

REVIEW ARTICLE

Open Access

MATERNAL CHALLENGES AND STRATEGIES IN COMBATING CHILD MALNUTRITION IN RURAL COMMUNITIES: A NARRATIVE REVIEWKamal Lazi¹, Woon Fui Chee^{1*}**Abstract**

Child malnutrition remains a persistent global problem despite numerous nutrition initiatives, especially in rural and underserved settings. Many interventions overlook the central role of mothers whose ability to ensure adequate child nutrition is constrained by limited health literacy, socio-cultural norms, and economic barriers. This narrative review examines the influence of maternal health literacy, socio-cultural norms, economic constraints, and support networks on child malnutrition in underserved communities. This narrative review synthesized evidence from studies published between 2020 and 2024 retrieved from PubMed, Scopus, Web of Science, and Google Scholar to identify maternal barriers and facilitators influencing child nutrition in rural contexts. Mothers play a pivotal role in child health, yet factors like limited autonomy, financial hardships, and inadequate support systems hinder their ability to combat malnutrition. Research indicates that low maternal health literacy is associated with poorer nutrition outcomes, emphasizing the need for targeted education programs. Economic barriers limit access to diverse and nutritious foods, while socio-cultural norms shape caregiving practices, either facilitating or restricting maternal efforts. Effective interventions should incorporate community-driven support, economic empowerment, and culturally tailored education to strengthen maternal capacity and improve child nutrition outcomes.

Keywords: Maternal health literacy, Child malnutrition, Socio-cultural factors, Economic barriers, Social support networks, Rural communities

*Correspondence Email: fuichee@ums.edu.my

¹Department of Public Health Medicine, Faculty of Medicine and Health Sciences, Universiti Malaysia Sabah, Jalan UMS, Kota Kinabalu 88400, Sabah, Malaysia

Received: 25/03/2025

Accepted: 01/11/2025

Published: 04/11/2025

INTRODUCTION

Child malnutrition remains a global health concern, with 148.1 million under-five children stunted, 45 million wasted, and 37 million overweight in 2023 (WHO, 2023a). Early nutrition interventions are essential for child development and long-term health (Kirolos et al., 2022). Global strategies, such as the WHO Global Nutrition Targets 2025 and Sustainable Developmental Goals (SDG) 2.2, aim to combat child malnutrition, yet many countries remain off track in meeting these targets (Arndt et al., 2024; WHO, 2023b). Despite numerous initiatives, many programs fall short due to inadequate focus on the critical role of caregivers especially mothers who face challenges related to food access, education, and socio-economic barriers. Therefore, addressing mothers' challenges is crucial for ensuring sustainable progress in reducing child malnutrition.

Mothers, as primary caregivers, play a crucial role in shaping child health and well-being. However, their ability to fulfil this role is influenced by complex socio-economic and cultural factors. Traditional views of motherhood often overlook the diverse experiences and challenges faced by mothers, particularly those in marginalized communities (Keefe et al., 2017). In many contexts, mothers bear the primary responsibility for determining their child's health and nutritional outcomes (Matare et al., 2015). This central role is further reinforced by the sociobiological explanations that have historically presented mothering as the natural priority and inevitable destiny for women (Stringer, 2020). Mothers are expected to nurture their children and support their development, yet diverse backgrounds and challenges often complicate these idealised expectations (Keefe et al., 2017). Nonetheless, the role of mothers as the primary caregivers remains a crucial critical factor in child development, with significant implications for policy and practice (Stringer, 2020). Understanding this complexity is essential for effectively supporting mothers and improving child nutrition, particularly among marginalised populations.

In public health, the critical role of mothers in shaping child nutrition is well established (Likhar & Patil, 2022; A. Saleh et al., 2021; Soharwardi & Ahmad, 2020). As primary caregivers, mothers have a profound influence on the dietary habits, food preferences, and overall health of their children, particularly during the early years of life. Adequate nutrition during this formative period is essential, as malnutrition can have long-term consequences on physical growth, cognitive development, and lifelong health (WHO, 2024). However, mothers' capacity to ensure optimal nutrition for her children is shaped by external factors beyond individual choice, including economic stability, access to education, and healthcare infrastructure (Ickes et al., 2015, 2018). In many rural settings, these barriers are exacerbated by persistent inequalities, further hindering maternal efforts in combating malnutrition.

This narrative review examines the facilitators and barriers affecting mothers' roles in addressing child malnutrition in rural communities, with a focus on the socio-cultural, economic, educational, and healthcare dimensions. By shedding light on both supportive and restrictive influences, this review presents a balanced perspective on the challenges and opportunities that mothers encounter. Ultimately, this review advocates for a holistic, community-driven approach to addressing the factors that shape maternal influence in alleviating child malnutrition, particularly in underserved communities where resources are scarce and the stakes are high.

METHODS

This narrative review examines maternal barriers and facilitators in addressing child malnutrition in rural communities. Relevant studies were selected from PubMed, Scopus, Google Scholar, and Web of Science using key search terms such as “child nutrition,” “child malnutrition,” “rural communities,” and “barriers to nutrition.” Search combinations included phrases like (“maternal barriers” OR “mother’s role”) AND (“child malnutrition” OR “undernutrition”) AND (“rural communities” OR “low-resource settings”).

Studies published between 2020 and 2024 were prioritised to capture recent findings, while older foundational studies were included where necessary. The selection process considered peer-reviewed journal articles, qualitative and quantitative studies relevant to maternal roles in child nutrition. Studies were included based on relevance to rural settings, appropriate study design such as cross-sectional, cohort, or mixed-methods, and adequate sample size. Articles not published in English, non-peer-reviewed sources, and grey literature were excluded. The review focused on socio-economic, cultural, and structural influences in rural settings. This approach ensures a comprehensive understanding of the key challenges and opportunities in improving child malnutrition through maternal interventions.

