Pediomaternal Nursing Journal

Review Article

Cultural perspectives of stunting prevention: A systematic review

Khalifatus Zuhriyah Alfianti*, Esti Yunitasari, Ni Ketut Alit Armini

ABSTRACT

Introduction: Developmental delays in children are signs of chronic malnutrition brought on by unfavorable circumstances since birth. Throughout the first 1000 days of life, stunting might increase mortality and disrupt bodily processes. Toddler malnutrition can also result from their culture, traditions, and social food. This study sought to synthesize earlier research that offered an overview of the cultural perspective on stunting prevention.

Methods: Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) Guidelines were employed in the research design, and four databases were used for the literature search method (Scopus, PubMed, ProQuest, and Google Scholar) To find relevant articles, use the Boolean operator "stunting" OR "stunted" AND "culture" OR "cultural" AND "prevention" OR "prevent" by limiting 2017–2022 in English, full-text articles, and open access.

Results: There are 12 papers addressing 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. These studies are cross-sectional and quasi-experimental.

Conclusions: Values emerge from interpersonal interaction and become part of the culture. A slightly different approach is required for communicating behavior change, especially in regions where ancestors' customs and beliefs are still practiced. Stunting can be avoided by using the cultural perspective as a preventative measure.

Keywords: culture; health care; prevention; stunting

INTRODUCTION

Stunting, a disorder that inhibits children's growth and development, can be brought on by inadequate nutrition, frequent illnesses, and a lack of psychosocial stimulation, particularly in the first 1,000 days of life (Kementerian PPN/Bappenas, 2018) because malnutrition in children continues to be a global public health issue and accounts for 3.1 million child deaths annually (Saaka et al., 2021). Stunting is a problem for public health because it raises the risk of illness, mortality, and growth problems in both the motor and mental domains. Failure and insufficient growth compensation represent the incapacity to achieve optimal growth, resulting in stunting. A group of infants with average weight at birth might become stunted if other needs are not appropriately supplied (Cahyani et al., 2019).

Indonesia ranks third in the South-East Asia Region (SEAR) for prevalence, after Timor Leste and India, according to the World Health Organization (WHO), with a rate of 29.6% in 2017. In 2018, 30.8% of Indonesian children under five were stunted (Kemenkes RI, 2018).

Stunting is a term used to indicate a long-term nutritional issue influenced by the health of the mother or pregnant woman, the fetus, and the period of infancy or toddlerhood, including illnesses experienced in infancy (Cahyani et al., 2019). At 0–2 years old, nutritional deficiencies or excesses are typically permanent and impact both the short- and long-term quality of life. Stunting has long-term impacts on the brain's ability to develop, affecting both academic achievement and cognitive capacities, and these effects are altered by several circumstances (IDAI, 2015). A variety of direct and indirect variables influence children's nutritional status. One of the indirect influences on children's nutritional health is culture (Eka et al., 2022). Parenting and feeding practices for children are influenced by culture. Pregnant women have barriers to getting the nourishment they need, which affects the growth and development of the child they are carrying, because of cultural taboos and bad feeding habits (Rafsanjani, 2018).

According to the WHO conceptual framework on stunting, socio-cultural factors might impact children's growth and development (Stewart et al., 2013). Stunting prevention measures have taken many different forms. In 2025, WHO aims to reduce the prevalence of stunting by 40%. When defining how each country should interpret this aim, it is important to take into account the nutritional profile, risk factor developments, demographic changes, expertise in developing and executing nutrition policies, and the level of the health system. Every nutritional intervention needs to be studied and customized for the region (Onis et al., 2013). Values emerge from interpersonal interaction and become part of the culture. A slightly different approach is required to communicate behavioral changes, particularly for regions that practice old conventions and beliefs. How a region's

OPEN ACCESS
*Correspondence: Khalifatus Zuhriyah Alfianti (khalifatus.zuhriyah.alfianti-2020@fkp.unair.ac.id)
Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia

Volume 9 (1): 36-41
http://dx.doi.org/10.20473/pmnj.v9i1.37242

e-ISSN: 2355-1577 | p-ISSN: 2656-4629

Article History
Received: August 18, 2023 | Revised: November 26, 2022 | Accepted: November 26, 2022 | Published : March 16, 2023

cultural perspective influences whether a specific intervention is accepted or rejected is an intriguing strategy. Prevention of stunting from a cultural standpoint. The goal of this thorough analysis is to have a general understanding of the cultural perspective on stunting prevention.

