

## Islamic Perspectives on Milk Banking: Jurisprudence, Public-Health Implications, and Practical Recommendations for Donor Human Milk Programs

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### Abstract

This paper examines the ethical, jurisprudential, and practical dimensions of human milk banking within Islamic contexts, with particular attention to the classical doctrine of *raḍāʿah* (milk kinship) and its implications for contemporary neonatal care. While donor human milk (DHM) is internationally recognized as the optimal alternative when a mother's own milk is unavailable—especially for preterm and medically fragile infants—Muslim families often face religious concerns related to inadvertent milk kinship, lineage confusion, and the permissibility of anonymous milk pooling. Drawing upon authoritative juristic opinions, contemporary fatwās, and relevant biomedical literature, the study highlights key areas of scholarly agreement and disagreement regarding the acceptability of milk donation, pasteurization processes, and record-keeping requirements. It also explores emerging scientific claims, including epigenetic effects and cellular transfer, assessing their relevance to Islamic legal reasoning. Using a multidisciplinary approach, the paper evaluates current milk bank practices such as donor screening, Holder pasteurization, inventory management, and identity documentation, proposing culturally sensitive models—such as small-pool or single-donor systems—to mitigate religious objections. The study concludes with policy-oriented recommendations for clinicians, religious authorities, and milk banks to ensure that DHM programs remain both medically effective and compliant with Islamic ethical norms, thereby supporting equitable neonatal care for Muslim communities.

**Keywords:** Islamic jurisprudence; milk kinship (*raḍāʿah*); donor human milk; milk banking; neonatal care; bioethics

### Introduction

The evolving landscape of neonatal care has brought renewed attention to donor human milk (DHM) as a life-saving intervention for preterm and medically vulnerable infants, prompting important discussions within Muslim communities about its ethical and religious implications. While modern milk banking systems prioritize safety, screening, and equitable access, the classical Islamic concept of *raḍāʿah* (milk kinship) introduces unique considerations that influence parental decisions, clinical practice, and healthcare policy in Muslim-majority and minority settings alike. As advancements in biomedical sciences intersect with long-established juristic principles, the need for a nuanced, research-based understanding becomes increasingly vital. This article situates the topic at the intersection of Islamic jurisprudence, public health, and bioethics, aiming to clarify key points of consensus and debate while offering practical recommendations for culturally sensitive milk-banking models. Through an interdisciplinary lens, it seeks to establish a balanced foundation for subsequent analysis, ensuring that both religious integrity and the best interests of the infant remain central to the discussion.

## Islamic Jurisprudential Perspectives on Milk Banking

In Islamic belief, milk kinship refers to the bond established through Raḍā‘at (رضاعت), which creates a familial relationship between the Murḍī‘ (مَرْضِع) and her non-biological Raḍī‘ (رَضِيع), as well as her biological children. This bond prohibits marriage between "milk siblings." Consequently, Muslim families in Western countries may have reservations about using DHM (Donor Human Milk) from milk banks due to concerns about anonymity and the involvement of multiple donors. Healthcare providers must be mindful of this certainty to engage in deferential and knowledgeable discussions with Muslim families, effectively advocating for healthy infant suckling practices. Understanding the principles of milk relationship within Islamic beliefs involves examining religious and bioethical interpretations and guiding physicians and healthcare professionals in appreciating this repetition.

Islam, as the world's second-major and rapidly rising religion, includes approximately 3.45 million Muslims in the USA<sup>1</sup>. Physicians are likely to happenstance Muslim patients and must be familiar with Islamic health-related beliefs. Pediatricians, in particular, need to understand how Islamic faith influences parental choices for their children's health. Islamic cultural beliefs and interpretations can vary, influenced by different schools of Islamic jurisprudence and diverse geographical and ethnic traditions<sup>2</sup>. The moral and civil laws of Islam may sometimes differ from secular practices in the U.S. Pediatricians can enhance their support for Muslim families by understanding these beliefs, fostering respectful interactions, and providing culturally sensitive care.

Guidelines for medical teams working with Muslim families and their babies explore Islamic teachings on Raḍā‘at (رضاعت) and milk kinship and offer recommendations for integrating DHM into a common decision-making process. This understanding is beneficial for all team members involved in the care of the mother-infant dyad, counting pediatricians, neonatologists, obstetrician-gynecologists, nurses, and lactation specialists.