RESULTS AND DISCUSSION

Key Determinants of Maternal Roles Addressing Child Malnutrition

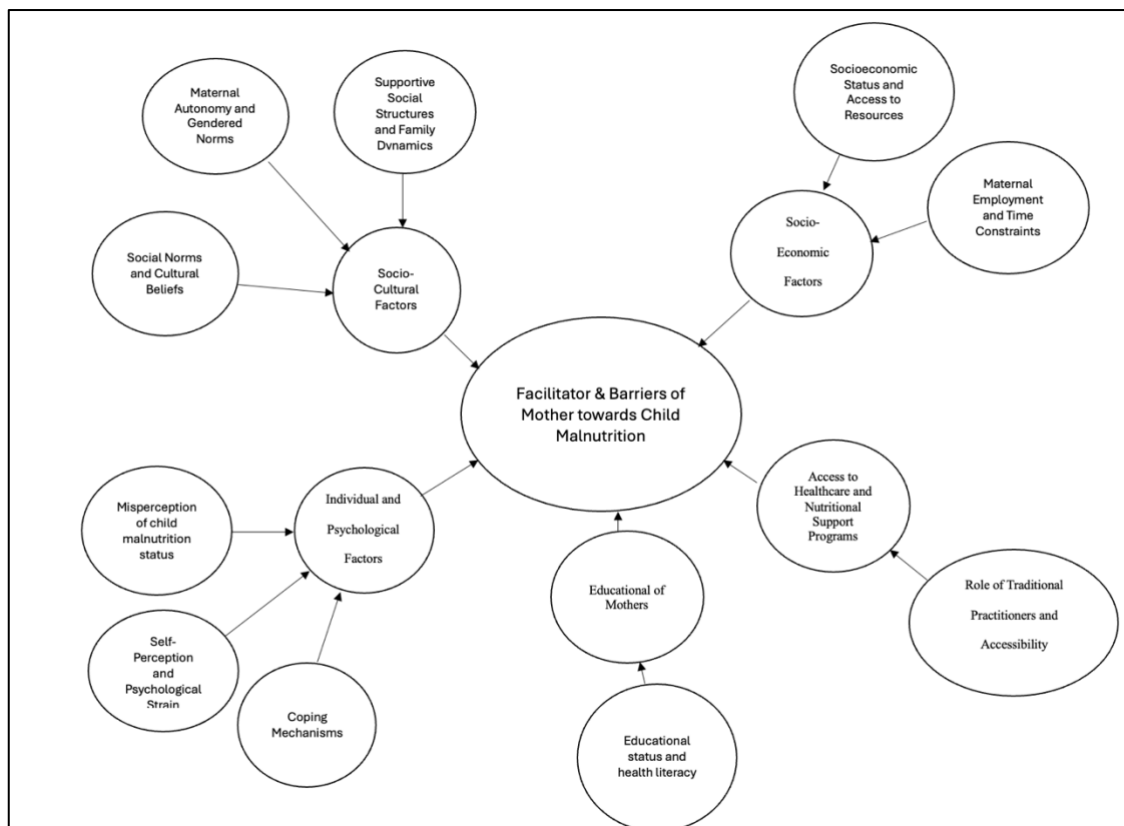


Figure 1: Framework of Maternal Barriers and Facilitators in Addressing Child Malnutrition in Rural Communities.

Socio-Cultural Factors

Supportive Social Structures and Family Dynamics

Socio-cultural factors play a crucial role in shaping maternal ability to address child malnutrition. Supportive family and community networks provide practical assistance, emotional support, and shared knowledge that benefit child nutrition (Burchinal et al., 1996; Gill et al., 2023; Nkwo et al., 2021). Elders, particularly grandmothers and community leaders, significantly influence child-feeding practices and health-seeking behaviours (Capitani et al., 2023). Their guidance can reinforce traditional practices and impact parental decision-making on nutrition (Burtscher & Burza, 2015). Research indicates that maternal participation in women's support groups promote the adoption of balanced diets and effective feeding strategies (Ayine et al., 2021). These networks alleviate caregiving burdens and encourage positive nutritional habits in children.

Conversely, mothers who lack stable, long-term support from family or social networks often face greater challenges. Limited social support, unstable relationships, or the absence of a co-parent can contribute to maternal stress and reducing their capacity to provide adequate nutrition for their children (Kerr et al., 1978). Single mothers, in particular, may struggle with meal planning and food preparation, while those with strong support systems tend to experience better mental health and provide more balanced diets (Balaji et al., 2007). In South Africa, younger mothers face the added challenge of balancing traditional feeding norms, such as preparing indigenous porridges and observing breastfeeding taboos, with modern practices that favour convenience foods and formula feeding. This cultural tension often leads to inconsistent feeding patterns and lower adherence to exclusive breastfeeding recommendations (Chakona, 2020). Without adequate support, maternal well-being suffers, making it more difficult to meet their child's nutritional needs.

Maternal Autonomy and Gendered Norms

Maternal autonomy, which refers to a mother's ability to make independent decisions regarding household resources, food distribution, healthcare access, and child-rearing, is a key determinant of child nutrition in underserved communities. In patriarchal societies, male control over finances and food allocation can restrict mothers' ability to provide nutritious meals to their children. (Esterik, 1999). Restrictive gender norms further limit maternal autonomy, often leading to poorer child health and nutrition outcomes. (Miedema et al., 2018). Studies have shown that in households where mothers possess greater autonomy, children tend to have better nutritional outcomes and overall health. Smith et al. (2003) found that women who actively participated in household financial and food procurement decisions were more likely to provide diverse and nutrient-rich diets for their children, resulting in lower rates of stunting and wasting (Smith et al., 2003). Similarly, Shroff et al. (2011) reported that higher maternal autonomy was associated with a greater likelihood of engagement in health-seeking behaviors, such as routine check-ups and vaccinations, thereby supporting child growth and development (Shroff et al., 2011). However, Paul and Saha (2022) found that maternal autonomy had no significant association with children's stunting and wasting (Paul & Saha, 2022). Comparing findings across studies is challenging due to diverse socio-cultural contexts, which can influence both maternal autonomy and child health outcomes. While maternal autonomy holds potential for improving child nutrition, variations across different settings highlight the need for further research.