METHODS

Design

This study has provided a systematic review of cultural perspectives to avoid stunting. The protocol outlines the purpose and goals of the review, the eligibility requirements, the information sources, the search strategy, the study selection and data collection procedure, the data items and outcomes sought, the methods for determining the risk of bias for individual studies, and data synthesis (Kamioka, 2019). Scopus, PubMed, ProQuest, and Google Scholar were the four databases used for the literature search. In February 2022, a search was done. The keywords were searched for using the Boolean operator "stunting" OR "stunted" AND "culture" OR "cultural" AND "prevention" OR "prevent" with the restrictions of 2017 - 2022 in English, full article text, and open access, to find relevant articles.

The PICOT Framework (Table 1) was utilized as a search engine to find publications because the review's main objective was to investigate cultural perspectives on stunting prevention. Cross-sectional and quasi-experimental research with participants were part of the research design.

Table 1. Inclusion and exclusion criteria

PICOT framework	Inclusion criteria
Participants	Children aged 0-5 years, parents, family
Interest	Culture
Comparison	No comparison
Outcomes	Stunting prevention
Time	2017 – 2022
Study design	Cross-sectional and quasi-experiment
Language	English
Article Types	Original research studies with full-text available

Study selection

Using the Preferred Reporting Items for Systemic Review and Meta-Analysis (PRISMA) Guidelines as a guide, this systematic review gathered literature data in this manner. After being taken and collected, articles are chosen through a series of organized steps, which may involve removing duplicate articles, titles, and abstracts. Four impartial reviewers will examine the articles from the chosen studies after the screening procedure.

Risk of bias

The risk of bias in this systematic review is carried out by assessing the data extraction, which includes the similarity of the research aims and the results obtained and the similarity of the research design utilizing cross-sectional and quasi-experimental methods. The JBI critical assessment list for

