

Maternal Employment and Child Nutrition: A Systematic Review of Evidence and Policy Perspectives

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Abstract

Child malnutrition remains a significant public health challenge in South Asia despite economic growth and improvements in healthcare and nutrition programmes. At the same time, increasing female labour force participation has altered traditional childcare practices, making maternal employment an important determinant of child nutritional outcomes. This systematic review examines the relationship between maternal employment and the nutritional status of children under five years of age in South Asia. A comprehensive literature search was conducted using PubMed, ScienceDirect, and Web of Science following the PRISMA 2020 guidelines. Studies published between January 2011 and December 2024 from South Asian countries were systematically reviewed to assess the association between maternal employment and anthropometric indicators, including stunting, wasting, underweight, height-for-age, weight-for-height, and body mass index (BMI).

The review indicates that the impact of maternal employment on child nutrition is highly context-specific. Formal-sector employment with stable income, maternity benefits, flexible working conditions, and childcare support generally contributes to improved child nutritional outcomes through enhanced household food security and healthcare access. Conversely, informal and low-paid employment is often associated with poorer nutritional outcomes due to inadequate maternity protection, limited childcare facilities, irregular income, and reduced caregiving time. The review highlights the need for integrated policies that strengthen maternity protection, childcare services, social security, and nutrition-sensitive interventions to improve child nutrition and promote sustainable development across South Asia.

Keywords: Maternal employment; Child nutrition; Stunting; Wasting; Underweight; South Asia; Informal employment; Childcare; Maternal health; Systematic review.

1. Introduction

Child malnutrition remains one of the most significant public health challenges worldwide, particularly in low- and middle-income countries. Despite substantial progress in economic growth, healthcare services, and food production, undernutrition continues to affect millions of children. According to the latest global estimates, approximately 148 million children under five years of age are stunted, 45 million are wasted, and 37 million are overweight, reflecting the coexistence of undernutrition and overnutrition in many developing countries (UNICEF, World Health Organization [WHO], & World Bank, 2023). South Asia accounts for the largest share of this burden, making improvements in child nutrition essential for

achieving the Sustainable Development Goals (SDGs), particularly SDG 2 (Zero Hunger) and SDG 3 (Good Health and Well-being) (United Nations, 2015)

Adequate nutrition during the first 1,000 days from conception to a child's second birthday—is fundamental for optimal physical growth, cognitive development, immune function, educational attainment, and future productivity (Black et al., 2013; Victora et al., 2021). Nutritional deficiencies during this critical period can result in irreversible consequences, including stunting, impaired brain development, poor educational performance, and increased susceptibility to disease (Black et al., 2013). Child nutritional status is therefore determined by a complex interaction of biological, socioeconomic, environmental, and behavioural factors, including dietary intake, disease burden, household food security, caregiving practices, access to health services, and maternal characteristics (UNICEF, 2020).

Among these determinants, maternal employment has received increasing attention because of the rapid socioeconomic transformation occurring across South Asia. Rising female labour force participation, urbanization, and changing household structures have expanded women's economic roles while simultaneously altering traditional childcare responsibilities (International Labour Organization [ILO], 2024; World Bank, 2024). Maternal employment has the potential to improve household welfare through increased income and women's economic empowerment; however, it may also reduce the time available for childcare, breastfeeding, complementary feeding, and health monitoring.