Social Norms and Cultural Beliefs

Social and cultural norms shape mothers' attitudes and child feeding practices, especially in traditional societies. In Indonesia, for example, cultural beliefs significantly impact the provision of complementary foods for breastfeeding infants. Cultural norms such as the influential role of grandmothers in decisions about when to introduce complementary feeding before six months, hesitancy to provide animal-source foods or seafood early because of fears about allergies or choking, and customary views on a child's 'readiness' for more textured foods are part of the local practices. A study by Saleh et al. (2023) found that mothers with a good understanding of local cultural practices tended to provide more appropriate complementary feeding (Saleh et al., 2023). Conversely, in Benin, socio-cultural beliefs have led to dietary restrictions that limit nutritional diversity. Lokossou et al. (2021) documented the avoidance of nutrient-rich foods such as catfish, crabs, pork, eggs, and certain fruits among pregnant and breastfeeding women. These restrictions stemmed from beliefs that such foods could cause childbirth complications, infant illness, or behavioural problems in children. As a result, many households relied heavily on maize-based porridge and vegetables, producing monotonous diets with low intake of animal protein and fruits, which heightens the risk of malnutrition (Lokossou et al., 2021). These taboos prevent mothers from introducing diverse and nutrient-rich foods to their children, increasing the risk of nutrient deficiencies. These beliefs can either support or hinder a mother's ability to meet her child's dietary needs, impacting not only the food choices but also maternal acceptance of nutrition education and intervention programs.

Inclusive approaches that engage fathers, grandmothers, and other influential family members can foster a more supportive environment for mothers to adopt recommended feeding practices. However, generational shift can create tensions. In South Africa, younger mothers often resist indigenous knowledge, reflecting evolving attitudes toward breastfeeding and complementary feeding (Chakona, 2020). Similarly in Pakistan, cultural norms dictate that elders, especially mothers-in-law and grandmothers, decide what young children should eat, and younger mothers are expected to obey without question. Baloch et al. (2020) found that nutritious foods such as milk, eggs, and apples are commonly avoided because they are believed to cause gastric problems or sore throats, while traditional foods like *Landhi* (dried meat) and heavily spiced dishes are preferred for cultural and taste reasons. These practices, reinforced by patriarchal household structures, restrict mothers' autonomy and contribute to poor dietary diversity and child malnutrition (Baloch et al., 2020). While some cultural beliefs support child health, others hinder optimal nutrition and contribute to deficiencies, highlighting the importance of culturally sensitive nutrition interventions.

Individual and Psychological Factors

Self-Perception and Psychological Strain

The psychological well-being and self-perception of mothers play a crucial role in determining child nutrition outcomes, particularly in cases involving malnutrition. Mothers experiencing psychological distress and stigma often struggle to provide adequate care, exacerbating child malnutrition. Self-stigma and societal blame can lower their self-esteem, reducing their likelihood of seeking health services. A study by Putri et al. (2024) found that self-stigma among mothers of malnourished children led to reluctance in engaging with healthcare providers and participating in community health programs, further worsening the nutritional challenges faced by their children (Putri et al., 2024). When mothers feel

unsupported or judged by their community, they may withdraw from social networks and essential resources, deepening the cycle of malnutrition. Negative perceptions and judgment from community members, along with the absence of compassionate communication from health workers, further intensify feelings of shame among mothers.

Maternal mental health is closely linked to child nutrition, as poor mental health can hinder a mother's ability to provide adequate care, including proper feeding and hygiene practices. In a study conducted in Bangladesh, Khan (2022) found that maternal common mental disorders (CMD), such as depression and anxiety, were associated with poorer feeding practices and an increased prevalence of wasting and underweight in children (Khan, 2022). Mothers experiencing CMD may struggle to maintain consistent feeding routines, making it difficult for them to meet their children's nutritional needs. Psychological distress in parents can also affect child growth and development. Studies by Susiloretni et al. (2020, 2021) demonstrated that stress experienced by both mothers and fathers has a direct impact on linear growth in children, increasing the likelihood of stunting. Addressing parental mental health is crucial for improving child nutrition, as stress and mental health challenges can hinder effective childcare, impacting long-term growth and development.

Misperception of child malnutrition status

Mothers' perceptions of child malnutrition play a pivotal role in determining child nutrition outcomes, as these perceptions guide feeding practices, health-seeking behaviours, and overall childcare approaches. A substantial portion of mothers misjudge their children's nutritional status, leading to potentially harmful feeding practices. A study by Sarker et al. (2024) found that 46% of mothers had perceptions that did not align with anthropometric measurements of their children's nutritional status. Within this group, 37% underestimated and 9% overestimated their child's nutrition levels (Sarker et al., 2024). These misperceptions can lead to feeding practices that are either insufficient or excessive, both of which pose health risks for children. Inappropriate feeding practices driven by misperceptions can have long-term consequences on child health. When mothers misjudge their child's nutritional needs, they may resort to dietary adjustments that fail to meet the child's actual requirements (Noor et al., 2022). Overfeeding, often resulting from a perception that the child is underweight, can increase the risk of obesity, while underfeeding may lead to deficiencies in essential nutrients. Educating mothers on accurate nutritional assessment is key to promoting balanced feeding practices and preventing both undernutrition and overnutrition.

Coping Mechanisms

Mothers play an essential role in shaping the nutritional outcomes of their children, especially when faced with challenges such as food insecurity, economic constraints, and health issues. The coping mechanisms employed by mothers can significantly influence child nutrition, with adaptive strategies often promoting better nutritional outcomes and maladaptive strategies potentially compromising them. Adaptive coping strategies are positive approaches that mothers use to secure and maintain their children's nutrition, often through creativity and resourcefulness. During the COVID-19 pandemic, for example, mothers turned to preparing home-cooked meals and seeking financial or food assistance to ensure their children received balanced diets. These methods helped to alleviate the impact of food insecurity and maintained children's access to essential nutrients, despite financial or logistical limitations (Vantono et al., 2022). In Rwanda, mothers have demonstrated further adaptive strategies through breastfeeding and complementary feeding practices. Ahishakiye et al. (2021) found

that mothers prioritised improving their own diets to enhance breastmilk production, invested time in preparing children's food in advance, and diversified their livelihoods to maintain food stability (Ahishakiye et al., 2021).

