Lentera Perawat
Volume 7 Number 3 : July-September 2026

OPEN ACCESS

Review Article

Nutrition-related parenting practices and child nutritional status in urban and rural settings: A systematic review

Komariah[1*], Nopi Nur Khasanah[1], Sri Wahyuni[1], Herry Susanto[1], Sri Tutik Rahayu[1]
[1] Universitas Islam Sultan Agung, Semarang, Indonesia

***Corresponding Author:**
Komariah
Universitas Islam Sultan Agung, Semarang, Indonesia
Email: nerskomariah5@gmail.com

Keyword:
Child Feeding; Child Nutrition; Grandparenting; Parenting Practices; Rural Population; Urban Population

DOI:
https://doi.org/10.52235/lp.v7i3.811

Article Info:
Received : May 04, 2026
Revised : July 01, 2026
Accepted : July 19, 2026

Lentera Perawat
e-ISSN : 2830-1846
p-ISSN : 2722-2837

Abstract

Background: Nutrition-related parenting practices operate within social and geographic environments that shape food availability, caregiving resources, and access to preventive services. Evidence linking these practices to child nutritional status across urban and rural settings remains fragmented and methodologically heterogeneous.
Objective: To synthesize evidence on the association between nutrition-related parenting or caregiving practices and nutritional status among children aged 0–12 years, and to examine whether the association differs between urban and rural settings.
Methods: This systematic review followed PRISMA 2020 and the Synthesis Without Meta-analysis (SWiM) framework. The last search was conducted on 31 May 2026 in Scopus, PubMed/MEDLINE, SAGE Journals, and ClinicalKey for Nursing for English-language studies published from January 2015 to May 2026.
Results: Eight cross-sectional studies involving 6,062 children or caregiver–child pairs were included; two were secondary analyses of population-based surveys. Three studies were rated low risk of bias and five moderate risk. Rural children consistently had a higher burden of stunting or underweight in comparative studies, but urban–rural differences in feeding practices did not uniformly account for this gap. Delayed complementary feeding and bottle feeding were associated with malnutrition in one Indian study. Grandparenting was associated with malnutrition in rural, but not urban, Chinese children. In other studies, feeding domains showed weak or non-significant associations after adjustment, while child illness, birth weight, maternal nutritional status, household socioeconomic conditions, and service use were more consistent correlates.
Conclusion: Nutrition-related parenting practices are relevant to child nutritional status, but their effects are contingent on household resources, child health, and place of residence. The evidence does not support treating urban–rural residence or parenting practice as an isolated causal determinant.

Background

Child malnutrition encompasses undernutrition, micronutrient deficiencies, overweight, and obesity, which may coexist within the same country, community, or household. These outcomes emerge from interacting biological, dietary, caregiving, and structural processes rather than from food intake alone. Early growth faltering can compromise neurodevelopment and later health, while rapid nutrition transition can increase excess-weight risk in children exposed to energy-dense diets and sedentary environments (Wells et al., 2020).

Parents and other caregivers influence nutrition through breastfeeding, the timing and quality of complementary feeding, meal structure, food availability, monitoring, modeling, encouragement, restriction, and responses to hunger and satiety. These practices should be distinguished from broad parenting styles and from socioeconomic characteristics that merely describe the family. Reviews of parental feeding emphasize that the same strategy may have different meanings and effects according to the child's age, temperament, health, and food environment (Costa & Oliveira, 2023). Observational research in low- and middle-income countries also shows substantial variation in the definition and measurement of infant and young-child feeding, which limits comparability across studies (Schwendler et al., 2024). The World Health Organization recommends exclusive breastfeeding during the first six months, timely introduction of diverse complementary foods at about six months, and continued breastfeeding alongside age-appropriate family foods (World Health Organization, 2023).

Place of residence can modify both caregiving opportunities and nutritional risk. Rural households may face longer travel to health services, limited market diversity, seasonal food insecurity, lower parental education, and fewer growth-monitoring opportunities. Urban households may have better service access but greater exposure to commercially processed foods, time constraints, and obesogenic environments. Comparative studies have reported

higher rural undernutrition in Nigeria and India, alongside substantial differences in breastfeeding and complementary-feeding practices (Senbanjo et al., 2016; Gautam et al., 2018; Bakare et al., 2023). Indonesian data similarly demonstrate a higher prevalence of stunting in rural than urban settings, although the relevant predictors differ by location (Siramaneerat et al., 2024).

