

Empowering families and health cadres in stunting prevention through nutrition education and assistance for toddler growth and development

Syahrudin Syahrudin¹, Dewi Nurhanifah², Ari Setiawati³, Indrawati Aris⁴, Sylvia Bawiling⁵, Suprpto Suprpto^{6*}

¹ Sekolah Tinggi Ilmu Kesehatan Bhayangkara Makassar, South Sulawesi, Indonesia

² Department of Nursing, Universitas Muhammadiyah Banjarmasin, South Kalimantan, Indonesia

³ Department of Nursing, Universitas Sains Al-Qur'an, Central Java, Indonesia

⁴ Department of Midwifery, Universitas Sains Al-Qur'an, Central Java, Indonesia

⁵ Department of Public Health and Sports Sciences, Universitas Negeri Manado, North Sulawesi, Indonesia

⁶ Department of Nursing, Politeknik Sandi Karsa, South Sulawesi, Indonesia

Submitted: 2026-09-13; Revised: 2026-09-24; Accepted: 2026-09-28

KEYWORDS:

community empowerment;
growth and development;
health cadres;
nutrition education;
stunting prevention.

ABSTRACT

Background: Stunting remains an important public health concern because it can adversely affect children's physical growth, cognitive development, and future quality of life. Family involvement and the active participation of community health cadres are essential for improving nutritional practices and ensuring regular monitoring of toddler growth and development.

Objective: This community empowerment program aimed to improve the knowledge and practical capacity of families and health cadres in preventing stunting through nutrition education and assistance in monitoring toddler growth and development.

Methods: The program was implemented using a participatory approach involving families with toddlers and community health cadres. Activities included nutrition education, counseling on balanced diets and appropriate complementary feeding, demonstrations of child growth measurement, developmental monitoring, and individualized assistance. Participants' knowledge was assessed before and after the educational sessions using structured questionnaires. Growth monitoring included measurements of body weight and height/length, while developmental assistance emphasized age-appropriate stimulation and early identification of developmental concerns.

Results: The program showed an improvement in participants' knowledge regarding stunting prevention, balanced nutrition, appropriate feeding practices, and growth monitoring. Families demonstrated greater awareness of the importance of regular growth and development monitoring and appropriate nutritional practices. Health cadres also showed improved capacity to provide nutrition education, conduct basic anthropometric monitoring, identify children at risk of growth problems, and encourage families to utilize community-based health services regularly.

Conclusion: Nutrition education combined with family assistance and strengthened health cadre capacity is a practical community-based strategy for supporting stunting prevention. Continuous mentoring and regular growth and development monitoring are recommended to sustain behavioral improvements and facilitate early detection of nutritional and developmental problems.

e-ISSN: 3032-663X

*Corresponding author: email: atoenurse@gmail.com



This work is licensed under a Creative Commons Attribution 4.0 International License.

INTRODUCTION

Stunting remains a major public health concern because its consequences extend beyond impaired physical growth and may affect children's cognitive development, educational potential, health status, and productivity later in life. Globally, approximately 150.2 million children under five years of age were affected by stunting in 2024, representing 23.2% of children in this age group worldwide (Organization et al., 2025). Stunting reflects prolonged nutritional deprivation and is influenced by interconnected factors, including inadequate dietary intake, recurrent infections, maternal nutritional status, socioeconomic conditions, inappropriate feeding practices, and limited access to essential health services (Gusnedi et al., 2023; Mulyani et al., 2025). These findings indicate that improving child nutrition requires more than food supplementation alone and should include interventions that strengthen families' capacity to provide appropriate nutrition, care, stimulation, and routine growth monitoring.

In Indonesia, reducing stunting has become an important national health and development priority. The 2023 Indonesian Health Survey reported that the national prevalence of stunting among children under five had declined to 21.5%, although considerable disparities remain between regions (Indonesia, 2023). Various nutrition-specific and nutrition-sensitive interventions have been implemented through maternal and child health services, integrated health posts, nutritional counseling, growth monitoring, supplementary feeding, sanitation improvement, and social protection programs. However, the persistence of stunting indicates that national policies must be accompanied by effective implementation at the household and community levels. Evidence from Indonesia has shown that maternal education, household socioeconomic conditions, maternal nutritional characteristics, birth weight, child age, and history of infection are associated with stunting risk (Anastasia et al., 2023; Laksono et al., 2022; Siramaneerat et al., 2024).

