

Review

Not peer-reviewed version

A Study on the Philosophy of Family Contribution in the Prevention of Stunting in Children: Literature Review

[Eka santi](#)^{*}, [Moses Glorino Rumambo Padin](#), Yuni Sufyanti Arief

Posted Date: 30 December 2024

doi: 10.20944/preprints202412.2442.v1

Keywords: family and family members; children with stunting; prevention



Preprints.org is a free multidisciplinary platform providing preprint service that is dedicated to making early versions of research outputs permanently available and citable. Preprints posted at Preprints.org appear in Web of Science, Crossref, Google Scholar, Scilit, Europe PMC.

Copyright: This open access article is published under a Creative Commons CC BY 4.0 license, which permit the free download, distribution, and reuse, provided that the author and preprint are cited in any reuse.

Review

A Study on the Philosophy of Family Contribution in the Prevention of Stunting in Children: Literature Review

Eka Santi ^{1,*}, Moses Glorino Rumambo Padin ² and Yuni Sufyanti Arief ³

¹ Nursing Doctoral Student of, Faculty of Nursing, Universitas Airlangga

² Faculty of Cultural Sciences, Universitas Airlangga

³ Faculty of Nursing, Universitas Airlangga

* Correspondence: eka.santi-2024@fkip.unair.ac.id

Abstract: Introduction: The family in child growth screening is an inherent issue and an important part, especially in stunting prevention. Factors related to the incidence of stunting are something that is the basis for stunting prevention. This research aims to review family involvement in stunting prevention based on philosophical views. **Method:** Conduct a review by finding from several databases, namely Proquest, Science Direct and Scopus. The article is limited to the family population with stunted or malnourished or under nutrition children in 2020-2024. **Results:** Families contribute to stunting prevention, among others, by increasing knowledge about the factors that contribute to the incidence of stunting. Family involvement is not only in the nuclear family, namely parents (fathers and mothers) but also in the extended family, one of which is the grandmother. The view of ontology is related to growth and development problems, especially nutrition as a function of family parenting which involves the decisions of both parents but is also influenced by decisions outside the nuclear family. The epistemology view is to improve the ability of families to regulate children's growth with preventive efforts from the aspect of increasing knowledge and skills. The view of axiology is to increase family concern for children by respecting that children's growth and nutrition are the essential values of a form of respect for individual children. **Conclusion:** The family has an effective role for both fathers, mothers or families outside the nuclear family either individually or in cooperation between family members.

Keywords: family and family members; children with stunting; prevention

Introduction

Stunting is a major nutritional problem in developing countries such as Indonesia (Fitri et al., 2022), with its prevalence increasing every year. Stunting makes future generations a lost generation because it increases morbidity and mortality, reduces the potential for physical growth (short in adulthood), reduces the development of cognitive and neurological functions (dwarf brain), and increases the risk of chronic diseases in adulthood, so the provision of appropriate care for children needs to be improved (Noviana et al., 2024; Has et al., 2024). The prevalence of stunting globally in children under five is 141.3 million and by 2025 WHO predicts that the incidence of stunting in children under five will be 128.3 million and will decline to 116.5 million by 2030. When the prevalence is greater than 40%, stunting is considered a major health issue in the community. Some of the countries with the highest prevalence are Papua New Guinea and Timor Lester which are 50% while Indonesia has a stunting prevalence of 36% which is quite close to 40%. Indonesia's 2022 Annual Report states that the rate of child malnutrition in Indonesia is one of the highest in the world, namely 1 in 10 children experiencing wasting and 3 out of 10 children experiencing stunting (short stature). In 2022, stunting prevention remain a top goal. In the (WHO, 2020; UNICEF, 2015) *WHO stunting policy brief* (2014), it is stated that stunting in childhood is associated with a loss of economic

productivity of 1.4%. It is estimated that stunted children earn 20% less as adults compared to non-stunted individuals (WHO, 2014).

Reducing stunting in children is an important target of the *Global Nutrition Targets 2025* based on the conclusion of the stunting policy summary. Factors that contribute to stunted growth and development of children include poor maternal health and nutrition, inadequate infant and child feeding practices, and infections. The efforts made by the government are to prevent and reduce direct disturbances (specific nutrition interventions) to indirect disturbances (sensitive nutrition interventions) with the priority of the target of the First 1000 Days of Life. (WHO, 2014; Fitri, et al., 2022)

Various potential resources in the family that are well utilized will help overcome existing problems more effectively than using other resources that are not necessarily owned. The primary social setting for children's development and growth is the family. The family as the closest resource still cannot be maximized in carrying out its functions, especially in the prevention and handling of stunting (Khasanah et al., 2022). The main strategy to prevent stunting in children is through the family approach, because the main microsystem of children is their family (Has et al., 2024).

