Revisión / Review

Exploring cultural influences in perinatal and early childhood nutrition

Explorando las influencias culturales en la nutrición perinatal y de la primera infancia

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ABSTRACT

Objective This review analyzes socio-cultural factors impacting maternal and infant nutrition in low-resource settings, covering the perinatal period including pregnancy, childbirth, and early infancy.

Methodology It examines qualitative studies from 1990 to 2021, identified through databases such as Medline, Embase, and Scopus, using broad search terms including "traditional beliefs," "practices" and "perinatal".

Results The synthesis highlights strong cultural support for breastfeeding across diverse cultures, although traditional taboos and beliefs often undermine exclusive breastfeeding. A deep cultural appreciation for the therapeutic benefits of foods is observed, with prevalent, albeit varied, notions of 'good' and 'bad' foods influencing dietary choices during the perinatal period. Intergenerational support plays a crucial role, though it often conflicts with biomedical advice, particularly in migrant populations. Cross-cutting themes include the enduring role of women as "good mother" in perinatal care, the impact of poverty on nutritional choices, and the evolving nature of cultural practices, the direction of which is not always predictable.

Conclusions Cultural beliefs profoundly shape perinatal and infant nutrition. It advocates the need for public health strategies that are culturally sensitive and tailored to specific community needs to optimize health outcomes for mothers and infants. Future interventions should integrate cultural understanding into public health practices, promoting beneficial traditions while modifying detrimental ones.

Key Words: Sociological factors; nutritional status; child health; maternal health; perinatal care (*source: MeSH, NLM*).

RESUMEN

Objetivo La revisión analiza los factores socioculturales que impactan la nutrición materna e infantil en entornos de bajos recursos, abarcando el periodo perinatal que incluye el embarazo, el parto y la primera infancia.

Metodología Examina estudios cualitativos desde 1990 hasta 2021, identificados a través de bases de datos como Medline, Embase y Scopus, centrándose en temas como "creencias tradicionales", "prácticas" y "perinatal".

Resultados La síntesis resalta un fuerte apoyo cultural para la lactancia materna en diversas culturas, aunque los tabúes y las creencias tradicionales a menudo socavan la lactancia materna exclusiva. Se observa una profunda apreciación cultural por los beneficios terapéuticos de los alimentos, con nociones prevalentes, aunque variadas, de alimentos 'buenos' y 'malos' que influyen en las decisiones dietéticas durante el periodo perinatal. El apoyo intergeneracional desempeña un papel crucial, aunque a menudo entra en conflicto con el asesoramiento biomédico, particularmente en poblaciones migrantes. Los temas transversales incluyen el papel perdurable de las mujeres como "buenas madres" en atención perinatal, el impacto de la pobreza en las elecciones nutricionales y la naturaleza evolutiva de las prácticas culturales, cuya dirección no siempre es predecible.

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Conclusiones Las creencias culturales moldean profundamente la nutrición perinatal e infantil. Se aboga por la necesidad de estrategias de salud pública que sean culturalmente sensibles y adaptadas a las necesidades específicas de la comunidad, para optimizar los resultados de salud para madres e infantes. Las futuras intervenciones deben integrar la comprensión cultural en las prácticas de salud pública, promoviendo tradiciones beneficiosas mientras se modifican las perjudiciales.

Palabras Clave: Determinantes sociales de la salud; estado nutricional; salud infantil; salud materna; atención perinatal (*fuente: DeCS, BIREME*).

The perinatal period is crucial for health interventions and significantly contributes to the disease burden in low-resource settings (1). The first 1,000 days from conception to two years of age are critical for infant growth faltering (2). Factors such as maternal education, health, nutrition, and social determinants like poverty, illiteracy, and the status of women, are fundamental to child outcomes. However, there is a shortage of community-based intervention studies in these settings.

Maternal and child malnutrition remains problematic, causing nearly three million child deaths annually, and maternal and childhood overweight and obesity also contribute to the chronic disease burden (3). Accessing appropriate nutrition for women and children is challenging. The perinatal period offers a key opportunity to address undernutrition and its adverse effects, but cultural, social, and psychosocial factors play a significant role in the perinatal experience, including parenting practices that can have long-term benefits or harms on children's development.