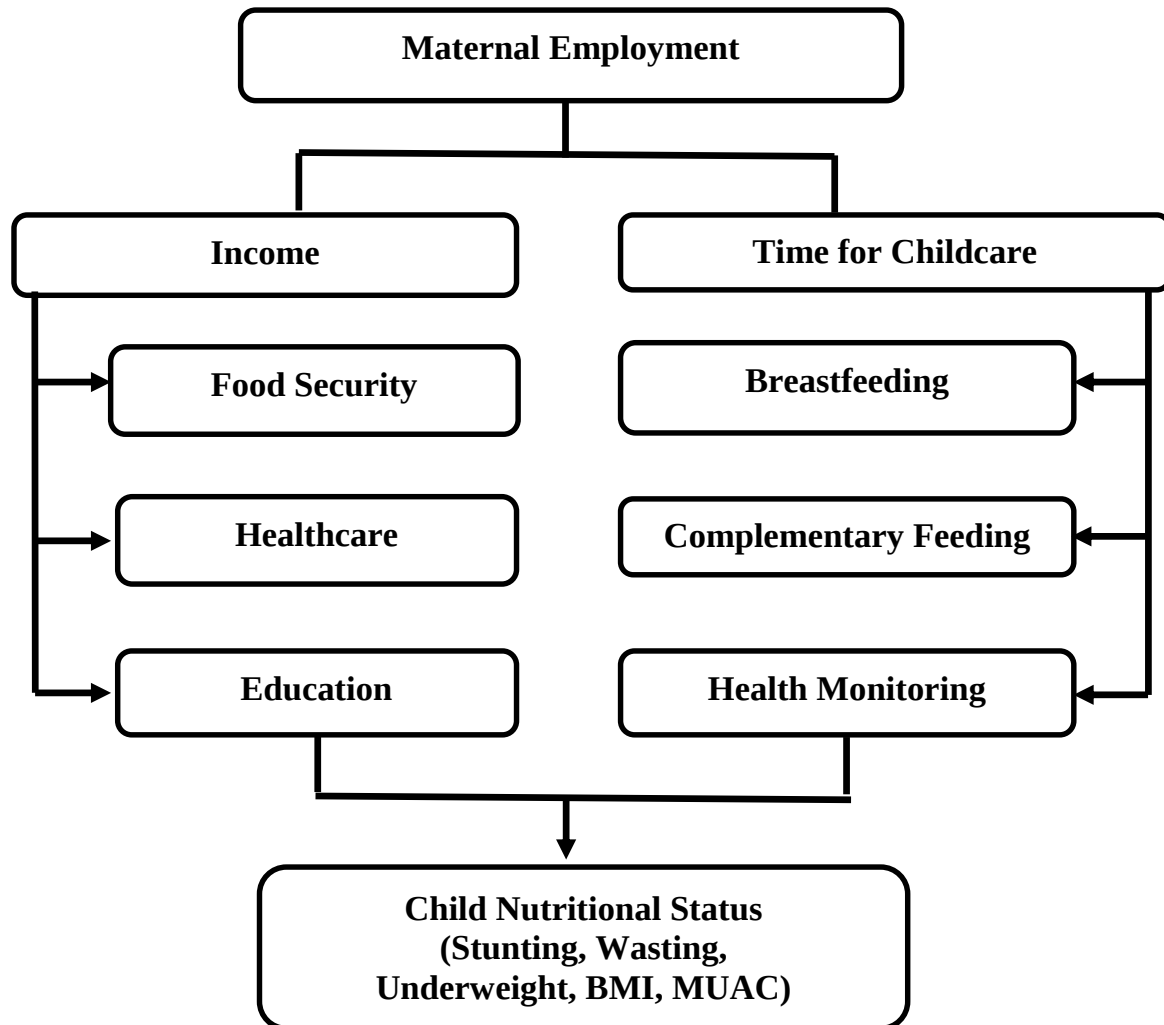
The pathways through which maternal employment influences child nutritional status are illustrated in Figure 1. The conceptual framework proposes that maternal employment affects child nutrition through two interconnected mechanisms. The first pathway operates through economic resources, whereby employment increases household income, improves food security, enhances access to healthcare, and supports educational investments that contribute positively to child growth and development (Becker, 1981; Smith et al., 2003). The second pathway operates through caregiving time, whereby employment may reduce the time available for breastfeeding, complementary feeding, illness monitoring, and other essential childcare practices, particularly when mothers are engaged in long working hours or physically demanding occupations (Glick, 2002; Leslie, 1988). These two pathways jointly influence children's nutritional outcomes, measured by anthropometric indicators such as stunting, wasting, underweight, body mass index (BMI), and mid-upper arm circumference (MUAC). The framework therefore highlights that maternal employment can exert both beneficial and adverse effects depending on the balance between increased economic resources and reduced caregiving time.

