



ORIGINAL ARTICLE

# Knowledge and Opinions of Turkish Parents About the Human Milk Bank

## Türk Ebeveynlerinin Anne Sütü Bankasına İlişkin Bilgi ve Görüşleri

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### Abstract

**Objective:** This study aims to determine the knowledge and opinions regarding human milk banks among Turkish parents with babies in the neonatal intensive care unit.

**Method:** The data of the study were collected using a questionnaire created to determine the socio-demographic characteristics of the parents, and their knowledge levels and opinions about the human milk bank. The chi-square test was used for categorical assessments, the Student's t-test for comparisons of two-group averages, and One-Way Analysis of Variance -with Tukey test- for comparisons of three or more groups for analysing data.

**Results:** The mean knowledge score of the parents about the human milk bank was 33.33±18.84, and for the mothers and fathers, scores were 32.93±19.69 and 33.73±18.05 respectively. It was determined that the parents were generally indecisive in their views regarding the human milk bank.

**Conclusion:** It was determined that the parents' level of knowledge about human milk banks were low. In line with the results, it is recommended that health personnel inform the society about breast milk banks.

**Keywords:** Human milk, milk bank, knowledge, opinion, mother, father

### Öz

**Amaç:** Bu çalışma, yenidoğan yoğun bakım ünitesinde bebekleri olan Türk ebeveynlerin anne sütü bankalarına ilişkin bilgi ve görüşlerini belirlemek amacıyla yapılmıştır.

**Yöntem:** Araştırmanın verileri, ebeveynlerin sosyo-demografik özelliklerini, anne sütü bankası hakkındaki bilgi düzeylerini ve görüşlerini belirlemek amacıyla oluşturulan anket formu kullanılarak toplanmış, kategorik değerlendirmeler için ki-kare testi, Student t-testi -iki grup ortalamalarının karşılaştırılması testi ve verilerin analizi için üç veya daha fazla grubun karşılaştırılması için- Tukey testi ile Tek Yönlü Varyans Analizi testi kullanılmıştır.

**Bulgular:** Anne ve babaların anne sütü bankası bilgi puan ortalaması 33,33±18,84, anne ve babaların bilgi puan ortalaması sırasıyla 32,93±19,69 ve 33,73±18,05'tir. Ebeveynlerin anne sütü bankasına ilişkin görüşlerinde genel olarak kararsız kaldıkları belirlendi.

**Sonuç:** Anne ve babaların anne sütü bankaları ile ilgili bilgi düzeylerinin düşük olduğu belirlendi. Sonuçlar doğrultusunda sağlık personelinin anne sütü bankaları hakkında toplumu bilgilendirmesi önerilir.

**Anahtar Kelimeler:** Anne sütü, süt bankası, bilgi, görüş, anne, baba

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Received: October 31, 2022

Accepted: December 22, 2022

**Cite this article as:** Sürmeli Y, Vefikuluçay Yılmaz D. Knowledge and Opinions of Turkish Parents About the Human Milk Bank. Mediterr Nurs Midwifery 2023; 3(1):10-17



## Introduction

The World Health Organization recommends that babies receive only human milk for the first 6 months after birth, start liquid and solid additional foods from the sixth month, and continue to receive human milk with these foods until at least two years of age (1). Because breastfeeding supports healthy brain development and protects babies from many diseases such as infections and obesity (2). However, not every baby is born and raised under the same circumstances, and therefore, some cannot receive breast milk. Furthermore, in the presence of various diseases of the mother and/or baby, breastfeeding may not be possible or recommended (3-5). For this group of infants who cannot receive breast milk and is not recommended to be taken, the need for breast milk is met through milk sharing or milk banks.

In the past, women who did not have breast milk or could not breastfeed required a means to address this problem, which is among the reasons for the development of traditional wet nursery (6). With its broad definition, wet-nursing is defined as a traditional practice that emerged as a necessity due to numerous reasons, including the death of mothers during or immediately after birth, lack of sufficient milk for their babies if they were alive; or the possible dangers of breastfeeding due to illness. In other words, in this application, the baby is directly breastfed by another woman who is not the mother of the baby. The practice of wet nursing dates back 5.000 years. It has been prevalent in many regions from Europe to China, from the Islamic geography to Jewish culture (7). However, when the history of wet nursing is examined, it is seen that it is actually more common in the Arab-Islamic society (6). In our age, although the practice of wet-nursing has all but disappeared with modern life, it is known that it is still encountered infrequently, usually limited to small regions and social surroundings. In this context, the study by Fouts et al. (8), which included 258 communities based on the human relations area files database, it was reported that babies were continuing to be breastfed by someone other than the mother in 97 of the 104 communities examined. Since unofficial milk sharing is done with wet nursing through interpersonal relationships, risks such as disease transmission may be relevant (9). For this reason, it is emphasized that it may be preferable to meet the milk need from milk banks implemented in western countries in recent years, since the risks are less.