Following Nichter's landmark study on childhood malnutrition in India (4), research has demonstrated how maternal dietary and infant feeding practices are shaped by local cultural norms and constraints. Our study explores qualitative research in low-resource settings about the perinatal period, focusing on cultural beliefs, values, and practices, aiming to identify common themes and gaps in the research. This review focuses on qualitative studies from low- and middle-income countries (LMICS) but includes migrant populations in high-income countries to reflect current situations for women and children.

METHODS

We expanded our systematic review, previously described in Raman et al. (5), with a revised search strategy for this narrative review.

Selection Criteria

Initially, we sought studies with primary qualitative or mixed-method data (interviews, focus groups, ethnography) on cultural practices and beliefs affecting the perinatal period in LMICS, excluding articles that used structured questionnaires, lacked information on cultural practices, or focused on high-risk conditions like HIV or diabetes. For the updated search, we included studies beyond LMICS and excluded non-English articles to avoid translation biases.

Literature Search

Phase 1: We systematically searched databases from 1990 to 2014, including Medline, Embase, Cochrane Library, and others, complemented by hand searches. Keywords included "perinatal", "pregnancy", "childbirth", "cultural beliefs", and "low resource setting". *Phase 2*: An updated search through Medline, Embase, and Scopus incorporated studies post-2014, focusing on maternal and infant nutrition and removing certain geographic terms to include migrant and refugee communities in developed nations.

Quality of Reporting

We applied the CASP Qualitative Research Checklist (6) to assess the explicitness and comprehensiveness of reporting in both review phases.

Data Synthesis and Analysis

We synthesized the data using thematic synthesis methods (7), involving line-by-line coding, organizing codes into themes, and abstracting findings to produce new interpretations.

RESULTS

Literature search

Initial search found 273 papers, 76 eligible studies; 70 were included (Figure 1). Phase 2 search found 144 papers, 64 eligible, and 37 included; 30 were from LMIC, 7 from developed countries' migrant or refugee populations (Figure 2). Table 1 shows LMIC studies (100 included), and Table 2 shows high-income settings' migrant studies by region, author, year published, and quality scores. The mayority of studies were from Africa and Asia, and published after 2010 (Table 3). Additionally, there was widespread belief in the healing properties of certain foods and medicines used during the perinatal period (Table 4).

Figure 1. Phase 1: Flow diagram of search and study inclusion process



LMIC: Low and middle-income countries





LMIC: Low and middle-income countries.

CASP

Score

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Author (Year)

Choudhury (2012)

Craig (2018)

Debnath (2021)

Dykes (2012)

Fikree (2004)

Fikree (2005)

lyengar (2008)

Kaphle (2013)

Kesterton (2009)

Khadduri (2008)

Moran (2009)

Pemo (2019)

Premji (2014)

Raman (2014)

Rashid (2007)

Sharma (2013)

Sharma (2016)

Thapa (2000)

Winch (2005)

Adams et al. (2005)

Alvesson et al. (2013)

Astuti (2021)

de Sa et al. (2013)

Ergenekon-Ozelci (2006)

Hadwiger (2012)

Kartchner, Callister (2003)

Lee et al. (2013)

Lundberg,Ngoc Thu (2012)

Lundberg (2011)

Matsuoka et al. (2010)

Raven et al. (2007)

Sein (2013)

Strand et al. (2009)

Sychareun et al. (2012)

Tobing (2019)

White (2002)

White (2004)

Wulandari (2011)

Abushaikha (2013)

Kavle (2018)

Khalaf, Callister (1997)

Nasrabadi (2019)

Berry (2006)

Concha (2021)

Hess and Maughan (2012)

Piperata (2008)

Radoff et al. (2013)

Nuño Martínez (2021)