The family structure also differs across settings. Grandparents may provide daily care when parents migrate or work long hours. A national Chinese analysis found that grandparenting was associated with malnutrition among rural children aged 0–3 years but not among their urban counterparts, suggesting that caregiving effects are conditioned by resources, knowledge, and household organization (Li et al., 2024). More recent studies have extended the evidence to multidomain feeding practices in North India and responsive feeding in urban Indonesia; both reported weak or inconsistent independent associations with anthropometric status (Kaur et al., 2025; Sari et al., 2026).

Previous reviews have largely described the prevalence and determinants of child malnutrition or compared urban and rural nutritional outcomes without requiring a direct measure of parenting or feeding. For example, a systematic review from Papua New Guinea documented marked heterogeneity in nutritional indicators and study quality but did not specifically synthesize residence-dependent associations between caregiving practices and child nutrition (McGlynn et al., 2018). Socioeconomic decomposition studies can identify the contribution of wealth, maternal education, sanitation, and health-service access to urban–rural gaps, but they do not establish whether a measured parenting practice is associated with nutritional status (Hossain et al., 2025).

A focused synthesis therefore requires strict separation of direct parenting evidence from contextual determinants and disease-specific evidence. It also requires transparent reporting, reproducible searching, structured appraisal, and an explicit synthesis method. PRISMA 2020, the JBI evidence-synthesis manual, and the SWiM guideline provide complementary standards for these tasks (Page et al., 2021; Aromataris & Munn, 2024; Campbell et al., 2020). The present review addresses the following question: among children aged 0–12 years, how are nutrition-related parenting or caregiving practices associated with nutritional status, and does the association differ between urban and rural settings?.

Methods

Study Design

A systematic review of quantitative observational studies was undertaken. Reporting followed PRISMA 2020, and narrative synthesis was structured according to SWiM because the included studies differed in exposure definitions, nutritional outcomes, settings, and statistical models (Page et al., 2021; Campbell et al., 2020).

Research question and PECO framework

The question was developed using the Population–Exposure–Comparator–Outcome (PECO) framework. Nutrition-related parenting was defined as an observable caregiving practice directly linked to food provision, feeding, monitoring, or daily care. Parental education, income, occupation, residence, and access to services were treated as contextual or confounding variables unless a study also measured a direct parenting or feeding exposure.

Table 1. PECO framework and operational definitions

Component	Operational definition	Eligible examples
Population	Children aged 0–12 years living in urban, peri-urban, slum, or rural settings.	Infants, toddlers, preschool children, and school-aged children when results for those aged ≤12 years were reported.
Exposure	A directly measured nutrition-related parenting or caregiving practice.	Breastfeeding, complementary feeding, meal frequency, dietary diversity, responsive feeding, monitoring, pressure to eat, modeling, food restriction, or grandparental care.
Comparator	A geographic or caregiving-practice comparison.	Urban versus rural residence; responsive versus non-responsive feeding; timely versus delayed complementary feeding; parent care versus grandparent care.
Outcome	A child nutritional-status outcome.	Stunting, wasting, underweight, overweight/obesity, BMI-for-age, weight-for-age, height-for-age, weight-for-height, or a clearly defined study-specific malnutrition measure.

Eligibility criteria

Primary quantitative studies were included when they: (1) used an observational cross-sectional, case–control, cohort, or longitudinal design; (2) enrolled children aged 0–12 years; (3) measured at least one direct nutrition-related parenting or caregiving practice; (4) reported an anthropometric or explicitly defined nutritional-status outcome; (5) examined an association between the exposure and outcome or reported parallel urban–rural comparisons that permitted interpretation of both; (6) were published in English from January 2015 through May 2026; and (7) were available in full text.

Reviews, editorials, protocols, qualitative studies, case reports, theses, and duplicate publications were excluded. Studies were also excluded when they reported only socioeconomic or residence disparities without measuring parenting or feeding, measured parenting without a child nutritional-status outcome, focused primarily on a disease or health condition without a parenting exposure, or included participants older than 12 years without separable data.

Information sources and search strategy

Scopus, PubMed/MEDLINE, SAGE Journals, and ClinicalKey for Nursing were searched from 1 January 2015 to 31 May 2026. Search terms combined controlled vocabulary and free-text terms for parenting or feeding, child nutritional status, and urban–rural residence. No design filter was applied because design labels are inconsistently indexed. Reference lists of eligible articles and relevant reviews were checked manually. The complete database-specific strategies are provided in Appendix A.

