

## DARMABAKTI CENDEKIA: Journal of Community Service and Engagements

www.e-journal.unair.ac.id/index.php/DC

## THE INITIATIVE TO RAISE AWARENESS ON STUNTING AMONG HEALTH CADRES IN WONOKROMO VILLAGE

### UPAYA PENINGKATAN KESADARAN STUNTING PADA KADER KESEHATAN DI DESA WONOKROMO

**Scope:** *Health* 

## Umi Hanik<sup>1</sup> <sup>(6)</sup>, Budhi Setianto<sup>2,3\*</sup> <sup>(6)</sup>, Agus Aan Adriansyah<sup>3</sup> <sup>(6)</sup>, Hartatiek Nila Karmila<sup>4</sup> <sup>(6)</sup>, Mery Susantri<sup>4</sup> <sup>(6)</sup>, Nikmatus Sa'adah<sup>5</sup> <sup>(6)</sup>

<sup>1</sup>Department of Nursing, Faculty of Nursing and Midwifery, Universitas Nahdlatul Ulama Surabaya - Indonesia

<sup>2</sup> Head of Administration and Human Resources, RS Islam Surabaya Ahmad Yani - Indonesia

<sup>3</sup> Department of Public Health, Faculty of Health, Universitas Nahdlatul Ulama Surabaya - Indonesia

\* Department of Bachelor of Medicine, Faculty of Medicine, Universitas Nahdlatul Ulama Surabaya - Indonesia

<sup>5</sup> Department of Dentistry, Faculty of Dentistry, Institut Ilmu Kesehatan Bhakti Wiyata - Indonesia

## ABSTRACT

Background: Stunting is associated with various short-term effects such as developmental delays, decreased immune function, impaired cognitive function, and compromised metabolic systems. Furthermore, long-term consequences may include obesity, reduced glucose tolerance, coronary heart disease, hypertension, and osteoporosis. The limited understanding among healthcare cadres regarding comprehensive treatment necessitates interventions to aid in the assistance and recovery of infants identified as stunted. Objective: This activity aims to enhance the knowledge level concerning stunting among healthcare cadres. **Method:** The initiative will take the form of lectures, discussions, and case studies targeting 68 women from RW 07 cadres in Wonokromo Village. The stunting counseling event for RW 07 Health Cadre, Wonokromo Village, held on July 9 2023, was met with enthusiasm. Results: The presentation emphasized the significance of preventing stunting and highlighted the "1000 First Day of Life" initiative. The outreach activity effectively enhanced knowledge regarding stunting incidence, with 68 participants actively engaged, primarily comprising women aged 36 to 45 years, predominantly housewives. Conclusion: Analysis of pre-test and post-test results revealed a notable increase of 19.2%. Furthermore, the paired t-test demonstrated a significant difference between the pre-test and post-test ( $\alpha = 5\%$ ).

### ABSTRAK

Latar belakang: Gejala stunting jangka pendek antara lain keterlambatan perkembangan, penurunan fungsi imun, penurunan fungsi kognitif, dan gangguan sistem pembakaran. Sedangkan gejala jangka panjangnya antara lain obesitas, penurunan toleransi glukosa, penyakit jantung koroner, hipertensi, dan osteoporosis. Rendahnya pengetahuan kader mengenai penanganan komprehensif diperlukan untuk proses pendampingan dan pemulihan bayi yang terindikasi stunting. Tujuan: Kegiatan ini diharapkan dapat memberikan tingkat pengetahuan mengenai stunting. Metode: Kegiatan ini dilaksanakan dalam bentuk ceramah, diskusi, dan studi kasus kepada 68 orang perempuan kader RW 07 Desa Wonokromo. Acara penyuluhan stunting bagi ibu kader RW 07 Desa Wonokromo dilaksanakan pada tanggal 9 Juli 2023 diikuti dengan antusias. Hasil: Pemaparan materi berupa pentingnya pencegahan stunting dan 1000 Hari Pertama Kehidupan. Kegiatan sosialisasi mengenai kejadian stunting ini sangat bermanfaat, antusias peserta sebanyak 68 orang, didominasi oleh peserta yang berusia 36 – 45 tahun dengan profesi sebagian besar adalah ibu rumah tangga. Kesimpulan: Hasil pre-test dan post-test menunjukkan terdapat penambahan nilai sebesar 19,2% dan hasil uji T-test menunjukkan terdapat perbedaan yang signifikan antara pre-test dan post-test ( $\alpha = 5\%$ ).

