



## Comparative Analysis of Unsafe Traditional Practices by Iraqi and Philippine Mothers in the Treatment of Newborn Health Problems: A Narrative Review

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### ABSTRACT

**Background:** Traditional practices are usually derived from the relationships with the environment and human attitude towards nature. Various societies, especially in developing nations, have unsafe traditional practices for newborns, traditionally associated with poverty, low educational levels, religiosity, culture, and by word of mouth intergenerationally handed over advice by elders in the families.

**Objectives:** This narrative review points out the prevalence, cultural significance, and health implications of unsafe traditional newborn care practices in Iraq and the Philippines.

**Methodology:** Literature was searched in PubMed, Scopus, Web of Science, CINAHL, and Google. All iterations searched literature among mothers whose neonates were at issues, favoring traditional techniques rather than modern medicine—a total of 51 articles to be reviewed from articles published from 2019 to June 2024.

**Results:** The following ten critical themes of unsafe practices were identified: care of the umbilical cord, feeding, traditional healing, bathing rituals, circumcision, swaddling, and treatments for gastrointestinal, respiratory, and eye problems, besides newborn isolation and practices of exposure. All these practices are comparatively prevalent in the rural setup and are ingrained in the fabric of cultural beliefs and traditions. These could include exposure to infection, complications, developmental delays, and neonatal mortality. The practices have also been associated with the perpetuation of poverty, low literacy levels, and cultural backgrounds.

**Conclusion:** This review indicates that interventions towards these problems have to be multi-faceted. Multiple dimensions can be integrated into evidence-based interventions to improve education and economic opportunities, engagement with religious and cultural leaders, health system strengthening, fomenting research, and community engagement to develop culturally relevant solutions linking tradition and evidence-based care to improve newborn health outcomes.

**Keywords:** Unsafe Traditional Practices, Newborn's health problems, Iraq and the Philippines.

### INTRODUCTION

Most traditional practices are rooted in the long historical relationships between communities and their environments, reflecting deeply held cultural attitudes toward nature and health. Traditional

practices significantly influence newborn care in most developing countries due to poverty, low education levels, religious beliefs, and advice from ancestors (Abad et al., 2014; Aabel, 2012).

The neonatal period—the first 28 days of life—is critical for child survival and development. Newborns undergo rapid physiological adaptations during this susceptible phase and are hence sensitive to environmental influences and factors related to traditional care. Because of this vulnerability, the importance of using evidence-based practices in newborn care is mainly highlighted (Bhutta et al., 2014; Sankar et al., 2016).

Traditional unsafe newborn care practices inhibit the realization of Sustainable Development Goal 3 in Iraq and the Philippines through extreme activities. Usually, these practices are perpetrated by poverty, low education levels, and deep-rooted cultural factors. Traditional practices in Iraq involve rubbing cumin or egg yolk mixtures on feverish patients, binding herbal powders on their teeth to relieve dental pain, and applying many other non-pharmacological options for common ailments (Ghafel & Al Jubouri, 2024; Hameed et al., 2019). To this end, a significant health risk exists with some of the practices that are associated with newborn care; these include burning, piercing, or smearing harmful substances onto their bodies.

The rich cultural tapestry of the Philippines harbors a diversity of traditional newborn care practices, which have been very well-entrenched in its culture and passed from generation to generation through knowledge transferred across generations. Like other low-middle-income countries, some support well-being, while others may inadvertently put newborn health at risk since they deviate from evidence-based recommendations (Perry & Jessop, 2013; Butalid et al., 2015).

Although some progress has been made in the health of mothers and children over the past few decades, both Iraq and the Philippines are still falling short of achieving the neonatal mortality reduction goal down to 12 per 1,000 live births by 2030 (Requejo et al., 2015; United Nations, 2015). These entities are still battling a myriad of dangerous

traditional practices among this challenge's primary drivers. The research required a scrutiny analysis of their prevalence, cultural significance, and health implications.

Those practices can be understood only from a multi-faceted approach that integrates cultural embeddedness with potential rectification. A narrative review is thus conducted to present an overview of unsafe traditional newborn care practices in Iraq and the Philippines, covering their prevalence, cultural significance, and health risks. The review synthesizes the literature on these practices. It compares them with evidence-based alternatives in a bid to inform culturally sensitive interventions geared to improve newborn health outcomes while respecting healthy traditional values (Cruz et al., 2022; Moyer et al., 2012).

