

Milk Banking in Turkey: Review

Türkiye’de Süt Bankaları

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ABSTRACT The ideal form of infant feeding is breastfeeding by his/her own mother. In cases where this is not possible, the best form of feeding is that by a wet nurse with no risk of disease transmission. If this is not possible, pasteurized human milk obtained from milk banks is the third form of best nutrition. Utilization of breast milk banks, which represent one of the ideal nutrition forms for the baby, is a widespread practice in western countries. Milk banks in Turkey have become a matter of public agenda after the announcement of the Ministry of Health concerning the establishment of breast milk banks, giving rise to some debate on the topic. These discussions often center around the issue of milk relationship in the concept of Islam. Upon objections by the Muslim clerics to the establishment of milk banks in terms of milk kinship, the Ministry of Health modified the project in March 2013 and declared that they would be established as wet nurse centers. This paper reviews approaches to infant nursing in different cultures, with a brief account on the development of milk banks in the world. It also discusses milk banks in the light of juristic approaches, particularly from Islamic jurists.

Key Words: Breast feeding; religion; İslam; ethics, medical

ÖZET Bebek beslenmesinde en ideal beslenme şekli bebeğin kendi annesi tarafından emzirilmesidir. Bunun mümkün olmadığı durumlardaki en iyi beslenme şekli hastalık bulaşma riski olmayan bir sütanne tarafından emzirilmesidir. Eğer bu da mümkün değilse süt bankalarından alınan pastörize insan sütü üçüncü sıradaki en iyi beslenme şeklidir. Bebek için en ideal beslenme şekillerinden biri olan anne sütü bankaları batı ülkelerinde yaygınlaşmış bir uygulamadır. Türkiye’de süt bankaları sağlık bakanlığının anne sütü bankası kuracağını açıklamasıyla kamuoyunun gündemine girmiş ve bu konu üzerinde çeşitli tartışmalar olmuştur. Bu tartışmaların odağında daha çok İslam dinindeki süt akrabalığı kavramı bulunmaktadır. Süt akrabalığı kavramı nedeniyle süt bankası kurulmasına din adamlarınca itirazların olması üzerine Sağlık Bakanlığı 2013 yılı mart ayında bu projeyi modifiye ederek sütanne merkezleri kurmaya karar verildiğini açıklamıştır. Bu yazımızda farklı kültürlerde bebeğin emzirilmesiyle ilgili yaklaşımlardan ve süt bankalarının dünyadaki gelişiminden bahsedilmektedir. Ayrıca Türkiye’deki hukukçularının da dahil olduğu İslam hukukçuları tarafından ele alınan süt bankası meselesi konu edilmiştir.

Anahtar Kelimeler: Emzirme; din; İslam; etik, tıbbi

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BENEFITS OF BREASTFEEDING FOR THE INFANT AND THE MOTHER

Breastfeeding has important benefits for the health of the mother and the infant. Mother’s milk represents the best nutrition for the offsprings of all mammals, because it is of sufficient amount and qual-

ity to meet the offspring's needs. For instance, the milk of a mother giving a premature birth is different in terms of its contents from that of mothers with term delivery.¹ It is well-established that breast milk provides the essential nutrients for optimal growth and the water needed for proper hydration, and consists of protective factors against infections and allergies, constituting a proper bond between the mother and the baby.² Breast-fed infants are at a lower risk of developing otitis media, gastroenteritis, lower respiratory tract infections, urinary tract infections, obesity, diabetes, childhood leukemia, sudden infant death syndrome, and necrotizing enterocolitis (NEC). Breastfeeding also has a positive impact on the psychology of the infant. Nursing mothers, on the other hand, have a lower risk for type II diabetes mellitus, breast and ovarian cancers, and heart attack. Moreover, breastfeeding is associated with decreases in postpartum hemorrhages and a more rapid return to maternal weight before pregnancy.³ In the first weeks of life, Bifidobacterium species predominate in the intestinal flora of babies fed on mother's milk, whereas Enterobacter species are predominant in formula-fed infants. It has been reported that the incidence of necrotizing enterocolitis is decreased when the intestines are colonized by non-pathogenic microorganisms such as Lactobacilli and Bifidobacteria and if more weight is placed on breastfeeding than formula feeding.⁴

The use of human milk obtained from milk banks reduces the risk of developing NEC, and accordingly, newborn morbidity and mortality in neonatal intensive care units. Thus, with their contribution to reduced morbidity and mortality in a particular population, milk banks can be considered among preventive health care services, and therefore among public health practices.⁵ It has been observed that, compared with formula feeding, infants fed on milk from milk banks, particularly premature infants, have a reduced risk for the development of NEC, along with improvements in the development of the central nervous system.⁶

In a study conducted at the University of Illinois in America, intestinal mRNAs of infants receiving breast milk and formula feeding were

investigated. It was shown that different genes were activated in the intestines of the two feeding groups. The contents of the diet significantly affected the identification of hundreds of genes.⁷

