

Original Paper

Stunting and Quality of Life: The nexus between Malnutrition, Community Empowerment and Economic Development

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Abstract

The community service program was implemented to overcome the stunting problem in Lenggahsari Village, Bekasi Regency, West Java. Stunting due to malnutrition causes pollution to become a problem in this village. The government has taken serious steps with the national stunting prevention movement. The method used is socialization and training about stunting, which aims to change mindsets towards a clean and healthy environment, support zero new stunting, and improve the quality of life. The flow stages of implementing this service program include preparation, stunting socialization, and evaluation. The results of implementing the community service program are increasing knowledge and changing the local community's mindset regarding the dangers of stunting and reducing the stunting rate in Lenggahsari Village. The socialization of stunting prevention is a step in contributing to the government and the state in the economic growth and development of the country; stunting prevention is a long-term investment in the next generation.

Keywords: Community Empowerment, Nutrition, Stunting, Quality of Life

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1. Background

Stunting is a chronic nutritional problem that occurs due to a lack of nutritional intake over a long period, which results in disrupted growth in children (La Ode Alifariki, 2020; Megawati & Wiramihardja, 2019; Sinuraya & Amalia, 2019). Stunting is one of the causes of stunted height in children, so children who experience stunting have a lower height than children their age. Stunting occurs due to several factors, namely poor parenting practices, limited health services, lack of family access to nutritious food, and lack of access to clean water and sanitation at home (Souisa et al., 2021).

The condition of failure to thrive in children under five caused by chronic malnutrition, especially during the First 1,000 Days of Life (HPK), causes stunting. Recurrent infections and inadequate nutritional intake are two factors that cause stunting, which is influenced by inadequate parenting patterns (de Onis et al., 2013; Widyastuti et al., 2022). Babies lack nutrition in the womb and the early period after birth, but stunting only appears after the baby is two years old (Widyastuti et al., 2022). Any child whose length or height, according to age, is lower than the applicable national standards is considered stunted. The Maternal and Child Health (KIA) book contains the standards. Because stunting affects children's brain development, their intelligence level is reduced. Many nutritional problems, including stunting, are estimated to contribute to the loss of 2-3% of gross domestic product (GDP) each year. In addition, children are more susceptible to chronic diseases in adulthood (Nirmalasari, 2020; Nurhidayah et al., 2023).

Stunting is referred to as a condition where a toddler experiences retarded physical growth in height or body length when compared to the standards determined for his age. Measurements are carried out by referring to child growth standards set by WHO. Stunting is when the measurement results are lower than twice the median standard deviation. Stunting in toddlers can be caused by various factors, such as low socio-economic conditions, nutritional status of the mother during pregnancy, history of illness in the baby, and lack of nutritional intake in the baby (Hall et al., 2018; Nurva & Maharani, 2023; Rahmadhita, 2020). Usually, these various factors last for a long period (chronic). Stunting needs to be given serious attention because it can affect a child's development into adulthood, especially threatening the risk of disrupting physical growth and thought processes. Apart from that, there is also a risk of becoming obese later in life, thereby increasing the risk of various non-communicable diseases, such as diabetes, hypertension, cancer, etc. (Nirmalasari, 2020).

One previous study conducted in Demak Regency, located in the province of Central Java, Indonesia, showed that children's food intake is one factor contributing to the risk of stunting in the region (Lawaceng & Rahayu, 2020). Despite this, Central Java is one of Indonesia's regions with important national rice supplies, ranking 6th in rice productivity in 2013. However, it is seventh in terms of chronic malnutrition in children. In 2015, a study was carried out to observe three sub-districts in Demak, which had the highest rice production but had the worst level of nutritional status for children under five. The selected children were aged 6 to 60 months, were breastfed, and came from farming families (Aisah et al., 2019; Christina et al., 2022). Then, the children's food intake data was collected, and their nutritional status was measured. Approximately one-third (31.9%) of the 335 children who were the subjects of this study experienced growth disorders. It is amazing that all children, whether stunted or not, have the same ease in getting food. However, households with children who are not stunted have better food quality in terms of energy, calcium, and iron intake. Eating unhealthy snacks is also known to increase the lack of adequate food intake (Desiplia et al., 2018; La Ode Alifariki, 2020).