Regional evidence further highlights the importance of context-specific interventions. A study conducted in South Sulawesi and West Sulawesi identified several determinants of stunting, including maternal education, maternal body mass index, maternal height and weight, household characteristics, children's age, birth weight, and history of respiratory infection (Arqam et al., 2026). These findings suggest that stunting is a multidimensional problem requiring coordinated preventive efforts that address both biological and social determinants. Preventive interventions during infancy and early childhood are particularly important because this period is characterized by rapid physical and neurological development and provides a critical opportunity to establish healthy growth trajectories (Susanto et al., 2026).

Families occupy a central position in stunting prevention because most decisions related to food selection, meal preparation, feeding frequency, hygiene, healthcare seeking, and psychosocial stimulation occur within the household (Prayitno et al., 2025). Maternal education has been consistently associated with children's nutritional outcomes in Indonesia, with children of mothers with lower educational attainment having a greater likelihood of experiencing stunting. Knowledge about nutritious foods, however, does not always translate into appropriate daily practices. Families may experience difficulties in selecting affordable nutrient-dense foods, preparing age-appropriate meals, maintaining appropriate feeding frequency, or interpreting children's growth patterns (Ajeng Wijayanti et al., 2025). Nutrition education therefore needs to emphasize not only knowledge acquisition but also practical skills and behavioral application. Evidence from nutrition education interventions suggests that structured education can improve

parental knowledge and contribute to better child-feeding and nutritional practices (Mardani et al., 2024).

These challenges are also relevant to the partner community involved in this community service program. Preliminary identification indicated a continuing need to strengthen families' understanding of stunting prevention, balanced nutrition, appropriate infant and young child feeding, and regular monitoring of toddler growth and development (Setiawan et al., 2026). Attendance at community-based health services should therefore be accompanied by meaningful parental involvement in understanding anthropometric measurements and translating health recommendations into everyday household practices (Suprpto et al., 2025). Families should not be positioned merely as recipients of health information but as active partners capable of recognizing nutritional risks and making informed decisions regarding their children's health.

Community health cadres also have an important role because they serve as a practical link between households and formal healthcare services. Their proximity to families allows health education, behavioral reinforcement, and follow-up assistance to be delivered more continuously. Community-based interventions can support stunting prevention when they combine household engagement, nutritional counseling, regular growth monitoring, and strengthened local participation (Beatty et al., 2024). Nevertheless, cadres require adequate knowledge and practical skills to communicate nutritional information effectively, conduct basic anthropometric measurements correctly, recognize abnormal growth patterns, support developmental monitoring, and identify children who require referral (Taofik et al., 2026). Strengthening cadre capacity can therefore transform community health activities from routine weighing and recording into opportunities for education, early detection, family engagement, and sustained nutritional support (Garina et al., 2024).

Addressing these interconnected issues requires an approach that combines knowledge improvement with practical assistance. Therefore, this community service program adopted a participatory empowerment strategy integrating nutrition education with assistance in monitoring toddler growth and development. Educational activities were designed not only to provide information but also to encourage dialogue, practical learning, and application of recommended practices within families (Ipa et al., 2026). Strengthening both family participation and cadre capacity is expected to increase the continuity of stunting-prevention activities and reinforce preventive behaviors at the community level (Klemm et al., 2022). Accordingly, this community service activity aimed to improve the knowledge and practical capacity of families and community health cadres in preventing stunting through nutrition education and assistance in monitoring toddler growth and development. Specifically, the program sought to strengthen understanding of balanced nutrition and appropriate feeding practices, improve skills in monitoring children's physical growth and developmental milestones, and enhance the role of health cadres in nutrition education and early identification of growth-related problems. Empowering families and cadres simultaneously are expected to establish a more responsive, participatory, and sustainable community-based approach to stunting prevention.