### Raḍā‘at (رضاعت) and Milk Kinship

Human Breast milk is universally acknowledged as the best source of nutrition for newborns by health and medical organizations. Mutually the World Health Organization (WHO) and the American Academy of Pediatrics (AAP) endorse DHM as the best alternative when a mother's own milk is not available or adequate<sup>3</sup>. DHM offers significant health benefits for sickening and premature newborns in neonatal intensive care units (NICUs), including reduced risks of necrotizing enterocolitis, sepsis, and bronchopulmonary dysplasia. It also improves feeding tolerance and promotes better neurodevelopmental outcomes. Therefore, healthcare providers have an accountability to advocate for and provision Raḍā‘at (رضاعت) to help address disparities in neonatal and pediatric health<sup>4</sup>.

The Qur'an uniquely addresses Raḍā‘at (رضاعت) among Abrahamic texts. Verse 46:15 describes a physiological bond between a mother and her child lasting 30 months<sup>5</sup>, interpreted as starting during pregnancy and continuing through breastfeeding, which extends until weaning around two years of age. This period, supported initially by intrauterine blood, continues post-birth through Raḍā‘at (رضاعت). The recommendation aligns with the World Health Organization's guidance to breastfeed up to two years or longer if desired<sup>6</sup>.

Verse 2:233 of the Qur'an also allows for the use of a Murḍī‘ (مَرْضِع) if the mother is unable or unwilling to breastfeed<sup>7</sup>.

This practice, rooted in the time of the Prophet Muhammad ﷺ, who was nursed by wet nurses<sup>8</sup> from Bedouin tribes. Now a days, a wet nurse is involving a relative or family friend in Muslim countries<sup>9</sup>. In Western contexts, the familiar support network may be lacking, making access to known Murḍī‘āt (مَرْضِعَات) more challenging<sup>10</sup>. The use of DHM from HMBs may become a necessary consideration for medically fragile infants.

Religious and cultural beliefs in Islam, particularly the concept of "milk kinship," may influence the acceptance of donor milk. This concept suggests that donor milk creates a familial relationship between the Murḍī‘ (مَرْضِع) and the recipient, which could affect decisions regarding the use of DHM<sup>11</sup>.

The Qur'an states:

حُرِّمَتْ عَلَيْكُمْ ..... وَأُمَّهَاتُكُمُ الَّتِي أَرْضَعْنَكُمْ وَأَخَوَاتُكُم مِّنَ الرِّضَاعَةِ

"Prohibited to you [for marriage] are ..... your milk mothers who nursed you and your sisters through nursing..."<sup>12,13</sup>

Raḍā‘at (رضاعت) denotes the kinship recognized through nursing between a child and the woman who nursed them. This bond extends to the children of the nurse, creating "milk siblings" with the breastfed infant<sup>14</sup>. In Islamic law, this relationship is akin to a blood relationship (نَسَب) and forbids marriage between milk siblings. Consequently, Muslim

families may have concerns about their kid mistakenly marrying a milk sibling if using donor human milk (DHM). To avoid such issues, it is preferable for the Murḍī‘ (مرضع) and the beneficiary families to be known to each other.

The Milk in Western human milk banks (HMBs), typically collected from multiple donors and pooled together <sup>15</sup>. This process means that the milk cannot be traced back to individual donors or recipients, creating uncertainty about the origins and destinations of the milk. This anonymity can lead to concerns among Muslim families about potential mixing of lineages, which might deter them from using or donating DHM <sup>16</sup>. Milk kinship is a deeply held religious and social belief, referenced in the Qur'an, but its clarification can differ based on cultural and regional practices <sup>17</sup>.

Healthcare professionals should handle discussions about DHM with Muslim families thoughtfully. They should provide information on the benefits of breast milk while respecting religious and cultural concerns. Encouraging families to seek guidance from their religious advisors can help them make informed conclusions that align with their principles and practices. The key role of healthcare providers is to offer accurate information and support families in making choices that best suit their needs and values.

#### Religious Considerations

Islamic jurisprudence is shaped by various schools of thought, each with its own interpretation of Islamic law. When ambiguities arise, legal councils may issue a fatwa <sup>18</sup>—a religious ruling on a specific point of Islamic law from a familiar authority, such as a qualified Islamic legal scholar. In recent years, fatwas have increasingly addressed contemporary social and biomedical issues faced by Muslim societies.

Muslim population increasing in Western countries and the rise of human milk banks (HMBs) in the 20th century, there has been a need for Islamic rulings on this practice <sup>19</sup>. Historically, there have been varied opinions among scholars. In 1983, the Islamic Organization for Medical Sciences in Kuwait convened to discuss Islam and human imitation <sup>20</sup>. At that time, several scholars were opposite to milk banks in the Muslim world due to concerns about the namelessness of pooled donor milk and its impact on milk kinship. The session proposed conditions for using donor milk, including documenting donor identities and maintaining detailed records to prevent unintended marriages between milk siblings <sup>21</sup>.