Handling stunting is the most important thing in national development through the National Action Plan for Nutrition and Food Security, so in 2018, a national movement to prevent stunting was launched (Communication and Community Services Bureau, 2018). The government has designated 160 districts/cities throughout Indonesia as priority areas for handling stunting (Megawati & Wiramihardja, 2019). Based on monitoring in 2017, it was found that the percentage of children under five who experienced stunting in Indonesia was very high, reaching 29.6%, exceeding the limit set by WHO of 20%. In 2013, a study revealed that stunting in children under five contributed to 1.5 million (15%) deaths of children under five worldwide and resulted in 55 million children losing a healthy period of life every year (Ministry of Health, 2018; WHO, 2014 in (Sinuraya & Amalia, 2019).

Based on the results of observations made by the Islamic University 45 community service team, there are various problems related to stunting that arise in the Lenggahsari Village area, Bekasi Regency, West Java, including a lack of awareness regarding nutritional knowledge and a lack of public awareness regarding environmental cleanliness. After conducting observations at the post of Children Integrated Service for health care (Posyandu) in Lenggahsari Village, the community

service team received information that Lenggahsari Village had cases of stunting, where there were 15 children affected by stunting, which means that the village had quite high levels of stunting data. Therefore, community service programs related to stunting prevention outreach are implemented to change mindsets towards a clean and healthy environment, supporting zero new stunting and improving the quality of life through community empowerment.

2. Method

Implementation of community service applies community education methods in the form of socialization and training with several stages (Basri et al., 2022; Malikhatus et al., 2021; Putra et al., 2020). In the preparation stage, the activity will be to provide outreach to residents of Lenggahsari Village spread across several hamlets, which will be carried out on 31 August and 07 September 2023. This activity is carried out to develop the knowledge of residents of Lenggahsari Village, Bekasi Regency, West Java, regarding stunting and increase awareness about health and environmental cleanliness due to a need for more understanding knowledge about stunting. At the implementation stage, outreach was carried out and provided knowledge material to Lenggahsari Village residents regarding stunting to support the community's mindset through the 5 pillars of Lenggahsari Village. The evaluation stage is the final stage, which contains an evaluation of the activities that have been carried out through a question-and-answer session so that the knowledge or material that has been presented is expected to be useful in the future. This socialization was carried out in several main stages, which can be seen in Figure 1 below:

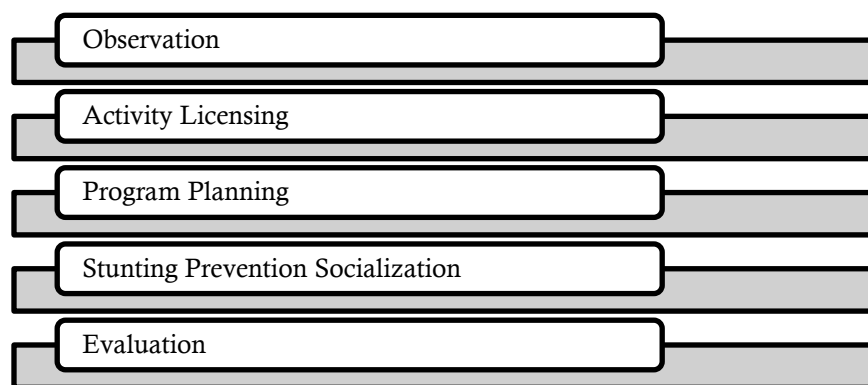


Figure 1. Stages of Implementation of Community Service

3. Results

Community service aims to disseminate science, technology, and art to the people of Lenggahsari Village. Stunting and quality of life socialization program activities: The nexus between malnutrition and community empowerment will be carried out starting on 31 August 2023 and 07 September 2023 in Lenggahsari Village, Branchbungin District, Bekasi Regency.

The first socialization activity that received support from Dompot Dhuafa through the Darling (Mobile Kitchen) activity, activity began with preparations before the activity, namely gathering information to related parties regarding stunting cases, such as the Head of the Community Health Center, Posyandu Cadres, and village midwives. From there, it can be seen that the cause of stunting in Lenggahsari Village is a lack of nutritious food caused by economic factors and a lack of knowledge about stunting. After making preparations, the second activity is participant registration by filling in data such as family card number, NIK, child's name, date of birth, parents' names, information about how many children they have, address, and child weighing data to find out whether the child's weight is appropriate for their development or not and whether there were signs of stunting during the weighing as a contribution step by the community service team who received direction from the Bekasi District Health Service, as can be seen in Figure 1.