While adaptive coping strategies have positive effects, maladaptive coping mechanisms can undermine child nutrition. Emotional feeding is one such practice where mothers use food to manage their children's emotions, which can lead to maladaptive eating behaviors. A study found that emotional feeding is often influenced by coping styles like preoccupied coping, which may negatively impact nutritional outcomes and foster unhealthy eating habits (Goldstein et al., 2017). Furthermore, a study by Dellenmark-Blom et al. (2019) revealed that avoidance and distancing from eating challenges are associated with lower eating quality of life (Dellenmark-Blom et al., 2019). This avoidance-based approach may prevent children from developing healthy eating behaviors. Stress can also lead mothers to coping behaviors that, while protective in the short term, may disrupt the consistency needed for a malnourished child's healthy development. (Kerr et al., 1978). The resilience displayed by mothers in such challenging circumstances is a testament to their strength, yet these coping strategies often underscore an urgent need for supportive interventions.

Socio-Economic Factors

Socioeconomic Status and Access to Resources

Economic factors are fundamental in shaping a mother's ability to provide adequate nutrition. Financial stability enable access to diverse, nutrient-rich foods, while poverty and financial dependency remain major barriers. Economic challenges significantly affect child nutrition, particularly in rural area, where limited resources and socioeconomic disparities often restrict access to healthy food. Mothers in low-income households often face a difficult choice between food quantity and quality, prioritising basic sustenance over nutritional diversity (Black et al., 2013). Families with lower socioeconomic status are more likely to experience food insecurity, which directly compromises the nutritional outcomes of children. In Pakistan, for example, households facing economic challenges often experience significant food insecurity, increasing parental stress and negatively affecting child nutrition (Ahmed et al., 2024). Similar patterns are observed in Latin America and the Caribbean, where lower wealth indices predict a double burden of malnutrition – overweight mothers coexisting with stunted children (Otten & Seferidi, 2022). Addressing these socioeconomic challenges requires targeted interventions, such as microfinance programs, food subsidies, and community nutrition education, to improve access to nutritious food and break the cycle of malnutrition.

Maternal Employment and Time Constraints

In many developing countries, increasing maternal workforce participation, coupled with inadequate childcare support, creates significant time constraints that can impact child nutrition. In India, for instance, as more mothers enter the workforce, they often face higher non-food expenditures, leading them to rely on ready-to-eat market foods, which are convenient but tend to be less nutritious (Chaturvedi et al., 2016). These time constraints can result in reduced meal preparation at home and increased reliance on processed foods, which may contribute to poorer nutritional outcomes for children. Meanwhile, in Brazil, Amaral (2018) noted that maternal employment can enhance household income and improve access to a wider variety of foods. However, without a balanced approach to nutrition, increased financial resources can also lead to higher consumption of calorie-dense, processed foods,

contributing to overweight and obesity among children (Amaral, 2018). This highlights the complex relationship between maternal employment and child nutrition, where economic improvements can have both positive and negative dietary effects. For mothers in low-income settings, the challenge of balancing work and caregiving is even greater. Employment demands can limit the time available for meal preparation and attentive child feeding, making it difficult to adhere to public health nutrition guidelines. Although these mothers strive to prioritise their family's health, limited resources and time constraints often lead them to neglect their own well-being, which, in turn, may affect their ability to provide optimal nutrition for their children (Wittels et al., 2022).

Educational of Mothers

Educational Status and Health Literacy

Educational attainment and health literacy profoundly affect a mother's approach to child nutrition. Mothers with higher education levels tend to achieve better child health outcomes, as they are more knowledgeable about diet diversity, portion control, and food hygiene (Akseer et al., 2023). Access to education equips mothers with the ability to make informed dietary choices, positively influencing their children's nutritional status. A study conducted in Indonesia found that mothers with higher education levels and those who were employed were more likely to correctly perceive their children's nutritional status, suggesting that education and exposure to broader social contexts improve maternal awareness of child nutrition (Neli et al., 2021). The role of maternal education is particularly significant in rural areas, where healthcare resources and access to nutritional information are often limited. In Punjab, Pakistan, a study conducted by Shahid et al. (2020) revealed that 91.8% of malnourished children were born to mothers with low nutritional awareness, underscoring the importance of maternal education in preventing malnutrition (Shahid et al., 2020). Furthermore, low literacy remains a formidable barrier especially for mothers in rural areas. In regions with limited educational access, mothers often rely on traditional practices that may not align with modern dietary recommendations (Hoddinott et al., 2012). Mothers with limited health literacy often relied on informal sources such as family, friends, and social media for nutritional advice. However, these sources may not always provide accurate or evidence-based information. A study by Rudin et al. (2024) found that mothers with low health literacy often perceived informal sources as more credible than professional healthcare providers, leading to potential misinformation and poor feeding practices. Misconceptions about nutrition can lead to either underfeeding or overfeeding, both of which negatively impact child health. Despite this, many parents continue to face significant challenges in health literacy, which impairs their ability to make informed health decisions for their children. Morrison et al. (2019) highlighted that poor health literacy is associated with inadequate nutrition knowledge and practices, leading to higher malnutrition and other health issues among children. Parents with low health literacy may struggle to interpret food labels, understand portion sizes, or assess the nutritional content of foods, increasing the likelihood of unhealthy feeding patterns (Morrison et al., 2019). Addressing these health literacy challenges is essential to prevent malnutrition and related health issues in children, especially in communities where parents have limited education or access to reliable health information.