### Main Points

- 52.6% of mothers and 51.6% of fathers agreed with the statement "Breast milk banks should definitely be established in our country."
- 36.8% of the mothers and 35.8% of the fathers did not agree with the statement that feeding the baby with milk taken from the breast milk bank is a sin according to my religious belief.
- It was found that fathers who do not want someone else to breastfeed their baby have a higher and significant mean of knowledge about breast milk bank.
- It was determined that the mean score of knowledge about the breast milk bank of the mothers who stated that their milk siblings could marry was high and significant.

Human milk banks (also known as breastmilk banks) which support breastfeeding and are usually non-profit organizations that collect breast milk from volunteer donors, analyse it, ensure its safety via pasteurizing, store it under appropriate conditions, and distribute it when necessary (10-12). Human milk banks have been established in more than 60 countries around the world. As of 2021, there are 263 active human milk banks in Europe and their number is increasing (13). The world's largest human milk banking system is in Brazil, which boasts around 224 human milk banks and 214 breast milk collection points (14). There is still no breast milk bank in our country (Turkey) due to many reasons such as the fact that health personnel do not have enough information about breast milk donation due to religious sensitivities created by different opinions about the religion of Islam and that these personnel do not have enough information about breast milk donation. cannot direct mothers (15,16). However, breast milk banks support women who have problems in breastfeeding and provide quality control in the collection and processing of breast milk. Thanks to this support, the chance of survival of premature newborns increases. For this reason, premature babies hospitalized in the neonatal intensive care unit (NICU) need milk that they can obtain from these institutions, especially if they cannot receive breast milk for various reasons. In this context, breast milk banks can be a good option for premature babies in our country.

In studies on breast milk banks in Turkey and other countries, the sample group generally consists of mothers (16-19). Generally, doctors and mothers decide to feed babies who cannot breastfeed in the NICU. However, in this process, it is forgotten that fathers as well as mothers have the right to decide on the nutrition of their babies. This study was planned with the assumption that it would be important to determine the knowledge levels and opinions of mothers and fathers who have babies in NICU about breast milk bank together so that steps can be taken to establish a breast milk bank in Turkey. He also thought that the results of the research could guide the education given by nurses about the use and need of breast milk banks. It is noteworthy that there are a limited number of studies on human milk banking in the literature and only mothers' views on this subject are determined. However, in this process, it was thought that fathers as well as mothers should take part in the decision mechanisms on the feeding of the baby, and in this study, it was aimed to investigate the knowledge levels and opinions of both parents.

## Material and Methods

The research was descriptive study conducted. Participants were parents who had a baby in the NICU at a university hospital in Turkey. The number of parents to be included in the sample of the study was calculated by power analysis based on correlation analyses used to determine relationships between the research variables (20). The

calculated sample size was based on power analyses by the G\*Power 3.1.10 program.

At a power of 0.90, a medium effect size of 0.15 ( $R^2=0.15$ ), and 0.05 alpha level of significance, the minimal sample size that was required was 188 parents (achieve a power of 80.276%). The inclusion criteria for parents were ability to speak Turkish as a native language, were older than 18 years of age, and agreed to participate in the study were included in the study.

### Data Collection

The data of the study were collected with a questionnaire prepared as a result of the literature review in order to determine the socio-demographic characteristics of the parents, their knowledge, and opinions about wet nurses and breast milk banks (16-19,21,22). Parents' knowledge on human milk banking was collected using the "information form about the human milk bank", consisting of 21 items. The 21-item "information form about the human milk bank", which was form was created by the researchers using relevant literature and was sent by e-mail to five faculty members working in the field of obstetrics and gynaecology nursing to receive their evaluation ("3, appropriate", "2, appropriate but should be corrected/rephrased", and "1, should be removed"). The opinions of the experts were transferred to the computer program and the content validity indices and content validity ratio were calculated in line with the expert opinions. The content validity index of the test items ranged from 0.80 (Item 21) to 1.

