

Review

Socioeconomic and Cultural Determinants of Early Childhood Feeding Practices in Indonesia: A Literature Review

Determinan Sosioekonomi dan Budaya dalam Praktik Pemberian Makan Anak Usia Dini di Indonesia: Tinjauan Pustaka

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Abstract: *Infant and young child feeding practices among children aged 6–23 months remain a major challenge in Indonesia due to social, economic, cultural inequalities and regional contextual disparities. These conditions directly affect the achievement of Infant and Young Child Feeding indicators, particularly the Minimum Acceptable Diet (MAD). This study aimed to review and synthesize scientific evidence on the socioeconomic and contextual determinants of feeding practices among children aged 6–23 months in Indonesia. This study employed a literature review design using a narrative synthesis approach. A systematic search was conducted in PubMed, ScienceDirect, Google Scholar, and Garuda databases for publications from 2020 to 2024. Articles were selected based on predefined inclusion and exclusion criteria and analyzed descriptively. The results of this review identified nine eligible articles, which consistently indicated that household economic status was the most influential determinant of child feeding practices. Maternal education, area of residence, antenatal care visits, paternal involvement, and access to media and the internet were also associated with variations in MAD achievement. Children from wealthier households and those living in urban areas were more likely to experience better feeding practices. In conclusion, infant and young child feeding practices in Indonesia are strongly shaped by socioeconomic factors and environmental context. It is recommended that nutrition interventions be designed in an integrated manner, with a focus on reducing socioeconomic inequalities, strengthening family roles, and optimizing health services and nutrition-related information channels.*

Key word: child feeding practices, socioeconomic factors, cultural factors, early childhood, indonesia

1. INTRODUCTION

Early childhood, particularly the period between 6 and 23 months of age, represents a critical phase that determines physical growth, cognitive development, and long-term health outcomes (1,2). During this period, nutritional requirements increase substantially due to rapid growth and the transition from exclusive breastfeeding to complementary feeding. Inadequate feeding practices, in terms of both quality and quantity, directly contribute to nutritional problems such as stunting, wasting, and micronutrient deficiencies, which remain major public health challenges in Indonesia (3,4).

To monitor the quality of infant and young child feeding practices, the World Health Organization developed the Infant and Young Child Feeding indicators, namely Minimum Dietary Diversity, Minimum Meal Frequency, and Minimum Acceptable Diet

(2). These indicators are widely used to assess the adequacy of dietary diversity, feeding frequency, and overall diet quality among young children. However, the achievement of these indicators in Indonesia varies considerably across regions, social groups, and household wealth levels, suggesting that non-biological determinants play a substantial role in shaping child feeding practices (3, 5).

A growing body of evidence indicates that infant and young child feeding practices are shaped by complex interactions among social, economic, and cultural factors. Maternal education, family support, and household decision-making patterns play a central role in determining the type, quantity, and frequency of foods provided to young children (6). In addition, economic constraints, parental employment status, and household food security influence families' capacity to consistently access and provide nutritionally adequate foods (7). Cultural norms, traditional beliefs, and family eating practices further affect food preferences and perceptions of foods considered appropriate or inappropriate for young children (8).

Despite the expanding empirical evidence on these determinants, existing studies remain fragmented and often examine social, economic, or cultural factors in isolation. To date, comprehensive literature reviews that integrate these three dimensions to explain infant and young child feeding practices are still limited. This gap constrains the development of context-specific and sustainable nutrition policies and interventions. Therefore, a systematic and analytical literature review is needed to synthesize the available scientific evidence on the roles of social, economic, and cultural factors in shaping infant and young child feeding practices.

2. METHODS

This study employed a literature review approach to examine the influence of social, economic, and cultural factors on infant and young child feeding practices among children aged 6–23 months. Social factors included maternal and paternal education and the role of family members in shaping decision-making related to food choices. Economic factors, such as household income, employment stability, and household wealth, determined families' capacity to access nutritionally adequate and diverse foods. Cultural factors, including traditional beliefs, family eating norms, and household size, further shaped parental perceptions of foods considered appropriate or inappropriate for young children.