In 2012, Professor Mohammed Ghaly <sup>22</sup>, a lecturer of Islamic and biomedical ethics at the Research Center for Islamic Legislation and Ethics at Hamad Bin Khalifa University in Qatar, conducted a groundbreaking study on fatwas related to milk kinship in both the Muslim world and among Muslim minorities in the West. Ghaly highlighted the ongoing significance of milk kinship for modern Muslim families and the diverse opinions on accepting donor milk.

In 2004, Ghaly reported that the European Council for Fatwa and Research (ECFR), established in 1997 to discourse issues relevant to Muslims living in the West, predict the unique context of "Muslim minorities living in a non-Muslim environment" and discussed the use of HMBs within these communities. The ECFR concluded that using HMBs does not present a religious matter in Islam based on the following points:

The growing presence of milk banks in Western countries and the likelihood that Muslim minorities in the West would encounter them.

The absence of "known" Murḍī‘ (مرضع) in Western settings, unlike in the Muslim world.

Strict procedures in milk banks to certify medical safety and prevent sickness transmission.

The element of Rīb (رب) in Western milk banks due to the lack of detailed registries tracking Murḍī‘āt (مرضعات), recipient infants, and proportions of mixed milk.

Despite this, the 2004 fatwa may not be universally recognized or acknowledged by all Muslim families <sup>23</sup>. Fatwas offer guidance based on context and can vary depending on circumstances. The binding nature of these rulings can differ based on scholarly interpretations. Ultimately, adherence to fatwas is a matter of personal conviction, and Muslims survey these rulings to act honorably and avoid sin <sup>24</sup>. As a result, Muslim families may hold different views on using pooled DHM depending on which scholarly opinions they follow.

#### Milk Kinship and Epigenetics

Concerns about milk kinship restrictions often arise from apprehensions regarding the possible transmission of genetic quantifiable through Human breast milk <sup>25</sup>. The article "Milk Kinship Hypothesis in Light of Epigenetic Knowledge," by Ozkan et al <sup>26</sup>, propose that Raḍā‘at (رضاعت) might transfer substances that could influence epigenetic regulation. They suggest that breast milk holds genetic elements, such as micro RNAs and stem-cells, which might affect gene appearance and potentially lead to cognation and an increased risk of genetic disorders <sup>27</sup>. However, this view does not align with the established understanding of genetic inheritance and consanguinity.

Genetic disorders resulting from consanguinity generally require the inheritance of two copies of a mutated gene, leading to autosomal recessive conditions. Research shows that breast milk undergoes digestion in the gastrointestinal tract, where genetic components like micro RNAs are broken down. Furthermore, donor milk is subjected to stringent

storage procedures, including freeze-thaw cycles, acidic incubation, and high-temperature pasteurization, all of which further degrade micro RNAs<sup>28</sup>.

As a result, whole genetic factual is not transferred to the beneficiary infant through breast milk, and there is no instrument by which autosomal recessive genetic disorders could be transmitted via donor milk<sup>29</sup>. By clarifying these processes to concerned parents, healthcare providers can help address fears about the potential risk of genetic or consanguineous diseases from donor milk.

#### Donor Milk Recommendations

There is no HMBs functioning in Muslim-majority countries, largely due to religious and social anxieties. An initiative by the Turkish Ministry of Health to establish a non-Western-style milk bank was discontinued after facing public opposition to the concept of Western-style HMBs<sup>30</sup>. Similarly, there are no milk banks in the United States that cater specifically to the religious worries of Muslim families.

Recent studies reveal that over 70% of Muslim scholars are receptive to the idea of milk banks if religious issues are adequately lectured<sup>31</sup>. Research conducted in Turkey indicates that most mothers are more willing to donate or use donor milk when religious concerns are addressed<sup>32</sup>. The main issue with Donor Human Milk (DHM) for Muslims is the anonymity of donors. For Muslims living in Western countries, it is important to identify both donors and recipients. According to a 1983 fatwa on milk banks, DHM use is permissible under certain conditions.

DHM is considered acceptable if the donor and beneficiary are known to each other and the milk comes from a limited number of donors. To comply with these conditions, practices such as labeling each milk bottle with the donor's name, keeping detailed records, and ensuring that both donor and beneficiary families have access to this information should be implemented. Recommendations by Al-nakshabandi and Fiester<sup>33</sup> suggest limiting the number of pooled donors to three to five to mitigate concerns about marriage restrictions.