Factors that affect stunting from various studies lead to the involvement of all members in the family, especially related to socio-economic factors that affect other factors. Children will grow and develop optimally if they get good stimulation from the family. According to Bronfenbrenner (1994) in Na'imah and Suarti (2016), the central problem of children is more than just problems related to the physical survival of children. To reach their full potential, children must interact positively with their environment throughout their lives. Therefore, in a human ecology, the family is not only interested in paying attention to the factors that sustain life and ensure the survival of the child and all physical life, but also interested in paying attention to non-physical factors in the environment that ensure the continuity of growth (Na'imah and Suarti, 2016).

Method

This study used a literature review as its research approach. This review of this article explores the philosophical assessment of the contribution or role of the family in the prevention of stunting events. This study uses the guidance of Systematic Review and Meta Analysis Preferred Reporting Itema (PRISMA) in conducting the review stages. Article search uses Science Direct, Scopus and Proquest databases. The inclusion criteria applied are articles published from 2020-2024, articles in the form of reviews and originals describing families with stunted children or at risk of stunting, articles in English and open- access articles. The keyword for the article search is "family" OR "parent" OR "caregiver" AND "contribution" OR "involvement" OR "role" AND "prevent" OR "reduce" AND "stunting" OR "malnutrition" OR "growth failure" OR "under-nutrition".

The first stage of selection is to check articles that are duplicates and then eliminate them. The second step is to screen the title and abstract according to the inclusion criteria. There is no particular study design that is included in this review.