Employment quality further moderates these relationships. Women employed in formal sectors often benefit from maternity leave, workplace breastfeeding support, flexible work arrangements, and childcare facilities, enabling them to balance employment with childcare responsibilities (ILO, 2018). In contrast, most employed women in South Asia work in the informal economy—including agriculture, domestic work, construction, and small-scale enterprises where employment is characterized by low wages, job insecurity, inadequate maternity protection, and limited social security (Bonnet et al., 2019; Chen, 2012). Such conditions may force mothers to resume work shortly after childbirth, potentially compromising infant feeding practices and increasing the risk of poor nutritional outcomes.

Empirical evidence regarding the relationship between maternal employment and child nutritional status remains inconclusive. Several studies report lower levels of stunting and underweight among children of employed mothers because increased household income and women's decision-making power improve access to nutritious food and healthcare (Cunningham et al., 2015). Conversely, other studies suggest that physically demanding or poorly paid employment is associated with poorer child nutrition owing to

reduced caregiving time and inadequate feeding practices (Glick, 2002; Leslie, 1988). Some investigations have found no statistically significant association after controlling for household wealth, maternal education, and other socioeconomic characteristics (Ruel & Alderman, 2013). These mixed findings indicate that the effects of maternal employment depend not only on whether women work, but also on the nature of employment, household support systems, and the broader social and policy environment.

Figure 1. Conceptual framework illustrating pathways linking maternal employment and child nutritional status.



South Asia provides a particularly important setting for examining these relationships because it combines a high burden of childhood malnutrition with considerable diversity in labour markets, gender norms, healthcare systems, and social protection programmes. Although governments have implemented nutrition interventions, maternity benefit schemes, and child development programmes, childhood undernutrition remains widespread while female labour force participation continues to evolve (ILO, 2024; UNICEF et al., 2023; World Bank, 2024). Understanding how maternal employment influences child nutritional outcomes is therefore essential for designing policies that simultaneously promote women's economic empowerment and safeguard child health.

Given the persistent burden of childhood malnutrition and the increasing participation of women in the labour market, a comprehensive synthesis of existing evidence is warranted. This systematic review aims

to critically examine empirical evidence on the association between maternal employment and child nutritional status in South Asia. Specifically, it evaluates how different forms of maternal employment influence anthropometric indicators of child nutrition, identifies contextual factors explaining variations in study findings, and highlights policy implications for labour, health, nutrition, and social protection programmes. By integrating the available evidence within the conceptual framework presented in Figure 1, this review provides a comprehensive understanding of the mechanisms linking maternal employment and child nutritional outcomes and offers evidence-based recommendations for improving both women's employment conditions and child well-being.

2. Materials and Methods

2.1 Study Design

This review was conducted using a systematic review approach to synthesize available evidence regarding the relationship between maternal employment and child nutritional status in South Asia. The review followed internationally accepted principles of systematic evidence synthesis and reporting, particularly the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The objective was to identify, evaluate, and summarize observational studies investigating how maternal employment influences various anthropometric indicators of child nutrition (Page et al., 2021).

Unlike narrative reviews, a systematic review employs explicit search strategies, predefined eligibility criteria, standardized study selection procedures, and transparent methods of data extraction. These approaches minimize selection bias while providing a comprehensive understanding of the available scientific evidence.

2.2 Search Strategy

A comprehensive electronic literature search was conducted using three internationally recognized bibliographic databases: PubMed, ScienceDirect, and Web of Science, which are widely recognized as reliable sources for biomedical, public health, and multidisciplinary scientific research (Bramer et al., 2017; Gusenbauer & Haddaway, 2020). The review was conducted and reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines (Page et al., 2021).

The search covered studies published between January 2011 and December 2024, reflecting the period during which women's labour force participation in South Asia became relatively stable and important labour policy reforms concerning maternity protection, gender equality, and informal employment were introduced (International Labour Organization [ILO], 2018, 2024; World Bank, 2024).

The search strategy combined Medical Subject Headings (MeSH) and free-text keywords using Boolean operators (AND, OR, and NOT) to maximize the sensitivity and specificity of the search (Lefebvre et al., 2023). The principal search terms included: "maternal employment," "working mothers," "women's employment," "female labour force participation," "child nutrition," "nutritional status," "stunting," "wasting," "underweight," "malnutrition," "anthropometry," "South Asia," "India," "Bangladesh," "Nepal," "Pakistan," "Sri Lanka," "Bhutan," "Maldives," and "Afghanistan."