Setting	Author (Year)	CASP	Setting	Author (Ye
Africa	· · ·	Score	Bangladesh urban	Choudbury
Ghana, rural	Arzoaguoi (2015)	9	India rural	Craig (20
Nigeria, rural	Asowa-Omorodion (1997)	7	India, rural	Debnath (2
Uganda, rural	Aviasi (2013)	8	Pakistan, rural	Dvkes (20
South Africa, rural	Chakona (2019)	9	Pakistan, urban	Fikree (20
Mozambique, peri urban	Chapman (2003)	9	Pakistan, urban	Fikree (20
Ghana, urban	Dako-Gveke (2013)	9	India, rural	Ivengar (2)
Ghana, urban	de-Graft Aikins (2014)	6	Nepal rural	Kanhle (20
Ethiopia, rural	Degefie (2014)	8	India rural	Kesterton (2
Burkina Faso, rural	Donmozoun (2014)	6	Pakistan rural	Khadduri (2
Sierra Leone, rural & urban	Dorwie (2014)	10	Bangladesh urban	Moran (20
Nigeria, rural & urban	Eiidokun (2000)	10	Bhutan urban	Pemo (20
Ghana, rural & urban	Farnes (2011)	10	Pakistan rural	Premii (20
Malawi, rural	Flax (2015)	9	India urban	Raman (2)
Ethiopia, rural	Gebrehiwot (2012)	9	Bangladesh, urban	Rashid (20
Kenva, rural & urban	Geissler (1999)	7	India, rural	Sharma (2
Tanzania, rural	Gross (2013)	8	Nepal rural	Sharma (2
Uganda, rural	Ickes (2017)	9	Nepal, rural	Thapa (20
Ghana, periurban and rural	Kalra (2018)	8	Bangladesh, rural	Winch (20
Uganda, rural	Kwagala (2013)	9	Asia other	
Uganda, rural	Kyomuhendo (2003)	7	Tibet rural	Adams et al
Tanzania. rural	Lennox (2017)	8		
Benin, rural, peri-urban	Lokossou (2021)	8		Astuti (20
Liberia, rural	Lori (2011)	10		de Salet al <i>l</i>
Zambia, rural & urban	Maimbolwa (2003)	10	Turkey urban	Fraenekon-Oze
Zambia, rural and urban	Maliwichi-Nyirenda (2016)	5	Philippines, peri urban	Hadwiger (
Tanzania, urban	Mbekenga (2013)	9	China urban	Kartchner Callis
Ghana, rural	Mills (2005)	9		
Kenya, rural and urban	Mohamed (2020)	8	Vietnam urban	
Ghana, rural	Moyer (2014)	9	Vietnam, urban	Lundborg (
S Africa, rural	Ngomane (2012)	9	Combodia, rural	Matauaka at a
Nigeria, rural	Orisaremi (2013)	9	China rural	Roven et al
S Africa, rural	Preez (2012)	8	Myonmor rural & urban	Raven et al.
Kenya, rural	Riang'a (2017)	9		Strand at al
Kenya, rural	Riang'a (2017)	9		Stranu et al.
Ghana, peri urban	Theroux (2013)	7	Laos, rural	Sychareun et a
Swaziland, rural	Thwala (2011)	7	Combodia, rural	TODITIQ (20
Swaziland, rural	Thwala (2012)	8	Cambodia, rural	White (20
Ethiopia, rural	Tsegaye (2021)	10		VVIIILE (20
Cameroon, rural	van der Sijpt (2013)	9	Ball, Turai Middle Feet	wulandan (
Ethiopia, rural & urban	Warren (2010)	6	Niludie East	Abushsikhs
Ghana, rural	Wilkinson (2010)	9	Syria, urban	ADUSHAIKHA
DRC, urban	Wood (2020)	9	Egypt, urban and rural	Kavie (20
Ethiopia, rural	Zerfu (2016)	9	Jordan, urban	Knalat, Calliste
Malawi, rural	Zulu (2001)	8	Latin America	Nasiabaul (
South Asia			Guatemala, rural	Berry (20
Bangladesh, urban	Ahmed et al. (2010)	9	Colombia, rural	Concha (2
India, urban	Athavale (2020)	9	Argentina, urban	Hess and Maugh
Pakistan, rural	Baloch (2020)	7	Brazil. rural	Piperata (2
India, rural	Bandyopadhyay (2w009)	7	Guatemala, rural	Radoff et al.
Nepal, peri urban	Brunson (2010)	9	Peru, rural	Nuño Martínez
India, rural	Chanchani (2019)	9	CASP: Critical Appraisal Skills Pro	gramme, scored out of 10.
India, rural	Chakrabarti (2019)	7		
Bangladesh, rural	Choudhury (2011)	9		