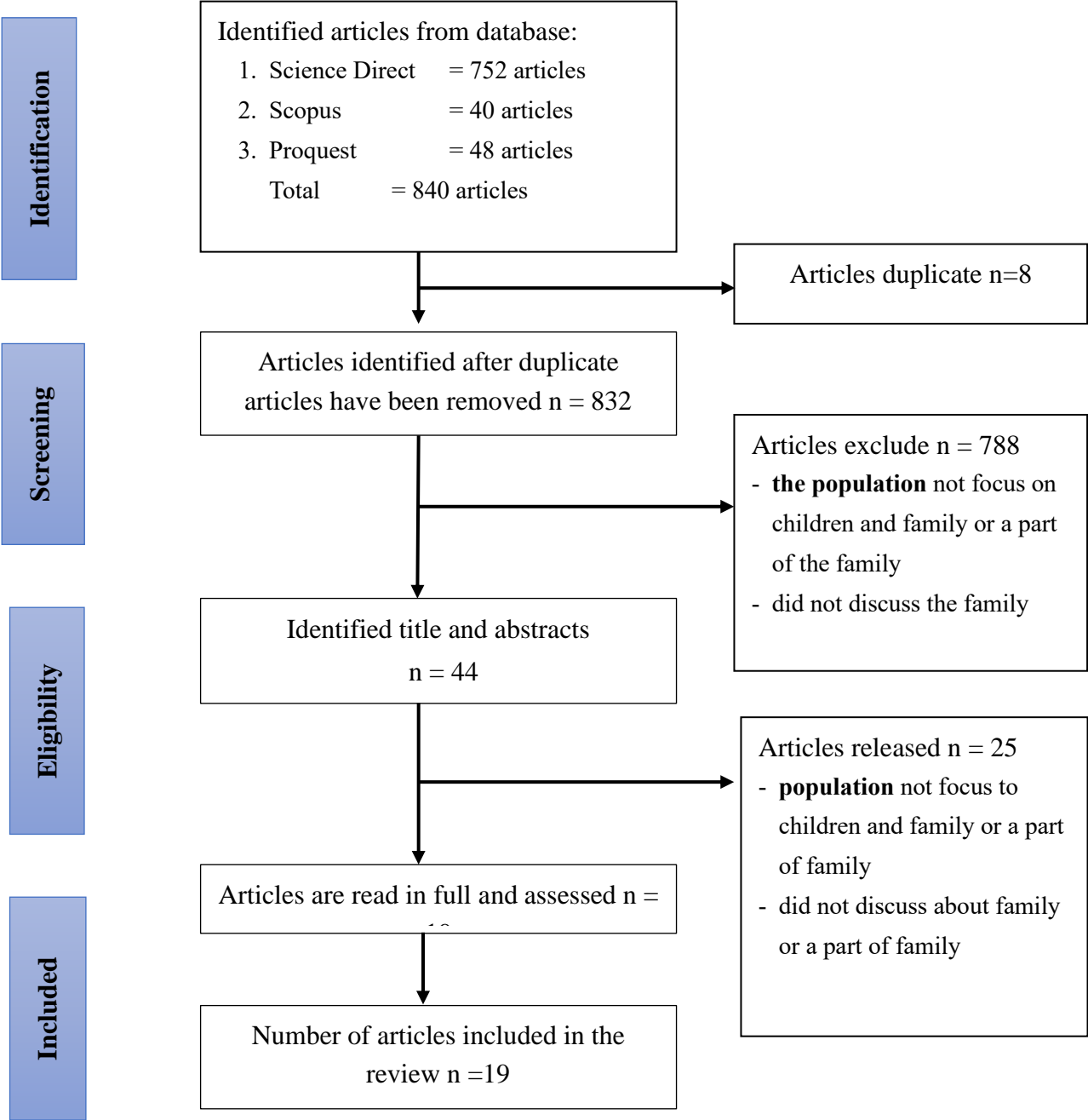


Figure 1. Flow Chart by PRISMA.

Table 1. Outcome of Article Analysis.

Author	Title	Purpose	Intervention/Program	Study Desain	Outcome
Rahmadiyah, et al (2024)	Family Resilience with Stunted Children Aged Below 5 Years: A Qualitative Study in Depok City, Indonesia	Explored the influence of family resilience in fulfilling the nutritional needs of stunted children	N/A	Qualitative	Identified three main themes: (1) family belief that stunting is hereditary, (2) family belief that stunted children will “grow up,” and (3) lack of communication between family members in discussing stunting.
Yani, Desy Indra, et al (2023)	Family Household Characteristics and Stunting: An Update Scoping Review	Identify family household characteristics related to stunting among children aged less than 5 years.	N/A	Scoping review	The family household characteristics included individual factors (sex age, history of diarrhea, and birthplace), family factors (family headship, primary caregiver/mother, social-cultural orientation, and family system factors), and environmental factors. Stunting has been linked to a number of child characteristics, family characteristics, and environmental factors (such as the kind of residence, floor type, water access, drinking water source, and household power).
Alfianti, KZ., Yunitasari, E., Armini, NKA. (2023)	Cultural perspectives of stunting prevention: A systematic review	Synthesize earlier research that offered an overview of the cultural perspective on stunting prevention.	N/A	Systematic review	The cultural perspectives in the prevention of stunting, including parenting cultures on the role of fathers, parenting cultures on the role of grandmothers, and cultures of family empowerment
Nursalam, Utami, S., Susilaningrum, R. (2021)	Analysis of Factors Affecting Commitment and Ability of Families to Early Detection in Stunting	Analyze the factors that influence family commitment and ability to detect stunting.	N/A	Cross-sectional study	The dominant factor affecting the commitment in early detection of stunting was community resources. The ability to identify early stunting was influenced by three main factors: enabling, empowering, and supporting.
Sarkar, Plabon., et al (2023)	How is parental education associated with infant and young child feeding in Bangladesh? a systematic literature review	Summarize how parental education is associated with IYCF practices in Bangladesh.	N/A	Systematic literature review	Parental education was found to be positively associated with complementary feeding practices. However, there remained uncertainty surrounding the general impact of parental education on breastfeeding. High parental education was associated with bottle-feeding practices and no initiation of colostrum.