Healthcare providers should also explore alternative sources of breast milk from family members, friends, or other identified individuals who might serve as donors<sup>34</sup>. Small scale milk distribution programs have been attempted in places like Kuwait and Malaysia, where donor and beneficiary families meet, discuss religious implications, and complete *Raḍāʿat* (رضاعت) forms<sup>35</sup>. By implementing thorough identification processes, it is possible to provide religiously compliant replacements to traditional milk banking for Muslim families.

#### Challenges Faced by Milk Banks

##### DHM Availability

The demand for donor human milk (DHM) surged due to *Raḍāʿat* (رضاعت) challenges, particularly during the COVID-19 pandemic. The Chinese Expert Consensus Group recommended that infants showing symptoms or testing positive for COVID-19 be isolated and fed DHM for 14 days<sup>36</sup>. This guidance influenced neonatal care practices globally and intensified pressure on HMB services. For example, Brazil's extensive national HMB network, established in 1998 with 224 HMBs and 215 milk collection centers, faced shortages due to a decrease in donations coupled with heightened demand.

Mothers donate excess breast milk to HMBs in various situations:

Mothers with low birthweight or ill newborns in hospitals.

Mothers at home providing milk previously stored while their infant was in the NICU.

Mothers recruited to provide milk for future use.

Bereaved mothers.

Donation volumes vary widely, with some donating as little as 50 ml in India, while others contribute over 100 liters over weeks or months in the US and UK. The COVID-19 pandemic introduced new challenges, affecting donors' ability to contribute milk due to restrictions.

To manage crowding during the pandemic, Myanmar closed its Lactation Management Center and Baby Clinic from April 1, 2020, although milk collection from postnatal wards continued. Some HMBs, such as Brazil's National Milk Bank Service, increased efforts by launching media campaigns to recruit more donors and educate them on safe milk expression and storage. The response from mothers in the USA, UK, India, France, and the Netherlands was overwhelmingly positive.

Norway reported no significant changes to DHM services, maintaining raw DHM use with adequate supplies and donors. However, countries like China, Poland, and India experienced declines in potential donors due to fears about leaving home for screening or donation, lockdowns, early hospital releases, and suspended outpatient services.

In India, DHM is used to supplement mothers with initially low milk production in NICUs until lactation improves. The country encountered challenges with lockdowns and transportation issues, temporarily halting milk collection.



With support from Program for Appropriate Technology in Health (PATH), India resumed its collection and storage efforts, emphasizing the need to ration DHM for very small and sick infants.

Some regions reported reduced DHM demand from neonatal units, possibly due to uncertainties about SARS-CoV-2 deactivation during DHM pasteurization and concerns about transmission. In the United States, India, and Iran, stricter DHM<sup>37</sup> rationing was implemented, with Iran reserving DHM for infants under 1.2 kg instead of the usual 1.5 kg.

Logistical and hygienic concerns limited DHM use during the pandemic, with hospitals avoiding unnecessary risks amid Personal Protective Equipment (PPE) shortages. In Poland, supporting lactation in COVID-19-positive mothers was considered risky. In China, despite a reduced need, donor screening became more stringent, including inquiries about epidemiological history, signed commitments, temperature checks, and prior examinations.

#### Prescreening for COVID-19 Contact in Milk Donors

It is generally accepted that SARS-CoV-2 is not transmitted via breast milk, milk banks have been vigilant in implementing rigorous precautionary measures to safeguard vulnerable infants receiving donor human milk (DHM) and to protect staff and volunteers. This includes identifying donors who are infected with or at risk of COVID-19.

Hospitals have heightened their screening protocols for all individuals entering the facility. This includes comprehensive screening for mothers, visitors, and anyone accompanying mothers to the hospital. Donor mothers are subjected to additional COVID-19 screening questions during the recruitment process to ensure they are not at risk.

National guidelines and screening procedures have been rapidly updated in many countries to detect donors who may exhibit symptoms of COVID-19 or who have tested positive for SARS-CoV-2. These enhanced screening measures have often been aligned with protocols used by local blood-transfusion services to ensure thorough safety checks.

#### Logistics of Milk Donor Serologic Transmission

Milk donors are usually required to undergo routine serological screening for blood-borne viruses and other infectious agents. The specifics of these tests, including the infections screened for and the timing, can differ. In the UK, Clinical Guideline #93 from the National Institute for Health and Care Excellence, which is also referenced in other regions, recommends that serological screening be conducted at the time of donor recruitment<sup>38</sup>. However, COVID-19 restrictions have created obstacles, such as the closure of facilities, redirection of services, or reluctance of potential donors to visit testing sites.