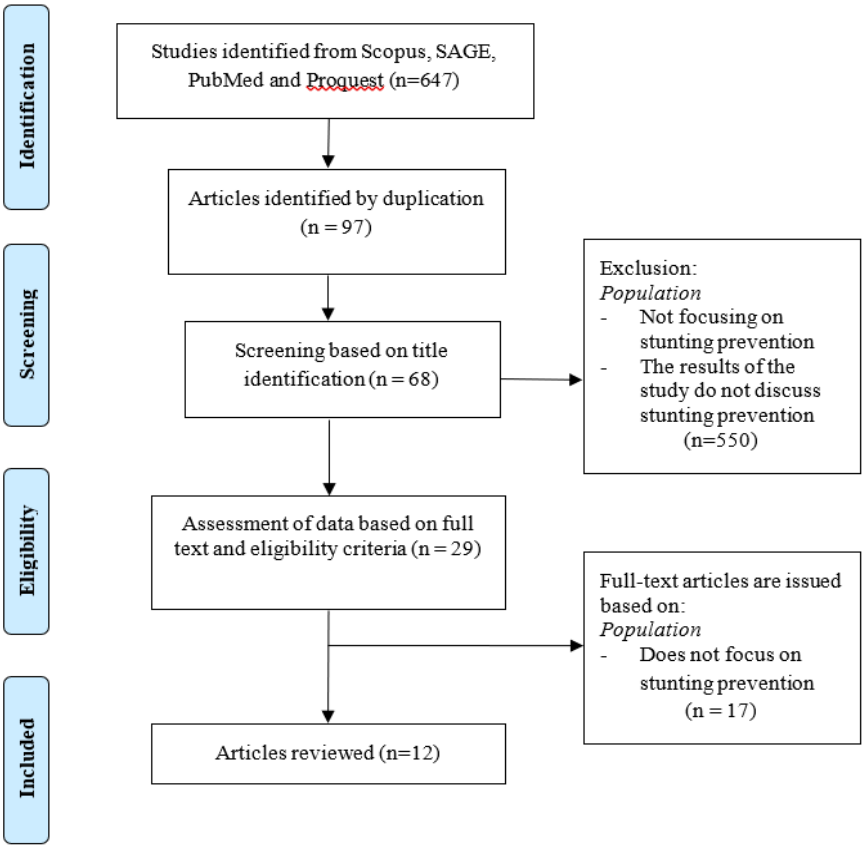

Figure 1. Flow chart of study selection

Table 2. Results of article reviews

Author	Outcome
Butarbutar et al., 2020	Values and beliefs, out of the four cultural elements, have an essential link with exclusive breastfeeding, although education and tradition do not. Exclusive breastfeeding is considerably associated with knowledge, attitude, and behavior characteristics. Knowing that moms who do not provide exclusive breastfeeding can do so at a prevalence ratio of 4.335 times higher than those who do is an essential aspect.
Januarti & Hidayathillah, 2020	Stunting prevention was significantly impacted by the father's role, with sig 0.001 0.05. Using the results of sig 0.019 0.05, parenting culture significantly affects toddler stunting prevention. The results demonstrate that the role of dads will raise the prevention of stunting in toddlers, the role of parenting culture will increase the role of parenting culture, and the prevention of stunting in toddlers will increase with the role of fathers.
Yunitasari et al., 2021	Knowledge (p = 0.007), attitude (p = 0.034), income (p = 0.006), cultural values (p = 0.016), and parenting styles (p = 0.000) were factors associated with the prevention of stunting.
Elis & Mustari, 2020	The knowledge, attitudes, and behaviors of postpartum women about exclusive breastfeeding to prevent stunting before and after intervention in the treatment and control groups are affected by health education based on Tudang Sipulung culture.
Rachmawati et al., 2018	The relationship between diet and economy (p = 0.013; r = 0.210), regulation and policy (p = 0.040, r = 0.174), cultural values and lifestyle (p = 0.000; r = 0.502), social and family support (p = 0.000, r = 0.337), religiosity and philosophy (p = 0.000, r = 0.371), and technology (p = 0.017; r = 0.203), diet was not related to education (p = 0.732). The primary influences are lifestyle and cultural values. The research demonstrates that culturally based variables can support stunting prevention.
Eka et al., 2022	Each dietary culture and health service use variable has a p-value (Sig) of 0.05, which indicates that they each have a marginally significant impact on the prevalence of stunting in the model. Food culture has a score of sig = 0.000, which indicates that eating habits may have some bearing on the prevalence of stunting. The respondent's behavior in using health services partially impacts the incidence of stunting, as indicated by the value of sig = 0.003 for utilization of health services.
Cahyani et al., 2019	A significance of p=0.003 indicated an association between social support and the provision of specialized dietary interventions. With a significance of p=0.048, cultural and lifestyle values were linked to the delivery of specific nutrition interventions.
Januarti et al., 2020	The direct impact of family empowerment on preventing stunting is more significant than the indirect impact. Toddler stunting prevention can be enhanced by family empowerment based on a family-centered nursing strategy.
Setia et al., 2020	The knowledge, intentions, attitudes, and behavior of pregnant women and mothers of young children to maximize nutrition in stunting prevention are significantly influenced by family-based education (p=0.00).
Yunitasari et al., 2020	The mother's knowledge, attitudes, and behavior in the therapy group had a significant value of p = 0.000. Conversely, the control group did not show any significance (p>0.05). After the intervention, there was a difference in mothers' knowledge and attitudes between the control and treatment groups, with a p-value of 0.000. To avoid stunting in toddlers, mothers' knowledge, attitudes, and behavior are improved through lectures, brainstorming sessions, and demonstrations (CBD).
Hasliani & Rahmawati, 2020	Pregnant women's attempts to prevent stunting before and after receiving health information on the First 1000 Days of Birth varied significantly.
Sary, 2020	The 36-month-old children's weight and height have changed or increased, leading researchers to conclude that health education about stunting prevention provided to caregivers positively impacts the 36-month-old children's weight and height in the coastal region of Probolinggo Regency, East Java.

cross-sectional and quasi-experiments was used to evaluate the research's quality. Twelve items received biased ratings.