Study selection

All records were exported to a reference manager and deduplicated. Two reviewers independently screened titles and abstracts, followed by full-text assessment against the prespecified criteria. Reasons for exclusion were recorded at full-text stage. Disagreements were resolved through discussion; a third reviewer adjudicated unresolved decisions.

Data extraction

Two reviewers independently extracted author, year, country, setting, design, sample size, child age, residence classification, caregiving exposure, measurement instrument, nutritional outcome, analytical method, adjusted covariates, effect estimates, and study limitations. A standardized form was piloted before full extraction. Conflicts were resolved by consensus and checked against the source article.

Risk-of-bias appraisal

The JBI Critical Appraisal Checklist for Analytical Cross-Sectional Studies was applied at domain level (Aromataris & Munn, 2024). The eight questions address inclusion criteria, description of participants and setting, validity of exposure measurement, objective criteria for the outcome, identification of confounders, strategies to address confounding, validity of outcome measurement, and appropriateness of statistical analysis. Two reviewers appraised each study independently. 'Yes' received one point; 'No' or 'Unclear' received zero. Overall ratings were low risk (7–8), moderate risk (5–6), or high risk (0–4). No study was excluded solely because of the appraisal; risk of bias informed the weight given to each finding.

Data synthesis

Meta-analysis was not appropriate because studies used different feeding constructs, residence categories, age groups, anthropometric indices, and statistical estimators. Studies were therefore grouped by (1) breastfeeding and complementary feeding, (2) multidomain parental feeding, and (3) caregiving arrangement. Synthesis considered the direction, magnitude, precision, and adjustment of associations, then compared patterns across residence. Contextual socioeconomic studies, disease-specific studies, and previous reviews were not included in the primary synthesis; they were used only to interpret the eligible evidence in the Discussion.

Results

The database searches identified 1,225 records. After removal of 542 duplicate or otherwise ineligible records before screening, 683 titles and abstracts were screened and 651 were excluded. Thirty-two reports were sought in full text; 20 could not be retrieved. Twelve reports were assessed for eligibility. Four were excluded because they did not measure a direct parenting or feeding exposure (n=3) or did not report a child

nutritional-status outcome (n=1). Eight studies were included in the narrative synthesis.

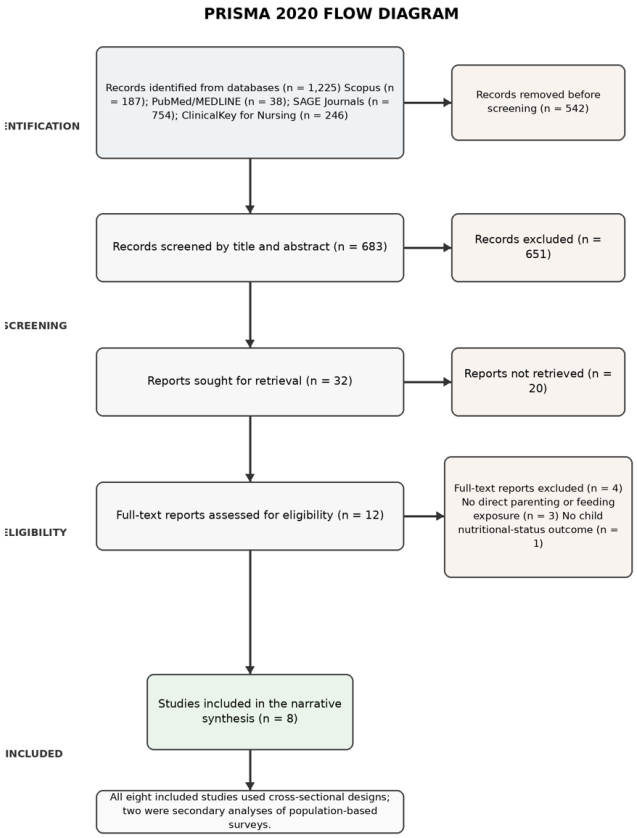

Figure 1. PRISMA 2020 flow diagram for study identification and selection.