It has contributed to the discussion of creating a holistic approach toward improving neonatal health in Iraq and the Philippines, looking at cultural and medical perspectives. It seeks to bridge tradition and evidence-based care, promoting the development of effective reductions of neonatal mortality and morbidity while being culturally respectful and engaging. In totality, this should contribute to progress towards achieving SDG 3, which is insolvable in link with poverty (SDG 1) and education (SDG 4), two directions that underpin many unsafe traditional practices.

## **AIMS OF THE STUDY**

The purpose of this study is to point out the prevalence, cultural significance, and health implications of unsafe traditional newborn care practices in Iraq and the Philippines.

## **METHODOLOGY**

The literature search was conducted regarding hazardous traditional practices related to the care of neonates with health problems in Iraq and the Philippines. Literature was sought through PubMed, Scopus, Web of Science, CINAHL, and Google

Scholar. This Grey Literature source was added, involving reports from WHO, UNICEF, Iraq, and Philippines Departments of Health, focusing on studies between 2019 and June 2024. The sample to be targeted consists of Iraqi and Filipino mothers who prefer the traditional way of practices over the modern prescribed medicinal way of treating health problems for their newborn babies. This study would primarily compare such traditional practices between the two countries selected. After screening 815 studies, 51 were finally included. Data extractions and summarization were based on a PICO model.

#### Research design:

The study design prioritized maximizing credibility and significance while encouraging continuous learning and evolving as insight into advancing scientific knowledge. Referencing recently published studies is essential in producing relevant research in the current scientific landscape. As mentioned, developing quality research applies to referencing recently published studies such as Villarino, 2024 Bernard et al., 2022 and Villarino et al., 2022b. Among the search keywords used were

"unsafe traditional practices," "newborn's health problems," "Middle Eastern mothers," and "Asian mothers."

#### Inclusion and Exclusion Criteria:

This corresponded to studies on newborn health practices in the Philippines and Iraq, traditional/cultural practices/, identification of unsafe practices, peer-reviewed publications, reputable grey literature, and those published between 2019-June 2024. Studies exclusively limited to settings other than these two countries, specifically only on maternal health or any that did not report significant data, were all excluded.

#### Study Selection and Data Extraction:

The PRISMA flow diagram guided the selection of the studies. Upon initial search, 815 records were identified, of which 51 met the inclusion criteria, including 18 qualitative and 33 quantitative studies. Extracted data consisted of study characteristics, described practices, the cultural context in which they took place, impacts on health—positive or otherwise; and recommendations.

## RESULTS

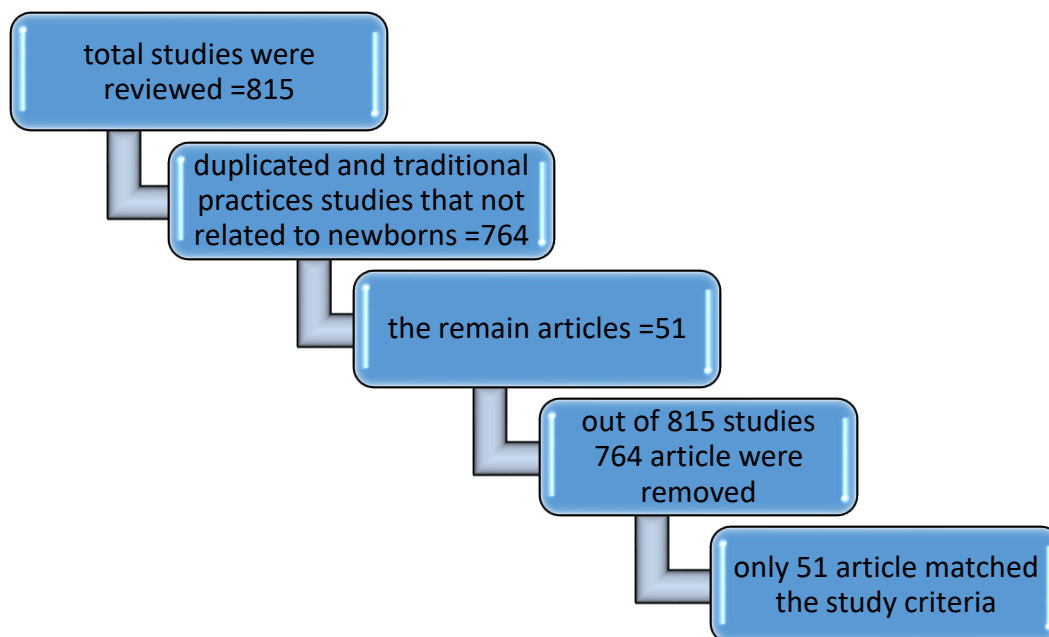


Figure (1): The process of searching and selecting the research articles



**Figure (2):** Comparison between unsafe traditional practices that are used to treat newborn health problems in the Middle East (Iraq) and Asian (Philippines) mothers

**Table (1):** Outcomes of comparison between unsafe traditional practices that are used by Iraq and Philippine mothers to treat newborn health problems.