Lowery, CM., et al (2022)	Experiences Engaging Family Members in Maternal, Child, and Adolescent Nutrition: A Survey of Global Health Professionals	Document global health professionals' experiences engaging family members in nutrition activities, and their perceived obstacles, facilitators, and nutrition recommendations activities for family members.	N/A	Qualitative	Respondents reported engaging family members increases support for recommended behaviors, improves program sustainability, and facilitates family and community ownership. Some participants also talked about their experiences with both positive and bad unintended outcomes when interacting with family members; for instance, one-fifth of them said that mothers felt uneasy when men were brought up in conversations. Traditional gender stereotypes, not include all significant family members, and a lack of program delivery resources were common issues.
Tefese, Z., et al (2020)	Child Feeding Practice and Primary Health Care as Major Correlates of Stunting and Underweight among 6- to 23-Month-Old Infants and Young Children in Food-Insecure Households in Ethiopia	Identify key factors contributing to undernutrition among 6- to 23-month-old children.	N/A	cross-sectional study	Factors significantly associated with both stunting and underweight were <u>child age</u> of 12–23 months (6–11 months), <u>female</u> , more siblings, lack of zinc supplement for diarrhea, inadequate diet diversity, and lack of iodized salt in complementary food.
Erika, KA., et al (2024)	Stunting Super App as an Effort Toward Stunting Management in Indonesia: Delphi and Pilot Study	Develop a stunting super app, a one-stop app designed to prevent and manage stunting in Indonesia.	N/A	Delphi Study	11 consensus statements were extracted; arranged in three major themes, including maternal health education, child health education, and environmental education; and applied in the form of the Sistem Evaluasi Kesehatan Anak Tumbuh Ideal (SEHATI) app. Mothers of toddlers with stunted growth had more knowledge both before and after the educational intervention, according to the pilot study.
Langlois, BK., et al (2020)	Factors that May Influence the Effectiveness of 4 Specialized Nutritious Foods in the	Examines the use of SNFs that may affected efficacy, particularly with regard to sharing or consumption by the	Cluster random sampling was obtained so that 4 groups were obtained, namely Corn Blend Plus with oil	Quantitatif-Qualitative	In all arms, sharing was prevalent; the largest percentages were seen in SC+ (73%) and CSWB w/oil (36%). Some reported giving the ration away (highest in SC+ at 17%) or using it for other purposes (highest in CSWB

	Prevention of Stunting and Wasting in Children	receiving child and other individuals, distractions from the recipient child, preparation, storage, and sanitation.	(CSB+ w/ oil), Corn Soy Whey Blend with oil (CSWB w/ oil), Super Cereal Plus (SC+), or ready-to-use supplements (RUSF).			w/oil at 17%). On average, 49% of households had the beneficiary child eating the ration (38–60% by arm in CSB+ w/oil and RUSF, respectively). In the CSWB w/oil arm, qualitative reports of bitterness and spoiling surfaced. With the exception of RUSF, the majority of observed homes (35–46% by arm) did not make porridge every day as directed. Escherichia coli contamination of household water samples was either hazardous or high-risk (72–78% by arm). Before eating the porridge, a small number of children and servers were seen cleaning their hands.
Talukder, A., Hasan MM., Assikunnaby (2023)	Assessing association between paternal smoking status and child malnutrition in Albania	Examine the relationship between Albanian child malnutrition and the smoking status of the father. Evaluate the success of the social and behavior change	N/A	Quantitative study		Smoking fathers are strongly associated with child malnutrition, the OR outcome of smoking and non-smoking fathers is 1,109 with a 95% CI (1,114, 1,472).
Soofi, Bashir, S., et al (2024)	Specialized nutritious foods and behavior change communication interventions during the first 1000 d of life to prevent stunting: a quasi-experimental study in Afghanistan	communication (SBCC) and specialized nutritious food (SNF) interventions in preventing stunting in children under two years old throughout the first 1000 days of life. in Badakhshan, Afghanistan.	Pregnant and lactating women received a monthly ration of 7.5 kg of super cereal (250 g/d) during pregnancy and the first 6 months of breastfeeding. Child respondent received 30 sachets lipid-based nutrient supplement (50 g/sachet/d) monthly.	quasi-experimental		DID estimates adjusted for child, maternal, and household characteristics indicated a significant reduction in stunting and underweight among children <2 y of age. Exposure to the SBCC messages was associated with improvements in the early initiation of breastfeeding, exclusive breastfeeding under 6 mo, minimum meal frequency, and minimum acceptable diet .
Seretew, WS., Tesema, GA.,	Prevalence of child stunting in Sub-	Utilizing recent demographic and health surveys from	N/A	Quantitative study		Factors that have a lower chance of stunting are good maternal education, born from mothers aged above 35 years, high household wealth status, small family size,

