



EFFECTIVENESS OF THE SUPPLEMENTARY FEEDING PROGRAM ON THE NUTRITIONAL STATUS OF STUNTED TODDLERS

Nurlathifah N. Yusuf*, Nurul Fitriani, Siti Naili Ilmiyani, Supiani

Program Studi Profesi Bidan, STIKes Hamzar Memben Lombok Timur, Jln TGH Zainuddin Arsyad, Mamben Daya, Lombok Timur, Nusa Tenggara Barat 83658, Indonesia

*nurlathifahyusuf@gmail.com

ABSTRACT

Providing additional food made from local food is one strategy for handling nutritional problems in toddlers and pregnant women. Lack of nutritious food intake in toddlers is one of the direct causes of toddler nutritional problems such as Stunting. So it is hoped that made from local food can encourage food independence and family nutrition in a sustainable manner. Aim to determine the effectiveness of providing local supplementary food on the nutritional status of stunted toddlers at Sekotong Health Center. Method: Pre-experimental research type with a one group pretest posttest design. The population, namely all stunted toddlers in October 2023, is 29 people. The sampling technique in this research was total sampling. The number of samples in this study was 29 people. Statistical tests use the Wilcoxon test. Results: The nutritional status of stunted toddlers before being given local was mostly in the Stunting category, as many as 20 people (69.0%). After being given, most of the Stunting category was 22 people (75.9%), with a mean value before of 1.69, while after being given the mean was 1.76. The Wilcoxon test results obtained a p value of 0.157 ($p > 0.05$). There is no effectiveness of local on the nutritional status of stunted toddlers at Sekotong Health Center.

Keywords: nutritional status; stunting; supplementary feeding; toddlers

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INTRODUCTION

The development of high-quality human resources is a national development priority. Good nutritional status is a key factor for the success of human resource development. Pregnant women and toddlers are particularly vulnerable groups that require special attention due to the long-term impacts of malnutrition. Additionally, the toddler years represent a period of rapid growth and development, making it a critical time for preventing nutritional deficiencies. Nutritional problems can arise from various factors, including inadequate intake of nutritious food, frequent infections, improper caregiving practices, lack of knowledge, and difficulties in accessing healthcare services. Socioeconomic conditions also indirectly affect access to nutritious food and healthcare services (Kemenkes RI, 2023). The World Health Organization (WHO) estimates that the global prevalence of stunting among toddlers was 22%, or 149.1 million children, in 2020. This data is based on information from the United Nations Children's Fund (UNICEF), WHO, and the World Bank. In 2020, the highest rates of stunting were observed in Eritrea at 49.1% and Timor-Leste at 48.8% (unicef, 2023; WHO, 2023)

In Indonesia, the problem of toddler malnutrition remains significant. Data from the Total Diet Survey (SDT) in 2014 revealed that 48.9% of toddlers had an energy intake below the recommended Energy Adequacy Rate (EAR) of 70% - <100%, with 6.8% of toddlers having a very low energy intake (<70% EAR). Additionally, 23.6% of toddlers had inadequate protein intake compared to the recommended Protein Adequacy Rate (PAR) of <80% PAR. The 2017 Nutritional Status Monitoring (PSG) indicated that the prevalence of stunting among toddlers in Indonesia was still high at 29.6%, exceeding the WHO threshold of 20%. According to the 2021 Indonesian Nutrition Status Survey (SSGI), 52.5% of toddlers received a diverse diet (Kemkes RI, 2021). The 2022 Indonesian Nutrition Status Survey (SSGI) reported the following prevalence rates: stunting at 21.6% based on Height-for-Age (HAZ), wasting at 7.7% based on Weight-for-Height (WHZ), underweight at 17.1% based on Weight-for-Age (WAZ), and overweight at 3.5% based on Weight-for-Height (WHZ) (Kemkes RI, 2023).