Themes	Iraq	Philippines	Common Practices	Health Risks
1. Umbilical Care	Ash, turmeric applied	Coins, herbs used	Avoid water on the stump	Infections, sepsis
2. Feeding	Herbal teas, date juice	Sugar water, rice water	Delayed breastfeeding	Diarrhea, malnutrition
3. Healing Methods	Evil eye treatments	Hilot massages	Traditional healers	Delayed medical care
4. Bathing	Immediate herb baths	Early shaping baths	Vernix removal	Hypothermia, infections
5. Circumcision	Unsterile tools, rituals	Tuli ceremonies	No pain management	Bleeding, infections
6. Swaddling	Tight wrapping, cradles	Lampin use	Prolonged swaddling	Overheating, hip issues
7. GI Problems	Anise tea, binding	Coconut oil massages	Delay seeking care	Dehydration, imbalances
8. Respiratory Care	Eucalyptus steam, rubs	Herbal baths, juices	Postural drainage	Delayed pneumonia care
9. Eye Care	Kohl's breast milk use	Coconut oil, herb wash	Unsterile materials	Infections, irritation
10. Isolation	40-day indoor period	Limited sun exposure	Delayed checkups	Vitamin D deficiency

Presented in Table 1, the thematic analysis identified vital themes of unsafe traditional newborn care practices in the Philippines and Iraq. This reveals similarities and differences that, besides the prevalence and cultural significance of the practice, include health risks associated with it in both the Philippines and Iraq.

## DISCUSSION:

- 1. Umbilical Cord Care:** Both apply such substances as ash, turmeric, or animal dung on the umbilical cord and avoid water on the stump. In most cases, the Philippines does cord-cutting earlier than Iraq. Capili et al. (2014), Sharma et al. (2021), and Coffey & Brown (2017) These methods are thus practiced by over 90 percent of the rural population and between 65 to 78 percent of urban populations that underpin beliefs about hastening healing and warding off evil spirits. This may present health risks through omphalitis, neonatal sepsis, and tetanus. (Capili et al., 2014; Silvestre et al., 2018).
- 2. Feeding practices:** Both practices delayed breastfeeding initiation and discarding colostrum. Iraq initiated herbal teas and date extracts, while the Philippines used formula for prelacteal feeding, either

with sugar or rice water. These practices are found to be in more than 60% of the urban population and over 80% of the rural populations due to beliefs about 'cleansing' the neonate, perceptions of insufficiency of early milk, or other cultural reasons. Health risks include diarrheal diseases, malnutrition, and delayed initiation of breastfeeding.

- 3. Traditional Healing Techniques:** Both nations resort to traditional healers and remedies such as herbal poultices, treatments for 'evil eye,' massage treatments like 'Hilot,' and herbal steam inhalation before modern medical interventions (Ong & Kim, 2015; Rebuya et al., 2020; Sureka et al., 2020). These methods are very ubiquitous, with over 80% coverage in rural populations, and appear to be influenced by beliefs in supernatural causes of illness, distrust of modern medicine, and cultural pride in

traditional knowledge (Reyes et al., 2019; Rukundo et al., 2020; Abad et al., 2014; Memon et al., 2015). It poses health risks like delayed treatment, harmful interactions, and misdiagnosis, as indicated by Zaidi et al. in 2013 and Memon et al. in 2015.