The literature search was conducted using the PubMed, ScienceDirect, Google Scholar, and Garuda databases. The primary search terms were combined using Boolean operators and included "feeding practices," "social factors," "economic factors," "cultural factors," "children aged 6–23 months," "socioeconomic factors," and "early childhood feeding." Searches incorporated both Medical Subject Headings (MeSH) and free-text keywords. Relevant MeSH terms, such as "infant and young child feeding," "cultural factors," and "socioeconomic factors," were identified and combined using Boolean operators. An example of the search string was: ("complementary feeding" OR "infant feeding practices" OR "infant and young child feeding" OR "minimum dietary diversity") AND ("socioeconomic factors" OR "social factors" OR "cultural factors") AND Indonesia AND ("6–23 months"). Filters were applied for publication

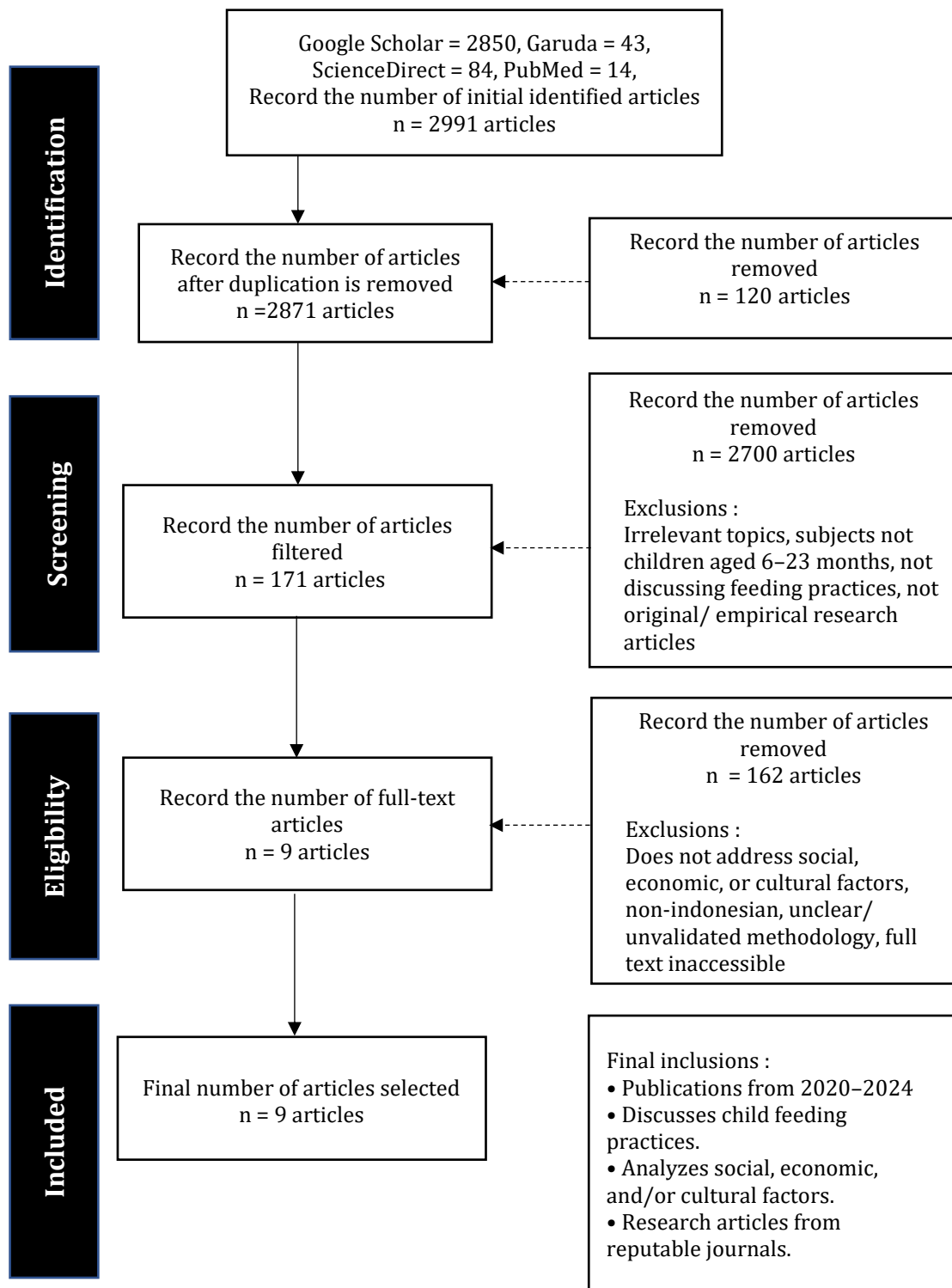


Figure 1. Flow chart for identification and selection of studies

years 2020–2024, human subjects, and article types limited to original research and reviews.

Inclusion criteria comprised peer-reviewed articles published between 2020 and 2024, written in English or Indonesian, available in full text, focusing on children aged 6–23 months, and explicitly examining associations between social, economic, or cultural factors and feeding practices. Exclusion criteria included review articles, meta-analyses, non-academic reports, studies addressing nutritional status without feeding practices, and studies involving populations other than young children. The selection process involved keyword identification, title and abstract screening, full-text review, and thematic synthesis of key findings. Data were extracted and analyzed using a thematic narrative approach to highlight relationships between determinants and feeding practices.