Table 1. Included studies by region, author, year and quality scores- Low and middle-income countries

Table 2. Included studies by region, author, year and quality scores- Migrant populations

Setting	Population group	Author (year)	CASP Score
Canada, urban	Chinese	Higginbottom (2018)	8
United States, rural	Hispanic	Hohl (2016)	9
Australia, urban	Vietnamese and Myanmarese refugees	Joseph (2019)	10
United States, urban	Chinese	Lee (2014)	9
United Kingdom, urban	Chinese	Leung (2017)	8
United states, urban	Latinx	MacMillan Uribe (2021)	
Ireland, urban	Chinese	Zhou (2020)	10

CASP: Critical Appraisal Skills Programme, scored out of 10.

Region (N)	Time Frame (N)	CASP Scores		
	1990-1999 (2)	7		
Africa (44)	2000-2009 (6)	7-10		
	>2010 (36)	5-10		
South Asia (27)	2000-2009 (10)	7-9		
South Asia (27)	>2010 (17)	8-10		
Asia (Other) (10)	2000-2009 (7)	7-10		
Asia (Other) (19)	>2010 (12)	8-10		
Latin Amorica (6)	2000-2009 (2)	8-10		
Laun America (6)	>2010 (4)	8-10		
Middle East (4)	1990-1999 (1)	8		
wildule East (4)	>2010 (3)	7-9		

Table 3. Summary of included studies by region, time period and quality scores

Table 4. Examples of ethno-medicine/healing foods used by women during the perinatal period

Author	Region	Food substances	Effect
Adams et al. (2005)	Tibet	Butter ingested by newborn Chang warm barley beer ingested by mothers	So, child will have a clear mind and well-developed senses
Ayiasi et al. (2013)	Uganda	Waragi local alcohol	Generally therapeutic, keeps infant's skin clear
Farnes et al. (2011)	Ghana	Local herbs ingested by mothers	Prevents <i>sunsumyare</i> (spiritual sickness), promotes maternal, fetal health, prevents complications
Hadwiger and Hadwiger (2012)	Philippines	Ginger, carried	Protect unborn baby from aswang (evil spirits)
Lundberg and Trieu Thi Ngoc (2011)	Vietnam	Pig's trotter with papaya or red bean and potato, meat and eggs	Enrich blood, help recovery, encourage expulsion of the lochia, stimulate lactation
Maimbolwa et al. (2003)	Zambia	Traditional medicine applied to vagina	Prepare and widen the birth canal in pregnant women
Ngomane and Mulaudzi (2012)	S Africa	Mbita, Ritlangi, Mpundulo Mbheswana, roots of Xirhakarhani, boiled Dinda	Strengthen and preserve pregnancy Induction, management of labour and management of pain
Radoff et al. (2013)	Guatemala	Teas and baths from grasses and trees, cypress, pine, oak, pear, eucalyptus	Stimulate labour, reduce postpartum bleeding
Raven et al. (2007)	China	Ginger and wine Meat and eggs	Enrich blood, help recovery, encourage expulsion of the lochia, stimulate lactation
Sein (2013)	Myanmar	Turmeric, ingested or applied on skin	Prevent muscle pain and to prevent newborn from abdominal pain
Thapa et al. (2000)	Nepal	Mustard oil, turmeric, eggs ingested	Regain energy post-partum, make womb strong, relieve pain
Theroux et al. (2013)	Ghana	Bitter leaf, dandelion, <i>prekos, maringa, nim</i> tree, and <i>kontosi</i> <i>Fou-fou</i> pounding	Treat minor illness and maintain/improve pregnancy Prepare for labour
Wulandari and Klinken Whelan (2011)	Bali	Tamarind, turmeric, cinnamon, clove, coconut Herbal medicines	Improve maternal and infant health

Thematic Synthesis

The following themes relating to cultural practices and beliefs influencing perinatal and infant nutrition were identified.