Figure 1. Body Weight Registration

The socialization activity contained a presentation of material regarding healthy living education and stunting prevention so that families avoid the risk of stunting, which Mr. H. Norsan delivered as Head of the Branchbungin Community Health Center, a resource person for the stunting socialization activity. Discussion activity regarding stunting using a question-and-answer method between participants and resource persons. This discussion session was given 5 minutes and the participant asked one question, namely a mother, to the resource person who asked about the development of the child who was experiencing delays and was underweight and thus had symptoms. As a child experiencing stunting, the resource person then suggested checking with the local health center and adjusting the child's nutrition so that it was sufficient to meet the child's nutrition every day.



Figure 2. Stunting socialization

This socialization activity is very effective given environmental problems that are still indifferent to cleanliness, especially regarding waste, people who lack knowledge about nutrition, and the habit of defecation, which is continued and lack of awareness of the dangers that defecation will cause, such as polluted water sources, easy infection. Disease malnutrition in children so that they can experience symptoms of stunting, and there are still many impacts that this behavior can cause. The weakness of this activity lies in the enthusiasm of the participants. The participants' enthusiasm can only be triggered by the symbolic provision of healthy food and other consumption. This condition occurs because they are willing to give their time and leave their jobs temporarily to participate in this socialization activity.

4. Discussion and Benefits

Stunting is a global health problem closely related to poor nutrition in children. This fact occurs when a child experiences body growth that is not appropriate for his age, ultimately resulting in a height that is shorter than it should be. Stunting mainly occurs during the early growth period, namely in the first 1,000 days of a child's life, from conception until the age of two years. Inadequate

nutritional intake, frequent infections, and inadequate socio-economic conditions cause this condition.

The purpose of this discussion is to determine the level of success of extension activities. The interactive dialogue between participants and resource persons, which took place intensively, showed that the participants had high enthusiasm to understand the material presented by the resource persons. There were several substantive questions from participants, including a. Participants asked how to assess/measure that a child is suffering from stunting, what action to take if a family member is indicated to be suffering, and how to treat them. b. Participants asked what if there were many children suffering from stunting in their village, what would be the role of the village government?

The link between stunting and human development disrupts the growth of the brain and critical body organs during the early development period, resulting in decreased cognitive function and mental development, negatively impacting education, productivity, and a person's ability to contribute to society. Children who experience stunting tend to have a higher risk of developing chronic diseases such as diabetes, heart disease, and hypertension in adulthood. This condition can reduce life expectancy and overall quality of life. Stunting can hinder the development of an individual's physical and mental abilities. This condition impacts economic productivity in the long term because individuals who experience stunting may have limitations in working and contributing to the economy.

The goals of stunting and quality of life through community empowerment can help children grow and develop well and increase their abilities in various aspects of life, including education, work, and participation in society; reducing the level of stunting can help improve the economic welfare of a country. Individuals who are physically and mentally healthy are better able to contribute to the economic growth and development of the country, and preventing stunting is a long-term investment in future generations. Children who grow well are more likely to reach their full potential, contributing to sustainable human development. Stunting and quality of life are closely related, and efforts to prevent stunting can help ensure that every individual has equal opportunities to grow and develop optimally, contribute to society, and achieve full potential in social life.

5. Conclusion

Based on the results of the implementation of community service in Lenggahsari Village, Bekasi Regency, West Java, it provides the benefits of success in the form of increased understanding and quality of life with the socialization of stunting prevention, increasing potential in social life and the socialization of stunting prevention as a contribution step to the government and the state in economic growth and development country because stunting prevention is a long-term investment in the next generation.

Recommendation

Recommendations that our community service team can provide are related to increasing stunting prevention so that it becomes a new zero stunting area in the form of interventions through the government, activating various interventions that support improving the quality of nutrition and health for children and pregnant women and active stunting strategies aimed at ensuring that all resources are directed and allocated to support and finance priority activities, especially increasing the coverage and quality of nutrition services to households.