4. **Bathing Rituals:** Immediate bathing with herb-infused water or alcohol is common, and vernix removal is practiced. Oils are used daily in Iraq, whereas the Philippines emphasizes 'shaping' the baby (Sobel et al., 2011; Sinha et al., 2016; Amare et al., 2014). Such practices are found in over 75 percent of the country's urban and 90 percent of rural populations. These arise from beliefs about cleansing birth 'impurities' and aesthetic preference. Hypothermia, respiratory distress, and skin infections are some health risks.
  5. **Circumcision:** is in practice in both countries by the traditional dimension with unsterilized equipment, without any pain management, and with the use of conventional healing substances. Some ritualistic celebratory instances exist in Iraq, while in the Philippines, 'Tuli' ceremonies and mass circumcisions are witnessed (Weiss et al., 2010; Drain et al., 2015). These methods, used by over 90 percent of rural and between 78-89 percent of urban populations, have their motivation constructed around rites of passage, religious obligations, and social pressure. The health risks include infections, severe bleeding, and attendant long-term complications.
  6. **Swaddling practice:** Tight and continued swaddling is practiced in both countries using traditional cloths and cradles made from wood, believing in shaping the baby's limbs. Such practices are common in over 80% of urban and 90% of rural populations for reasons such as soothing the baby, attaining straight limbs, and protecting from evil spirits (Abad et al., 2014). Health hazards may result in overheating, hip dysplasia, and respiratory problems, van Sleuwen et al. (2007).
  7. **Gastrointestinal Problems:** Basics life solutions include anise, infusion of chamomile teas, massage with coconut oil, and herbal decoctions, amongst others, which most often delay them from seeking medical care in case of persistence (Ghafel & AL Jubouri, 2024; De Vera et al., 2016). These practices exist in more than 60% of the urban and 80% of the rural population. This is driven by beliefs in 'natural remedies' and ancient knowledge. Health risks include dehydration, various electrolyte imbalances, and missed diagnosis of severe conditions.
  8. **Respiratory:** The same is managed traditionally by steam inhalation, chest rubs, herbal steam baths, and postural drainage techniques—often delaying medical care. These practices exist in over 70% of urban and 85% of rural populations, propelled by beliefs about 'opening' airways and distrust of modern medications (de Vera et al., 2016). Health risks include delayed treatment of pneumonia, burns from steam, and asthma exacerbation.
  9. **Eye Problems:** The most used or traditional forms of eye care, such as kohl in Iraq or coconut oil in the Philippines, are cleaned with unsterilized materials (Ghafel & AL Jubouri, 2024; Verd, 2007). These practices exist in over 50% of urban and 70% of rural populations, impelled by cultural beliefs about 'bright' eyes and the protective properties of traditional substances (Butalid et al., 2017). Potential health risks include eye infections, chemical irritation, and lead toxicity from kohl.
  10. **Practices in Isolation and Exposure for the Newborn:** Newborns are kept indoors longer in both countries, use amulets against the 'evil eye' in Iraq, and restrict sun exposure and visitors in the Philippines. These practices are found in over 60% of urban and 80% of rural populations, influenced by beliefs in shielding the newborn from supernatural harm and the significance of bonding (Raman et al., 2016; Dennis et al., 2007). The health risks are related to a deficiency in vitamin D, delayed diagnosis of health problems, and possible developmental delays.
- Global Context:**
- The unsafe traditional newborn care practices reflected in Iraq, the Philippines, and other countries

are not isolated cases but a broader global phenomenon seen across countries worldwide with different income levels.

- a. **High-Income Countries:** Even in high-income countries like the United States and Australia, traditional practices persist, especially among the immigrant community. In these countries, while generally having advanced healthcare systems, cultural beliefs which have been transferred from the country of origin often influence newborn care practices. This scenario is comparable to Iraq and the Philippines, where traditional practices are concomitantly used with modern healthcare. High-income countries, therefore, incorporate culturally competent care into practice to avoid risks associated with medical care without losing cultural diversity.
- b. **Upper-Middle-Income Countries:** In some upper-middle-income countries, like Brazil, there is a complex interplay between traditional and modern practices. As the trend goes toward increasing hospital births, traditional practices often persist at home. This points to the situation in the Philippines, where modern and traditional practices coexist. Interventions must address both facility- and community-based newborn care settings that can bridge the continuum leading from deep-seated traditional beliefs to evidence-based practices.
- c. **Lower-Middle-Income and Low-Income Countries:** In most lower-middle-income countries, like India and low-income countries, these traditional newborn care practices are deeply followed (Sharma et al., 2016; Arumugam et al., 2023). These are usually bereft of scientific rationale and may pose severe threats to newborn health. Such countries, like some parts of sub-Saharan Africa or South Asia, face similar challenges to those in rural and underserved parts of Iraq and the Philippines. Among other reasons, such traditional unsafe practices prevail because of a poorly developed infrastructure for health care, low health literacy, and strong cultural traditions. On the other hand, community-based interventions and

culturally sensitive health education show significant promise in promoting safer alternatives.

#### **Health Implications and SDG Goals:**

The persistence of unsafe traditional newborn care practices in the Philippines and Iraq places a significant obstacle to the attainment of various SDGs. The direct contribution of such practices to neonatal mortality is thus an obstacle to attaining SDG 3: good health and well-being, mainly target 3.2, which aims to reduce neonatal mortality to at least as low as 12 per 1,000 live births by 2030. Both imply that addressing these practices is central to improving newborn survival if this target is to be achieved.