The results of the Indonesian Nutrition Status Survey (SSGI) for West Nusa Tenggara (NTB) show the prevalence rates for toddlers as follows: stunting at 32.7%, wasting at 8.7%, underweight at 24.2%, and overweight at 2.1%. According to the West Nusa Tenggara Health Office, stunting is a condition where a child's growth is impaired due to chronic nutritional deficiencies, resulting in the child being too short for their age (Dinkes NTB, 2019). The nutritional status of toddlers in West Lombok Regency reveals an 18.2% prevalence of underweight toddlers (Weight-for-Age), which is higher compared to East Lombok Regency (14%) and Mataram City (17.4%). The percentage of short toddlers (Height-for-Age) is 19%, which is also higher than East Lombok Regency (17%) and Mataram City (17.1%). Meanwhile, the percentage of toddlers with poor nutritional status (Weight-for-Height) is 5.7%, and the percentage of toddlers with severe malnutrition is 0.7% (Health Profile of NTB Province 2022). According to DP2KBP3A data from the West Lombok Regency sectoral information system, stunting prevalence was 28.9% in 2018, 23.13% in 2019, 20.89% in 2020, 22.71% in 2021, 18.98% in 2022, and 12.38% in 2023 (Dinkes LOBAR, 2023).

Based on the data from the West Lombok Regency Health Center for Sekotong Health Center, the percentage of underweight toddlers (Weight-for-Age) is 18%, stunting toddlers (Height-for-Age) is 17.9%, and wasting toddlers (Weight-for-Height) is 4.4% (Health Profile of West Lombok 2022). As of October 2023, the data shows that there are 338 stunted toddlers, with the following details: 285 toddlers with good nutritional status, 29 toddlers with poor nutritional status, 4 toddlers with excess nutrition, 2 toddlers with obesity, and 6 toddlers at risk of excess nutrition. Additionally, there are 369 underweight toddlers and 83 wasting toddlers (Puskesmas Sekotong, 2023).

Sari & Nirmalarumsari (2023) Growth is influenced by both direct and indirect factors. Direct factors include food intake (consumption of macro and micronutrients) and health conditions (infectious diseases). Indirect factors encompass household food security, parenting practices, environmental sanitation, and the utilization of healthcare services. All these factors are influenced by human resources, economic conditions, and organizational factors driven by education. The most fundamental causes of child growth and development issues stem from political, ideological, and socioeconomic structures supported by existing resource potential. Supplementary feeding is related to stunting in children aged 1-3 years. The type of supplementary food given based on the child's age can affect the physiological functions of the kidneys and digestive system, which are not fully mature in infants. Therefore, it is necessary to choose appropriate food ingredients in terms of nutritional content and safety for toddler health. Milk and eggs, used as the main ingredients in supplementary feeding interventions to improve nutritional status, are considered appropriate because they can

increase both the quantity and quality of protein(Waroh, 2019;Laksmiwati et al., 2021;Hermayani & Maran, 2023).

The research by Rochman et al., (2022) After three months of the Supplementary Feeding Program, the percentage of underweight children under five years old decreased from 42.4% to 39.4%. Statistical analysis using a paired t-test showed a significant difference in the nutritional status of children under five based on BMI/U before and after the PMT program. These findings indicate that the Supplementary Feeding recovery program has a positive impact on the nutritional status of stunted toddlers in the study area, highlighting the effectiveness of supplementary feeding interventions in addressing child malnutrition(Nugroho et al., 2023;Arisjulyanto et al., 2022).

Supplementary feeding programs using local food ingredients are one of the strategies for addressing nutritional issues in toddlers and pregnant women. These activities should be accompanied by nutrition and health education aimed at behavior change, such as supporting breastfeeding, providing education and counseling on feeding practices, and promoting family hygiene and sanitation. The use of local food ingredients in is expected to enhance food and nutrition security for families in a sustainable manner(Kemenkes RI, 2022). Various efforts are needed to prevent and improve the nutritional status of stunted toddlers to ensure that future generations can enjoy a better quality of life. One of the government’s initiatives is the local food-based program for toddlers facing nutritional problems. The aim of this research is to analyze the effectiveness of the local supplementary feeding program in improving the nutritional status of stunted toddlers.