Breastfeeding: "Everyone here breastfeeds their babies" (8)

Breastfeeding is widely supported across cultures, viewed as superior to all other feeds and often described as a "gift from God" (9), including among Hispanic migrants who strongly identify with breastfeeding (10). Despite this cultural endorsement, practices vary. Common practices include preparing and cleaning the breast and infant (8), and using traditional remedies like ash massage in rural Laos (11). In Bhutan, a mother stated, "Not breastfeeding never occurred to me, it's the best and natural" (12). However, taboos and prohibitions also exist. Islamic teachings recommend breastfeeding for up to two years (13), while other beliefs suggest that pregnant women's milk is harmful (14). Pre-lacteal feeds vary regionally, with practices in South Asia including giving honey, mustard oil, or goat milk (15,16), and in Bangladesh, sugar water and banana (17). In Pakistan, a traditional feed involves honey and butter (18), believed to imbue the baby with certain qualities. In Uganda, the practice differs with age; younger mothers give glucose, whereas older mothers prefer water and salt (19). A concerning belief in parts of Africa is that newborns must consume water daily, leading some mothers to dilute breast milk (20).

In Peru, breastfeeding is crucial for development, though some associate it with causing diarrhea in certain contexts (21). Nigerian beliefs about breastfeeding have evolved with access to modern medications mitigating previous concerns (22). In Africa, traditional tests for milk safety, such as placing an ant in the milk, still occur; if the ant dies, the milk is deemed harmful (23).

Colostrum is often rejected due to beliefs about its quality and effects (14,16). Discrepancies between elder wisdom and medical advice are common, with elders often promoting early food supplements contrary to health recommendations (11). Elders typically influence breastfeeding practices significantly, including the timing of introducing additional foods (24).

Healing Foods and Medicines: "God's own way of helping the baby" (25)

Widespread beliefs were found about the healing properties of certain foods and medicine in the perinatal period; especially in more traditional populations in Asia and Africa (Table 4). For example, in Myanmar, nearly all women use turmeric to alleviate muscle and newborn abdominal pain, and licensed traditional medicines are available in hospitals to enhance postpartum recovery and lactation (26). In Cambodia, women drink Khmer medicine to expel residual blood post-delivery (27), while in Zambia, traditional medicines are used to facilitate labor if it is prolonged due to stress or infidelity (28).

Herbalists and traditional healers, including witch doctors and religious leaders, play a significant role in these practices. They are respected for promoting autonomy and are often seen as providers of "God's medicine" (25). In Kenya, Maasai women use local herbs not only for health but to cleanse the body post-dietary indulgence (29), while Ghanaian women prefer herbal medicine over pharmaceuticals, citing strength versus weakness (30). Traditional food and drink are also part of the rituals for newborn care in Tibetan and Balinese cultures (31,32).

Soil-eating, particularly among pregnant women, is another practice noted for its supposed health benefits, affecting the blood's quality and thus, the overall health and fertility, with cultural approval varying significantly across genders and regions (33).

"Good food versus bad food: 'there are bad foods and good foods to consume, and I want to consume good foods'"(34)

The study shows a broad spectrum of foods categorized as 'good' or harmful across different cultures. In Asia, including South Asia, traditional beliefs classify foods as "heaty" or cooling, a distinction that persists even post-migration (35). In many parts of Asia, post-partum practices involve consuming 'hot' foods to restore balance after childbirth, which is believed to deplete both yin and yang (36). In China, traditional Chinese Medicine influences the consumption of 'hot' foods like meat and eggs, often enhanced with ginger and wine (37). Similarly, Vietnamese new mothers consume boiled vegetables and pork-based soups (38), while Balinese prefer vegetables to improve the quality of breast milk (32).

In Bengal, post-partum diets include milk, ghee, and fish, supplemented with garlic to aid in uterine recovery or as is described "drying of the womb" (16). The Philippines promotes a diet of boiled vegetables during pregnancy to strengthen both mother and fetus, steering clear of unhealthy fats and sugars (39). In Zambia, nourishing local foods like vegetables with groundnuts and *nshima* (maize flour) are emphasized for maternal health (28).

Dietary restrictions are prevalent during pregnancy and lactation. A Ghanaian woman shared that ignoring food taboos could lead to spiritual consequences affecting the pregnancy (40). In Pakistan, new mothers are advised against eating rice, prawns, and fish to prevent abdominal pain, whereas certain foods are recommended to encourage healthy post-partum bleeding (41). In South Africa, isiXhosa women are often restricted from consuming nutritionally valuable foods like fruits and meats during pregnancy as per traditional advice (42).