Data extraction

The purpose of data extraction in this study was to direct information from records following the study's goals. Each study collected information on the following topics: year, language, population, research design, goals, methods, interventions, instruments used, follow-up period, and study findings. The findings section also contains the data that has to be examined, including the year, the intervention, the analytic method, the outcomes, and the conclusions.

Data synthesis

To assess the chosen research, four impartial reviewers synthesized qualitative data and held discussions. This

systematic review documents all interventions that consolidate prior research and provide a broad picture of cultural perspectives on stunting reduction.

RESULTS

Study Selection

According to the PRISMA Flowchart diagram, the following stages are taken to conduct the article/literature search. The cross-sectional, quasi-experimental method yielded 647 articles from the 647 searches that were rejected, 1635 of which were based on limits from the previous five years. Only 29 articles and 12 research articles from the full-text article feasibility test were examined (Figure 1).

Study characteristics

The results of the article reviews are shown in Table 2.

DISCUSSION

Parenting culture of the father's role

According to research by **Setyowati et al., (2013)**, most fathers play an active role in their families, acting as decision-makers, risk-takers, protectors, and motivators for their wives. However, some fathers play a passive role in their families, failing to take responsibility for risk-takers protection and failing to assist in caring for their children when they are ill. In addition to providing care, fathers also serve as instructors, mentors, bosses, enforcers, guardians, and supporters. These five responsibilities will shape the function of dads in avoiding child stunting. A stimulation of particular cognitive consequences in interpersonal influences is the fathers' role proposed by Pender (2002), which will influence health promotion behavior to prevent stunting under five. Culture is an individual component connected to a particular cognitive impact on interpersonal effects, namely the father's role in producing the final habit of health promotion to prevent stunting in children under five (Alligood, 2014).

According to the Sunrise Model Leininger (2001), if the caring culture is advantageous, nurses can assist fathers by upholding it. Yet, suppose adopting the father's caring culture presents an undesirable opportunity. In that case, it is feasible to negotiate a culture of care (culture care accommodation) and even family culture reconstruction (culture care restructuring). The caring culture demonstrates that parenting culture has a more significant impact on increasing the direct role of dads than parenting culture has on boosting the prevention of stunting in toddlers. Also, the prevention of stunting in toddlers is directly impacted by the involvement of dads. So, it may be inferred that parenting culture has a significant direct impact on dads' ability to avoid stunting in toddlers and that fathers' actions directly impact this ability (Januarti & Hidayathillah, 2020).

Parenting culture of grandmother's role

Most of the babysitters are housewives, and even though they live very simply with few basic needs, this grandmother tries to provide nutritious food to her grandchildren. Grandmother's wealth and economy reflect the economic resources available to the family (Huang, 2020). After attending health education to prevent stunting, it was discovered that the caregiver was trying to save money and grow vegetables and fruits for her grandchildren. The nanny and grandchildren live on the beach, so eating fish and seafood is easy. To save costs, caregivers always go to fishing auctions and fishing grounds and ask fishermen for side dishes of fish and other seafood. Fish has a good effect on young children's health because it is a food high in animal protein (Sary, 2020).

Culture of family empowerment

Understanding family behavior, value systems, and family functions may involve considering the family's cultural background. Individual, family, and social activities are influenced and permeated by culture, which has far-reaching effects on practice (Januarti & Hidayathillah, 2020). All types of prevention involve the involvement of the family (Jannah et al., 2016). There are formal and informal aspects to the family's function. The formal roles of the family are broken down into roles such as dads, mothers, and kids. Empowering families has an impact on preventing family stunting. When a person has a believable attitude and is independent in decision-making, they are said to be family empowered. An independent family can create family empowerment. Improved stunting prevention in young children can result from family empowerment based on a family-centered nursing paradigm (Januarti et al., 2020).