The eight studies were published between 2016 and 2026 and included 6,062 children or caregiver–child pairs. All used cross-sectional designs; Li et al. (2024) and Siramaneerat et al. (2024) were secondary analyses of population-based surveys. Four studies directly compared rural and urban groups in Nigeria or India, one used urban, slum, and rural categories, one stratified adjusted models by urban and rural residence, one used residence as a determinant in an Indonesian survey, and one was conducted only in urban Indonesia. Child age ranged from infancy to six years; no eligible study focused exclusively on children older than six years

Table 2. Characteristics and principal findings of the included studies

Study; country	Design, sample, setting	Parenting/caregiving exposure	Nutritional outcome	Main finding relevant to the review	Adjustment/ analysis	Key limitation
Senbanjo et al. (2016); Nigeria	Comparative cross-sectional; n=300 children <5 years (150 rural, 150 urban), Lagos.	Caregiver-reported dietary practices.	WHO WAZ, HAZ, WHZ.	Rural vs urban: underweight 19.4% vs 9.3%; stunting 43.3% vs 12.6%. Feeding differences were less consistent.	Bivariate comparisons.	Cross-sectional; limited confounder control.
Gautam et al. (2018); India	Cross-sectional; n=1,000 children aged 0–3 years (500 rural, 500 urban),	Breastfeeding, prelacteal feeds, complementary-feeding timing/type, bottle feeding.	WHO/IAP anthropometry and malnutrition.	Rural vs urban malnutrition: 70.0% vs 42.2%. Delayed complementary feeding (p=.004) and bottle	Bivariate; no adjusted model.	Hospital sample; selection and residual confounding.

Study; country	Design, sample, setting	Parenting/caregiving exposure	Nutritional outcome	Main finding relevant to the review	Adjustment/ analysis	Key limitation
	tertiary hospital.			feeding (p=.001) were associated with malnutrition.		
Vyas et al. (2021); India	Comparative cross-sectional; n=234 preschool children (117 rural, 117 urban), Uttar Pradesh.	Familial characteristics and feeding-related practices.	Stunting, underweight, wasting.	Undernutrition was more frequent in rural children; family size, parental education, occupation, and socioeconomic class were associated.	Chi-square/bivariate.	Small local sample; no validated feeding scale or multivariable model.
Bakare et al. (2023); Nigeria	Comparative cross-sectional; n=617 pairs (rural 299, urban 318), Ibadan.	Breastfeeding, 24-hour recall, dietary diversity, meal frequency, counselling.	WHO WAZ, HAZ, WHZ, MUAC.	Stunting (30.6%), underweight (21.9%), wasting (22.3%), and overweight (7.0%) were more common in rural settings; dietary diversity was not associated with outcomes.	Descriptive and chi-square.	No adjusted model; one-day recall.
Li et al. (2024); China	CFPS 2020 secondary analysis; n=1,028 aged 0–3 years (rural 666, urban 362).	Any, daytime, or nighttime grandparenting.	Height-based study-defined malnutrition.	Rural: any grandparenting OR 1.423 (p=.037); daytime OR 1.436 (p=.035). Urban associations were non-significant.	Adjusted logistic regression.	Cross-sectional; caregiving intensity and diet unmeasured; narrow outcome.
Siramaneerat et al. (2024); Indonesia	IFLS-5 secondary analysis; n=2,428 aged 24–59 months, urban and rural.	Age at weaning and related care variables.	WHO stunting (HAZ <−2 SD).	Rural vs urban stunting: 41.85% vs 30.58%; rural residence OR 1.229 (95% CI 1.016–1.486). Urban weaning result requires caution.	Multivariable and multilevel logistic regression.	Secondary data; limited feeding variables; unclear temporality.
Kaur et al. (2025); India	Cross-sectional; n=200 pairs aged 1–3 years: urban 60%, slum 30%, rural 10%, Chandigarh.	Seven Child Feeding Questionnaire domains.	WAZ, HAZ, WHZ.	Underweight 42.5%, stunting 57.0%, wasting 24.0%. Monitoring showed weak, non-significant correlations with malnutrition and stunting.	Comparisons and Spearman correlations.	Very small rural subgroup; no adjusted model.
Sari et al. (2026); Indonesia	Urban cross-sectional; n=255 pairs aged 3–6 years, West Jakarta.	Responsive vs non-responsive feeding (adapted CFQ).	WHO-classified status from measured height/weight.	Weak bivariate correlation (r=.123; p=.04), but no adjusted association. Recent illness predicted undernutrition (aOR 3.16; 95% CI 1.61–6.21).	Adjusted multinomial regression.	Single-city sample; possible reverse causation.

Three studies were rated low risk of bias and five moderate risk; none was rated high risk. The strongest studies used standardized anthropometry and multivariable models that addressed key confounders. Recurrent limitations were incompletely described feeding measures, bivariate analyses without adjustment, small rural subsamples, and cross-sectional temporality.