The classification of most fruits and vegetables as 'cold' can lead to beliefs about their negative effects, such as causing infant and maternal diarrhea and other discomforts (37). South Asian women also believe 'cold' foods, such as yogurt, cold water during the puerperium can have long-term negative health consequences including "backache, body aches, weakness and fever" (43). In rural Bengal, post-partum prohibited foods include various vegetables and fruits believed to hinder recovery (16). In Nepal, certain 'cold' foods are avoided post-delivery to prevent child diarrhea (44). Cultural taboos in Cambodia restrict many common foods, impacting maternal diet significantly (8). In Zambia, specific dietary advice includes avoiding eggs to prevent a baby being born without hair and avoiding fish to avoid a large anterior fontanelle (27).

Eating excessively or the wrong types of food, leading to a 'big baby', is viewed as dangerous in many cultures, including Ethiopia, where reducing food intake is practiced to facilitate safer childbirth (45). Additionally, Ethiopian pregnant women avoid dairy products to prevent potential harm to the fetus (46). Maasai women avoid sweets, beans, and milk, believing that these foods contribute to fetal overweight (29).

Restrictive practices influencing nutrition: "They don't let you eat, you can't eat salt, oil, ...you can't eat your fill" (47)

"Restrictive practices influencing nutrition: 'They don't let you eat, you can't eat salt, oil, ...you can't eat your fill'"

(47). These practices, common in Asia, Africa, and parts of Latin America during the perinatal period, impact food, physical activity, and mobility. A Nepalese health worker reports that new mothers are restricted from salt, green vegetables, and sunlight until the nwaran purification day (48). In rural India, a new mother's diet is limited to dry foods like rice crisps and ghee, consumed only once daily to aid uterine contraction (16). In Nigeria, traditional healers dictate restrictions on pregnant women's mobility and diet, often including nutrient-rich local foods (49). Post-partum confinement in Southeast Asia, known as zuo yuezi in China, involves strict dietary limitations to foods like millet soup and eggs, aiming to help mothers regain strength, although it often leads to physical weakening and mental health issues (47,50). Similarly, Brazilian indigenous women's resguardo involves avoiding certain meats and fruits believed to cause illness, lasting up to 41 days depending on the baby's gender (51). In Myanmar and Cambodia, women avoid cold and strenuous activities to prevent health issues like toas, characterized by symptoms such as diarrhea and abdominal pain (26,27). Post-partum diets in Bangladesh include dry foods and spices believed to cool the stomach and boost milk production (52). In rural Vietnam, only 'hot' or 'warm' foods are recommended to strengthen new mothers, with 'cold' foods being avoided (53).

"Social and inter-generational support: 'oh, she [grandmother] can be tiresome ... but my mother's support has been essential to my baby's upbringing" (54)

Family and extended female networks play a crucial role in breastfeeding and early childhood nutrition. A Maasai woman highlighted the guidance from elder women with childbirth experience (29). In Indonesia, a young mother valued her mother's ongoing support in teaching breastfeeding and infant feeding techniques (55). Conversely, Nasrabadi found that in urban Iran, spousal support significantly impacted breastfeeding success, with lack of support linked to lower breastfeeding rates (56). Conflicts can arise, particularly when traditional practices clash with biomedical advice, as noted by an Indian mother who felt pressured by her mother-in-law's traditional views (57). Another Indonesian mother experienced distress when her mother-in-law fed her newborn solid food prematurely (55).

Cross-cutting themes

Highlighting societal factors critical for understanding maternal-infant nutrition, including among migrant populations in Western countries. Role of woman/mother/wife as strong and good: "as women we just bear that burden, that's all" (47)

In traditional societies, a woman's value often hinges on her role in reproduction and endurance during childbirth, as seen in Uganda's Sabiny community (58). For example, Khmer women adhere to restricted diets post-partum despite extreme hunger (8), and a Bhutanese mother describes enduring pain during breastfeeding (12).