Most importantly, unsafe practices prevail in so many cases, particularly within disadvantaged communities due to poverty and low education, which requires the presence of appropriate health coverage with access to quality health care services by all persons pointed out in the SDGs under Target 3.8 as universal health coverage.

Unsafe practices disproportionately challenging vulnerable populations are a pointer to health inequity, contrary to the goal of SDG 10: Reduced Inequalities, aimed at reducing inequality within and among countries. Addressing inequality must imply specific interventions for different communities based on particular needs, taking into account the cultural contexts of the communities that involve a decrease in poverty levels and an increment in education levels, together with healthcare efforts.

#### **Implications and limitations:**

This narrative review brings into sharp relief the critical need to address unsafe traditional newborn care practices in both the Philippines and Iraq. It evidences essential implications for healthcare policy, training, and research on newborn health outcomes toward achieving the Sustainable Development Goals by showing culturally sensitive interventions, health system strengthening, and community engagement as lead factors.

However, some limitations in the methodology of this review are there. As this is a narrative review, its nature does not include systematic attention to an extensive search and critical appraisal of evidence that may lead to selection bias. The discussion being focused on only two countries—the Philippines and Iraq—generally reduces the relevance of its findings to other contexts. The review primarily draws from currently published literature, which may fail to adequately cover the finely tuned nuances of traditional practices and their deep-seated underlying cultural beliefs. Future research should include systematic reviews and meta-analyses of literature on unsafe newborn care practices and their consequences for health outcomes using rigorous methodologies.

### RECOMMENDATIONS:

Addressing traditional unsafe care practices for newborns requires a multi-faceted approach:

1. Developing culturally sensitive training on evidence-based practices respecting existing cultural beliefs is vital to Abad et al. (2014). Community leaders, traditional birth attendants, and elders should be engaged in designing and delivering such programs relevant to and accepted by the community's cultural context. This approach will help the health-providing stakeholders gain trust and collaborate with communities to diffuse safer practices.
2. A second critical strategy is incorporating safe traditional practices into modern healthcare settings. Modern healthcare providers can identify and integrate traditional practices with positive, evidence-based recommendations, bridging the gap between conventional and contemporary care to permit greater cultural acceptance and trust (Ong & Kim, 2015). Healthcare providers must also receive cultural competency training to communicate effectively and respectfully with families and communities.
3. Health systems should be empowered with corresponding policies on evidence-based newborn care delivery. Coverage of skilled birth attendants and

postnatal care, particularly in rural locations and areas with inadequate services, should be promoted to ensure equity in health care delivery. To a larger degree, policymakers ought to ensure that resources are provided in the execution and its sustainability to allow safe and effective care to all newborns.

### Long-term Research and Monitoring :

There is a need for more in-depth mixed-method research into barriers to safe practices and the evaluation of culturally-tailored interventions to improve newborn care. Robust monitoring systems for neonatal deaths, the practice of unsafe methods, and healthcare utilization can provide relevant data for informed decision-making:

- a. Community-based approaches that use community health workers and participatory methods are also integral to empowering mothers and their families to make informed choices (Mullany et al., 2013).
- b. mHealth technologies can thus be used to disseminate information, provide virtual consultation, and support behavior change.

### CONCLUSION:

Unsafe traditional newborn care practices in the Philippines and Iraq are major stumbling blocks to newborn health and slow progress toward attaining SDG 3: Good Health and Well-being. These are deeply rooted in cultural belief and often sustained by poverty and limited education—both keystones leading up to increased neonatal mortality and morbidity.

In this respect, such a multidimensional approach that foregrounds culturally sensitive education programs, integration of traditional safe practices into modern healthcare, and strengthening health systems for fair access to quality care must be followed. Creating culturally relevant solutions requires quality care that bridges the gap between traditional and evidence-based care through research and community engagement. This whole and culturally sensitive approach can be the basis upon

which the Philippines and Iraq empower mothers and families to make sound decisions about newborn care for better neonatal outcomes, a healthful future for all, and progress toward SDGs. This review points out, through different case studies, the complex interplay of health and culture in such contexts, with the necessity of understanding traditional beliefs and, at the same time, promoting evidence-based practices to ensure the well-being of newborns and the family.

#### Author contributions:

Hawraa Hussein Ghafel: Writing – original draft, Supervision, Resources, Project administration, Investigation, Funding acquisition, Data curation, Conceptualization. Resti Tito H. Villarino: Writing – review & editing, Methodology, Formal analysis, Data curation.

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#### Declaration of interest:

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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