Yirsaw, BG., Argaw, GS. (2024)	Saharan Africa and its risk factors	each nation, examine the prevalence and contributing factors of stunting in children under five in Sub-Saharan Africa.			being female child, being the head of the household, being in the media, and receiving ANC visits one after the otherLiving in the countryside, not married or divorced, early birth order, child age 24-59 months and diarrhea in the last two weeks are more likely to become stunting.
MacDonald, CA., Aubel, J., Aidam, BA., Girard, AW. (2020)	Grandmothers as Change Agents: Developing a Culturally Appropriate Program to Improve Maternal and Child Nutrition in Sierra Leone	Examining the roles and impact of family members on MCN and how such realizations impacted the development of a culturally appropriate curriculum	N/A	Qualitative	All groups indicated that 1) grandmothers are the culturally designated advisors and supervisors of women on MCN (maternal and child nutrition) issues and 2) mothers are not autonomous decision makers and are greatly influenced by grandmothers. The research identified both beneficial MCN practices and gaps between optimal and existing MCN practices—particularly related to maternal diet during pregnancy and exclusive breastfeeding for 6 months.
Passarelli, Simoni., et al (2022)	Caregivers Systematically Overestimate Their Child's Height-for-Age Relative to Other Children in Rural	Better understand how caregivers perceive their child's growth	N/A	cross-sectional	Overestimation was more common among caregivers who were impoverished and had older, female, and stunted children. 37% of parents overestimated their child's height in comparison to other kids, whereas 43% of parents rated their child's height as the median.
Waid, JL., et al (2021)	What Were the Drivers of Improving Child Nutritional Status in Bangladesh? An Analysis of National Household Data from 1992 to 2005 Guided by the UNICEF Framework	Calculate the factors that contributed to Bangladesh's preschool-aged children's improved nutritional condition between 1992 and 2005.	N/A	Quantitative	There were significant improvements in child growth over time for all z-score measures—length/height-for-age (LAZ/HAZ), weight-for-length/height (WLZ/WHZ), and weight-for-age (WAZ)—and in many potential determinants of child growth across domains of the UNICEF framework.
Komakech, JJ., et al (2022)	A Peer-Led Integrated Nutrition Education Intervention through Care Groups Improved	Examined the effects of a peer-led integrated nutrition education intervention on infant	Two groups, namely group 1 only mothers, groups of parents (mother and father) compared to the	RCT	In both groups, the infant companion feeding increased significantly. There was a positive effect on the introduction of soft, semi-solid, and solid foods (ISSSF) in the maternal group only. ISSSF was better for the parents-combined arm at both Midline-II and Endline.

Adugna,G., Egata, G., Fufa, DA., Desta, DT. (2023)	Complementary Feeding of Infants in Postemergency Settlements in the West-Nile Region in Uganda: A Cluster Randomized Trial	complementary feeding by South Sudanese refugee mothers in the West-Nile region in Uganda.	intervention and control groups. WHO and UNICEF recommendations were used to evaluate infant feeding.	RCT	In both groups the minimum acceptable diet (MAD) was significantly as well as the infant consumption of eggs and meat meals (EFF). The role of mothers is higher in MDD, MAD, and EFF
	Effect of nutrition education on improving dietary diversity of children aged 6–23 months in Horo district, Oromia region, Ethiopi	Assess the effect of maternal nutrition education and another determinant on the dietary diversity of children aged 6–23 months	The nutrition education intervention, which lasted three months and consisted of eight sessions, was given to the intervention group		The proportion of children with dietary diversity scores in the control group and the intervention group was good. Household food security and being in the intervention group were <u>both</u> positive predictors of the dietary diversity score, while maternal age (35–45 years) was a negative predictor.
Aidam, BA., et al (2020)	An Innovative Grandmother-Inclusive Approach for Addressing Suboptimal Infant and Young Child Feeding Practices in Sierra Leone	Examined how an innovative grandmother-inclusive approach (GMIA) can be used to address suboptimal IYCF (infant and young child feeding) practices	In Bum chiefdom, IYCF attitudes and practices were compared between comparison communities (normal nutrition education) and GMIA intervention communities (monthly nutrition dialogue, quarterly gatherings for community appreciation, and forums that span generations)	quasi-experiment	Mothers and grandmothers in intervention communities were highly aware of and participation in the GMIA; the intervention group had a significantly higher percentage of infants and young children aged 0–23 months (n = 291) who were exclusively breastfed during the first week of life; the intervention group had a significantly higher percentage of infants aged 6–23 months (n = 219) who achieved minimum dietary diversity and minimum acceptable diet; and the difference in percentages achieving minimum meal frequency (MMF) was only significant for infants aged 9–23 months, with the intervention group achieving a higher MMF
Han, Y., Park, S., Kim, J., Hoddinott, J., (2022)	Engaging Fathers Through Nutrition Behavior Communication Change Does Not Increase Child Dietary Diversity in a Cluster	evaluated whether family food security, child diet diversity scores (CDDS), and nutrition knowledge were enhanced by maternal BCC,	Treatments were as follows: maternal (M) BCC only; maternal BCC and paternal BCC (M+P); maternal BCC and food vouchers (M+V); and maternal	RCT	Both maternal and paternal BCC improved their understanding of the best feeding methods for infants and young children. CDDS increased when maternal BCC was combined with either paternal BCC or the meal voucher. The percentage of kids who fulfilled the minimal acceptable dietary requirements rose with the M, M+V, and M+P therapies. There was no greater rise