Reference lists of all eligible articles and relevant review papers were manually examined to identify additional studies that were not retrieved through the electronic database search, thereby minimizing publication bias and enhancing the comprehensiveness of the review (Higgins et al., 2023; Page et al., 2021).

2.3 Eligibility Criteria

Studies were selected according to predefined inclusion and exclusion criteria.

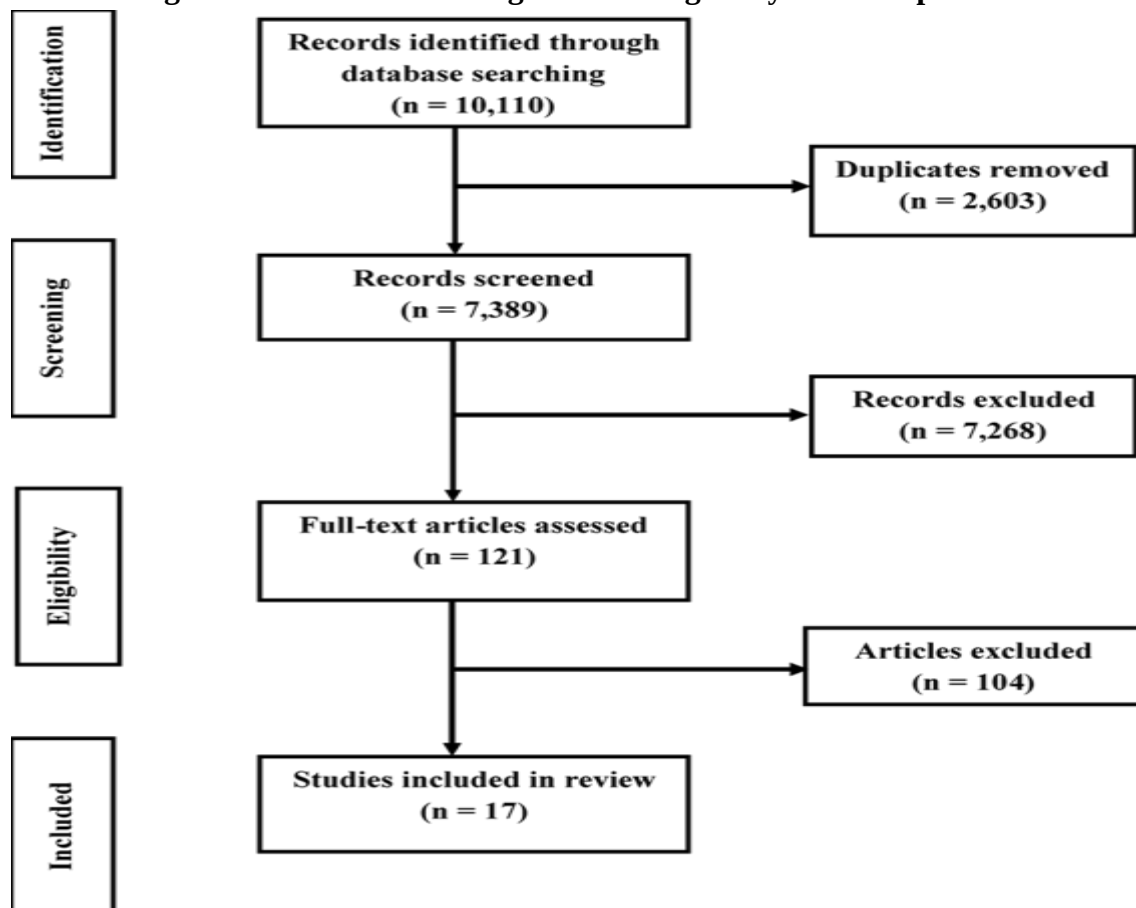
Inclusion Criteria: Studies were included if they: investigated children aged 0–12 years; examined maternal employment as the principal exposure variable; reported at least one anthropometric indicator of child nutritional status; were conducted in South Asian countries; employed observational study designs including cross-sectional, cohort, or case-control studies; were published in English between 2011 and 2024.

Exclusion Criteria: The following were excluded: intervention studies, randomized controlled trials, editorials reviews, conference abstracts, case reports, qualitative studies, studies conducted outside South Asia, studies involving adolescents older than twelve years.