3. RESULTS

The initial literature search across all databases identified a number of potentially relevant articles. Following a multi-stage screening process, studies that met the inclusion criteria were selected for further analysis. Synthesis of the nine included articles indicated that infant and young child feeding practices among children aged 6–23 months in Indonesia are strongly influenced by social and economic factors, maternal characteristics, and the contextual characteristics of the area of residence. Cultural factors were included as search keywords at the initial identification stage. However, no article that explicitly analyzed cultural determinants of feeding practices among children aged 6–23 months in Indonesia met the inclusion criteria at the full-text assessment stage.

Most studies reported that household economic status was significantly associated with the achievement of Infant and Young Child Feeding indicators, particularly Minimum Dietary Diversity and Minimum Acceptable Diet (9,10). Children from households with higher wealth indices were more likely to meet minimum dietary diversity and acceptable diet criteria than those from lower-income households, at both national and subnational levels (9,11,12). These findings indicate that access to economic resources remains a fundamental prerequisite for achieving adequate dietary quality among young children.

Maternal education consistently emerged as an important determinant in the majority of studies, particularly in increasing the likelihood of children meeting MAD and MDD indicators through improved nutrition literacy and enhanced household decision-making capacity (10,13). However, several studies also reported inconsistent associations, whereby higher maternal education did not necessarily translate into optimal feeding practices when economic constraints or high domestic workloads were present (14).

Geographical factors showed a relatively consistent pattern, with children residing in urban areas and on Java Island being more likely to meet IYCF indicators than those living in rural areas and outside Java. This pattern reflects structural disparities in access to food resources, health services, and nutrition information (11,15). Beyond maternal and economic factors, several studies highlighted the role of additional

enabling factors, including paternal involvement in childcare, frequency of antenatal care visits, and access to media and the internet, all of which collectively contributed to improved child feeding practices (12,13,16). Overall, this synthesis indicates that infant and young child feeding practices are shaped by a complex interaction of economic conditions, educational attainment, geographic context, and social support. Therefore, nutrition interventions should be designed using a contextualized and multisectoral approach to achieve meaningful and sustainable impacts (15,16).

Table 1. Summary of Included Studies on Early Childhood Feeding Practices

Authors (Year)	Study Design	Location	Sample size	Main Factors	Outcomes
Simbolon, Demsa, Suryani, Desri, Dayanti, Heidy, Setia, Agustina, Hasan, Tobianus. (2024)	cross-sectional study	Indonesia	The sample size was 4,869 children, consisting of 2,424 children in urban areas and 2,445 children in rural areas.	Socioeconomic status factors, maternal age, and age at first marriage	The article discusses risk factors for failure of IYCF practices in urban areas, including socioeconomic status, maternal age, and age at first marriage. Risk factors for failure of IYCF practices in rural areas include socioeconomic status, maternal education, and the quantity and quality of antenatal care.
Khalida Dalimunthe, N., Ekayanti, I., & Dwiriani, C. M. (2024)	cross-sectional study	Indonesia	Subjects were 1511 children aged 12-23 months	Family socio-economic status factors include family size, parental education, mother's occupation, father's occupation, economic status.	The article discusses family socio-economic factors such as family size ≥ 5 people, high father's education ($p=0.046$), and low economic status ($p=0.001$), middle economic status ($p=0.005$) related to low dietary diversity in children aged 12-23 months.
Rahayu HK., Paratmanitya Y., Herawati HD., Nurhayati E., & Nuryani R. (2024)	cross-sectional study	Indonesia	The subjects were 574 mothers of children aged 6-23 months.	Factors of high household income levels, high maternal education levels, and housewife status	The article discusses the association of maternal deficiencies with high maternal education and being a housewife. Children living on Java Island tend to consume a more diverse diet than children living outside Java. Households with