# ARTICLE INFO

Recieved 29 February 2024 Revised 04 April 2024 Accepted 06 May 2024 Online 11 June 2024

\*Correspondence (Korespondensi): Budhi Setianto

E-mail: budhisetianto@unusa.ac.id

Keywords:

Stunting; 1000 HPK; Health Counseling; MPASI

Kata kunci: Stunting; 1000 HPK; Konsultasi Kesehatan; MPASI

Darmabakti Cendekia: Journal of Community Service and Engagements p-ISSN: 2657-201X; e-ISSN: 2657-1099 DOI: 10.20473/dc.V6.I1.2024.1-6

Open access under Creative Commons Attribution-Non Comercial-Share A like 4.0 International License

#### BACKGROUND

WHO data indicates that stunting affects the growth of approximately 178 million children under the age of five worldwide (Sasmita, 2021). Stunting is a persistent nutritional issue resulting from inadequate food intake to meet children's nutritional requirements over an extended period (Setiyabudi, 2019). The effects of stunting typically become noticeable after a child reaches two years of age. UNICEF defines stunting as the percentage of children aged 0-59 months with a height below minus two standard deviations, indicating moderate or severe stunting, or below minus three standard deviations, indicating chronic stunting (Lawaceng and Rahayu, 2020). This classification is based on child growth standards established by WHO. Stunting is frequently associated with suboptimal brain development, which can impact mental and cognitive abilities, leading to poor academic performance (Lestari et al., 2018).

Additionally, stunted growth can have longterm consequences stemming from malnutrition (Mashar *et al.*, 2021). As reported by www.jawapos. com on March 1, 2023, Surabaya has witnessed a significant reduction in stunting cases over the past three years. Specifically, the number of cases has decreased from 12,788 in 2020 to 6,722 in 2021. Subsequently, by the end of December 2022, the number further declined to 923, and as of February 2023, there were 872 reported stunting cases in Surabaya. The Surabaya City Government (Pemkot) and the Chair of the Surabaya City PKK Mobilization Team (TP), Rini Indriyani, have agreed to prioritize the handling and prevention of stunting among toddlers in the city.

Stunting, stemming from insufficient nutritional intake, can be addressed by ensuring adequate nutrition (Yanti et al., 2020). Its impact primarily manifests due to inadequate nutrition during a child's first 1,000 days, beginning from fetal development until the child reaches 2 years of age (Yuwanti et al., 2021). Inadequate nutrition during this critical period can result in both short-term and long-term consequences (Yanti et al., 2020). Short-term effects include developmental delays, decreased immune function, impaired cognitive function, and compromised metabolic processes. Conversely, long-term implications encompass obesity, reduced glucose tolerance, coronary heart disease, hypertension, and osteoporosis. Addressing the lack of comprehensive knowledge among cadres is crucial for effectively assisting and rehabilitating stunted infants (Lonang and Normawati, 2022).

#### METHOD

In this community service initiative, training methods such as lectures, practical exercises, and discussions are employed. The training process commences with the creation of an invitation flyer, inviting cadres to participate in stunting prevention training. The training session took place on July 9, 2023, in front of the RW 07 hall in Wonokromo Village. Conducted by lecturers from Nahdlatul Ulama University, Surabaya, the session drew participation from 68 individuals. The proposed solutions will be implemented through a series of stages. Counseling sessions will be organized for cadres in RW 07, Wonokromo Village, to educate them about stunting management. The workshop program aims to provide practical solutions to address stunting issues. In collaboration with Region RW 07, Wonokromo Village will serve as a partner and play a pivotal role in organizing program activities and ensuring program sustainability post-community service intervention. This entails monitoring and addressing malnutrition issues within the RW 07 area of Wonokromo Village.