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References

- Aisah, S., Ngaisyah, R. D., & Rahmuniyati, M. E. (2019). *Personal hygiene dan sanitasi lingkungan berhubungan dengan kejadian stunting di Desa Wukirsari Kecamatan Cangkringan*. 1(2), 49–55.
- Basri, H., Putra, P., Supratno, S., Irham, I., Rofieq, A., Rusham, R., Maysaroh Chairunnisa, N., & Amin Ash Shabah, M. (2022). *Buku Panduan Kuliah Kerja Nyata (KKN) Era Covid-19 Periode Semester Ganjil Tahun Akademik 2021/2022*.
- Christina, C., Gunawan, G., Sultanea, R., Lestari, D., Azizah, U., Haniifah, H., Yulatifah, T., Fatimah, R., Muzaki, A., & Munir, M. (2022). Pola Asuh Orangtua Dan Kurangnya Gizi Anak Penyebab Stunting Di Desa Karangduwur, Kalikajar, Wonosobo. *Jurnal Pengabdian Masyarakat Madani (JPMM)*, 2(2), 188–195.
- de Onis, M., Dewey, K. G., Borghi, E., Onyango, A. W., Blössner, M., Daelmans, B., Piwoz, E., & Branca, F. (2013). The World Health Organization's global target for reducing childhood stunting by 2025: Rationale and proposed actions: WHO global stunting reduction target. *Maternal & Child Nutrition*, 9, 6–26. <https://doi.org/10.1111/mcn.12075>
- Desiplia, R., Indra, E. N., & Puspaningtyas, D. E. (2018). Asupan energi, konsumsi suplemen, dan tingkat kebugaran pada atlet sepak bola semi-profesional. *Ilmu Gizi Indonesia*, 2(1), 39–48.
- Hall, C., Syafiq, A., Crookston, B., Bennett, C., Hasan, M. R., Linehan, M., West, J., Torres, S., & Dearden, K. (2018). Addressing Communications Campaign Development Challenges to Reduce Stunting in Indonesia. *Health*, 10(12), 1764–1778. <https://doi.org/10.4236/health.2018.1012133>
- La Ode Alifariki, S. K. (2020). *Gizi Anak dan Stunting*. Penerbit LeutikaPrio.
- 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*, 9(3), 136–146.
- Malikhatun, I., Putra, P., & Tirtajaya, M. D. (2021). PENYULUHAN PERENCANAAN MANAJEMEN DANA DESA. *DEVOSI*, 2(1), 10–14. <https://doi.org/10.33558/devosi.v2i1.2845>
- Megawati, G., & Wiramihardja, S. (2019). Peningkatan Kapasitas Kader Posyandu Dalam Mendeteksi Dan Mencegah Stunting. *Dharmakarya: Jurnal Aplikasi Ipteks untuk Masyarakat*, 8(3), 154–159.
- Nirmalasari, N. O. (2020). Stunting Pada Anak: Penyebab dan Faktor Risiko Stunting di Indonesia. *Qawwam*, 14(1), 19–28.
- Nurhidayah, S., Basri, H., Ridwan, R., Putriani, P., Widayati, D. D., & Khoiriyah, U. (2023). Penyuluhan Perubahan Pemahaman Dalam Pencegahan Dan Penurunan Stunting Di Kecamatan Batujaya Karawang. *Devosi*, 4(1), 70–80.
- Nurva, L., & Maharani, C. (2023). Analisis Pelaksanaan Kebijakan Penanggulangan Stunting: Studi Kasus di Kabupaten Brebes. *Jurnal Kebijakan Kesehatan Indonesia: JKKI*, 12(2), 74–83.
- Putra, P., Huda, N., Basri, H., Alrasyid, M. H., Sardiana, A., Amalia, R. M., Amalia, A. N., & Qurnain, D. S. (2020). Sinergitas Pemberdayaan Pondok Pesantren. *Devosi*, 1(2), 13–17.
- Rahmadhita, K. (2020). Permasalahan stunting dan pencegahannya. *Jurnal Ilmiah Kesehatan Sandi Husada*, 9(1), 225–229.
- Sinuraya, R. K., & Amalia, R. (2019). Peningkatan Pengetahuan Masyarakat Dalam Mencegah Stunting. *Jurnal Pengabdian Kepada Masyarakat*, 3(2), 48–50.
- Souisa, G. V., Rehena, Z., & Joseph, C. (2021). PKM Ibu dan Balita Stunting Di Puskesmas Perawatan Waai, Kabupaten Maluku Tengah. *AMALIAH: JURNAL PENGABDIAN KEPADA MASYARAKAT*, 5(1), 19–31.
- Widyastuti, Y., Rahayu, U. F. N., Mulyana, T., & Khoiri, A. M. (2022). Sosialisasi Stunting dan Upaya Pencegahannya Di Desa Padarincang, Kecamatan Padarincang, Kabupaten Serang. *Komunitas: Jurnal Pengabdian Kepada Masyarakat*, 2(1).