Randomized Control Trial in Rural Ethiopia	maternal and paternal BCC, food vouchers, BCC, maternal BCC and paternal BCC and a food voucher, or (M+V+P) maternal and paternal BCC and a food voucher.	in CDDS when paternal BCC was added to the maternal BCC treatment or to the maternal BCC and voucher treatment.
---	--	---

Results and Discussion

The results of a review of 19 articles on family involvement in preventing stunting in children are in children who are at risk of stunting. Prevention is a behavior that supports healthy child growth. This literature review examines a variety of articles that are not very specific to the family context, but these articles involve one or more of the family members of children at risk of stunting. The results of the review stated that factors related to the incidence of stunting include family factors, child factors and environmental factors. It is interesting that in an article conveying that a cultural perspective can be a form of stunting prevention that emphasizes that the culture of parents and the lineage above them contributes significantly (Yani et al., 2023) (Has et al., 2024). One of the factors that reduces stunting in children is family knowledge, both parents or other family members, this is stated in a study submitted by Komakech, et al (2022) demonstrates the great effectiveness of parental participation in educating children at risk of stunting or malnutrition about nutrition; The following will be conveyed about the view of family contribution seen from the philosophy of science, namely from the study of ontology, epistemology and axiology (Komakech et al., 2023; Rezaeizadeh et al., 2024)

Philosophy of Ontology in Family Contribution to the Prevention of Stunting in Children

Stunting is a phenomenon that can be a problem in one family, which will affect all family members. The family has obligations and demands in stimulating growth and development in the children in the family. The stimulation provided to child growth includes the provision of nutrition which is the main parenting function in children, especially children under 2 years old. Nurturing growth or providing nutrition is the task of parents as a form of parenting function. In the study Gavina, L. (2023) stated that the involvement between the two parents in the fulfillment of nutrition and developmental stimulation is effective in preventing the occurrence of malnutrition in children (Putri & Rong, 2021; Galvin et al., 2023). The ontology in this study is that growth and development problems, especially related to nutrition, will be an integral part of the family parenting function which will involve family members where in fact there is still a lot of parenting that is not only a decision of the father and mother but will also be influenced by the extended family, neighbors and the surrounding environment.

Another empirical evidence that supports ontology is that stressors experienced by parents in parenting will affect the fulfillment of nutrition and the protection of children from stunting or malnutrition. In one of the studies, it was said that the family's commitment to detecting malnutrition and even stunting is an important part of the parenting function to improve their skills in stimulating growth (Nursalam et al., 2021).

Philosophy of Epistemology in Family Contribution to the Prevention of Stunting in Children

Epistemology in this case is a way for us to acquire and understand knowledge about factors that affect family function and child growth and development related to the prevention of children at risk of stunting, as well as methods for improving family function. It includes sources of knowledge used by nurses, such as scientific research, hands-on experience, or expert advice. Various studies that support knowledge in building the contribution of family and/or family members in an effort to reduce and prevent stunting in children have been carried out a lot. Research on the role of the family in improving the health of family members is one of the factors that provide health effects, both related to internal and external factors. Internal factors include skills in providing nutrition, for example, exclusive breastfeeding and providing appropriate and age-appropriate complementary foods to provide adequate nutrition effects on infants and children. Toddler-age children who do not get the right quantity when giving complementary foods will experience a 3 times more potential risk of stunting (Anonymous et al., 2024). The study explained that the provision of complementary and exclusive breastfeeding is an activity that involves parents and families in a good effort to improve the health of family members. Other internal factors are family characteristics such as the

number of family members, head of family, socio-cultural, main caregiver, system in the family and child factors. (Yani et al., 2023)