2.4 Study Selection

The initial database search identified more than 10,000 records. Duplicate publications were removed before screening titles and abstracts for relevance.

Figure 2. PRISMA flow diagram showing study selection process.



Potentially eligible articles underwent full-text assessment based on the predefined inclusion criteria. Studies were independently evaluated by reviewers to minimize selection bias.

Only studies reporting quantitative associations between maternal employment and child nutritional indicators were retained for final synthesis. Ultimately, 19 observational studies met all eligibility criteria and were included in the review.

2.5 Data Extraction

Relevant information from each study was extracted using a standardized data extraction form.

The following information was collected: author(s), publication year, country, study design, sample size, age of children, maternal employment characteristics, nutritional indicators, statistical methods, principal findings, reported limitations

Child nutritional outcomes included: Stunting (Height-for-age), Wasting (Weight-for-height), Underweight (Weight-for-age), Body Mass Index (BMI), Mid-upper Arm Circumference (MUAC), Height, Weight, Composite Index of Anthropometric Failure (CIAF), Coexisting Forms of Malnutrition (CFM)

2.6 Quality Assessment

Methodological quality was assessed using the modified Strengthening the Reporting of Observational Studies in Epidemiology (STROBE-M) checklist.

The included studies were categorized into four quality grades: Excellent, Good, Fair, Poor

Most studies demonstrated good methodological quality with adequate reporting of study design, sampling procedures, outcome measurement, and statistical analysis.

2.7 Data Synthesis

Considerable variation existed among studies regarding study populations, nutritional indicators, statistical models, and maternal employment categories. Because of this heterogeneity, quantitative meta-analysis was not appropriate. Instead, findings were synthesized narratively by grouping studies according to: Stunting, Wasting, Underweight, Other anthropometric outcomes, Employment characteristics, Regional differences, Policy implications

This approach enabled identification of consistent patterns across different socioeconomic contexts.

3. Results

3.1 Characteristics of the Included Studies

Table 1 explain that A total of 17 observational studies published between January 2011 and December 2024 were included in this systematic review (Table 1). The studies were conducted in India (n = 6), Nepal (n = 4), Bangladesh (n = 3), Pakistan (n = 2), and Sri Lanka (n = 2). Most studies employed a cross-sectional (n=13) design, while the remainder comprised one longitudinal, one community-based, and two case-control studies. Sample sizes ranged from 256 to 6,168 participants, with the majority focusing on children under five years of age.

The included studies assessed various anthropometric indicators, including stunting, wasting, underweight, HAZ, WHZ, MUAC, CIAF, severe acute malnutrition (SAM), height, weight, thinness, and overweight. As shown in Table 1, the findings were mixed. Several studies reported that formal and stable maternal employment was associated with improved child nutritional outcomes through increased household income and food security. In contrast, informal or physically demanding employment, such as agricultural labour, plantation work, and daily wage employment, was associated with a higher risk of undernutrition.

Table 1. Characteristics of studies included in the systematic review on maternal employment and child nutritional status in South Asia (January 2011–December 2024)

S. N.	Author (Year)	Country	Study Design	Sample Size	Child Age	Nutritional Indicators	Main Findings
1	Adhikari et al. (2020)	Nepal	Cross-sectional	9989	0–59 months	Stunting	Maternal employment was associated with an increased risk of childhood stunting.
2	Brauner-Otto et al. (2021)	Nepal	Longitudinal	860	3–60 months	HAZ, WHZ, MUAC	Wage labour associated with poor nutrition
3	Budhathoki et al. (2021)	Nepal	Cross-sectional	16086	0–59 months	Stunting	Children of employed mothers had a lower risk of stunting than those of unemployed mothers.
4	Deshmukh et al. (2014)	India	Cross-sectional	990	0–36 months	Stunting	No significant association between maternal employment and childhood stunting.
5	Galgamuwa et al. (2021)	Sri Lanka	Cross-sectional	547	Under 5 years	Underweight, Wasting	Plantation labour increased malnutrition
6	Huda et al. (2020)	Bangladesh	Cross-sectional	7173	<60 months	Stunting	No significant association between