#### **RESULT AND DISCUSSION**

A child's weight and height serve as indicators of their growth. Therefore, a child's height not only signifies stunting but also reflects the adequacy of their nutrition (Ruswati et al., 2021). As per the Stunting Bulletin released by the Indonesian Ministry of Health, stunting refers to a condition wherein a child experiences growth disorders leading to shorter stature compared to their peers (Kementerian Kesehatan Republik Indonesia, 2022). It is crucial to note that shorter stature does not always equate to stunting; however, stunted children are characterized by a height or length below -2 standard deviations (SD). Additionally, immediate treatment is imperative for children under two years of age diagnosed with this condition (Sutarto et al., 2018).

The WHO child growth chart (GPA) is commonly employed to evaluate nutritional status using standard deviation measurements. The diminished stature of a stunted child falls below the established norms, often as a consequence of prolonged malnutrition (J *et al.*, 2022). This condition arises when children experience insufficient nutritional intake necessary to meet their daily requirements, consequently impeding their height growth. Various factors contribute to this health issue, including inadequate nutritional intake, recurrent exposure to infectious diseases, premature birth, and low birth weight (LBW) (Peraturan Walikota Surabaya, 2022). Inadequate nutrition in children often begins before birth and can persist during pregnancy. Approximately 20 percent of stunting cases, according to the World Health Organization (WHO), occur during fetal development (Rahmadhita, 2020). This is attributed to the mother's inadequate and less nutritious diet during pregnancy, resulting in reduced fetal nutrition intake. Fetal growth may halt during pregnancy and resume after birth. Hence, ensuring adequate nutrient intake during pregnancy is crucial (Kemensetneg RI, 2021).

Insufficient food intake during early childhood, particularly under the age of two, can lead to inadequate fulfillment of children's nutritional requirements. Factors such as improper breastfeeding positions, insufficient breast milk supply, or inadequate complementary feeding (MPASI) are examples of this nutritional deficiency (Yanti *et al.*, 2020). A primary cause of stunting in children is the lack of intake of foods rich in protein, iron, and zinc (Ruswati *et al.*, 2021).

As outlined in the book "Nutrition for Children and Adolescents," this developmental transition typically occurs around the age of three months and gradually slows down by the age of three years (Fikawati *et al.*, 2017). Additionally, the height-forage (TB/U) assessment curve remains below the standard curve, indicating stunted growth. There's a slight disparity in stunting conditions between children aged 2 to 3 years and those over 3 years old. For children aged 2 to 3 years, a low height-for-age measurement on the growth chart (TB/U) suggests an ongoing stunting process, while in older children, it indicates that growth failure (stunting) has already occurred (Peraturan Walikota Surabaya, 2022).



**Figure 1.** Flier and Invitation for Stunting Counseling for RW 07 Health Cadres, Wonokromo Village

Figure 1 illustrates the process of inviting cadre groups to participate in the Women's Stunting Knowledge and Stunting Extension event for RW 07 Cadres, held in Wonokromo Village on July 9. Invitations were disseminated to cadre groups to encourage their involvement in the outreach activities.



**Figure 2.** Presentation of Counseling Material and Stunting Knowledge by RW 07 Health Cadres, Wonokromo Village

Figure 2 depicts the utilization of outreach materials during the event, employing lecture sessions, question-and-answer sessions, and lively discussions. Health cadres participated enthusiastically in these activities.



Figure 3. Toddler Weighing Activities After Counseling





Brochures, also known as pamphlets, serve as informative documents detailing goods, services, public facilities, company profiles, educational institutions, or advertisements. They are designed with concise language to facilitate quick comprehension by readers. Intended to attract attention, brochures are typically printed on high-quality paper to provide a comprehensive overview of the featured service or product. One effective method for product promotion is through brochures, which aim to inform potential buyers about the offerings. Typically, these brochures consist of a single sheet of paper containing textual descriptions and images supporting the product information. Often distributed free of charge, brochures enable individuals to learn more about the product. Common types of brochures include those featuring food, English language instruction, and educational institutions.