Authors (Year)	Study Design	Location	Sample size	Main Factors	Outcomes
					increased income during the pandemic were more likely to meet the MDD than households with decreased income.
Nofitasari T., Rahmawati NI., Eka Nurhayati, Fatimah, Siswati T., Paramashanti BA. (2023)	multistage cluster sampling	Kebumen, Indonesia	subjects were 356 young children aged 6-23 months	factors include mother's educational attainment, father's educational attainment, mother's occupation, father's occupation, and household income	The article discusses the economic factor of high household income, which is significantly associated with minimum dietary diversity. Socioeconomic factors, such as parental education and occupation, are not associated with minimum dietary diversity in children.
Pranita, R. F., Briawan, D., Ekayanti, I., & Triwinarto, A. (2023)	cross-sectional study design	Indonesia	the subjects totaling 817 children between the ages 6 and 23 months	The factors are socioeconomic, characteristics and the MAD in children between the ages of 6 and 23 months	The article discusses a significant positive relationship between child age, maternal education status, and area of residence (p<0.001) with MAD. Determinants of MAD were child age (p<0.05; OR=7.06; 95% CI: 3.46-14.38) and area of residence (p<0.05; OR=1.61; 95% CI: 1.19-2.15).
Paramashanti, B. A., Dibley, M. J., Alam, A., & Huda, T. M.(2022)	stratified sampling	Indonesia	Total subjects 5038 children aged 6-23 months	socio-economic factors of low-income families, mother's education, father's role in caring for children, parents' residence, ANC visits>4 times	The article discusses significant disparities related to wealth and education in MDD. Maternal education (26.1%), household wealth (19.1%), ANC visits (14.9%), and father's occupation (10.9%) contribute most to educational inequality in MDD.

Authors (Year)	Study Design	Location	Sample size	Main Factors	Outcomes
Yunitasari E, Al Faisal AH, Efendi F, Kusumaningrum T, Yunita FC, Chong MC. (2022)	multistage cluster sampling	Indonesia	A total of 502,800 mothers with children aged 6-23 months	factors on maternal education, Children who come from households with higher wealth, whose mothers work, who live in urban areas, and children of mothers who receive delivery assistance from professional personnel.	The article discusses children of mothers with higher education, children from households with a high wealth index, children of mothers who received professional birth assistance (OR = 1.63), and children of mothers with internet access (OR = 1.26). Furthermore, children from households with a higher wealth index (OR = 1.40), children whose mothers worked, those living in urban areas, and children of mothers who received professional birth assistance were more likely to meet the MMF.
Zebadia, E. ., & Atmaka, . D. R. (2022)	stratified sampling	Indonesia	the subjects totaling 1,593 children aged 6-11-month-old.	Economic wealth index which is categorized as richer, wealth index which is categorized as richest and uses the internet almost every day	The article discusses factors that are significantly correlated with the practice of providing complementary foods that meet the needs of MDD, namely the wealth index which is categorized as richer (OR=1.72; p=0.007), the wealth index which is categorized as richest (OR=2.42; p<0.001) and using the internet almost every day (OR=1.42; p=0.023).
Sirait, Aniza Rizky Aprilya and Achadi, Endang L (2020)	cross-sectional study	Indonesia	The number of samples of this study is 2,976 children aged 6- 23 months.	Factors on maternal age, maternal education, maternal employment status, maternal access to	The article discusses the results of the analysis of child age, maternal education, maternal employment status, wealth index, paternal role, birth assistant, and residence are significantly associated with MDD. Children from

Authors (Year)	Study Design	Location	Sample size	Main Factors	Outcomes
				media, wealth index, paternal factors: father's role, ANC visits, birth assistant, place of delivery, and place of residence	better-off families (quintile 3 or above), those born assisted by trained health workers, children of mothers with higher education, working mothers, fathers who play a role in child care, mothers who have had ANC visits > 4 times and parents living in urban areas, have a significantly greater likelihood of achieving appropriate MDD.

4. DISCUSSION

This review demonstrates that socioeconomic inequality remains a dominant determinant of infant and young child feeding (IYCF) practices among children aged 6–23 months in Indonesia, particularly in relation to the indicators of Minimum Dietary Diversity (MDD), Minimum Acceptable Diet (MAD), and Minimum Meal Frequency (MMF) (13,15,16). Across national and subnational studies, children from households with higher wealth levels consistently show a greater likelihood of meeting recommended feeding indicators compared with those from poorer households, reflecting persistent structural barriers to equitable nutrition outcomes (11,12).

Household wealth influences food purchasing power and access to diverse foods, especially animal source foods that are essential for improving child diet quality (9,17). Maternal education repeatedly emerges as an important determinant, although the strength of its association varies by context and nutritional indicator. This variation suggests that formal education alone does not necessarily translate into optimal feeding practices without adequate economic resources and a supportive food environment (10,14).

Geographic disparities also play a significant role. Children living in urban areas and on Java Island are more likely to achieve adequate dietary diversity and overall diet adequacy than those residing in rural areas and outside Java, highlighting inequities in access to food markets, health services, and nutrition information (13,15,22). In addition, contact with the health system, particularly adequate antenatal care visits, is positively associated with improved IYCF practices, underscoring the role of maternal health services as a platform for nutrition education (11,16). Recent evidence further highlights the influence of paternal involvement, media exposure, and maternal internet access on child feeding decisions, indicating that the determinants of IYCF practices are increasingly complex and involve multiple household and societal actors (12,13).