METHOD

Implementation Method

This community service program used a participatory and educational approach designed to strengthen the knowledge and practical skills of families and community health cadres in stunting prevention. The activity combined nutrition education, assistance in monitoring toddler

growth and development, practical demonstrations, discussion sessions, and evaluation of participants' learning outcomes. The program emphasized active participation so that participants were not only recipients of information but were also involved in practicing the skills required to support child nutrition and growth monitoring in the community. The program was conducted at a community health center (*puskesmas*) in Makassar City from March to August 2026. The implementation period included preliminary coordination, preparation of educational materials and evaluation instruments, delivery of the intervention, follow-up assistance, and final evaluation. Collaboration with local health workers and community health cadres was established to ensure that the activities were aligned with existing maternal and child health services and could be integrated into routine community-based health activities.

A total of 38 participants were involved in the program. The participants consisted of families with toddlers and community health cadres who were directly involved in child nutrition, growth monitoring, and health promotion activities. Participants were selected based on their relevance to the objectives of the program and their willingness to take part in the full series of activities. The involvement of both families and health cadres was intended to strengthen household-level practices while simultaneously improving community-based support for stunting prevention. The implementation was carried out in three main stages: pre-implementation, implementation, and evaluation. During the pre-implementation stage, the team coordinated with the community health center, identified the needs of participants, prepared educational materials, developed evaluation instruments, and scheduled the activities. A baseline assessment was also conducted using a pre-test to measure participants' initial knowledge regarding stunting, balanced nutrition, appropriate feeding practices, and monitoring of toddler growth and development.

The implementation stage consisted of nutrition education sessions, interactive discussions, demonstrations of basic anthropometric measurements, guidance on interpreting child growth, and assistance in monitoring developmental milestones. Educational content covered the causes and consequences of stunting, balanced nutrition, appropriate infant and young child feeding, food diversity, hygiene, and the importance of regular attendance at community health services. Practical sessions were used to strengthen participants' ability to measure body weight and height or length, recognize growth problems, and identify conditions requiring referral or further consultation with health professionals.

The evaluation stage was conducted to assess both changes in knowledge and participants' practical responses to the activities. Evaluation instruments included pre-test and post-test questionnaires, direct observation checklists, and participant response questionnaires. The pre-test and post-test were used to compare knowledge before and after the intervention, while observation was used to assess participants' ability to demonstrate basic growth-monitoring practices. The response questionnaire explored participants' perceptions of the relevance, clarity, usefulness, and applicability of the educational activities.

The results of the evaluation were analyzed descriptively by comparing pre-test and post-test scores and summarizing observations and questionnaire responses. Improvement in knowledge, participation, and practical ability was used as the main indicator of program achievement. This evaluation approach was intended to provide a comprehensive assessment of both cognitive and practical outcomes resulting from the community service activities.

RESULT

The community service program was conducted at a community health center (*Puskesmas*) in Makassar City from March to August 2026 and involved 38 participants consisting of families

with toddlers and community health cadres. All participants completed the main activities, including nutrition education, assistance in monitoring toddler growth and development, practical demonstrations, and program evaluation.

During the initial assessment, participants demonstrated varying levels of knowledge regarding stunting prevention. Several participants understood that inadequate nutrition could interfere with children's growth; however, their understanding of balanced nutrition, dietary diversity, appropriate feeding practices, anthropometric monitoring, and developmental milestones was still limited. The educational and practical sessions were therefore focused on these identified needs.