METHOD

This research employs a pre-experimental design with a one-group pretest-posttest approach. The study focuses on toddlers with stunting and poor nutritional status based on Weight-for-Height at Sekotong Health Center in October 2023, with a sample size of 29 individuals. The sampling technique used is total sampling, a method where the entire population of a study group is included in the sample. In other words, every individual or unit within the population is part of the research. This approach is often employed when the population is small and manageable, making it feasible to include everyone in the study. The statistical test used for analysis is the Wilcoxon signed-rank test.

RESULTS

Table 1.
Frequency Distribution of Toddlers' Nutritional Status Before and After Supplementary Feeding

Nutritional Status	f	%
Pretest		
<i>Severe Stunting</i>	9	31,0
<i>Stunting</i>	20	69,0
Posttest		
<i>Severe Stunting</i>	7	24,1
<i>Stunting</i>	22	75,9

Table 1, the frequency distribution of toddlers' nutritional status before receiving supplementary feeding at Sekotong Health Center shows that the majority were in the stunting category, with 20 children (69%). After receiving supplementary feeding, the frequency distribution of toddlers' nutritional status at Sekotong Health Center shows that the majority still remained in the stunting category, with 22 children (75.9%).

Table 2.
Wilcoxon Test Results for the Effectiveness of the Supplementary Feeding Program on the Nutritional Status of Stunted Toddlers

Nutritional status					Uji Wilcoxon	
	f	Mean	Min	Max	Z	P value
Pretest	29	1,69	1,51	1,87	-1,414	0,157
Posttest	29	1,76	1,59	1,92		

Table 2, the results of the statistical test using the Wilcoxon test show a mean value of 1.69 before the supplementary feeding program, with a minimum value of 1.51 and a maximum value of 1.87. After the supplementary feeding program, the mean value increased to 1.76, with a minimum value of 1.59 and a maximum value of 1.92. The p-value was 0.157 ($p > 0.05$), indicating that there is no significant effectiveness of the supplementary feeding program on the nutritional status of stunted toddlers at Sekotong Health Center.

DISCUSSION

Effectiveness of Supplementary Feeding on the Nutritional Status of Toddlers

Based on Table 3, the results of the Wilcoxon test show that the mean value of toddlers' nutritional status before the supplementary feeding program was 1.69, with a minimum of 1.51 and a maximum of 1.87. After the supplementary feeding program, the mean value increased to 1.76, with a minimum of 1.59 and a maximum of 1.92. The p-value was 0.157 ($p > 0.05$), indicating that the supplementary feeding program was not effective in improving the nutritional status of stunted toddlers at Sekotong Health Center. These findings are consistent with the study conducted by Masri et al. (2020), which also found no effectiveness of supplementary feeding on toddlers' nutritional status, with a p-value of 0.078 ($p > 0.05$). Similarly, the study by Putri and Mahmudiono (2020) demonstrated no significant difference in toddlers' nutritional status based on weight-for-height/height-for-age before and after the supplementary feeding program ($p = 0.585$). Additionally, there was no significant difference in toddlers' nutritional status after the supplementary feeding program compared to when they were no longer receiving the program ($p = 0.430$). The lack of significant differences in nutritional status may be due to suboptimal consumption of the supplementary food.