Table 1.	Characteristics	of Res	pondents
----------	-----------------	--------	----------

No	Audience Age	Frequency	Percentage
1	< 25 Years	12	17.65%
2	25 - 35 Years	31	45.59%
3	36 - 45 Years	21	30.88%
4	> 45 Years	4	5.88%
No	Occupation	Frequency	Percentage
1	Housewife	31	45.59%
2	Employee	21	30.88%
3	Civil Servants	8	11.76%
4	Other	8	11.76%
		68	100.00%

Table 1 provides information that the majority of cadre mothers aged 36 – 45 years whose profession is mostly housewives.



#### Figure 5. Photo with Participants

Figure 5 depicts the enthusiastic participants of the outreach program capturing memorable moments through group photos. As part of the evaluation process, both pre-test and post-test activities were conducted. The Pretest typically includes questions or information related to previous units covered in the curriculum. Its purpose is to gauge the participants' understanding of the upcoming material. Conversely, a post-test comprises assessments administered after participants have completed the assigned tasks or received instruction. Below are the results obtained from the pretest and posttest assessments.

Table 2. Pre-test and Post-test Analysis

No	Question	Pre-test	Post-test
1	Understanding Stunting	64.3%	84.8%
2	Causes of Stunting	66.9%	83.9%
3	Handling Stunting	61.9%	82.5%
4	1000 HPK	67.6%	88.9%
5	MPASI	65.2%	88.8%
6	Exclusive Breast Milk Knowledge	73.8%	87.5%
7	Making MPASI	74.2%	89.8%
8	Toddler Growth	63.9%	84.9%
9	Toddler Development	62.9%	83.9%
10	Parenting	68.4%	85.9%
	Mean	66.9%	86.1%

Table 2 presents the score improvements observed between the pretest and posttest, indicating an enhancement in participants' knowledge resulting from this activity. Further details on the statistical test outcomes conducted using distinct methods for both pretest and posttest are provided below.

Table 3. The Results of Paired T-test

No	Paired T-test	Mark
1	Pre-test	66.3
2	Post-test	85.3
3	Correlation	0.74395
4	Sig	0.01362
5	Sig (2-Tailed)	0.000

Table 3 illustrates the significant benefits of this training for participants, showcasing an increase in knowledge as evidenced by the pre-test and post-test results from the correlation paired t-test. The findings reveal a notable difference between the pretest and post-test outcomes, as indicated by the results of the Paired Sample T-Test with an Alpha level of 5%.

#### CONCLUSION AND SUGGESTION

The workshop revealed a low level of knowledge regarding stunting incidents among participants. However, the outreach activity proved highly beneficial in increasing awareness regarding the incidence of stunting. Enthusiastic participation was observed among 68 attendees, predominantly aged between 36 and 45 years, with housewives being the most represented profession. Analysis of the pre-test and posttest results indicated a notable 19.2% increase in knowledge. Furthermore, the correlation paired t-test demonstrated a significant difference between the pre-test and post-test results, as confirmed by the Paired Sample T-Test with an Alpha level of 5%.

#### ACKNOWLEDGMENTS

IextendmyheartfeltgratitudetoLPPMUNUSA for their generous support and for providing the resources that made this community service possible. My sincere appreciation also goes to the dedicated members of RW 07, Wonokromo Village, Wonokromo District, Surabaya City, along with the committed cadres and residents who actively participated in this initiative. Your enthusiasm and involvement were key factors in the success of our efforts. Lastly, I want to emphasize that there are no conflicts of interest with any parties involved in this community service project.