Access to Healthcare and Nutritional Support Programs

Role of Traditional Practitioners and Accessibility

Traditional practitioners play a significant role in shaping maternal behaviours related to child nutrition, particularly in communities where cultural beliefs strongly influence dietary practices. As custodians of traditional knowledge, these practitioners pass down both beneficial and harmful nutritional practices. In Indonesia, long-standing cultural beliefs shape maternal and infant feeding practices, often reinforced by traditional practitioners and family elders. Astuti et al. (2024) documented that many mothers avoid milk, red meat, seafood, eggs, and chicken during pregnancy due to fears that these foods cause hypertension, miscarriage, allergies, or affect the baby's appearance, beliefs commonly advised by older relatives and traditional birth attendants. Similar restrictions apply to children, with eggs and seafood often withheld for fear of allergies. Prelacteal feeding, for example newborn is given honey, sugar, coffee, rice water, or plain water, believed to bring good fortune, cleanse the infant's body, or promote growth.

Traditional birth attendants and senior family members play a central role in transmitting and reinforcing these beliefs, often outweighing health workers' advice. These traditional practices, though culturally significant, contribute to nutritional inadequacy and increase the risk of stunting (Astuti et al., 2024). Similarly, in Kenya, traditional birth attendants and family elders remain the main sources of infant feeding guidance, shaping practices in ways that often diverge from modern health recommendations. Among the Maasai community, Mugo (2008) found that prelacteal feeding, offering infants traditional fluids before breastfeeding, was widely practised, exclusive breastfeeding was rare, and nearly all mothers introduced complementary foods before one month of age in line with ancestral customs.

Advice from elders outweighed that from health clinics, illustrating how traditional knowledge systems continue to dominate maternal nutrition decisions in rural settings (Mugo, 2008). Meanwhile, in Turkey, societal pressure and maternal anxiety contribute to early complementary feeding, which may not always align with current nutrition recommendations. Ertem and Ergün (2013) found that many mothers discard colostrum because it is believed to be "dirty" or harmful. During this waiting period, infants are often given sugar water or herbal mixtures as prelacteal feeds to cleanse the stomach and bring blessings. Feeding decisions are typically controlled by grandmothers or mothers-in-law, and mothers who follow medical advice rather than traditional norms may be criticised.

Sons are often breastfed longer than daughters due to cultural expectations of male strength. These beliefs, reinforced by social pressure and maternal anxiety about milk sufficiency, result in deviation from national nutrition recommendations and practices (Ertem & Ergün, 2013). However, some traditional practices can also play a protective role. Kristo et al. (2021) observed that in low-income Turkish families, strong intergenerational support systems and customary food habits contribute to healthier diets among preschool children. Extended family networks encourage the preparation of home-cooked traditional dishes using fresh ingredients supplied by rural relatives, while eating out and processed snacks are discouraged. Mothers, supported by grandmothers and older women, prioritise vegetables, legumes, and soups over calorie-dense convenience foods. These traditional household structures and food-sharing practices help preserve balanced dietary patterns and reduce obesity risk even among children from low socioeconomic backgrounds. (Kristo et al., 2021).

This dual impact underscores the need for a nuanced approach; while some traditions promote child well-being, others may contribute to malnutrition or unhealthy feeding patterns. Resistance to modern nutritional interventions remains a challenge. Traditional practitioners, deeply rooted in cultural beliefs, may be hesitant to adopt scientifically backed nutrition recommendations. This reluctance can hinder efforts to introduce improved child nutrition practices through public health initiatives (Sivaramakrishnan & Patel, 1993). Therefore, integrating traditional knowledge with modern nutritional science, rather than dismissing it entirely, may be a more effective strategy for sustainable behaviour change.

Access to healthcare and nutritional support is vital for improving maternal and child nutrition. Consistent access to maternal counselling and child growth monitoring play an important role in empowering mothers with evidence-based dietary knowledge and enhances mothers' ability to make informed nutritional choices (Torlesse et al., 2021). However, in remote and underserved areas, limited healthcare access often forces mothers to rely on traditional healers rather than trained medical professionals (Burtscher & Burza, 2015). Cultural familiarity, affordability, and trust in traditional healers contribute to their continued influence in these settings. To bridge this gap, community-based interventions such as mobile health units and community health worker programs can provide culturally appropriate nutrition education while respecting traditional values, which could improve maternal knowledge and child health outcomes in underserved communities.

STRENGTH AND LIMITATION

This review offers a comprehensive and multidimensional understanding of the sociocultural, psychological, and economic determinants that shape maternal practices and child nutrition outcomes, especially in underserved and low-resource settings. One of its key strengths is the integration of diverse global studies across different cultural contexts. The inclusion of both qualitative and quantitative evidence enhances the robustness of the review, while the focus on maternal autonomy, mental health, health literacy, and coping strategies adds a critical depth to the discussion. However, the review also presents several limitations. First, there is an inherent heterogeneity in the studies reviewed, making it difficult to generalize findings across contexts. Variations in study design, measurement tools, and cultural norms limit the ability to draw consistent conclusions, particularly regarding maternal autonomy and its impact on child malnutrition. Additionally, while the review highlights the influence of traditional practices and beliefs, it does not fully explore the mechanisms through which these practices can be transformed or integrated with modern nutritional knowledge. A further limitation lies in the underrepresentation of paternal roles and systemic policy influences, which are crucial to creating sustainable improvements in maternal and child nutrition.

RECOMMENDATIONS

Based on the review findings, a set of targeted, culturally sensitive, and evidence-based interventions are recommended to improve child nutrition outcomes. First, maternal mental health and autonomy should be central components of nutrition programs, recognising the interplay between psychological well-being, decision-making power, and caregiving practices. Integrating mental health support into maternal and child health services could address barriers related to stress, stigma, and health-seeking behaviour. Second, health literacy campaigns must be tailored to address misinformation and low literacy levels, especially in

rural areas. These efforts should be accompanied by accessible, community-based nutrition education, delivered in local languages, and supported by trusted community figures such as grandmothers, fathers, and traditional practitioners. To promote sustainable impact, nutrition-sensitive policies should also incorporate childcare support for working mothers and expand financial inclusion strategies like microfinance. Finally, partnerships between modern healthcare providers and traditional practitioners can foster culturally respectful interventions that bridge knowledge gaps without alienating local beliefs. This dual approach may enhance program acceptance and adherence, ultimately supporting healthier outcomes for both mothers and children.