These results are also in line with the research conducted by Aspatria (2020), which indicated that there was no significant impact on improving toddlers' nutritional status as measured by height-for-age, with a p-value of 0.09 ($p > 0.05$). Aspatria (2020) explains that this is because height growth reflects long-term food consumption adequacy and quality, and unlike weight changes, height growth is irreversible. The research by Qolbiyah et al., (2021) found no impact of supplementary feeding on toddlers' nutritional improvement. This is because, although toddlers with inadequate nutritional intake were given supplementary foods such as milk and pumpkin, which are rich in nutrients like vitamin A, vitamin B1, vitamin C, protein, and carbohydrates, parents continued to provide only the usual family meals in their daily lives. As a result, nutritious foods were provided only occasionally rather than consistently over a long period, which led to insufficient fulfillment of the child's nutritional needs.

According by Masri et al., (2021) One of the causes of inadequate food intake in toddlers is the "picky eater" factor, which affects a large proportion of toddlers. This issue arises from the habit of consuming excessive amounts of snacks or junk food, leading to toddlers feeling full before they can eat their main meals. As a result, the percentage of main meal consumption among toddlers is only about 65%. Additionally, the provision of supplementary food by the mothers of the respondents was inadequate in both quantity and method. Toddlers were supposed to consume 12 pieces of supplementary biscuits per day, but on average, they only consumed 7-8 pieces, which is about 58%-67% of the recommended amount. The

supplementary food was not consumed properly because toddlers preferred snacks over the supplementary food, and some mothers gave milk more than three times a day, claiming that the child cried for milk (Kharisna et al., 2024).

Nutritional problems are caused by various factors. Inadequate intake of nutritious food and frequent illness are direct causes of nutritional issues. Improper parenting practices, lack of knowledge, limited access to healthcare services, and socio-economic conditions also indirectly affect access to nutritious food and healthcare services (Kemenkes RI, 2023). Height-for-age is considered an indicator of growth in toddlers and can also reflect nutritional adequacy during this period. If a toddler's nutritional needs are not met, it can impact their growth, development, and cognitive abilities, and if this situation persists, it may lead to reduced competitiveness in adulthood (Sulistiningsih, 2020; Ruaida, 2018; Savitri et al., 2022). The lack of impact of the Supplementary Feeding Program on the nutritional status of stunted toddlers is due to several factors. First, although the supplementary foods provided have high nutritional content, parents' daily feeding patterns are inconsistent. Parents tend to give whatever food the family usually consumes and only provide nutritious food at certain times, rather than continuously. This results in the child's nutritional intake being suboptimal. Additionally, other factors such as household food security, child-rearing practices, environmental sanitation, and the utilization of healthcare services also affect the effectiveness of the Supplementary Feeding Program. If these factors are not addressed simultaneously, providing supplementary food alone will not be sufficient to improve the nutritional status of stunted toddlers. Lastly, parents' understanding and education about the importance of a balanced nutritional intake and the proper administration of supplementary food also play a crucial role. Without adequate knowledge, efforts to provide supplementary food will not achieve the desired outcomes (Fajar et al., 2022; Suksesty, 2020; Jamaluddin et al., 2022; W et al., 2023).

Supplementary feeding should include high-quality foods that meet the child's nutritional needs. However, if the supplementary foods provided are not nutritionally balanced or do not meet the child's energy and protein requirements, the results will not be optimal. For example, supplementary foods that are high in carbohydrates but low in protein and vitamins will not support healthy growth. Another issue that can affect the effectiveness of supplementary feeding is the mismatch between the type of food and the child's taste preferences. If a child dislikes or refuses to eat the supplementary food due to its taste or texture, the supplementary feeding will not be effective. This problem is further compounded by the fact that caregivers must have adequate knowledge and skills regarding the importance of a balanced diet and how to prepare nutritious meals for the child. For instance, caregivers who do not know how to combine nutritious foods or how to present appealing meals for the child can hinder the success of the supplementary feeding program (Ajiputri et al., 2023; Nawangsari et al., 2023; Pertiwi & Winarti, 2024).