							maternal employment and childhood stunting.
7	Khan et al. (2019)	Pakistan	Cross-sectional	3071	0–59 months	Underweight , Wasting	No significant association
8	Sk et al. (2019)	India	Cross-sectional	731	3–59 months	Stunting	Children of bidi workers and manual labourers had a higher likelihood of childhood stunting.
9	Yeleswarapu et al. (2018)	India	Cross-sectional	623	2–5 years	Height, Weight	Better growth among children of unemployed mothers
10	Win et al. (2018)	Bangladesh	Cross-sectional	346	0–59 months	Stunting	Children of employed mothers had a significantly higher risk of childhood stunting.
11	Shinsugi et al. (2020)	Sri Lanka	Cross-sectional	543	5–10 years	Thinness, Overweight	No significant association
12	Khaliq et al. (2023)	Pakistan	Cross-sectional	6,168	Under 5 years	Multiple anthropometric failures	Lower malnutrition among employed mothers
13	Hossain et al. (2020)	Bangladesh	Case-control	256	6–59 months	Severe Acute Malnutrition	Daily wage work increased SAM risk

14	Sigdel et al. (2022)	Nepal	Case-control	279	Under 5 years	Underweight	Employment reduced underweight risk
15	Chatterjee and Dubey (2024)	India	Longitudinal	9548	Under 5 years	Child nutrition (stunting, underweight)	Significantly improved child nutritional outcomes, partly through increased maternal employment.
16	Das and Subba (2015)	India	Cross-sectional	7287	Under 5 years	Child nutrition	Maternal employment had varying effects on child nutrition among with socioeconomic status influencing outcomes.
17	Taran et al. (2015)	India	Cross-sectional	100	Under 5 years	General health and nutritional status	Children of working mothers had poorer health and nutritional profiles than those of non-working mother

Other studies found no significant association after controlling for socioeconomic and demographic factors. Overall, the evidence suggests that employment quality, working conditions, maternal education, household wealth, and childcare support play a more important role in determining child nutritional status than maternal employment alone.

3.2 Maternal Employment and Childhood Stunting

Table 2 shows that stunting represents chronic undernutrition resulting from prolonged nutritional deprivation and recurrent infections during early childhood. It remains one of the most serious public health problems across South Asia.

Six studies investigated the association between maternal employment and childhood stunting.

The findings revealed considerable heterogeneity.

Only two of the studies reported **no statistically significant relationship** between maternal employment and stunting after adjustment for socioeconomic characteristics.

These studies suggested that employment alone does not determine children's growth outcomes. Rather, household wealth, maternal education, sanitation, food security, and healthcare access

Table 2. Summary of Maternal Employment and Child Nutritional Outcomes

Nutritional Indicator	Positive Association	Negative Association	No Association
Stunting	Improved household income	Informal employment	Several national surveys
Wasting	Formal employment	Daily wage labour	Pakistan studies
Underweight	Salaried employment	Agricultural labour	Few studies
Height-for-age	Professional employment	Wage labour	Mixed
Weight-for-height	Stable income	Poor childcare	Mixed
MUAC	Formal employment	Manual labour	Limited evidence
BMI-for-age	Better socioeconomic status	Heavy physical work	Mixed
Composite Anthropometric Failure	Reduced in higher-income families	Increased among poor households	Limited evidence

exert stronger influences on linear growth. However, several studies demonstrated that maternal employment in low-paying informal occupations significantly increased children's risk of stunting.

Children whose mothers worked as: agricultural labourers, daily wage earners, bidi workers, construction workers, casual labourers were consistently more likely to experience chronic undernutrition.

Several mechanisms explain these findings.

Women employed in physically demanding occupations frequently spend long hours away from home, reducing opportunities for breastfeeding, complementary feeding, illness monitoring, and responsive childcare. Moreover, irregular wages and insecure employment often limit dietary diversity despite maternal employment. Conversely, some studies found that maternal employment reduced stunting. These positive associations were generally observed where maternal employment generated stable household income, improved food purchasing capacity, enhanced maternal autonomy, and facilitated access to healthcare services.

Consequently, available evidence indicates that employment itself is neither protective nor harmful. Instead, employment quality, wages, working conditions, childcare support, and household socioeconomic circumstances determine nutritional outcomes.