CONCLUSION

Mothers play a crucial role in shaping child nutrition, with their influence affected by socio-cultural, economic, educational, and healthcare factors. Supportive families, financial stability, education, and healthcare access empower mothers to make informed nutritional choices, while socio-economic constraints, restrictive cultural norms, and low health literacy present significant challenges. Implementing family oriented, culturally sensitive, and gender-inclusive interventions can enhance maternal influence, fostering sustainable improvements in child nutrition and well-being, particularly in underserved communities.

Acknowledgement

The author thanks the Department of Public Health Medicine, Faculty of Medicine and Health Sciences, Universiti Malaysia Sabah for its institutional support. Appreciation is extended to Associate Professor Dr. Azizan Omar and Associate Professor Dr. Khalid Mokti for their valuable feedback, and to colleagues and peers for their helpful input during manuscript preparation.

Conflicts of Interest

The authors declare no conflict of interest.

Funding

None.

REFERENCES

- Ahishakiye, J., Vaandrager, L., Brouwer, I. D., & Koelen, M. (2021). Qualitative, longitudinal exploration of coping strategies and factors facilitating infant and young child feeding practices among mothers in rural Rwanda. *BMC Public Health*, 21(1), 103–103. <https://doi.org/10.1186/S12889-020-10095-8>
- Ahmed, F., Malik, N. I., Bashir, S., Noureen, N., Ahmad, J., & Tang, K. (2024). Political Economy of Maternal Child Malnutrition: Experiences about Water, Food, and Nutrition Policies in Pakistan. *Nutrients*, 16(16), 2642–2642. <https://doi.org/10.3390/nu16162642>
- Akseer, N., Tasic, H., Adeyemi, O., & Heidkamp, R. (2023). Concordance and determinants of mothers' and children's diets in Nigeria: An in-depth study of the 2018 Demographic and Health Survey. *BMJ Open*, 13(7), e070876. <https://doi.org/10.1136/bmjopen-2022-070876>

- Amaral, S. B. (2018). *Exploring the links between women's work and child nutritional status in rapidly developing economies: The cases of Brazil and India*. (Doctoral dissertation, University of Southampton). <https://eprints.soton.ac.uk/422165/>
- Arndt, M. B., Abate, Y. H., Abbasi-Kangevari, M., Abd ElHafeez, S., Abdelmasseh, M., Abd-Elsalam, S., Abdullah, D. M., Abdulkader, R. S., Abidi, H., Abiodun, O., Aboagye, R. G., Abolhassani, H., Abtew, Y. D., Abu-Gharbieh, E., Abu-Rmeileh, N. M., Acuna, J. M., Adamu, K., Adane, D. E., Addo, I. Y., ... Reiner, R. C. (2024). Global, regional, and national progress towards the 2030 global nutrition targets and forecasts to 2050: A systematic analysis for the Global Burden of Disease Study 2021. *The Lancet*, 404(10471), 2543–2583. [https://doi.org/10.1016/S0140-6736\(24\)01821-X](https://doi.org/10.1016/S0140-6736(24)01821-X)
- Astuti, Y., Paek, S. C., Meemon, N., & Marohabutr, T. (2024). Analysis of traditional feeding practices and stunting among children aged 6 to 59 months in Karanganyar District, Central Java Province, Indonesia. *BMC Pediatrics*, 24. <https://doi.org/10.1186/s12887-023-04486-0>
- Ayine, P., Selvaraju, V., Venkatapoorna, C. M. K., Bao, Y., Gaillard, P., & Geetha, T. (2021). Eating Behaviors in Relation to Child Weight Status and Maternal Education. *Children*, 8(1), 32. <https://doi.org/10.3390/children8010032>
- Balaji, A. B., Claussen, A. H., Smith, D. C., Visser, S. N., Morales, M. J., & Perou, R. (2007). Social Support Networks and Maternal Mental Health and Well-Being. *Journal of Women's Health*, 16(10), 1386–1396. <https://doi.org/10.1089/jwh.2007.CDC10>
- Baloch, F. A., Jomezai, N. A., & Mohamed Ismail, S. A. M. (2020). Food and cultural norms: Rural mothers' selection of nutrition intake for their young children. *Health Education*, 120(1), 87–106. <https://doi.org/10.1108/HE-09-2019-0040>
- Black, R. E., Allen, L. H., Bhutta, Z. A., Caulfield, L. E., Onis, M. D., Ezzati, M., Mathers, C., & Rivera, J. (2013). Maternal and child undernutrition and overweight in low-income and middle-income countries. *The Lancet*, 382(9890), 427–451.
- Burchinal, M. R., Follmer, A., & Bryant, D. M. (1996). The relations of maternal social support and family structure with maternal responsiveness and child outcomes among African American families. *Developmental Psychology*, 32(6), 1073–1083. <https://doi.org/10.1037/0012-1649.32.6.1073>
- Burtscher, D., & Burza, S. (2015). Health-seeking behaviour and community perceptions of childhood undernutrition and a community management of acute malnutrition (CMAM) programme in rural Bihar, India: A qualitative study. *Public Health Nutrition*, 18(17), 3234–3243. <https://doi.org/10.1017/S1368980015000440>
- Capitani, E., Carlotta, L., Adele, B., Lucia, A., & Nicola, N. (2023). Factors Influencing The First Thousand Days Of Life. *Journal of Preventive Medicine and Hygiene*, E172 Pages. <https://doi.org/10.15167/2421-4248/JPMH2023.64.2.2850>
- Chakona, G. (2020). Social circumstances and cultural beliefs influence maternal nutrition, breastfeeding and child feeding practices in South Africa. *Nutrition Journal*, 19(1), 47. <https://doi.org/10.1186/s12937-020-00566-4>
- Chaturvedi, S., Ramji, S., Arora, N., Rewal, S., Dasgupta, R., & Deshmukh, V. (2016). Time-constrained mother and expanding market: Emerging model of under-nutrition in India. *BMC Public Health*, 16(1), 632–632. <https://doi.org/10.1186/S12889-016-3189-4>
- Dellenmark-Blom, M., Chaplin, J. E., Quitmann, J. H., Jönsson, L., Gatzinsky, V., Dingemann, J., & Abrahamsson, K. (2019). The prevalence and role of coping strategies in the nutritional intake of children born with esophageal atresia: A condition-specific