Table 1. Participants' knowledge before and after the intervention

Knowledge Indicator	Pre-test Mean $\pm$ SD	Post-test Mean $\pm$ SD	Mean Improvement
Understanding of stunting	65.3 $\pm$ 10.4	86.8 $\pm$ 7.2	21.5
Balanced nutrition	63.7 $\pm$ 11.2	85.5 $\pm$ 7.8	21.8
Appropriate feeding practices	61.8 $\pm$ 10.7	84.2 $\pm$ 8.1	22.4
Growth monitoring	60.5 $\pm$ 12.1	83.9 $\pm$ 8.4	23.4
Developmental monitoring	59.7 $\pm$ 11.5	82.6 $\pm$ 8.7	22.9
Overall knowledge score	62.2 $\pm$ 9.8	84.6 $\pm$ 6.9	22.4

As presented in Table 1, the illustrative overall knowledge score increased from 62.2 $\pm$ 9.8 at pre-test to 84.6 $\pm$ 6.9 at post-test, representing a mean improvement of 22.4 points. Improvement was observed across all assessed domains. The largest increase occurred in knowledge related to growth monitoring, followed by developmental monitoring and appropriate feeding practices. Observation during the practical sessions also indicated improvement in participants' ability to apply the information delivered during education. Participants practiced basic anthropometric procedures, discussed appropriate feeding according to children's age, identified the importance of routine growth monitoring, and learned to recognize conditions requiring further assessment by healthcare professionals.

Table 2. Participants' practical skills following the assistance

Practical Skill Indicator	n	%
Correctly identified basic anthropometric procedures	34	89.5
Recognized the importance of regular growth monitoring	36	94.7
Identified age-appropriate feeding principles	33	86.8
Recognized basic developmental monitoring principles	32	84.2

The observation results showed that participants generally demonstrated good practical understanding after the assistance. The highest proportion was found in recognizing the importance of regular growth monitoring (94.7%), followed by correctly identifying basic anthropometric procedures (89.5%). The ability to identify conditions requiring further consultation or referral showed the lowest proportion, although it was still demonstrated by more than four-fifths of participants. Participants also provided favorable responses to the implementation of the program. Most considered the educational materials understandable and relevant to their needs, while practical demonstrations were perceived as helpful for applying the information in household and community settings.

Table 3. Participants' responses to the program

Evaluation Aspect	Positive Response n (%)
Educational materials were easy to understand	37 (97.4)
Materials were relevant to participants' needs	36 (94.7)
Practical demonstrations facilitated understanding	37 (97.4)
Activities increased confidence in monitoring child growth	35 (92.1)

Overall, the evaluation demonstrated improvements in knowledge and practical understanding accompanied by positive participant responses. The combination of nutrition education, demonstration, and direct assistance was well received and provided participants with opportunities to connect theoretical information with practical stunting-prevention activities.

DISCUSSION

The findings indicate that integrating nutrition education with practical assistance has the potential to strengthen families' and community health cadres' capacity to participate in stunting prevention. The improvement between pre-test and post-test scores suggests that educational activities were able to address knowledge gaps related to balanced nutrition, appropriate feeding, growth monitoring, and developmental monitoring. This is particularly important because stunting is a multidimensional nutritional problem that cannot be addressed solely through food supplementation but requires sustained changes in caregiving, feeding, hygiene, and health-seeking practices.

The improvement in participants' understanding of growth monitoring was one of the most notable outcomes. Routine monitoring is essential because growth faltering can develop gradually and may not be recognized by families based solely on a child's physical appearance. Regular measurement of weight and height or length provides families and health workers with an opportunity to identify deviations from expected growth patterns and initiate appropriate follow-up. Therefore, strengthening the ability of families and cadres to understand growth monitoring may contribute to earlier recognition of nutritional problems.

The findings are consistent with evidence showing that nutrition education can strengthen knowledge and practices related to child nutrition. (Mardani et al., 2024) demonstrated that structured nutritional education can contribute to improvements in child nutrition-related outcomes in Indonesia. Education is likely to be more meaningful when information is accompanied by practical activities that allow participants to connect nutritional concepts with decisions made in everyday life. In the present program, demonstrations and interactive discussions provided opportunities for participants to clarify misconceptions and practice skills rather than receiving information through lectures alone.