Table 3. JBI risk-of-bias appraisal for analytical cross-sectional studies

Study	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Score	Overall
Senbanjo et al. (2016)	Y	Y	Y	Y	Y	N	Y	Y	7/8	Low
Gautam et al. (2018)	Y	Y	U	Y	N	N	Y	Y	5/8	Moderate
Vyas et al. (2021)	Y	Y	U	Y	Y	N	Y	Y	6/8	Moderate
Bakare et al. (2023)	Y	Y	Y	Y	N	N	Y	Y	6/8	Moderate
Li et al. (2024)	Y	Y	Y	U	Y	Y	U	Y	6/8	Moderate
Siramaneerat et al. (2024)	Y	Y	Y	Y	Y	Y	Y	Y	8/8	Low
Kaur et al. (2025)	Y	Y	Y	Y	N	N	Y	Y	6/8	Moderate
Sari et al. (2026)	Y	Y	Y	Y	Y	Y	Y	Y	8/8	Low

*Note. Y = yes; N = no; U = unclear. Q1, clear inclusion criteria; Q2, detailed participants and setting; Q3, valid/reliable exposure measurement; Q4, objective standard criteria for the condition/outcome; Q5, confounders identified; Q6, strategies to address confounding; Q7, valid/reliable outcome measurement; Q8, appropriate statistical analysis. Low risk = 7–8; moderate risk = 5–6; high risk = 0–4.

Urban–rural pattern in nutritional status

Comparative studies consistently reported a higher prevalence of undernutrition in rural children. The clearest differences were observed for stunting: 43.3% versus 12.6% in rural and urban Lagos, respectively (Senbanjo et al., 2016), and 41.85% versus 30.58% in rural and urban Indonesia (Siramaneerat et al., 2024). Gautam et al. (2018) reported malnutrition in 70.0% of rural and 42.2% of urban children. Bakare et al. (2023) also found that stunting, underweight, and wasting were more common in rural wards, although dietary diversity was similar across settings. These patterns support a residence gradient in undernutrition, but do not by themselves identify parenting as the causal mechanism.

Association between parenting or feeding practices and nutritional status

Evidence for direct exposure–outcome associations was mixed. Gautam et al. (2018) found higher malnutrition among children introduced to complementary feeding after six months and among bottle-fed children, but the estimates were unadjusted. Li et al. (2024) reported an adjusted association between grandparenting and malnutrition only in the rural subsample. In contrast, Kaur et al. (2025) found that monitoring, pressure, and other feeding domains had weak or non-significant correlations with anthropometric outcomes. Sari et al. (2026) found a weak bivariate association that disappeared after adjustment. Bakare et al. (2023) reported no significant association between minimum dietary diversity and anthropometric outcomes, while the Vyas et al. (2021) analysis primarily implicated family socioeconomic characteristics rather than a distinct feeding practice.

Siramaneerat et al. (2024) demonstrated that residence remained associated with stunting after adjustment and that predictor profiles differed between urban and rural strata. Their result for age at weaning in the urban stratum should not be interpreted as evidence that earlier weaning is beneficial because cross-sectional data are susceptible to reverse causation, residual confounding, and imprecise measurement of feeding history.

Contextual modifiers

Across studies, parental education, household socioeconomic position, birth weight, maternal nutritional status, recent child illness, and engagement with growth or health services repeatedly influenced the observed relationships. The pattern suggests that parenting practices are embedded within material and service environments. A caregiver may understand recommended feeding but remain unable to provide diverse foods, attend growth monitoring, or maintain responsive meal routines when income, time, transport, or food availability are constrained

Discussion

Principal findings from eligible studies

This review identified a consistent rural disadvantage in undernutrition but inconsistent evidence that measured parenting or feeding practices independently explained that disadvantage. The eligible studies showed three patterns. First, feeding practices differed across settings, particularly for prelacteal feeding, exclusive breastfeeding, bottle feeding, and

complementary-feeding timing (Gautam et al., 2018; Bakare et al., 2023). Second, direct associations were stronger in studies using specific exposures, such as delayed complementary feeding or grandparental care, than in studies using broad multidomain feeding scores (Li et al., 2024; Kaur et al., 2025). Third, associations often attenuated after socioeconomic and health variables were considered, as demonstrated in the urban Indonesian study (Sari et al., 2026).