In the USA, while some local donors drop off milk directly, most donations are received via overnight shipping. The pandemic has led to the cancellation of milk drives in several societies, including those in California. Despite these challenges, hospital-based milk collection sites and depots continue to collect milk or provide shipping bottles to mothers. Concerns about potential infection during phlebotomy procedures remain a significant issue.

Human milk banks (HMBs) facing difficulties with donor recruitment are looking to learn from the experiences of countries with different transmission protocols to overcome local challenges while preserving safety standards. There have been discussions about possibly using antenatal screening tests instead of the standard postnatal tests at the time of recruitment. However, this approach is considered below the standard and would only be considered in cases of critical shortages, with local governance approval required. Some milk banks have managed to recruit donors whose babies are in neonatal units, allowing for onsite blood tests performed by hospital staff. These challenges have prompted innovative solutions and collaborations.

In the UK, efforts to recruit donors and volunteer phlebotomists were promoted via social media and the BBC, leading to a robust response. Fortunately, enough donors have been secured without the need for unconventional measures. The National Health Service Blood Transfusion Service, which had not previously worked with HMB services, began offering phlebotomy services to potential milk donors through the Hearts Milk Bank. This collaboration could set a precedent for future partnerships between these services beyond the pandemic.

#### Communication by HMBs:

The COVID-19 pandemic underscored the importance of clear communication regarding the safe management and processing of human milk. Reassuring parents, healthcare providers, and the community about the safety of donor human milk (DHM) became a critical task. Concerns arose among some donors about the potential risk of SARS-CoV-2 transmission through their milk. Social media emerged as a valuable tool for disseminating updates and supervision to donors. Furthermore, there is a recognized need for enhanced communication systems and networking between human milk banks (HMBs) to facilitate the swift exchange of information, protocols, and practices related to COVID-19 safety measures.

As the pandemic evolved, various countries developed their own guidelines for managing maternal and infant care during the perinatal period. In the absence of unified global protection standards, HMB associations and individual milk banks created regional protocols for handling DHM amidst the pandemic<sup>39</sup>. The Virtual Community Network (VCN) played a crucial role in spreading information to milk bank leaders worldwide.

At present, much of the available data is anecdotal or based on informal communications, highlighting a gap in systematic data collection and analysis. There is a need for a comprehensive review to assess the overall impact of the pandemic on DHM practices.

#### DHM Gathering and Transportation

The COVID-19 epidemic led to the implementation of social disaffection measures, which significantly impacted the gathering and distribution of donor human milk (DHM). These restrictions made it difficult for donor mothers to access collection sites and for couriers to transport milk. In some regions, such as British Columbia, the closure of basic transport infrastructure, like ferries, and disruptions to air freight services in areas with large geographical coverage further complicated logistics.

In response, some human milk banks (HMBs) introduced non-contact collection and delivery methods. Additionally, protocols such as "milk quarantine" were implemented, where pre-pasteurized milk was stored distinctly from other stock for 14 days following the last appearance. Before removing the milk from storage, donors were communicated to confirm that they had been symptom-free for the preceding 14 to 28 days.

For example, in our HMB, we adopted an especially cautious approach by quarantining breast milk from approved donors for three weeks after expression. During this period, we verify the donor's health and that of her immediate family before distributing the pasteurized milk. Milk from donors who tested positive for COVID-19 was discarded immediately. Although this approach is conservative, it was deemed necessary given the situation. (New Zealand)

This method was regarded as a guideline rather than a strict rule, and it was not intended to compromise DHM stocks if supplies were low. In countries like India, where donors are screened in hospitals before discharge, follow-up can be challenging. Discussions indicated that the risks associated with formula feeding were perceived as meaningfully higher than the risks of providing pasteurized DHM from well-screened donors. Lessons from countries such as South Africa, which experienced severe consequences during the initial HIV response, highlighted the critical importance of maintaining DHM supply.

#### DHM Management

Respirational pathogens are primarily spread through aerosol or droplet transmission but can also be transferred via vehicles and surfaces <sup>40</sup>. Early research indicated that SARS-CoV-2 could remain viable on surfaces like plastic, stainless steel, and cardboard for several hours or even days under controlled conditions <sup>41</sup>. While these routes of transmission have not been definitively proven as significant, they still present a potential risk to milk bank operations<sup>42</sup>. Milk bank leaders were worried about the possibility of virus transmission from handling bottles or bags touched by asymptomatic donors or couriers, particularly if standard protocols were not adhered to.