DIFFERENT CULTURAL AND RELIGIOUS APPROACHES TO FEEDING WITH BREAST MILK

Being the easiest, cheapest, and the most ideal form of nutrition, breastfeeding dates back to primitive tribes and ancient civilizations. We have learned from the Ebers Papyrus, an Egyptian medical papyrus dating to 1534 BC, that in ancient Egyptian civilization babies were breast-fed for three years.⁸

In the most ancient sources of Indian civilization, for example in The Vedic Age, milk and the breast are considered to be symbols of longevity and nectarine sweetness. In the Atharva Veda, the breast is depicted as a pitcher full of nectar. In the Yajur Veda, breast milk is defined as a drink in the middle of the flood and the breast as a fountain filled with redolent and sweet sap. The Charak Samhita emphasizes the importance of breastfeeding. The Kashyap Samhita glorifies the quality of breast milk as having great potency and providing longevity. The Sushruta Samhita describes breast milk as an eternal and sacred sap, providing the baby with vitality and longevity and the gods feeding the baby with beverage of immortality.^{9,10}

In Jewish belief, creation of women with ability to produce milk is considered to be the will of god and depriving of a woman of her child's breastfeeding is not appreciated by the rabbis. The recommended duration of breastfeeding is 24 months in the Talmud, but some rabbis, for example Rabbi Yehoshua, prolong this time up to 4 or 5 years. A woman is not allowed to breastfeed another child unless enough breast milk is warranted for her own child. In addition, other liabilities (including housework) of the mother are reduced so that sufficient quantity and quality of milk is ensured and the mother is requested to take care of feeding herself properly for the production and continuance of breast milk. If breastfeeding of the mother is not possible, then providing milk from a wet nurse or

an animal such as goat is advised.¹¹ While describing the Parable of Moses, The Qur'an says: "*We revealed to Moses' mother, 'Suckle him and if you fear for him, cast him into the water. Do not fear or grieve; We will return him to you and make him one of the messengers*".¹²" (Al-Qasas 28:7) Afterwards, Moses' mother enters the palace of Pharaoh as a wet nurse and breastfeeds Moses. Although the existence of wet nursing as a body was known in the time of Moses (pbuh), the Torah does not mention of milk kinship as a restriction for those who are forbidden to get married to. Such a relation has not been incorporated into Christian consciousness, either.¹³ There is no remark in the Bible as to whether Jesus was breastfed by Mary, though in art works related to Christianity, Jesus is portrayed while being breastfed by Mary.¹⁴

Burdette et al. examined the relationship between the mother's religious beliefs and initiation and continuation of breastfeeding and found that the likelihood of initiation of breastfeeding was higher in conservative Protestants, Muslims, and members of other religious beliefs than in those who were not linked with any religious group. There was a weaker association between affiliation to a religious group and continuation of breastfeeding.¹⁵ Encouragement of breastfeeding in religious sources may be among one of the main reasons of this association.

HISTORY OF MILK BANKS

The oldest document related to the sharing of human breast milk is seen in the laws of Hammurabi dating back to 1790 B.C. According to the Old Babylonian laws, if the baby cannot be breastfed by the mother, he/she is expected to be submitted to relatives, friends, or even to other persons to be breastfed.¹⁶ This document provides evidence showing that wet nursing is quite an old practice.

The concept of establishing milk banks was born in the early 1900s due to the difficulties of living of the wet nurse with the baby in the same environment. The first milk bank was founded in Vienna, Austria, in 1909.^{16,17} The first milk bank in North America was founded in Boston in 1919.¹⁸

The concept of donor human milk was first used in 1914 in the medical literature. In the United States, donor human milk has been used for over 90 years. In the early 1900s, pediatricians who noticed that premature infants fed by their mothers' milk enjoyed better health status started to use donor human milk. Due to the lack of cooling systems and the diversity of pasteurization techniques, preservation of human milk was almost impossible in the period from 1920 to 1930. For this reason, donor human milk was supplied from nursery centers close to the hospitals. The first human milk supply system in the USA was set up by Boston Wet Nursing Agency. In the following years, with the developments in technology and medicine, high survival rates obtained in low-birth-weight infants fed on human milk increased the use of donor human milk. In early 1980s, however, the discovery of the HIV virus resulted in a temporary drop in demand for pasteurized donor human milk (PDHI). With the development of laboratory methods to detect HIV and new scientific evidence showing the benefits of human milk feeding, human milk banks regained popularity from the mid-1980s. In 1985, the Human Milk Bank Association of North America (HMBANA) was established. HMBANA milk banks distributed more than 1 million oz of human milk in 2008.¹⁹

Compared to Islamic countries, milk bank practices have become widespread in Western countries. The main reason for this is the lack of Islamic concept of milk kinship in Christianity and other religions.