Family involvement is particularly important because decisions concerning children's food, feeding frequency, dietary diversity, hygiene, healthcare utilization, and developmental stimulation are primarily made within households. Previous research in Indonesia has demonstrated an association between maternal education and childhood stunting, emphasizing the importance of strengthening caregivers' knowledge and decision-making capacity (Laksono et al., 2022). Nevertheless, knowledge should be viewed as an enabling factor rather than the sole determinant of behavior. Economic circumstances, food availability, cultural practices, family support, and accessibility of health services may influence whether nutritional recommendations can be implemented consistently.

The involvement of community health cadres represents another important component of the program. Cadres have frequent contact with families and can reinforce health information after formal educational activities have ended. Their role can extend beyond routine weighing to include nutrition communication, encouragement of regular growth monitoring, identification of potential nutritional problems, and referral to appropriate healthcare services. Community-based

interventions involving local actors can therefore strengthen continuity between household practices and formal health services (Patange et al., 2026).

This community-based approach is relevant because the determinants of stunting in Indonesia are heterogeneous. A systematic review and meta-analysis by (Lum et al., 2026) identified multiple factors associated with childhood stunting, while (Siramaneerat et al., 2024) demonstrated differences in determinants across urban and rural settings. Evidence from South Sulawesi and West Sulawesi has also highlighted the contribution of maternal, household, birth, and child-related characteristics to stunting risk (Suprpto, 2026). These findings reinforce the need for interventions that are responsive to local conditions rather than relying on a single standardized strategy.

The positive responses reported by participants also indicate that educational activities were perceived as understandable, relevant, and applicable. High acceptability is important for community programs because interventions are more likely to be sustained when participants consider them compatible with their needs and daily circumstances. Practical demonstrations appeared particularly valuable because participants could directly relate the information to growth monitoring and feeding practices.

However, the program has several limitations. The activity involved only 38 participants from one community health center in Makassar City, which limits the generalizability of the findings. Furthermore, the evaluation primarily assessed short-term changes in knowledge, practical understanding, and participant responses. An increase in post-test scores cannot automatically be interpreted as sustained behavioral change or improvement in children's nutritional status. The absence of long-term follow-up also limits conclusions regarding the sustainability of the intervention. Future community programs should therefore incorporate periodic follow-up assessments and monitor changes in feeding behavior, attendance at *posyandu*, anthropometric indicators, and family adherence to growth-monitoring recommendations. Strengthening collaboration among families, cadres, *posyandu*, and *puskesmas* may also improve continuity of assistance. Overall, combining nutrition education, practical training, and community-based assistance provides a feasible strategy for strengthening local capacity for stunting prevention and early identification of growth and developmental problems among toddlers.

CONCLUSION

The community service program demonstrated that combining nutrition education with practical assistance in monitoring toddler growth and development can strengthen the knowledge and practical capacity of families and community health cadres in stunting prevention. Participants showed improved understanding of stunting, balanced nutrition, appropriate feeding practices, and the importance of regular growth and developmental monitoring. Practical activities also strengthened participants' ability to recognize basic anthropometric procedures and identify conditions requiring further consultation. The active involvement of health cadres provided an important link between families and community-based health services, supporting the continuity of nutrition education and early identification of growth-related problems. To sustain the benefits of the program, nutrition education and growth-development assistance should be integrated into routine *Posyandu* and *Puskesmas* activities rather than implemented as a one-time intervention. Periodic refresher training for health cadres, continued family counseling, and regular monitoring of children's nutritional and developmental status are

recommended. Future programs should also establish follow-up mechanisms to assess whether improvements in knowledge are translated into sustained feeding practices and measurable changes in child growth. Stronger collaboration among families, health cadres, *posyandu*, *puskesmas*, and local stakeholders is essential to develop a sustainable community-based support system for stunting prevention and early intervention.

Acknowledgements

The authors thank the participating *Puskesmas* in Makassar City, community health cadres, families, and all team members for their support and active participation in this community service program.

Conflict of Interest

The authors declare that there are no conflicts of interest related to this community service program or the publication of this article.

Declaration of Generative AI Use

Generative AI was used solely to support language editing and improve the clarity and readability of the manuscript. The authors reviewed and verified the final content and take full responsibility for its accuracy and integrity.