CONCLUSION

The term "stunting problem" refers to a long-term nutritional issue influenced by the health of the mother or pregnant woman, the fetus' life, and infancy or toddlerhood, including illnesses experienced in infancy. Values emerge from interpersonal interaction and become part of the culture. A slightly different approach is required for communicating behavior change, especially in regions where ancestors' customs and beliefs are still practiced. Stunting can be avoided by using the cultural perspective as a preventative measure. It consists of three viewpoints: the parenting culture emphasizing the father's role, the parenting culture emphasizing the role of the grandmother, and the culture of family empowerment. Further study is needed to address child stunting from a cultural perspective.

Declaration of Interest

The authors declare that there is no conflict of interest.

Funding

None.

Data Availability

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

REFERENCES

Alligood, M. R. (2014). Nursing Theorists And Their Work (8th ed.). *Elsevier*.

Butarbutar, A. F., Lubis, F. H., Fitriani, E., Bukit, H. B., & Sitorus, F. E. (2020). The Stunting Prevention Efforts for Babies in Culture and Behavior of Exclusive Breastfeeding. *Ichimat 2019*, 278–285. https://doi.org/10.5220/0009488302780285

Cahyani, V. U., Yunitasari, E., & Indarwati, R. (2019).

Dukungan Sosial sebagai Faktor Utama Pemberian Intervensi Gizi Spesifik pada Anak Usia 6-24 Bulan dengan Kejadian Stunting berbasis Transcultural Nursing. *Pediomaternal Nursing Journal, 5*(1), 77. https://doi.org/10.20473/pmnj.v5i1.12410

Eka Islamiah, W. (2022). The Correlation between Food Security with Stunting Toodler from Fisherman Family. Media Gizi Indonesia, 17 NO 1SP(International Conference On Stunting) https://doi.org/10.20473/mgi.v17i1SP.83-89

Elis, A., & Mustari, R. (2020). The Role of Presenting Exclusive Breastfeeding for The Prevention of Stunting Based on The Culture of Tudang Sipulung. 9(2), 1230–1237. https://doi.org/10.30994/sjik.v9i2.461

Hasliani, A., & Rahmawati, R. (2020). Pendekatan Health Education Tentang 1000 Hpk Terhadap Upaya Pencegahan Stunting Di Puskesmas Tamalanrea Jaya Makassar. *Media Kesehatan Politeknik Kesehatan Makassar, 15*(2), 279. https://doi.org/10.32382/medkes.v15i2.1704

Huang, Y. (2020). Grandparents' wealth and the body mass index trajectories of grandchildren. *PLoS ONE, 15*(4), 1–15. https://doi.org/10.1371/journal.pone.0232491

IDAI. (2015). Rekomendasi Praktik Pemberian Makan Berbasis Bukti pada Bayi dan Batita di Indonesia untuk Mencegah Malnutrisi. UKK Nutrisi Dan Penyakit Metabolik, Ikatan Dokter Anak Indonesia. https://doi.org/10.1017/CBO9781107415324.004

Jannah, M. F., Kepel, B. J., & Maramis, F. R. R. (2016). Hubungan antara pengetahuan dan tindakan pencegahan ibu dengan kejadian diare pada balita di Puskesmas Tikala Baru Manado. 5(3), 211–217. https://doi.org/10.35799/pha.5.2016.12976

Januarti, L. F., Abdillah, A., & Priyanto, A. (2020). Family Empowerment Model in Stunting Prevention Based on Family Centered Nursing. 9(2), 1797–1806. https://doi.org/10.30994/sjik.v9i2.536

Januarti, L. F., & Hidayathillah, A. P. (2020). Parenting Culture on The Role of Father in Prevention of Stunting in Toddler. *Babali Nursing Research, 1*(2), 81–90. https://doi.org/10.37363/bnr.2020.1211

Kemenkes, R. (2018). Cegah Stunting Itu Penting. Kementerian Kesehatan RI.