The findings therefore support a contextual rather than deterministic interpretation. Nutrition-related parenting is one pathway through which household resources and knowledge are translated into children's diets, but it cannot be separated from infection, birth conditions, maternal nutrition, food security, and service access. The rural excess in stunting reported by Senbanjo et al. (2016), Bakare et al. (2023), and Siramaneerat et al. (2024) persisted even when feeding differences were modest or heterogeneous, indicating that broader structural mechanisms remain important.

Grandparenting illustrates this interaction. Li et al. (2024) found an adverse association in rural but not urban children after adjustment. The result does not establish that grandparents are inherently less capable caregivers. It may instead reflect migration-related family separation, lower access to current nutrition information, household poverty, caregiver age or health, and differences in the intensity of care. Interventions should therefore include grandparents when they are regular caregivers rather than framing them as a risk group.

Contextual socioeconomic evidence not included in the main synthesis

Several studies in the source literature were relevant to interpretation but did not meet the review's exposure criteria. Hossain et al. (2025) decomposed the urban–rural nutrition gap in Bangladesh and showed that household wealth, maternal education, and health-service factors contribute to disparity; however, the analysis did not measure a direct parenting practice. Rakotomanana et al. (2023) described home stimulation and severe stunting among young children in rural Madagascar, but the small study did not provide a direct urban–rural test of nutrition-related parenting. Długoński et al. (2025) characterized maternal feeding strategies among Polish school-aged children, including modeling, encouragement, monitoring, and food as reward, but did not link those strategies to child anthropometric status or compare urban with rural settings. These studies clarify mechanisms and measurement options but cannot be counted as direct evidence for the review question.

This distinction is important because maternal education, income, occupation, and place of residence are not parenting practices. They may shape feeding opportunities and may confound or modify associations between feeding and nutritional status. Treating them as interchangeable with parenting would overstate the evidence and obscure where intervention should occur.

Disease- and health-condition studies excluded from the main synthesis

Disease-specific studies were also excluded from the primary synthesis. Gan-Ochir et al. (2026) linked tooth loss to nutritional status in Mongolian schoolchildren; Uwimana et al. (2025) examined asymptomatic malaria and malnutrition in Rwandan children; and Palacios et al. (2021) examined factors associated with anemia in urban and rural Haitian children. These studies demonstrate that oral health, infection, and micronutrient outcomes can contribute to or coexist with poor nutritional status, but they do not estimate an association between a direct parenting practice and nutritional status. They are therefore contextual evidence, not eligible parenting studies.

Relation to previous reviews and authors' interpretation

The present findings are consistent with McGlynn et al. (2018), who reported substantial heterogeneity in child nutrition research and emphasized limitations in sampling, measurement, and comparability. The current review extends that observation by showing that heterogeneity begins with the exposure construct: some studies measure feeding behaviors, others use caregiving arrangements, and others rely on broad family characteristics. The resulting estimates cannot be combined meaningfully without imposing an artificial equivalence.

The most defensible interpretation is that responsive, timely, and developmentally

appropriate feeding can support healthy growth, but its measurable effect depends on whether households possess the food, time, health, and service resources needed to enact it. This interpretation aligns with the broader literature on parental feeding and with WHO guidance, while avoiding causal claims that cross-sectional evidence cannot support (Costa & Oliveira, 2023; World Health Organization, 2023). It also explains why a weak association may disappear after adjustment: feeding behavior may partly mediate socioeconomic conditions, respond to a child's existing weight or illness, or be measured too imprecisely to capture the relevant interaction.

The appraisal results reinforce this caution. Studies with multivariable analysis and standardized anthropometry offered more credible evidence than studies limited to bivariate comparisons. Nevertheless, even the low-risk studies were cross-sectional, so temporal ordering remains uncertain. A caregiver may increase pressure, monitoring, or restriction because a child is already underweight or overweight; this reverse pathway can make feeding practices appear causal when they are responses to nutritional status.

Implications for policy, nursing, and public health practice

Programs should combine caregiver-focused and structural components. Caregiver education should address exclusive breastfeeding, timely complementary feeding, age-appropriate dietary diversity, responsive feeding, and avoidance of coercive feeding. Education should include fathers, grandparents, and other regular caregivers, with examples adapted to locally available and affordable foods. Community and primary-care nurses can integrate feeding assessment into growth monitoring and use repeated counselling rather than one-time information delivery.