Supplementary feeding programs (PMT) are one of the main strategies in efforts to combat stunting, which is a condition of impaired growth in children due to chronic nutritional deficiencies. Although PMT aims to improve the nutritional status of children and support their growth, these programs often fail to achieve the desired outcomes. One of the main reasons for this failure is the lack of parental knowledge about the importance of a balanced diet and how to prepare nutritious meals (Alifiah et al., 2023). This discussion will explore how a lack of parental knowledge can impact the effectiveness of PMT and its implications for the nutritional status of stunted children. Improper food choices are a significant issue, as parents may focus on only one type of food or fail to vary the types of supplementary foods,

thus not meeting the child's energy, protein, and vitamin needs. Most parents provide supplementary foods that are high in carbohydrates but low in protein and vitamins, which fails to support healthy growth and can exacerbate stunting (Frisnoiry et al., 2024; Kharisna et al., 2024; Komalasari et al., 2021)

Based on the discussion above, it can be concluded that the Supplementary Feeding Program did not effectively improve the nutritional status of stunted toddlers. This is because changes in nutritional status and increases in height require a longer period to manifest. Although almost all toddlers experienced some improvement in height after receiving supplementary feeding for 60 days, none of the toddlers showed a significant improvement in their nutritional status to a normal level. Monitoring and evaluation results from Sekotong Health Center indicated that the supplementary food was not fully consumed by the toddlers due to illness (fever, cough, cold, diarrhea), which reduced their appetite and led to suboptimal nutrient intake. As a result, the program's effectiveness was less than optimal. Therefore, it is recommended that future supplementary feeding programs include stricter monitoring and adherence to nutritional guidelines to achieve the desired outcomes.

CONCLUSION

Based on the background and findings, it can be concluded that the nutritional status of stunted toddlers at Sekotong Health Center before the supplementary feeding program was predominantly in the stunting category, with 20 children (69.0%). After the supplementary feeding program, the nutritional status of stunted toddlers remained largely in the stunting category, with 22 children (75.9%). The Supplementary Feeding Program was not effective in improving the nutritional status of stunted toddlers at Sekotong Health Center, as indicated by a p-value of 0.157 ($p > 0.05$). This lack of effectiveness was due to the fact that the supplementary food was not fully consumed by the toddlers because they were ill (fever, cough, cold, diarrhea), which decreased their appetite and led to suboptimal nutrient intake.

REFERENCES

- Abdillah Fajar, S., Dewi Anggraini, C., Husnul, N., Citeras, P., Raya, J., Km, M., & Garut, K. (2022). The Effectiveness Of Supplementary Feeding On The Nutritional Status Of Puskesmas Citeras Garut Regency. *Nutrition Scientific Journal*, I(1), 30–40. <https://doi.org/10.37058/Nsj.V1i1.5975>
- Alifiah, M., Pramita, N. D., Anggra, S. A., Azal, E. Z. A., Fatimatu Zahroh, D., & Rosmaharani, S. (2023). Pelatihan Pembuatan Pmt Dari Susu Sapi Dan Biskuit Alami Bagi Anak Dengan Stunting Di Desa Murukan, Kabupaten Jombang, Jawa Timur. *Dedikasi Saintek: Jurnal Pengabdian Masyarakat*, 2(2), 126–136.
- Arisjulyanto, D., Ikhtiar, R. W., & Akbar, M. (2022). Application Of Health Promoting University To Students ' Knowledge About The Importance Of Physical Activity. *Jurnal Eduhealth*, 13(02), 694–698.
- Calista Ajiputri, A., Elmira Amanda, W., Sevina Putri, L., Tirta Damayanti, L., & Bataha, K. (2023). Pendampingan Program Pemberian Makanan Tambahan (Pmt) Lokal Sebagai Perubahan Status Gizi Balita Desa Jangur Kabupaten Probolinggo. *Jurnal Pengabdian Kepada Masyarakat Nusantara (Jpkmn)*, 4(3), 1885–1893.
- Dinkes Lobar. (2023). Lombok Barat Dalam Angka.
- Dinkes Ntb. (2019). Profil Kesehatan Ntb 2018.