Milk banks generally enforce stringent hygiene and handwashing practices. Although some have proposed decontaminating containers and storage bags with bleach or other viricides during the COVID-19 pandemic, the VCN determined that there was insufficient evidence to justify this practice <sup>43</sup>. Such measures could introduce the risk of chemical contamination to donor human milk (DHM).

The VCN recommended the following protocols for HMB staff:

Regular handwashing.

Use of gloves when handling bottles or bags containing donated milk.

Avoiding contact with their face or glasses.

Protecting their skin from frequent exposure to soap, alcohol gel, and water.

Moisturizing their hands after work shifts.

Limiting access to facilities, including laboratories and offices.

Maintaining social distancing among staff.

Self-isolating for 14 days if exposed to symptomatic individuals.

Considering solitary working procedures where possible <sup>44</sup>.

In France, donors are contacted before each collection to report any symptoms. A distance of 2 meters is maintained between the donor and the collection staff, and the ice box used for storing DHM is disinfected.

#### Contingency Planning

Human milk banks (HMBs) frequently function with limited resources and staffing, which can make it challenging to preserve a steady supply of donor human milk (DHM). Reports from the UK and India reveal that many HMBs are managed by just one or two staff members and can only maintain a DHM supply for 2 to 3 weeks. This situation complicates the continuity of service, particularly in light of social distancing measures and transportation limitations. The challenges faced by HMBs can differ depending on their location—whether within hospitals, where infection control is a concern, or external locations, where transportation for microbiological screening and DHM delivery can be problematic.

Currently, there is no comprehensive method to assess the impact of HMB closures, underscoring the need for a multi-country evaluation to better understand the consequences of such closures or logistical issues. A significant challenge looming for HMBs is the potential necessity to decline DHM requests that were previously accepted, as noted in the USA.

In response, HMBs are exploring contingency plans, including potential collaborations between nearby HMBs to ensure a continuous supply of DHM for vulnerable infants. There is a critical need for global communication platforms that connect HMBs to facilitate the swift exchange of information, data, and protocols during emergencies or pandemics. The VCN has begun efforts to streamline data collection and improve communication networks among milk bank services. It is essential for neonatologists and other healthcare professionals to highlight the importance of HMBs to prevent service interruptions and ensure that DHM access remains prioritized as a critical resource.

## Conclusion

This study highlights that the discussion on human milk banking within Islamic contexts is neither a simple matter of permissibility nor an outright rejection, but rather a nuanced intersection of jurisprudence, ethics, and modern medical practice. The classical doctrine of *raḍāʿ* rightly emphasizes lineage clarity and family structure, yet contemporary neonatal needs—particularly the proven benefits of donor human milk (DHM) for preterm and medically fragile infants—require thoughtful engagement rather than avoidance. The evidence shows that with proper screening, pasteurization, and structured record-keeping, DHM can be delivered safely while respecting Islamic principles. Jurists who allow milk banking emphasize transparency, identifiable donors, and documentation systems, while others call for small-pool or single-donor models to prevent ambiguity in milk kinship. Practical challenges such as donor shortages, logistical constraints, and administrative record management further underscore the need for context-specific solutions. By integrating established *fiqh* principles with current clinical realities, this article proposes a framework that protects both religious integrity and infant welfare. Future efforts should focus on developing standardized tracking systems, enhancing community awareness, and strengthening collaboration between medical professionals and Islamic scholars. Such an approach ensures that Muslim families can benefit from modern neonatal care without compromising foundational ethical and legal values.