Rural strategies should also reduce barriers to service use, food diversity, sanitation, and early management of illness. Urban strategies should address time pressure, reliance on convenience foods, commercial marketing, and the emerging double burden of malnutrition. Growth monitoring must be linked to action: abnormal trajectories should trigger assessment of feeding, illness, household food insecurity, maternal nutritional status, and access to social protection rather than a generic instruction to 'improve diet.'

Research should use validated and age-specific feeding instruments, report item or domain definitions, apply WHO anthropometric standards, define urban and rural residence explicitly, and prespecify confounders using a conceptual framework. Longitudinal cohorts are needed to distinguish whether feeding precedes growth change or changes in response to it. Multilevel models should test whether residence modifies the feeding–nutrition association rather than merely enter residence as a covariate.

4.6 Strengths and limitations of the review

The review applied a focused PECO question, required a direct parenting or feeding exposure, separated contextual from eligible evidence, used dual-reviewer procedures, and appraised studies at domain level with the JBI checklist. Complete database strategies and explicit decision rules improve reproducibility.

Several limitations remain. The search was restricted to English-language publications and four databases, and 20 potentially relevant reports could not be retrieved. All included studies were cross-sectional, and several used bivariate analysis or non-validated exposure measures. Urban, peri-urban, slum, and rural categories were not consistently defined. Nutritional outcomes ranged from standardized anthropometric indices to a study-defined malnutrition measure. The small number of studies and their methodological heterogeneity precluded meta-analysis and formal assessment of publication bias. The review therefore identifies patterns and evidence gaps rather than a pooled causal effect.

Conclusion and Recommendation

Children in rural settings generally experienced a higher burden of stunting and underweight than children in urban settings. Nutrition-related parenting practices were associated with nutritional status in some studies, particularly for delayed complementary feeding and rural grandparental care, but associations were weak, inconsistent, or attenuated after adjustment in others. Parenting should therefore be understood as a modifiable pathway within a wider system of household resources, child health, food access, and service availability. Effective interventions must strengthen caregiver capacity while also addressing the structural conditions that determine whether recommended practices are feasible.

Acknowledgement
The author would like to express deepest gratitude to all respondents who willingly took the time to participate in this research. Your contributions were invaluable to the success of this study.

Funding Source
None.

Declaration of conflict of interest
The authors declare no competing interests.

Declaration on the Use of AI
No AI tools were used in the preparation of this manuscript.

Data Availability Statement
Data sharing is not applicable to this article.

References

Aromataris, E., & Munn, Z. (Eds.). (2024). JBI manual for evidence synthesis. JBI. https://doi.org/10.46658/JBIMES-24-01

Bakare, A. A., Uchendu, O. C., Omotayo, O. E., & King, C. (2023). Feeding practices and nutritional status of under-five children in a peri-urban setting in Ibadan, Southwest Nigeria: A comparative cross-sectional study. Annals of Ibadan Postgraduate Medicine, 21(1), 50–62.

Campbell, M., McKenzie, J. E., Sowden, A., Katikireddi, S. V., Brennan, S. E., Ellis, S., Hartmann-Boyce, J., Ryan, R., Shepperd, S., Thomas, J., Welch, V., & Thomson, H. (2020). Synthesis without meta-analysis (SWiM) in systematic reviews: Reporting guideline. BMJ, 368, l6890. https://doi.org/10.1136/bmj.l6890

Costa, A., & Oliveira, A. (2023). Parental feeding practices and children's eating behaviours: An overview of their complex relationship. Healthcare, 11(3), 400. https://doi.org/10.3390/healthcare11030400

Długoński, Ł., Skotnicka, M., & Mikulec, A. (2025). Socio-demographic determinants of dietary strategies of mothers of school-aged children—A study in Pomeranian Province. Nutrients, 17(22), 3514. https://doi.org/10.3390/nu17223514

Gan-Ochir, B., Byambasukh, O., Bayartsogt, B., Batbayar, E. O., Yadamsuren, E., Boldbaatar, D., Nyamdavaa, K., Luuzanbadam, G., Jugder, O., Jargaltsogt, D., & Enebish, O. (2026). Tooth loss and nutritional status in 120,994 children aged 6–9 years in Mongolia: A population-based study. Children, 13(2), 191. https://doi.org/10.3390/children13020191

Gautam, S., Eske, G. S., Singh, P., & Kashyap, A. (2018). Comparison of feeding practices among rural and urban mothers and their effect on nutritional status of children. Indian Journal of Child Health, 5(5), 328–331. https://doi.org/10.32677/IJCH.2018.v05.i05.004

