities if you want to increase public knowledge. By increasing knowledge about stunting, it is hoped that the prevalence of stunting in Cibunar Village, Sumedang Regency, West Java can be eliminated from year to year so that stunting cases are no longer a nutritional problemsuccessful.

## **CONCLUSIONS AND RECOMMENDATIONS**

Outreach activities about stunting to the community of Cibunar Village, Sumedang Regency, West Java with a total of 38 participants consisting of parents (fathers and/or mothers) were declared effective in increasing participants' knowledge about stunting, where the results of the pre and post-test instruments were processed. The results obtained were that as many as 28 participants (73.7%) experienced an increase in scores from pre- to post-test.

## **ACKNOWLEDGMENT**

A big thank you to the Faculty of Medicine for fully supporting this community service activity starting from planning, and implementation to evaluation of the activity. Thanks are also expressed to the Cibunar village government, Sumedang Regency, West Java, which also provides full support starting from providing facilities and infrastructure for activities while in Cibunar Village.

## **REFERENCES**

- A, M. (2022). Risk Factors for Stunting in School Children at Poboya Elementary School. *Journal of Health and Nutrition Research*, 1(1), 1-5
- A. Ernawati, "Health Promotion Media to Increase Mothers' Knowledge About Stunting," *J. Litbang Media Inf. Research, Development. and Science and Technology*, vol. 18, no. 2, pp. 139-152, 2022
- COMMINFO. *Reducing Stunting Through Socialization of a Clean and Healthy Generation*. 2019
- D. Puspitarini, I. Sofyan, and F. B. Setyawan, "Management of community-based stunting prevention strategies in the Naswiatul Aisyiyah Regional Leadership of Gunungkidul Regency," in *Proceedings of the National Seminar on Team Results for the Community*, Ahmad Dahlan University, 2023, vol. 4, no. 1, pp. 751-758

- Irwan, M., & Risnah. (2021). Health Education Influences Family Knowledge About, Indonesian Journal of Community Service and Development, Vol. 1 No. 1 (2022): 1-4
- Marni, M., & Ratnasari, N. Y. (2021). Counseling on Stunting Risk Prevention in the First 1000 Days of Life in the Young Generation. Indonesian Journal of Community Services, 3(2), 116-125. <https://doi.org/10.30659/ijocs.3.2.116-125>
- Ministry of Health. Stunting Bulletin. Indonesian Ministry of Health. 2020;301(5):1163-78
- Ministry of Villages PDPT. Village Stunting Pocket Book in Handling Stunting. 2017.
- Ministry of Villages, Development of Disadvantaged Regions and Transmigration. (2017). Village pocket book on handling stunting. Village pocket book on handling stunting, 42
- Mutingah, Z., & Rokhaidah. (2021). The relationship between maternal knowledge and attitudes and stunting prevention behavior in toddlers. Widya Gantari Indonesian Nursing Journal, 5(2), 49-57. <https://doi.org/10.52020/jkwgi.v5i2.3172>
- Nadeak B, Siagian C, Sormin E, Juwita CP. Analysis of Family and Infant Characteristics of Potential Stunting Events. In 1st World Conference on Health and Social Science (WCHSS 2022) 2023 Jun 14 (pp. 66-71). Atlantis Press.
- R. H. Setyorini and A. Andriyani, "Increasing Knowledge about Stunting as an Effort to Prevent Stunting," J. Bina Tim. To. Mass., vol. 3, no. 2, pp. 61-68, 2023
- Rachmah, Q., Indriani, D., Hidayah, S., Adhela, Y., & Mahmudiono, T. (2020). Nutrition Education for Eating Fish as an Effort to Increase Mothers' Knowledge about Stunting Prevention in Gempolmanis Village, Sambeng District, Lamongan Regency, East Java Province. Amerta Nutrition, 4(2), 165-170. <https://doi.org/10.20473/amnt.v4i2.2020.165-170>
- Rahmawati F, Bintang M, Yang AJ, Sormin E. Counseling on Stunting Prevention and Anthropometric Measurements at Posyandu Cempaka RW "A" Kemirimuka Village, Beji District, Depok-West Java. JOURNAL ComunitÃ Servizio: Journal Related to Community Service Activities, especially in the fields of Technology, Entrepreneurship and Social Affairs. 2023 Sep 14;5(2):1391-9.

TNP2K. Stunting Summary Book. 2017.

UNICEF, "Action Framework for Maternal Nutrition and Complementary Foods for Breast Milk," 17 September 2023. [Online]. Available: <https://www.unicef.org/indonesia/id/document/kerangka-aksi-untuk-gizi-ibu-dan-makanan-pendamping-asi>