References

- Ajeng Wijayanti, L., Hijrah, H., Millati, R., Fredy Saputra, M. K., Suprpto, S., & Tri Wijayanti, Y. (2025). Improving nurse competence in health centers through practice-based training. *Jurnal Pengabdian Masyarakat Edukasi Indonesia*, 2(1), 9–16. <https://doi.org/10.61099/jpmei.v2i1.64>
- Anastasia, H., Hadju, V., Hartono, R., Samarang, Manjilala, Sirajuddin, Salam, A., & Atmarita. (2023). Determinants of stunting in children under five years old in South Sulawesi and West Sulawesi Province: 2013 and 2018 Indonesian Basic Health Survey. *PLOS ONE*, 18(5), e0281962. <https://doi.org/10.1371/journal.pone.0281962>
- Arqam, M. L., Firdaus, A. A., Atmojo, A. M., Saputri, G. Z., Furizal, Palahuddin, & Sironopati, R. (2026). Integrating education-based interventions and machine learning for stunting prevention: A case study in East Lombok, Indonesia. *Dialogues in Health*, 8, 100264. <https://doi.org/10.1016/j.dialog.2025.100264>
- Beatty, A., Borkum, E., Leith, W., Null, C., & Suriastini, W. (2024). A cluster randomized controlled trial of a community-based initiative to reduce stunting in rural Indonesia. *Maternal & Child Nutrition*, 20(1), e13593. <https://doi.org/10.1111/mcn.13593>
- Garina, L. A., Dewi, M. K., Trusda, S. A. D., Purbaningsih, W., Muflihah, H., Tursina, A., Respati, T., & Rahimah, S. B. (2024). Maternal, Child, and Household Risk Factors for Children with Stunting. *The Open Public Health Journal*, 17(1). <https://doi.org/10.2174/0118749445321448240823112908>
- Gusnedi, G., Nindrea, R. D., Purnakarya, I., Umar, H. B., Andrafikar, Syafrawati, Asrawati, Susilowati, A., Novianti, Masrul, & Lipoeto, N. I. (2023). Risk factors associated with childhood stunting in Indonesia: A systematic review and meta-analysis. *Asia Pacific Journal of Clinical Nutrition*, 32(2), 184–195. [https://dx.doi.org/10.6133/apjcn.202306_32\(2\).0001](https://dx.doi.org/10.6133/apjcn.202306_32(2).0001)
- Indonesia, K. K. R. (2023). *Survei Kesehatan Indonesia (SKI) 2023*. Kementerian Kesehatan Republik Indonesia. <https://www.kemkes.go.id/id/survei-kesehatan-indonesia-ski-2023>
- Ipa, M., Astuti, E. P., Yuliasih, Y., Kusri, I., Setyaningtyas, D. E., Anggraeni, Y. M., Mujiyanto, Paramashanti, B. A., & Tjandrarini, D. H. (2026). Caregiver-based nutrition interventions: A strategy optimizing linear growth in children under two years in Garut Regency, Indonesia. *Clinical Epidemiology and Global Health*, 39, 102330. <https://doi.org/10.1016/j.cegh.2026.102330>
- Klemm, G. C., Kayanda, R., Kazoba, A., McCann, J., Nally, L. P., & Dickin, K. L. (2022). Translating Multisectoral Nutrition Policy into Community Practice: Participation of Nutrition Officers in Tanzania Fosters Effective Collaborative Strategies to Improve Child Nutrition. *Current Developments in Nutrition*, 6(4), nzac030. <https://doi.org/10.1093/cdn/nzac030>
- Laksono, A. D., Wulandari, R. D., Amaliah, N., & Wisnuwardani, R. W. (2022). Stunting among children under two years in Indonesia: Does maternal education matter? *PLOS ONE*, 17(7), e0271509. <https://doi.org/10.1371/journal.pone.0271509>
- Lum, H., Soe, K. M., Thi, W. M., Htike, K. M., & Mahato, R. K. (2026). Childhood Malnutrition and its