Hossain, M., Alam, M. J., Begum, I. A., Sun, H., & McKenzie, A. M. (2025). Blinder–Oaxaca decomposition analysis of the urban-rural gap in child nutrition in Bangladesh. Scientific Reports, 15, 42752. https://doi.org/10.1038/s41598-025-26857-6

Kaur, P., Gupta, M., & Bharti, B. (2025). Feeding practices of caregivers and malnutrition among 1–3 year old children in North India, Chandigarh. Journal of Family Medicine and Primary Care, 14(11), 4549–4554. https://doi.org/10.4103/jfmpc.jfmpc_1018_24

Li, L., Zhang, Z., Tian, S., & Shi, X. (2024). Analysis of urban–rural differences in the relationship between grandparenting and the nutrition and health status of children aged 0–3 in China. Frontiers in Public Health, 12, 1494222. https://doi.org/10.3389/fpubh.2024.1494222

McGlynn, P. J., Renzaho, A. M. N., Pham, M. D., Toole, M., Fisher, J., & Luchters, S. (2018). Critical examination of evidence for the nutritional status of children in Papua New Guinea: A systematic review. Asia Pacific Journal of Clinical Nutrition, 27(1), 1–18. https://doi.org/10.6133/apjcn.042017.02

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., … Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. BMJ, 372, n71. https://doi.org/10.1136/bmj.n71

Palacios, A. M., Freeland-Graves, J. H., Dulience, S. J.-L., Delnatus, J. R., & Iannotti, L. L. (2021). Differences in factors associated with anemia in Haitian children from urban and rural areas. PLOS ONE, 16(4), e0247975. https://doi.org/10.1371/journal.pone.0247975

Rakotomanana, H., Hildebrand, D., Gates, G. E., Thomas, D. G., Fawbush, F., & Stoecker, B. J. (2023). Home stimulation, development, and nutritional status of children under 2 years of age in the highlands of Madagascar. Journal of Health, Population and Nutrition, 42, 59. https://doi.org/10.1186/s41043-023-00399-x

Sari, W., Veronika, E., Kartini, K., & Pamungkas, R. A. (2026). Parental feeding practices and nutritional status among preschool children in urban Indonesia: Implications for family-centered nursing. Media Publikasi Promosi Kesehatan Indonesia, 9(5), 937–948. https://doi.org/10.56338/mppki.v9i5.9227

Schwendler, T. R., Na, M., Keller, K. L., Jensen, L., & Kodish, S. R. (2024). Observational methods in studies of infant and young child feeding practices in low- and middle-income countries: A twenty-year retrospective review. Nutrients, 16(2), 288. https://doi.org/10.3390/nu16020288

Senbanjo, I. O., Olayiwola, I. O., & Afolabi, W. A. O. (2016). Dietary practices and nutritional status of under-five

children in rural and urban communities of Lagos State, Nigeria. Nigerian Medical Journal, 57(6), 307–313. https://doi.org/10.4103/0300-1652.193854

Siramaneerat, I., Astutik, E., Agushybana, F., Bhumkittipich, P., & Lamprom, W. (2024). Examining determinants of stunting in urban and rural Indonesia: A multilevel analysis using the population-based Indonesian Family Life Survey (IFLS). BMC Public Health, 24, 1371. https://doi.org/10.1186/s12889-024-18824-z

Uwimana, A., Robert, A., Ahmed, A., Alexiou, H., Rujeni, N., Cani, P. D., Coutelier, J.-P., Mutesa, L., & Everard, A. (2025). Exploring the prevalence and association between nutritional status and asymptomatic malaria in Rwanda among under-5 children: A cross-sectional analysis. Malaria Journal, 24, 152. https://doi.org/10.1186/s12936-025-05370-1

Vyas, S., Sonkar, S., Sharma, N., Srivastava, A. K., Sharma, P., & Srivastava, K. (2021). The role of familial characteristics on the nutritional status of preschool children: A comparative study on rural and urban children. Journal of Public Health and Primary Care, 2(1), 15–20. https://doi.org/10.4103/jphpc.jphpc_17_20

Wells, J. C. K., Sawaya, A. L., Wibaek, R., Mwangome, M., Poullas, M. S., Yajnik, C. S., & Demaio, A. (2020). The double burden of malnutrition: Aetiological pathways and consequences for health. The Lancet, 395(10217), 75–88. https://doi.org/10.1016/S0140-6736(19)32472-9

World Health Organization. (2023). WHO guideline for complementary feeding of infants and young children 6–23 months of age. World Health Organization.