## References

- <sup>1</sup> Mohamed B. New estimates show U.S. Muslim population continues to grow. 2018
- <sup>2</sup> Hedayat KM, Pirzadeh R. Issues in Islamic biomedical ethics: a primer for the pediatrician. *Pediatrics*. 2001; 108(4):965–971
- <sup>3</sup> Karadag A, Ozdemir R, Ak M, Ozer A, Dogan DG, Elkiran O. Human milk banking and milk kinship: perspectives of mothers in a Muslim country. *J Trop Pediatr*. 2015;61(3):188–196
- <sup>4</sup> Bertino E, Giuliani F, Baricco M, et al. Benefits of donor milk in the feeding of preterm infants. *Early Hum Dev*. 2013; 89(suppl 2):S3–S6
- <sup>5</sup> Koçtürk T. Foetal development and breastfeeding in early texts of the Islamic tradition. *Acta Paediatr*. 2003; 92(5):617–620
- <sup>6</sup> World Health Organization. Breastfeeding. 2020. Available at: [https://www.who.int/health-topics/breastfeeding#tab=tab\\_2](https://www.who.int/health-topics/breastfeeding#tab=tab_2).
- <sup>7</sup> Shaikh U, Ahmed O. Islam and infant feeding. *Breastfeed Med*. 2006;1(3): 164–167
- <sup>8</sup> Wet Nurse: A Woman Who Breastfeeds and Cares for Another Person's Child.
- <sup>9</sup> Karadag A, Ozdemir R, Ak M, Ozer A, Dogan DG, Elkiran O. Human milk banking and milk kinship: perspectives of mothers in a Muslim country. *J Trop Pediatr*. 2015;61(3):188–196
- <sup>10</sup> Ghaly M. Milk banks through the lens of Muslim scholars: one text in two contexts. *Bioethics*. 2012;26(3):117– 127
- <sup>11</sup> El-Khuffash A, Unger S. The concept of milk kinship in Islam: issues raised when offering preterm infants of Muslim families donor human milk. *J Hum Lact*. 2012;28(2):125–127
- <sup>12</sup> Al- Quran, 4: 23
- <sup>13</sup> Khalil A, Buffin R, Sanlaville D, Picaud JC. Milk kinship is not an obstacle to using donor human milk to feed preterm infants in Muslim countries. *Acta Paediatr*. 2016;105(5):462–467

- <sup>14</sup> El-Khuffash A, Unger S. The concept of milk kinship in Islam: issues raised when offering preterm infants of Muslim families donor human milk. *J Hum Lact.* 2012;28(2):125–127
- <sup>15</sup> Karadag A, Ozdemir R, Ak M, Ozer A, Dogan DG, Elkiran O. Human milk banking and milk kinship: perspectives of mothers in a Muslim country. *J Trop Pediatr.* 2015;61(3):188–196
- <sup>16</sup> Thorley V. Milk siblingship, religious and secular: history, applications, and implications for practice. *Women Birth.* 2014;27(4):e16–e19
- <sup>17</sup> Khalil A, Buffin R, Sanlaville D, Picaud JC. Milk kinship is not an obstacle to using donor human milk to feed preterm infants in Muslim countries. *Acta Paediatr.* 2016;105(5):462–467
- <sup>18</sup> . Oxford Islamic Studies Online. Fatwa. In: Esposito JL, ed. *The Oxford Dictionary of Islam*. Oxford, United Kingdom: Oxford University Press; 2020
- <sup>19</sup> El-Khuffash A, Unger S. The concept of milk kinship in Islam: issues raised when offering preterm infants of Muslim families donor human milk. *J Hum Lact.* 2012;28(2):125–127
- <sup>20</sup> Ghaly M. Milk banks through the lens of Muslim scholars: one text in two contexts. *Bioethics.* 2012;26(3):117– 127
- <sup>21</sup> Rigourd V, Nicloux M, Giuseppi A, et al. Breast milk donation in the Muslim population: why it is possible. *Am J Pediatr.* 2018;4(1):12–14
- <sup>22</sup> Ghaly M. Milk banks through the lens of Muslim scholars: one text in two contexts. *Bioethics.* 2012;26(3):117– 127
- <sup>23</sup> Thorley V. Milk siblingship, religious and secular: history, applications, and implications for practice. *Women Birth.* 2014;27(4):e16–e19
- <sup>24</sup> Oxford Islamic Studies Online. Fatwa. In: Esposito JL, ed. *The Oxford Dictionary of Islam*. Oxford, United Kingdom: Oxford University Press; 2020
- <sup>25</sup> Onat G, Karakoç H. Informal breast milk sharing in a Muslim country: the frequency, practice, risk perception, and risk reduction strategies used by mothers. *Breastfeed Med.* 2019;14(8): 597–602
- <sup>26</sup> Ozkan H, Tuzun F, Kumral A, Duman N. Milk kinship hypothesis in light of epigenetic knowledge. *Clin Epigenetics.* 2012;4(1):14
- <sup>27</sup> Khalil A, Buffin R, Sanlaville D, Picaud JC. Milk kinship is not an obstacle to using donor human milk to feed preterm infants in Muslim countries. *Acta Paediatr.* 2016;105(5):462–467
- <sup>28</sup> Rigourd V, Nicloux M, Giuseppi A, et al. Breast milk donation in the Muslim population: why it is possible. *Am J Pediatr.* 2018;4(1):12–14
- <sup>29</sup> Khalil A, Buffin R, Sanlaville D, Picaud JC. Milk kinship is not an obstacle to using donor human milk to feed preterm infants in Muslim countries. *Acta Paediatr.* 2016;105(5):462–467
- <sup>30</sup> Karadag A, Ozdemir R, Ak M, Ozer A, Dogan DG, Elkiran O. Human milk banking and milk kinship: perspectives of mothers in a Muslim country. *J Trop Pediatr.* 2015;61(3):188–196
- <sup>31</sup> Ozdemir R, Ak M, Karatas M, Ozer A, Dogan DG, Karadag A. Human milk banking and milk kinship: perspectives of religious officers in a Muslim country. *J Perinatol.* 2015;35(2):137–141
- <sup>32</sup> Karadag A, Ozdemir R, Ak M, Ozer A, Dogan DG, Elkiran O. Human milk banking and milk kinship: perspectives of mothers in a Muslim country. *J Trop Pediatr.* 2015;61(3):188–196
- <sup>33</sup> Alnakshabandi K, Fiester A. Creating religiously compliant milk banks in the Muslim world: a commentary. *Paediatr Int Child Health.* 2016;36(1):4–6
- <sup>34</sup> Thorley V. Milk siblingship, religious and secular: history, applications, and implications for practice. *Women Birth.* 2014;27(4):e16–e19
- <sup>35</sup> Alnakshabandi K, Fiester A. Creating religiously compliant milk banks in the Muslim world: a commentary. *Paediatr Int Child Health.* 2016;36(1):4–6
- <sup>36</sup> Wang, L., Shi, Y., Xiao, T., Fu, J., Feng, X., Mu, D., ... Working Committee on Perinatal and Neonatal Management for the Prevention and Control of the 2019 Novel Coronavirus Infection. (2020). Chinese expert consensus on the perinatal and neonatal management for the prevention and control of the 2019 novel coronavirus infection (First edition). *Ann Transl Med.* 8(3), 47. <https://doi.org/10.21037/atm.2020.02.20>
- <sup>37</sup> Furlow, B. (2020). US NICUs and donor milk banks brace for COVID-19. *Lancet Child Adolesc Health.*, 4, 355. [https://doi.org/10.1016/S2352-4642\(20\)30103-6](https://doi.org/10.1016/S2352-4642(20)30103-6)
- <sup>38</sup> Moland, K. M., de Paoli, M. M., Sellen, D. W., van Esterik, P., Leshabari, S. C., & Blystad, A. (2010). Breastfeeding and HIV: Experiences from a decade of prevention of postnatal HIV transmission in sub-Saharan Africa. *International Breastfeeding Journal*, 5, 10. <https://doi.org/10.1186/1746-4358-5-10>