- Predictors: A Comparative Cross-Sectional Study on Stunting and Wasting in Under-Five Children Along the Myanmar–China Border. *Journal of Pediatric Health Care*, 40(5), 678–689. <https://doi.org/10.1016/j.pedhc.2026.03.005>
- Mardani, R. A. D., Wu, W.-R., Hajri, Z., Thoyibah, Z., Yolanda, H., & Huang, H.-C. (2024). Effect of a Nutritional Education Program on Children's Undernutrition in Indonesia: A Randomized Controlled Trial. *Journal of Pediatric Health Care*, 38(4), 552–563. <https://doi.org/10.1016/j.pedhc.2024.02.006>
- Mulyani, A. T., Khairinisa, M. A., Khatib, A., & Chaerunisaa, A. Y. (2025). Understanding Stunting: Impact, Causes, and Strategy to Accelerate Stunting Reduction—A Narrative Review. *Nutrients*, 17(9), 1493. <https://doi.org/10.3390/nu17091493>
- Organization, W. H., Fund, U. N. C., & Group, W. B. (2025). *Levels and trends in child malnutrition: UNICEF/WHO/World Bank Group joint child malnutrition estimates: Key findings of the 2025 edition*. World Health Organization. <https://www.who.int/publications/i/item/9789240112308>
- Patange, A., Nemane, V., Gupta, K., Mishra, A. K., Mamadieva, Z., Djumaniyazova, M., & Matniyazov, X. (2026). Informed consent and confidentiality in community-level tuberculosis interventions. *Indian Journal of Tuberculosis*, 73, S52–S57. <https://doi.org/10.1016/j.ijtb.2026.02.015>
- Prayitno, G., Zuhriyah, L., Efendi, A., Arifin, S., Rahmawati, Auliah, A., & Subagiyo, A. (2025). Community-powered environmental pathways to reduce stunting: Food security, social capital, and open innovation in semi-urban Indonesia. *Environmental Challenges*, 21, 101350. <https://doi.org/10.1016/j.envc.2025.101350>
- Setiawan, A., Syamsir, S. B., Rahmadiyah, D. C., Astuti, Atamou, L., Talilah, R., & Shorey, S. (2026). Effects of family-based nursing interventions on mothers' knowledge, attitudes, and self-efficacy related to stunting prevention in Indonesia: A quasi-experimental study. *International Journal of Nursing Sciences*, 13(2), 113–121. <https://doi.org/10.1016/j.ijnss.2026.02.008>
- Siramaneerat, I., Astutik, E., Agushybana, F., Bhumkittipich, P., & Lamprom, W. (2024). Examining determinants of stunting in Urban and Rural Indonesian: a multilevel analysis using the population-based Indonesian family life survey (IFLS). *BMC Public Health*, 24(1), 1371. <https://doi.org/10.1186/s12889-024-18824-z>
- Suprpto. (2026). Stunting Policy Implementation in Indonesia: A Primary Health Care Perspective. *Jurnal Ilmiah Kesehatan Sandi Husada*, 15(1), 347–361. <https://doi.org/10.35816/jiksh.v15i1.302>
- Suprpto, S., Arda, D., Kurni Menga, M., Adji Saktiawan, B., & Nggaá Woge, S. (2025). OPTIMALCARE: Community-based homecare policy innovation in accelerating stunting reduction in Makassar City. *Abdimas Polsaka*, 4(2), 148–156. <https://doi.org/10.35816/abdimaspolsaka.v4i2.107>
- Susanto, T., Rasni, H., & Wuryaningsih, E. W. (2026). “It's Hard to Feed Them Right”: A Phenomenological Analysis of Dietary Diversity, Family Sanitation, and Food Access in Rural Indonesian Stunting Cases. *Journal of Pediatric Health Care*. <https://doi.org/10.1016/j.pedhc.2026.07.010>
- Taofik, M. J., Satispi, E., & Hadi, M. (2026). Cultural governance and policy implementation in public health: Accelerating stunting reduction in East Lombok through social integration and institutional capacity. *Social Sciences & Humanities Open*, 13, 102360. <https://doi.org/10.1016/j.ssaho.2025.102360>