Kamioka, H. (2019). Preferred reporting items for systematic review and meta-analysis protocols (prisma-p) 2015 statement. J*apanese Pharmacology and Therapeutics, 47*(8), 1177–1185.

Kementerian PPN/ Bappenas. (2018). Pedoman Pelaksanaan Intervensi Penurunan Stunting Terintegrasi di Kabupaten/Kota. Rencana Aksi Nasional Dalam Rangka Penurunan Stunting: Rembuk Stunting, November, 1–51.

Leininger, M. (2001). 'Culture Care Theory : A Mayor Kontribution to Advance Transcultural Nursing Knowledge and Parcties'. Transcultural Nursing, 13, p. 189.

Onis, M. De, Dewey, K. G., Borghi, E., Onyango, A. W., Blössner, M., Daelmans, B., Piwoz, E., & Branca, F. (2013). Orginal Article The World Health Organization ' s global target for reducing childhood stunting by 2025 : rationale and proposed actions. 9, 6–26. https://doi.org/10.1111/mcn.12075

Pender, N.J., Murdaugh, C. and Parsons, M.A. (2002) Health Promotion in Nursing Practice. 4th Edition, Prentice-Hall Health, Inc., USA, 140-145.

Rachmawati, P. D., Pradanie, R., & Dwiwardani, R. L. (2018). Factors Affecting the Feeding Pattern of Under-Five Children with Stunting in Indonesia. Inc, 229–235. https://doi.org/10.5220/0008323102290235

Rafsanjani, T. M. (2018). Pengaruh individu, dukungan keluarga dan sosial budaya terhadap konsumsi makanan ibu muda menyusui (Studi kasus di Desa Sofyan Kecamatan Simeulue Timur Kabupaten Simeulue). *AcTion: Aceh Nutrition Journal, 3*(2), 124. https://doi.org/10.30867/action.v3i2.112

Saaka, M., Saapiire, F. N., & Dogoli, R. N. (2021). Independent and joint contribution of inappropriate complementary feeding and poor water, sanitation and hygiene (WASH) practices to stunted child growth. *Journal of Nutritional Science, 10*, 1–10. https://doi.org/10.1017/jns.2021.103

Sary, Y. N. E. (2020). Health Education for Caring Grandmothers in Preventing Stunting for 36 Months Old Children in Coastal Areas. P*ratama Widya : Jurnal Pendidikan Anak Usia Dini, 5*(2), 89–94.

Setia, A., Shagti, I., Boro, R. M., Adi, A. M., Saleh, A., & Sanjiwany, P. A. (2020). The effect of family-based nutrition education on the intention of changes in knowledge, attitude, behavior of pregnant women and mothers with toddlers in preventing stunting in Puskesmas Batakte, Kupang Regency, East Nusa Tenggara, Indonesia Working Area. Pakistan *Journal of Medical and Health Sciences, 14*(3), 1001–1004.

Stewart, C. P., Iannotti, L., Dewey, K. G., Michaelsen, K. F., & Onyango, A. W. (2013). Original Article Contextualising complementary feeding in a broader framework for stunting prevention. 9, 27–45. https://doi.org/10.1111/mcn.12088

Wardani, N. E. K., Harumi, A. M., & Yuniarti, A. M. (2022). Culture of Diet and Utilization of Health Services on Stunting Cases in Children Aged 2-5 Years in Bangkalan East Java. *44(Ismophs 2021)*, 16–19. https://doi.org/10.2991/ahsr.k.220108.004

Yunitasari, E., Pradanie, R., Arifin, H., Fajrianti, D., & Lee, B. (2021). Determinants of Stunting Prevention among Mothers with Children Aged 6–24 Months. *Open Access Macedonian Journal*

of Medical Sciences, 9(B), 378–384. https://doi.org/10.3889/oamjms.2021.6106

Yunitasari, E., Rahayu, M., & Kurnia, I. D. (2020). The Effects of Lecture , Brainstorming , Demonstration (CBD) to Mother ' s Knowledge , Attitude , and Behavior About Stunting Prevention on Toddler. 11(6), 1131–1136. https://doi.org/10.31838/srp.2020.6.163