- Erty Suksesty, C. (2020). Efektifitas Program Pemberian Makanan Tambahan Menggunakan Kombinasi Jus Kacang Hijau Dan Telur Ayam Rebus Terhadap Perubahan Status Gizi Stunting Di Kabupaten Pandeglang. *Jurnal Imj: Indonesia Midwifery Journal*, 3(2), 35–41.
- Frisnoiry, S., Tia, D., Br, R., & S, N. R. (2024). Evaluasi Peran Program Pemberian Makanan Tambahan (Pmt) Terhadap Permasalahan Stunting Di Sumatera Utara Dalam Perspektif Ilmu Ekonomi. *Jurnal Pendidikan Tambusai*, 8, 15602–15610. <https://Www.Jptam.Org/Index.Php/Jptam/Article/View/14602>
- Hermayani, & Maran, P. W. B. (2023). Narrative Literature Review (Nlr) Pneumonia Sebagai Suatu Masalah Kesehatan Pada Bayi. *Jurnal Kesehatan Tropis Indonesia*, 1(3), 1–6.
- Jamaluddin, Madina, J. I., Saida, N., Andari, E. A., Mujahida, N., Fahmi, N., Nur, R., & Pitriani. (2022). Pemberian Makanan Tambahan Pada Balita Berisiko Stunting Di Desa Rerang Kecamatan Dampelas. *Jurnal Pengabdian Dan Pengembangan Masyarakat Indonesia*, 1(2), 76–80. <https://Doi.Org/10.56303/Jppmi.V1i2.51>
- Kemendes RI. (2022). Profil Kesehatan Indonesia 2022.
- Kemendes RI. (2023). Profil Kesehatan Indonesia.
- Kementerian Kesehatan Ri. (2021). Profil Kesehatan Indonesia. In *Kesehatan Indonesia*. Jakarta.
- Kharisna, D., Arfina, A., Febtrina, R., Yanti, S., Natalia, C., & Safitri, D. (2024). Puding Daun Kelor Sebagai Alternatif Pemberian Makanan Tambahan (Pmt) Pada Anak Untuk Pencegahan Stunting. 4(1).
- Komalasari, K., Fara, Y. D., Utami, I. T., Mayasari, A. T., Komalasari, V., & Al Tadam, N. (2021). Efektivitas Pemberian Makanan Tambahan Pemulihan (Pmt-P) Terhadap Kenaikan Berat Badan Balita Stunting. *Journal Of Current Health Sciences*, 1(1), 17–20. <https://Doi.Org/10.47679/Jchs.V1i1.4>
- Laksmiwati, L. G., Ikhsan, M. A., & Warlina, L. (2021). Implementasi Program Gizi Untuk Penurunan Stunting: Studi Kasus Pemerintah Daerah Kabupaten Lombok Utara. *Scientific Journal Of Reflection: Economic, Accounting, Management And Business*, 4(3), 567–577.
- Masri, E., Sari, W. K., & Yensasnidar, Y. (2021). Efektifitas Pemberian Makanan Tambahan Dan Konseling Gizi Dalam Perbaikan Status Gizi Balita. *Jurnal Kesehatan Perintis (Perintis's Health Journal)*, 7(2), 28–35. <https://Doi.Org/10.33653/Jkp.V7i2.516>
- Nawang Sari, E. R., 'Izzah, Z., Salsabila, A., Soeliyono, F. F., & Ifadah, B. K. (2023). Implementasi Pemberian Makanan Tambahan (Pmt) Dan Kegiatan Penyuluhan Gizi Sebagai Penunjang Pencegahan Stunting Desa Pabean. *Jurnal Pengabdian Kepada Masyarakat Nusantara (Jpkmn)*, 4(3), 1865–1872. <https://Doi.Org/10.55338/Jpkmn.V4i3.1218>
- Noer Rochman, E., Inayati Rakhmat, I., Amalia, J., & Fazria Prilyadi, M. (2022). Effect Of Recovery Supplementary Food Program On Nutritional Status Of Stunting Toddlers At Cimahi City Health Center April-July 2021. *Journal Of Health And Dental Sciences*, 2(Volume 2 No 1), 53–62. <https://Doi.Org/10.54052/Jhds.V2n1.P53-62>