#### **BIBLIOGRAPHY**

- Fikawati, S., Syafiq, A., Veratamala, A., 2017. Gizi Anak dan Remaja. PT. Raja Grafindo Persada.
- J, R.F., Huljannah, N., Rochmah, T.N., 2022. Stunting Prevention Program in Indonesia: A SYSTEMATIC REVIEW. Media Gizi Indonesia Vol. 17(3), Pp. 281-292. https://doi.org/10.20473/ mgi.v17i3.281-292
- Kemensetneg RI, 2021. Perpres Nomor 72 tahun 2021 Tentang Percepatan Penurunan Stunting.
- Kementerian Kesehatan Republik Indonesia, 2022. Keputusan Menteri Kesehatan Republik Indonesia Nomor HK 01.07/Menkes/1928/2022 tentang Pedoman Nasional Pelayanan Kedokteran Tata Laksana Stunting.
- Lawaceng, C., Rahayu, A.Y.S., 2020. Tantangan Pencegahan Stunting pada Era Adaptasi Baru "New Normal" melalui Pemberdayaan Masyarakat di Kabupaten Pandeglang. Jurnal Kebijakan Kesehatan Indonesia: JKKI Vol. 9(3), Pp. 136-146. https://doi.org/10.22146/ jkki.57781
- Lestari, W., Kristiana, L., Paramita, A., 2018. Stunting : Studi Konstruksi Sosial Masyarakat Perdesaan dan Perkotaan Terkait Gizi dan Pola Pengasuhan Balita di Kabupaten Jember. Aspirasi: Jurnal Masalah-Masalah Sosial Vol. 9(1), Pp. 17-33. https://doi.org/10.46807/ aspirasi.v9i1.985
- Lonang, S., Normawati, D., 2022. Klasifikasi Status Stunting pada Balita menggunakan K-Nearest Neighbor dengan Feature Selection Backward Elimination. Jurnal Media Informatika Budidarma Vol. 6(1), Pp. 49-56. https://doi. org/10.30865/mib.v6i1.3312
- Mashar, S.A., Suhartono, S., Budiono, B., 2021. Faktor-Faktor yang Mempengaruhi Kejadian Stunting pada Anak: Studi Literatur. Jurnal Serambi Engineering Vol. 6(3), Pp. 2076-2084. https://doi.org/10.32672/jse.v6i3.3119
- Peraturan Walikota Surabaya, 2022. Percepatan Penurunan Stunting di Kota Surabaya.

- Rahmadhita, K., 2020. Permasalahan Stunting dan Pencegahannya. Jurnal Ilmiah Kesehatan Sandi Husada Vol. 9(1), Pp. 225-229. https:// doi.org/10.35816/jiskh.v11i1.253
- Ruswati, R., Leksono, A.W., Prameswary, D.K., Pembajeng, G.S., Inayah, I., Felix, J., Dini, M.S.A., Rahmadina, N., Hadayna, S., Aprilia, T.R., Hermawati, E., Ashanty, A., 2021. Risiko Penyebab Kejadian Stunting pada Anak. Jurnal Pengabdian Kesehatan Masyarakat (Pengmaskesmas) Vol. 1(2), Pp. 34-38.
- Sasmita, L.C., 2021. Prevention of Childhood Stunting Problems with The Mayang-Wati Program. Jurnal Layanan Masyarakat (Journal of Public Services) Vol. 5(1), Pp. 140-150. https://doi.org/10.20473/jlm.v5i1.2021.140-150

- Setiyabudi, R., 2019. Stunting, Risk Factor, Effect and Prevention. MEDISAINS Jurnal Ilmiah Ilmu-Ilmu Kesehatan Vol. 17(2), Pp. 24-25. http:// dx.doi.org/10.30595/medisains.v17i2.5656
- Sutarto, Mayasari, D., Indriyani, R., 2018. Stunting, Faktor Resiko dan Pencegahannya. Journal Agromedicine Vol. 5(1), Pp. 540-545.
- Yanti, N.D., Betriana, F., Kartika, I.R., 2020. Faktor Penyebab Stunting pada Anak: Tinjauan Literatur. REAL in Nursing Journal Vol. 3(1), Pp. 1-10. https://doi.org/10.32883/rnj.v3i1.447
- Yuwanti, Y., Mulyaningrum, F.M., Susanti, M.M., 2021. Faktor - Faktor yang Mempengaruhi Stunting pada Balita di Kabupaten Grobogan. Jurnal Keperawatan dan Kesehatan Masyarakat Cendekia Utama Vol. 10(1), Pp. 74-84. https://doi.org/10.31596/jcu.v10i1.704