- approach. *Diseases of the Esophagus*, 32(7), doz004. <https://doi.org/10.1093/dote/doz004>
- Ertem, G., & Ergün, S. (2013). Traditional practices and beliefs regarding nutrition of children in the 0-5 age group in western Turkey: A qualitative study. *Journal of Pakistan Medical Association*, 63(2), 173–178.
- Esterik, P. V. (1999). Right to food; right to feed; right to be fed. The intersection of women's rights and the right to food. *Agriculture and Human Values*, 16(2), 225–232. <https://doi.org/10.1023/A:1007524722792>
- Gill, A., Page, S. M., & Hairston, M. (2023). Communities of Support for Care-Experienced Mothers. *The British Journal of Social Work*, 53(3), 1775–1783. <https://doi.org/10.1093/bjsw/bcad032>
- Goldstein, M., Tan, C. C., & Chow, C. M. (2017). Maternal emotional feeding practices and adolescent daughters' emotional eating: Mediating roles of avoidant and preoccupied coping. *Appetite*, 116, 339–344. <https://doi.org/10.1016/J.APPET.2017.05.021>
- Hoddinott, P., Craig, L. C. A., Britten, J., & McInnes, R. M. (2012). A serial qualitative interview study of infant feeding experiences: Idealism meets realism. *BMJ Open*, 2(2), e000504. <https://doi.org/10.1136/bmjopen-2011-000504>
- Ickes, S. B., Hurst, T. E., & Flax, V. L. (2015). Maternal Literacy, Facility Birth, and Education Are Positively Associated with Better Infant and Young Child Feeding Practices and Nutritional Status among Ugandan Children1–3. *The Journal of Nutrition*, 145(11), 2578–2586. <https://doi.org/10.3945/jn.115.214346>
- Ickes, S. B., Wu, M., Mandel, M. P., & Roberts, A. C. (2018). Associations between social support, psychological well-being, decision making, empowerment, infant and young child feeding, and nutritional status in Ugandan children ages 0 to 24 months. *Maternal & Child Nutrition*, 14(1), e12483. <https://doi.org/10.1111/mcn.12483>
- Keefe, R. H., Brownstein-Evans, C., & Polmanteer, R. S. R. (2017). The Challenges of Idealized Mothering. *SAGE Publishing*, 33(2), 221–235. <https://doi.org/10.1177/0886109917747634>
- Khan, A. M. (2022). Maternal mental health and child nutritional status in an urban slum in Bangladesh: A cross-sectional study. *PLOS Global Public Health*, 2(10), e0000871. <https://doi.org/10.1371/journal.pgph.0000871>
- Kirolos, A., Goyheneix, M., Kalmus Elias, M., Chisala, M., Lissauer, S., Gladstone, M., & Kerac, M. (2022). Neurodevelopmental, cognitive, behavioural and mental health impairments following childhood malnutrition: A systematic review. *BMJ Global Health*, 7(7), e009330. <https://doi.org/10.1136/bmjgh-2022-009330>
- Kristo, A. S., Sikalidis, A. K., & Uzun, A. (2021). Traditional Societal Practices Can Avert Poor Dietary Habits and Reduce Obesity Risk in Preschool Children of Mothers with Low Socioeconomic Status and Unemployment. *Systems Research and Behavioral Science*, 11(4). <https://doi.org/10.3390/BS11040042>
- Likhar, A., & Patil, M. S. (2022). Importance of Maternal Nutrition in the First 1,000 Days of Life and Its Effects on Child Development: A Narrative Review. *Cureus*. <https://doi.org/10.7759/cureus.30083>
- Lokossou, Y. U. A., Tambe, A. B., Azandjè, C., & Mbhenyane, X. (2021). Socio-cultural beliefs influence feeding practices of mothers and their children in Grand Popo, Benin. *Journal of Health, Population and Nutrition*, 40(1), 33. <https://doi.org/10.1186/s41043-021-00258-7>