The findings of this review are consistent with previous global and regional reviews that identify socioeconomic status and maternal education as key determinants of complementary feeding practices in low and middle income countries (18, 19). In line with earlier evidence, household wealth emerges as a stronger and more stable predictor of dietary diversity than parental education alone, suggesting that economic capacity often outweighs knowledge based determinants when access to food is constrained (20, 21). However, this review extends existing evidence by demonstrating context specific inconsistencies in Indonesia, where higher maternal education does not always correspond with adequate achievement of MAD, particularly among stay at home mothers or households facing economic constraints (14, 17). Compared with earlier narrative reviews, this synthesis also highlights the growing influence of digital access and paternal involvement, factors that have received relatively limited attention in previous IYCF frameworks (11, 12). These findings indicate that the determinants of child feeding practices are increasingly shaped by social dynamics beyond maternal characteristics alone, reinforcing the need for family centered and systems based approaches (13, 16).

The accumulated evidence underscores the need for nutrition interventions that explicitly address socioeconomic inequities rather than focusing solely on individual behavior change (15,16). Social protection programs, including food assistance and income support for vulnerable households, have the potential to play a critical role in improving child dietary diversity, particularly in economically disadvantaged settings (9,21). Efforts to strengthen maternal education should be accompanied by improvements in household food environments, caregiving time availability, and the affordability of nutrient dense foods (10, 14). Health services, especially antenatal and postnatal care, should be more systematically leveraged as entry points for culturally sensitive IYCF counseling that targets not only mothers but also fathers and other family members (13,16). Given the increasing role of media and internet access, digital nutrition education strategies may be integrated into national IYCF programs, while ensuring content accuracy and equitable access between urban and rural areas (11,12, 22).

Despite the breadth of available evidence, several research gaps remain. Exploration of cultural factors, intra household decision making dynamics, and caregiving practices is still limited, particularly through qualitative approaches that could help explain inconsistencies in quantitative findings (13, 14). Regional analyses beyond Java Island are also underrepresented, constraining understanding of contextual diversity in eastern Indonesia (10, 16). Future studies should adopt longitudinal designs to better capture pathways linking socioeconomic conditions, caregiving practices, and child feeding outcomes (18, 19). In addition, greater attention to emerging determinants such as digital exposure, paternal engagement, and policy environments is needed to support more adaptive and context responsive IYCF strategies in Indonesia.

This review has several distinctive strengths compared with previous studies. First, it systematically synthesizes evidence specifically focused on Indonesian contexts, allowing for a nuanced understanding of socioeconomic and contextual determinants of IYCF practices rather than relying on generalized global findings. Second, the review integrates multiple IYCF indicators, including MDD, MAD and MMF, providing a more comprehensive assessment of child feeding practices than studies that examine a single indicator. Third, this review captures both national and subnational

evidence, enabling the identification of geographic disparities between urban and rural areas and across regions, particularly Java and non-Java settings. The findings highlight the need for the Indonesian government to prioritize multisectoral nutrition strategies that address underlying socioeconomic inequalities. Strengthening social protection schemes, increasing equitable access to quality maternal and child health services, and expanding context-sensitive nutrition education, including digital platforms, are crucial to improving IYCF practices.

5. CONCLUSION

This review confirms that infant and young child feeding practices among children aged 6–23 months in Indonesia are strongly influenced by socioeconomic inequalities, particularly household economic status and maternal education. Children from wealthier households are more likely to meet the Minimum Dietary Diversity, Minimum Acceptable Diet, and Minimum Meal Frequency indicators than those from economically disadvantaged families. In addition, geographic disparities persist, with better IYCF outcomes observed in urban areas and on Java Island compared with rural and non-Java regions (11, 12).

Beyond economic factors, child feeding practices are also shaped by maternal education, access to maternal health services, paternal involvement, and exposure to media and the internet. However, the influence of maternal education is not consistently observed in the absence of adequate economic resources and supportive food environments (10, 14). These findings indicate that efforts to improve IYCF practices should adopt an integrated approach that addresses socioeconomic inequalities, strengthens family involvement, and optimizes health services as sustainable platforms for nutrition education.

CONFLICT OF INTEREST

The authors declare that there were no conflicts of interest in this study.

ACKNOWLEDGEMENT

The authors would like to thank the researchers and institutions providing access to scientific databases that supported the completion of this review.

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