Poverty and its pervasive effects on perinatal nutrition: "We mostly eat the cheapest available food" (13)

Many women in resource-limited settings understand the importance of nutritious food but cannot afford it. A study in urban Ghana found mothers unable to buy essential vegetables (59), while pregnant Kenyans predominantly consumed carbohydrates due to financial constraints (33). Similarly, Egyptian women often relied on readily available foods like beans and potatoes (60). In rural Bengal, only economically better-off women accessed 'special' foods during the perinatal period (16). Financial pressures also affect breastfeeding, highlighted by an Iranian mother forced back to work postpartum due to lack of maternity leave. Migrant women in the West struggle with cultural dietary practices and returning to work soon after childbirth due to financial necessity and lack of traditional support (35,50,61,62).

"Change is constant but unpredictable: 'But now we have forgotten our herbs because there are hospitals around'" (23).

This theme emerges clearly in evolving breastfeeding and childcare practices, especially among migrants in the West, caught between traditional and biomedical advice (62). Despite awareness of colostrum benefits, South Asian mothers often do not practice exclusive breastfeeding (63).

Cultural practices are dynamic; young mothers sometimes reject the advice of older generations, despite potential repercussions like losing further support from their mothers-in-law (64). Pregnant or lactating mothers blend traditional and Western medicines, exemplified by a Ghanaian mother combining herbs with prescribed drugs (65). In Chattisgarh, India, while women accept immunizations, they reject micronutrient pills fearing they will lead to cesarean sections (66). Conversely, Chinese migrants in Canada adopt non-traditional elements like cow's milk to promote infant growth (35). However, inappropriate biomedical practices, such as unnecessary milk powder prescriptions in Iran, hinder natural breastfeeding (56).

Cultural practices like "doing the month" evolve, with Chinese migrants adjusting traditional dietary restrictions due to time constraints (67). Swazi mothers might use traditional medicines postpartum under familial pressure (68). Latina mothers in the U.S. selectively integrate cultural practices with biomedical advice to benefit their children (69).

Positive changes in breastfeeding practices are evident, although slow. An older Ugandan mother avoided supplements until her milk came (19), and mothers in Kinshasa and Neyshabour follow medical advice strictly regarding breastfeeding, even against community pressure (20, 56).

DISCUSSION

Our review of qualitative studies from the past three decades shows that cultural influences strongly affect maternal and infant nutrition, often outweighing biomedical advice. Significant cultural support exists for health-promoting practices like breastfeeding, recognizing the healing properties of foods, and the need for rest during the perinatal period. Our findings indicate that while social support is crucial for maintaining these practices, it sometimes comes with challenges, particularly from the older generation, who may resist change. This tension reveals a gendered aspect of cultural transmission, often placing more restrictions on women (70).

Despite strong cultural backing for breastfeeding, global data shows a decline, with early initiation at 52% and exclusive breastfeeding at less than a third for 4-5 months in certain regions. This decline is exacerbated by aggressive marketing of breastmilk substitutes and globalization (71,72). Our review also highlights the persistence of culturally mandated dietary practices, such as the concepts of 'heating' and 'cooling' foods in Asia, which are more influential than biomedically supported nutrition choices (35).

The role of social support, especially from older women like mothers and mothers-in-law, remains significant in influencing infant feeding practices. However, restrictive practices that curtail women's mobility and nutrition, such as resguardo and zuo yuezi, may hinder rather than help postpartum recovery, impacting both physical and mental health (47,73). Interestingly, in some cultures, such as among the Tsimane in Bolivia, modernization has unexpectedly intensified traditional practices like breastfeeding (74). The addition of studies on migrant populations emphasized the impact of poverty on accessing supportive interventions (50,60).

Our review identified a gap in studies from Latin America and the Middle East, possibly due to language barriers in the literature search. The focus of existing research tends to emphasize negative traditional practices rather than positive aspects of culture in perinatal care. In conclusion, the diversity of cultural practices impacting perinatal nutrition confirms that generalizations are not feasible, and comparisons across groups and regions can be problematic. It is essential to consider cultural dimensions in perinatal and early childhood nutrition. Public health policymakers and clinicians should design interventions that respect cultural practices and promote beneficial behaviors while addressing harmful traditions, emphasizing the importance of culture in shaping health outcomes \blacklozenge

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