- <sup>39</sup> European Milk Bank Association. (2020). Covid-19: European milk bank association position statement. In. <https://europeanmilkbanking.com/covid-19-emba-position-statement/> Accessed 2024-13-05
- <sup>40</sup> Asadi, S., Gaaloul Ben Hnia, N., Barre, R. S., Wexler, A. S., Ristenpart, W. D., & Bouvier, N. M. (2020). Influenza A virus is transmissible via aerosolized fomites. *Nature Communications*, 11(1), 4062. <https://doi.org/10.1038/s41467-020-17888-w>
- <sup>41</sup> Chin, A. W. H., Chu, J. T. S., Perera, M. R. A., Hui, K. P. Y., Yen, H.-L., Chan, M. C. W., ... Poon, L. L. M. (2020). Stability of SARS-CoV-2 in different environmental conditions. *The Lancet Microbe*, 1, e146. [https://doi.org/10.1016/S2666-5247\(20\)30003-3](https://doi.org/10.1016/S2666-5247(20)30003-3)
- <sup>42</sup> Dhillon, P., Breuer, M., & Hirst, N. (2020). COVID-19 breakthroughs: Separating fact from fiction. *The FEBS Journal*, 287, 3612–3632. <https://doi.org/10.1111/febs.15442>
- <sup>43</sup> Marinelli, K. A., & Lawrence, R. M. (2020). Safe handling of containers of expressed human milk in all settings during the SARS-CoV-2 (COVID-19) pandemic. *Journal of Human Lactation*, 36, 498–501. <https://doi.org/10.1177/0890334420919083>
- <sup>44</sup> Yan, Y., Chen, H., Chen, L., Cheng, B., Diao, P., Dong, L., ... Li, H. (2020). Consensus of Chinese experts on protection of skin and mucous membrane barrier for healthcare workers fighting against coronavirus disease 2019. *Dermatologic Therapy*, 33, e13310. <https://doi.org/10.1111/dth.13310>