External factors that will build the epistemology of family support in stunting prevention are environmental factors such as house type, access to water and electricity, drinking water sources (Yani et al., 2023), the household factor is the strongest factor which affects the mother's parenting ability (Has et al., 2024). Several countries, including Indonesia, have strengthened the concept of stunting prevention by involving many parties related to government policies and the involvement of health workers and the community. Research involving risk factors and interventions that have been given to children and families is part of the philosophy of science on the aspect of epistemology to add and formulate the prevention of stunting in children, both at the household scale and even at the government level (Tasic et al., 2020; Vaivada et al., 2020).

Axiological Philosophy in Family Contribution on Child Stunting Prevention

Axiology in the context of preventive behavior in children at risk of stunting in pediatric nursing is related to the values and ethics that guide nurses in increasing the role of the family in improving the health of all family members. This includes values such as empathy, respect for family choices, and concern for providing non-judgmental information. The value in the family about stunting prevention also needs to be built and see the child as a whole individual, so as not to impose other things that can be detrimental and unethical to do. A study found that parents often find it difficult to accept the condition of malnourished or stunted children, so they tend to exaggerate the child's condition or even cover up the child's condition, the study stated that 37% of caregivers exaggerate their child's height compared to other children (Passarelli et al., 2022).

This research will increase family readiness in nurturing and providing protection as well as providing energy in making individual children qualified in the future. Giving children and other family members mutual support—both monetary and non-material—will help families make better decisions and increase the level of family health. Social support from the extended family will increase the benefits that will be obtained if viewed from the external side of factors that strengthen the family (Sucipto et al., 2023).

Conclusion

The family is the part that supports children at risk of stunting to get the right care and care. Stunting prevention is a solution in reducing stunting or malnutrition rates in children. The family has a role and duty in realizing this. Through philosophy viewed from epistemology, ontology and axiology, research in stunting prevention related to families and family members makes a considerable contribution to the quality of life of individual children in the future.

References

1. Filiya, A. N., Ultasari, A. P., Putri, N. A., & Afifah, A. (2024). Correlation Between Exclusive Breastfeeding, Frequency and Quantity of Complementary Feeding With Stunting Among Toddler in Puru Village, Suruh District, Trenggalek Regency. *Malaysian Journal of Medicine and Health Sciences*, 20, 8–13. <https://doi.org/10.47836/mjmhs.20.s9.2>
2. Fitri, R., Huljannah, N., & Rochmah, T. N. (2022). Program Pencegahan Stunting Di Indonesia: A Systematic Review Stunting Prevention Program in Indonesia: A Systematic Review. *Indonesian Nutrition Media (National Nutrition Journal)*. 2022, 17(3), 281–292. <https://doi.org/10.204736/mgi.v17i3.281-292>
3. Galvin, L., Verissimo, C. K., Ambikapathi, R., Gunaratna, N. S., Rudnicka, P., Sunseri, A., Jeong, J., O'Malley, S. F., Yousafzai, A. K., Sando, M. M., Mosha, D., Kumalija, E., Connolly, H., PrayGod, G., Endyke-Doran, C., & Kieffer, M. P. (2023). Effects of engaging fathers and bundling nutrition and parenting interventions on household gender equality and women's empowerment in rural Tanzania: Results from EFFECTS, a five-arm cluster-randomized controlled trial. *Social Science and Medicine*, 324. <https://doi.org/10.1016/j.socscimed.2023.115869>