BREASTFEEDING AND MILK BANKS IN THE ISLAMIC RELIGION

Although milk banks began to spread throughout the world in 1980s, Islamic countries approached this issue cautiously. The main reason for this is that three types of kinship are defined in the Islamic religion, including kinship by blood, by marriage, and by milk.²⁰ In Islam, just as in blood kinship, marriage is not allowed in milk kinship as defined in Surat An-Nisa 4:23 "*Prohibited to you [for marriage] are your [milk] mothers who nursed you, your sisters through nursing...*"^{21,22}

The Qur'an defines the mutual life between the mother and baby as 30 months. *"And We have enjoined upon man, to his parents, good treatment. His mother carried him with hardship and gave birth to him with hardship, and his gestation and weaning [period] is thirty months."*²³ In another verse, the recommended duration for breastfeeding is 2 years: *"Mothers may breastfeed their children two complete years for whoever wishes to complete the nursing [period]."* (Surat Al-Baqarah 2:233).^{8,24}

Concerning milk kinship, there is also a hadith saying that "Those prohibited by religion in terms of birth and parentage are also prohibited in terms of suckling milk."²⁵

Parkes mentions a common belief in Islam in his article on milk kinship. It is believed that wet nurse influences the character of the child through her milk.²⁶ Thus, care should be taken while determining or selecting a wet nurse for the baby's breastfeeding.

International Islamic Fiqh Academy (IIFA) issued a fatwa in 1985, which prohibited establishment of milk banks in Islamic countries and feeding Muslim children from milk banks. In contrast, a famous and influential Egyptian Islamic jurist, al-Qaradawi issued a fatwa in 1993 stating that milk banks are established for a lofty purpose, and thus women who donate their milk to milk banks deserve to be rewarded by God and to be admired by people. His fatwa concludes that Islam does not prevent establishment of milk banks, nor supplying milk from these banks, because bottle-feeding or nasogastric tube will not result in milk kinship and breast-feeding is a prerequisite for the establishment of kinship.²⁷ The European Council for Fatwa and Research (ECFR), despite opposition by many Islam jurists and IIFA, expressed their attitude in favour of al-Qaradawi's fatwa, announcing that giving donor human milk to premature infants in neonatal intensive care units would not result in milk kinship. To explain how they came to this conclusion, they put forward three justifications. The first evidence is that the Qur'an uses the term "breastfeeding" for the formation of a kinship that

will pose an obstacle to marry (Nisa 4:23). The verse states that wet nursing will not occur with only drinking milk. For the establishment of kinship, there should be a special relationship with close contact between the mother and the child. The second evidence is that the number of breastfeeding is important for the establishment of kinship. If there is any doubt about the number of breastfeeding, then kinship will not be the case. The third evidence is that, if a practice is a matter of debate in terms of religion, Islam tends to prefer the better path and avoids the one that would cause difficulties for its followers. In this context, the ECFR announced it to be permissible to establish human milk banks, to donate milk, and to supply milk from these banks. Following this statement, some Islamic countries are considering to establish milk banks.²⁸

For the majority of Islamic jurists, there has not been a distinction as to the access of the milk to the baby's stomach. No matter how it reaches the stomach, whether by breastfeeding, bottle, or through the nostrils, the important thing is the transport of milk to the baby's stomach. However, according to the Jafari school of thought, a branch of Shia Islam, breastfeeding is considered to be a prerequisite for the establishment of kinship. While even small amounts of milk are enough to establish kinship according to Hanafis, Malikis, and some Hanbalis, breastfeeding of at least five times is a necessity for the establishment of kinship for Shafi'is and other Hanbalis. According to Shia Jafaris, the stipulated number of breastfeeding is at least ten times. In addition, according to both Sunni and Shia jurists, the baby should be an infant, that is, the age should not exceed two years for the justification of kinship.²³

MILK BANKS IN TURKEY

Milk banks entered the public agenda when the Ministry of Health announced plans to establish a milk bank in 2012. Upon objections by the Muslim clerics to the establishment of milk banks in terms of milk kinship, the Ministry of Health modified the project in March 2013 and declared that they would be established as wet nurse centers.

According to a Turkish Islamic jurist, Hayrettin Karaman, there should be an absolute necessity for giving an unknown woman's milk to the baby, that is, the child's life should be vitally at stake unless he receives the milk. Under this circumstance, the milk is given due to a necessity without knowing who the mother is; therefore, people cannot be held responsible for doing something they actually do not know. In the absence of necessity for a specific baby, if the milk is to be taken and stored, then the owner of the milk should be labeled on the container and recorded appropriately. When this milk is given to a baby, then identity of the baby should be noted in the same record of the wet nurse and the child's family should be informed, as well. If a baby is breastfed at different times or successively by more than one woman, each of these women will be considered to be a wet nurse. Thus, a child who receives mixed milk from more than

one woman will have more than one wet nurse. What plays an effective and determinant role in the establishment of wet nursing is the transport of the milk to the baby's stomach, not the place, source, and type of milk delivery. Muslims who want to take advantage of milk banks should be aware of these considerations and act responsibly.²⁹

CONCLUSION

Donor human milk feeding, which is a more ideal form of nutrition than formula feeding, is one of the subjects that give rise to different approaches among Islamic jurists. Whenever there are discrepant approaches, there is a tendency to act in favour of the opinion of the majority. Using milk from a known donor after completely eliminating the risk of disease transmission seems to be justified in ethical terms for the implementation of milk banks in Islamic countries.^{30,31}

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