- Matare, C. R., Mbuya, M. N. N., Peltó, G. H., Dickin, K. L., & Stoltzfus, R. J. (2015). Assessing Maternal Capabilities in the SHINE Trial: Highlighting a Hidden Link in the Causal Pathway to Child Health. *Oxford University Press*, 61(suppl 7), S745–S751. <https://doi.org/10.1093/cid/civ851>
- Miedema, S. S., Haardörfer, R., Girard, A. W., & Yount, K. M. (2018). Women's empowerment in East Africa: Development of a cross-country comparable measure. *World Development*, 110, 453–464. <https://doi.org/10.1016/j.worlddev.2018.05.031>
- Morrison, A. K., Glick, A., & Yin, H. S. (2019). Health Literacy: Implications for Child Health. *Pediatrics in Review*, 40(6), 263–277. <https://doi.org/10.1542/PIR.2018-0027>
- Mugo, G. M. (2008). *Influence of maternal nutrition knowledge on infant :feeding practices among the Maasai community in Narok District, Kenya.*
- Neli, W., Latif, F. L. A., Rompas, H., Putri, A. H., & Firman, L. O. M. (2021). Indonesian mothers' perception about the children nutritional status and its related factors. *Public Health of Indonesia*, 7(3), 126–132. <https://doi.org/10.36685/phi.v7i3.440>
- Nkwo, M., Orji, R., & Ajah, I. (2021). A Health Belief Model Approach to Evaluating Maternal Health Behaviors among Africans—Design Implications for Personalized Persuasive Technologies. *Adjunct Proceedings of the 29th ACM Conference on User Modeling, Adaptation and Personalization*, 309–317. <https://doi.org/10.1145/3450614.3464624>
- Noor, R., Khurshid, F., Arshad, Q., Qamar, U., Yousaf, F., Akbar, J., & Tanweer, A. (2022). Development of Perception-Focused Nutrition Education Material for Mothers of Children in Early Childhood. *Nurture*, 16(2), 103–107. <https://doi.org/10.55951/nurture.v16i2.136>
- Otten, H. S., & Seferidi, P. (2022). Prevalence and socioeconomic determinants of the double burden of malnutrition in mother–child pairs in Latin America and the Caribbean. *BMJ Nutrition, Prevention & Health*, 5(2), 263–270. <https://doi.org/10.1136/bmjnph-2022-000489>
- Paul, P., & Saha, R. (2022). Is maternal autonomy associated with child nutritional status? Evidence from a cross-sectional study in India. *PLOS ONE*, 17(5), e0268126. <https://doi.org/10.1371/journal.pone.0268126>
- Putri, L., Martha Irene Kartasurya, & Syamsulhuda Budi Musthofa. (2024). Self-Stigma, Experiences and Psychological Conditions of Mothers Having Children with Malnutrition-Stunting: Literature Review. *Media Publikasi Promosi Kesehatan Indonesia (MPPKI)*, 7(7), 1764–1771. <https://doi.org/10.56338/mparki.v7i7.5407>
- Saleh, A., Syahrul, S., Hadju, V., Andriani, I., & Restika, I. (2021). Role of Maternal in Preventing Stunting: A Systematic Review. *Gaceta Sanitaria*, 35, S576–S582. <https://doi.org/10.1016/j.gaceta.2021.10.087>
- Saleh, S. N. H., Agustin, A., & Sudirman, S. (2023). Cultural Determinants of Community in Giving Breast Milk Complementary Food to Babies in Kotamobagu City. *Medical Technology and Public Health Journal*, 7(2), 182–188. <https://doi.org/10.33086/mtphj.v7i2.5021>
- Sarker, T., Ahmed, S., Rahman, S., & Chakraborty, B. (2024). Maternal misperception of under-five children weight status and associated factors: A cross-sectional study. *Maternal and Child Nutrition*. <https://doi.org/10.1111/mcn.13674>
- Shahid, M., Leghari, I. U., & Ahmed, F. (2020). *Socio-Economic Correlates of Children's Nutritional Status: Evidence from Pakistan Demographic and Health Survey 2017-18*. 5(1), 221–233. [https://doi.org/10.31703/GER.2020\(V-I\).18](https://doi.org/10.31703/GER.2020(V-I).18)

- Shroff, M. R., Griffiths, P. L., Suchindran, C., Nagalla, B., Vazir, S., & Bentley, M. E. (2011). Does maternal autonomy influence feeding practices and infant growth in rural India? *Social Science & Medicine*, 73(3), 447–455. <https://doi.org/10.1016/j.socscimed.2011.05.040>
- Sivaramakrishnan, M., & Patel, V. L. (1993). Role of traditional knowledge in the explanation of childhood nutritional deficiency by indian mothers. *Journal of Nutrition Education*, 25(3), 121–129. [https://doi.org/10.1016/S0022-3182\(12\)80568-1](https://doi.org/10.1016/S0022-3182(12)80568-1)
- Smith, L. C., Ramakrishnan, U., Ndiaye, A., Haddad, L., & Martorell, R. (2003). The Importance of Women's Status for Child Nutrition in Developing Countries: International Food Policy Research Institute (Ifpri) Research Report Abstract 131. *Food and Nutrition Bulletin*, 24(3), 287–288. <https://doi.org/10.1177/156482650302400309>
- Soharwardi, M. A., & Ahmad, T. I. (2020). Dynamic Role of Mother Empowerment in reducing malnutrition among children: Evidence from Sub-Saharan Africa. *Review of Economics and Development Studies*, 6(1), 135–146. <https://doi.org/10.47067/reads.v6i1.191>
- Stringer, E. C. (2020). Managing Motherhood: How Incarcerated Mothers Negotiate Maternal Role-Identities with Their Children's Caregivers. *Taylor & Francis*, 30(5), 336–355. <https://doi.org/10.1080/08974454.2020.1750538>
- Susiloretni, K. A., Smith, E. R., Suparmi, Marsum, Agustina, R., & Shankar, A. H. (2020). *The psychological distress of parents is associated with reduced linear growth of children: Evidence from a nationwide population survey*. <https://doi.org/10.1101/2020.02.11.20022103>
- Susiloretni, K. A., Smith, E. R., Suparmi, Marsum, Agustina, R., & Shankar, A. H. (2021). The psychological distress of parents is associated with reduced linear growth of children: Evidence from a nationwide population survey. *PLOS ONE*, 16(10), e0246725. <https://doi.org/10.1371/journal.pone.0246725>
- Torlesse, H., Benedict, R. K., Craig, H. C., & Stoltzfus, R. J. (2021). The quality of maternal nutrition and infant feeding counselling during antenatal care in South Asia. *Maternal & Child Nutrition*, 17(3), e13153. <https://doi.org/10.1111/mcn.13153>
- Vantono, S. A., Bardosono, S., & Wiradnyani, L. A. A. (2022). Mother's Coping strategies toward Food Insecurity during COVID-19 Pandemic: A Review Article. *World Nutrition Journal*, 5(i2), 18–22. <https://doi.org/10.25220/wnj.v05.i2.0004>
- WHO. (2023a). *Global targets 2025*. <https://www.who.int/teams/nutrition-and-food-safety/global-targets-2025>
- WHO. (2023b). *Levels and trends in child malnutrition: UNICEF/WHO/World Bank Group joint child malnutrition estimates: key findings of the 2023 edition*. <https://www.who.int/publications/i/item/9789240073791>
- WHO. (2024). *Nutrition*. <https://www.who.int/health-topics/nutrition>
- Wittels, P., Kay, T., & Mansfield, L. (2022). Adopting and maintaining a healthy lifestyle in low SES families: How the experience of motherhood shapes responses to dietary and physical activity public health guidance. *BMC Public Health*, 22(1), 1092. <https://doi.org/10.1186/s12889-022-13502-4>