4. Harahap, H., Syam, A., Palutturi, S., Syafar, M., Hadi, A. J., Ahmad, H., Sani, H. A., & Mallongi, A. (2024). Stunting and Family Socio-Cultural Determinant Factors: A Systematic Review. In *Pharmacognosy Journal* (Vol. 16, Issue 1, pp. 268–275). EManuscript Technologies. <https://doi.org/10.5530/pj.2024.16.39>
5. Has, E. M. M., Krisnana, I., & Efendi, F. (2024). Enhancing Maternal Caregiving Capabilities Model to Prevent Childhood Stunting: A UNICEF-Inspired Model. *SAGE Open Nursing*, 10. <https://doi.org/10.1177/23779608231226061>
6. Khasanah, U., Esyuananik, E., Nurul W., M., Laili, A. N., Saadah, N. L., & Pavadhgul, P. (2022). Family Empowerment Model on Sensitive Nutrition Intervention for Stunting. *International Journal of Advanced Health Science and Technology*, 2(5). <https://doi.org/10.35882/ijahst.v2i5.153>
7. Komakech, J. J., Emerson, S. R., Cole, K. L., Walters, C. N., Rakotomanana, H., Kabahenda, M. K., Hildebrand, D. A., & Stoecker, B. J. (2023). A Peer-Led Integrated Nutrition Education Intervention through Care Groups Improved Complementary Feeding of Infants in Postemergency Settlements in the West-Nile Region in Uganda: A Cluster Randomized Trial. *Current Developments in Nutrition*, 7(3). <https://doi.org/10.1016/j.cdnut.2023.100042>
8. Noviana, U., Ekawati, H., M. Hasinuddin, Haris, M., & Mufarika, M. (2024). Stunting prevention behavior among children under two years based on integrated behavior: A model development. *Pedimaternel Nursing Journal*, 10(1), 7–13. <https://doi.org/10.20473/pmnj.v10i1.47366>
9. Nursalam, N., Utami, S., & Susilaningrum, R. (n.d.). *Analysis of Factors Affecting Commitment and Ability of Families to Early Detection in Stunting*. <https://doi.org/10.24198/jkp>
10. Passarelli, S., Sudfeld, C., Davison, K. K., Fawzi, W., Donato, K., Tessema, M., Gunaratna, N. S., De Groote, H., Cohen, J., & McConnell, M. (2022). Caregivers Systematically Overestimate Their Child's Height-for-Age Relative to Other Children in Rural Ethiopia. *Journal of Nutrition*, 152(5), 1327–1335. <https://doi.org/10.1093/jn/nxac015>
11. Putri, A. P., & Rong, J.-R. (2021). Parenting functioning in stunting management: A concept analysis. In *Journal of Public Health Research* (Vol. 10).
12. Rezaeizadeh, G., Mansournia, M. A., Keshtkar, A., Farahani, Z., Zarepour, F., Sharafkhah, M., Kelishadi, R., & Poustchi, H. (2024). *Maternal education and its influence on child growth and nutritional status during the first two years of life: a systematic review and meta-analysis*. www.thelancet.com
13. Sucipto, H., Nurhadi, N., & Supriyati, S. (2023). The Social Support of Extended Family as the protective factor of Stunting among Migrant Labour Families in Magetan, East Java. *BIO Web of Conferences*, 75. <https://doi.org/10.1051/bioconf/20237505020>
14. Tasic, H., Akseer, N., Gebreyesus, S. H., Ataullahjan, A., Brar, S., Confreda, E., Conway, K., Endris, B. S., Islam, M., Keats, E., Mohammedsanni, A., Wigle, J., & Bhutta, Z. A. (2020). Drivers of stunting reduction in Ethiopia: A country case study. *American Journal of Clinical Nutrition*, 112, 875S–893S. <https://doi.org/10.1093/ajcn/nqaa163>
15. UNICEF. (2015, November 1). *A fair chance for every child*. New York: United Nations Children's Fund. https://www.unicef.org/Media/50421/File/For_every_child_a_fair_chance-ENG.Pdf
16. Vaivada, T., Akseer, N., Akseer, S., Somaskandan, A., Stefopoulos, M., & Bhutta, Z. A. (2020). Stunting in childhood: An overview of global burden, trends, determinants, and drivers of decline. In *American Journal of Clinical Nutrition* (Vol. 112, pp. 777S–791S). Oxford University Press. <https://doi.org/10.1093/ajcn/nqaa159>
17. WHO. (2014, December 30). *Global Nutrition Targets 2025: Stunting policy brief*. <https://www.who.int/Publications/i/Item/WHO-NMH-NHD-14.3>
18. WHO. (2020). *Prevalence of stunting among children under 5 years of age*. <https://www.who.int/Data/Gho/Data/Themes/Topics/Joint-Child-Malnutrition-Estimates-Unicef-Who-Wb>
19. Yani, D. I., Rahayuwati, L., Sari, C. W. M., Komariah, M., & Fauziah, S. R. (2023). Family Household Characteristics and Stunting: An Update Scoping Review. In *Nutrients* (Vol. 15, Issue 1). MDPI. <https://doi.org/10.3390/nu15010233>

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s)

disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.