3.3 Maternal Employment and Childhood Wasting

Wasting reflects acute undernutrition caused by recent nutritional deficiencies or illness. Four studies specifically examined wasting among children of employed mothers. Results again showed mixed

evidence. Hospital-based studies from India and Nepal reported significantly higher risks of wasting among children whose mothers worked as daily wage labourers. Physically demanding occupations combined with unstable employment appeared to reduce mothers' capacity to provide adequate feeding during illness, increasing susceptibility to acute malnutrition. In contrast, nationally representative surveys from Pakistan found no statistically significant relationship between maternal employment and wasting after controlling for confounding variables.

These findings suggest that acute malnutrition is strongly influenced by infectious diseases, sanitation, food insecurity, and seasonal factors rather than maternal employment alone. Nevertheless, informal employment characterized by poverty and unstable income may increase children's vulnerability during periods of illness or food shortages.

3.4 Maternal Employment and Underweight

Underweight represents a composite indicator reflecting both chronic and acute nutritional deprivation. Three studies investigated this outcome. Evidence suggested that children of mothers employed in unstable informal occupations were more likely to be underweight. Conversely, studies involving women employed in regular salaried occupations demonstrated lower risks of underweight owing to improved household purchasing power and food availability.

These findings reinforce the importance of distinguishing between formal and informal employment rather than treating maternal employment as a single homogeneous exposure.

3.5 Other Anthropometric Indicators

Several investigations examined additional indicators including: Height-for-age Z score, Weight-for-height Z score, BMI-for-age, Mid-upper Arm Circumference, Composite Index of Anthropometric Failure, Coexisting Forms of Malnutrition. Studies consistently showed poorer anthropometric performance among children whose mothers were engaged in manual wage labour. Lower average height, reduced body weight, smaller MUAC, and greater anthropometric failure were frequently reported among these children. Conversely, children of mothers employed in professional occupations generally demonstrated nutritional outcomes comparable with or superior to those of children whose mothers were unemployed.

These differences largely reflected disparities in income, education, maternity protection, and childcare support rather than employment status alone.

3.6 Regional Variation Across South Asia

Table 3 explore regarding important regional differences emerged across South Asian countries. Urban studies often reported poorer nutritional outcomes among children of employed mothers despite relatively better economic opportunities. Rapid urbanization has increased maternal participation in low-paying service-sector employment while simultaneously weakening traditional family support systems.

Table 3. Maternity Leave and Childcare Policies in South Asia

Country	Maternity Leave	Paternity Leave	Childcare Provision	Coverage
India	26 Weeks	No	Yes	Formal sector
Bangladesh	16 Weeks	No	Yes	Formal sector
Pakistan	12 Weeks	No	Limited	Formal sector
Nepal	Approximately 7 Weeks	15 Days	Yes	Formal sector
Sri Lanka	12 Weeks	No	Limited	Formal sector

Many urban nuclear families lack grandparents or extended relatives who traditionally provided childcare. Consequently, employed mothers may rely on informal caregivers or leave children unattended during working hours. Rural areas presented a different pattern. Although poverty remains widespread, extended family structures occasionally compensate for maternal absence by providing childcare support. However, women engaged in agricultural labour continue to face substantial challenges related to seasonal employment, low wages, long working hours, and limited maternity protection. Overall, regional differences demonstrate that social support networks, employment conditions, and labour welfare policies substantially modify the relationship between maternal employment and child nutrition.

4. Discussion

This systematic review synthesized the available evidence on the relationship between maternal employment and child nutritional status in South Asia. Overall, the findings indicate that maternal employment is generally associated with improved child nutritional outcomes, primarily through increased household income, improved food security, greater access to healthcare, and enhanced maternal decision-making. However, the effects of maternal employment are not uniform and vary according to employment type, working conditions, maternal education, household socioeconomic status, and the availability of family support. These findings suggest that maternal employment influences child nutrition through multiple interrelated pathways rather than exerting a purely positive or negative effect.