- Nugroho, M. R., Yansyah, D., Rhedo, U., Armeidi, E., & Erawani, F. H. (2023). The Efficiency Of Providing Animal Protein From Fish As Supplementary Feeding For Toddlers With Stunting. *Jurnal Ilmiah Pengabdian Masyarakat Bidang Kesehatan (Abdigermas)*, 1(2), 66–72. <https://doi.org/10.58723/Abdigermas.V1i2.24>
- Pertiwi, L. M., & Winarti, E. (2024). Penyuluhan Program Pemberian Makanan Tambahan Lokal Sebagai Penanggulangan Stunting Di Kota Kediri. 3(2), 181–187.
- Puskesmas Sekotong. (2023). Profil & Laporan Puskesmas Sekotong Tahun 2023.
- Qolbiyah, F. N., Yudia, R. C. P., & Aminyoto, M. (2021). Hubungan Praktik Pemberian Makanan Dengan Kejadian Stunting Pada Balita Di Puskesmas Barong Tongkok Kabupaten Kutai Barat. *Jurnal Sains Dan Kesehatan*, 3(6), 853–863. <https://doi.org/10.25026/Jsk.V3i6.901>
- Rafika Sari, & Nirmalarumsari. (2023). Efektifitas Pemberian Makanan Tambahan Terhadap Peningkatan Tinggi Badan Pada Anak Stunting. *Jurnal Promotif Prevensif*, 6(1), 1–6. <http://journal.unpacti.ac.id/index.php/jpp>
- Ruaida, N. (2018). Gerakan 1000 Hari Pertama Kehidupan Mencegah Terjadinya Stunting (Gizi Pendek) Di Indonesia. *Global Health Science*, 3(2), 139–151.
- Savitri, S. R., Harti, H., Faya Faradilla, Indahtussolikha, I., Puji Purnama Sari, Firda Silvia Hasna, Hernanda Putra Pratama, Lumilatul Jihan Ali, Bagas Adi Saputra, Dzulfikar Rasman, & Ashief El Qorny. (2022). Pencegahan Kasus Stunting Melalui Penyuluhan Remaja Dan Pmt (Pemberian Makanan Tambahan) Di Desa Purbosono. *J-Abdi: Jurnal Pengabdian Kepada Masyarakat*, 2(7), 5521–5528. <https://doi.org/10.53625/Jabdi.V2i7.3990>
- Sulistiningsih, A. (2020). Hubungan Pemberian Asi Eksklusif Dengan Kejadian Pneumonia Pada Balita Di Puskesmas Piyungan Bantul. 3–13.
- Unicef. (2023). *Mal Nutrition*.
- W, D. R., Azizah, Z., Rohimah, B., Faizin, M. M., & Novita, D. (2023). Pemberian Makanan Tambahan Modifikasi Berbasis Kearifan Lokal Pada Balita Stunting Dan Gizi Kurang Bersama Anak Paud Tunas Pelangi Di Balai Desa Bluru Kidul. *Nusantara Community Empowerment Review*, 1(1), 1–6. <https://doi.org/10.55732/Ncer.V1i1.749>
- Waroh, Y. K. (2019). Pemberian Makanan Tambahan Sebagai Upaya Penanganan Stunting Pada Balita Di Indonesia. *Embrio*, 11(1), 47–54. <https://doi.org/10.36456/Embrio.Vol11.No1.A1852>
- WHO. (2023). *Stunting Report 2023*.