The review demonstrates that increased household income is the principal mechanism through which maternal employment improves child nutrition. Additional earnings enable households to purchase more diverse and nutritious foods, access quality healthcare, maintain better sanitation, and invest in children's education and well-being. Financial independence also strengthens women's participation in household decision-making, leading to greater investment in child health and nutrition. These findings support previous research demonstrating that women's economic empowerment contributes positively to child growth and nutritional outcomes (Black et al., 2013; Cunningham et al., 2015).

Despite these benefits, employment may reduce the time available for breastfeeding, complementary feeding, illness monitoring, and responsive childcare, particularly among mothers working long hours in physically demanding occupations. Nevertheless, most studies included in this review suggest that these challenges are often outweighed by the economic advantages of employment, especially in households with support from other family members or alternative caregivers. Therefore, the nutritional impact of maternal employment depends on achieving a balance between increased household resources and adequate childcare. Employment quality emerged as an important determinant of this relationship. Mothers employed in the formal sector generally have access to maternity leave, workplace flexibility, breastfeeding support, and social protection, enabling them to combine paid work with childcare responsibilities more effectively. In contrast, women engaged in informal employment frequently experience low wages, job insecurity, inadequate maternity protection, and limited childcare support, reducing the potential nutritional benefits of employment. These findings indicate that improving employment conditions may be more important than simply increasing female labour force participation. The review also highlights the importance of contextual factors. Maternal education, household wealth, healthcare access, urban residence, and family support consistently strengthened the positive association between maternal employment and child nutritional status. These factors enhance mothers' ability to utilize additional income for nutritious food, healthcare, and appropriate childcare practices. Consequently,

maternal employment should be considered within the broader socioeconomic environment that shapes child health and nutrition.

Although the overall evidence suggests a positive association, variations across studies remain. Differences in employment classification, nutritional indicators, sample characteristics, and analytical methods contributed to inconsistent findings. Furthermore, most included studies employed cross-sectional designs, limiting causal inference. These methodological differences underscore the need for more longitudinal and comparative research to better understand the long-term effects of maternal employment on child nutritional outcomes.

5. Policy Implications

The findings of this review underscore the need for integrated policies that promote maternal employment while safeguarding child nutrition in South Asia. Governments should strengthen maternity protection through paid maternity leave, workplace breastfeeding support, flexible working arrangements, and affordable childcare services, particularly for women employed in the informal sector. Expanding community-based childcare facilities and nutrition-sensitive social protection programmes, including cash transfers, food supplementation, and nutrition counselling, can help reduce the conflict between employment and childcare responsibilities. In addition, improving women's education, skills, and access to decent employment opportunities can enhance household income and childcare practices, thereby improving child nutritional outcomes. Coordinated action across the health, labour, education, women and child development, and social welfare sectors is essential to maximize the benefits of maternal employment while reducing child malnutrition. Such integrated policies can contribute to better child health, women's economic empowerment, and the achievement of the Sustainable Development Goals (SDGs) in South Asia.

6. Strengths and Limitations

This review possesses several important strengths. It provides one of the most comprehensive syntheses of recent evidence examining maternal employment and child nutritional status across South Asia. The review incorporates studies from multiple countries representing diverse socioeconomic and cultural settings. Standardized methodological procedures, transparent eligibility criteria, and systematic quality assessment enhance the credibility of the findings. Another strength lies in the broad consideration of multiple anthropometric indicators, including stunting, wasting, underweight, BMI, MUAC, anthropometric failure, and coexisting forms of malnutrition.

Nevertheless, several limitations should be acknowledged. Most included studies employed cross-sectional designs that cannot establish causal relationships. Considerable heterogeneity existed in the measurement of maternal employment, nutritional outcomes, and statistical adjustment for confounding factors. Only English-language publications were included, creating potential language bias. Future longitudinal and mixed-methods research should address these important evidence gaps.

7. Conclusion

Child malnutrition continues to be a major public health concern in South Asia, despite notable socioeconomic progress. This systematic review shows that maternal employment can improve child nutritional status when supported by adequate income, maternity protection, childcare services, and favourable working conditions. However, insecure and informal employment may limit these benefits by

reducing the time and resources available for childcare. The findings highlight the need for integrated policies that combine women's economic empowerment with nutrition, health, and social protection programmes. Future longitudinal research is needed to strengthen the evidence base and guide effective interventions that improve both maternal livelihoods and child nutritional outcomes.

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