The minimum value to be obtained for each item was determined as 0.99 ( $p=0.05$ ) in the evaluation made by the experts using the Lawshe technique to decide on compliance in the literature (23). In the 1<sup>st</sup> and 5<sup>th</sup> items of the test, arrangements were made in terms of language and expression in line with expert suggestions. The 21<sup>st</sup> item in the information test, whose content validity index was determined as 0.80, was re-examined by the researchers and it was decided to keep it in the final form, as it was thought that the removal of this item could reduce the representation power of the content. The overall content validity of the 21 items was calculated as 0.99. This finding reveals that the test represents approximately 99% of the content to be measured and it can be considered proof of achieving excellent content validity. In the final form (after correction in line with expert opinion), correct answers were evaluated as "1" point, and incorrect and "do-not-know" answers were scored as "0" points. The highest score that could be obtained from the information form was 21 points, and the scores were converted to 100-point scoring.

In order to evaluate the applicability and comprehensibility of the finalized questionnaire, it was applied to 20 parents (10 mothers, 10 fathers) who met the inclusion criteria of the study. As a result of the pre-application, no changes were made to the survey questions. The data were collected at different times in order to prevent the couples from influencing each other in the mother's room or waiting

room of the NICU, using a face-to-face interview method to determine their knowledge and opinions about the human milk bank. An appointment was made to reach the spouses of the mothers who agreed to participate in the study. The questionnaire was applied to the fathers who were given an appointment in the mother's room or waiting room of the NICU. The application of the questionnaire to the parents participating in the study took approximately 20 minutes.

### Ethical Aspects

All procedures performed in this study involving human participants were conducted in accordance with the ethical standards and according to the principles of the Helsinki Declaration. Before collecting the research data, written approval from the Clinical Research Ethics Committee of the Mersin University (date: 7/11/2017, number: 32705888-903.99) and the necessary institutional permission from the university hospital where the study was conducted was obtained.

### Statistical Analysis

To determine the relationship between the research variables, as a result of the power analysis made according to chi-square tests, the required sample size was determined to be at least 188 individuals (94 pairs) in total. Percentage, mean, standard deviation, and maximum and minimum values were calculated using a statistical package program (SPSS) to obtain descriptive values. The normality of distribution and homogeneity of variances in quantitative variables were evaluated using the Shapiro-Wilk and Levene's test, respectively. While analysing data, the chi-square test was used for categorical evaluations, Student's t-test for comparisons of two-group averages, and One-Way Analysis of Variance -with Tukey test- for comparisons of three or more groups. The significance level of the tests was accepted as  $p<0.05$ .

### Results

It was found that all of the parents included in the study were married, 45.3% of the mothers and 46.3% of the fathers were between the ages of 27-35 years. Nearly half (49.5%) of the mothers were high school graduates and 25.3% of them were employed, while 53.7% of the fathers were high school graduates and 9.5% were unemployed. It was determined that 15.8% of the parents were living in an extended family structure and 41.1% of them had had their first child. It was found that the income of 21.1% of the mothers and 16.8% of the fathers were less than their expenses (see Table 1).

Regarding the babies (60% males and 40% females), 78.9% were hospitalized in the NICU with a diagnosis of prematurity, 5.3% with jaundice, 1.1% with pneumothorax, 3.1% with hypoglycaemia, 2.1% with pneumonia, 7.4% with low birth weight, and 2.1% with congenital heart disease.

In Table 2, the distribution of parents' views concerning the human milk bank is described. It was found that most

mothers supported the establishment of human milk banks (46.3%), whereas most of the fathers were undecided concerning this matter (46.3%). It was determined that 31.6% of the mothers did not want to donate their own milk, and 23.2% of fathers did not want their wives to donate milk to

human milk banks. In the study, 28.43% of the mothers and 34.7% of fathers stated that feeding their babies with milk obtained from the human milk bank was a sin according to their religious beliefs (see Table 2).

**Table 1.**  
**Socio-demographic Characteristics (n=190)**

	Mother $\bar{X} \pm SD$		Father $\bar{X} \pm SD$	
<b>Age</b>	28.69±6.49		31.41±6.65	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
18-26 years	38	40.0	24	25.3
27-35 years	43	45.3	44	46.3
36 years and older	14	14.7	27	9.5
<b>Level of education</b>				
Illiterate	-	-	-	-
Literate	-	-	-	-
Primary school graduate	13	13.7	6	6.3
secondary school graduate	15	15.8	21	22.1
High school graduate	47	49.5	51	53.7
Graduated from a university	20	21.1	17	17.9
<b>Working status</b>				
Worker	24	25.3	86	90.5
Not working	71	74.7	9	9.5
<b>Income status</b>				
Income less than expenses	1	1.1	3	3.2
Income equals expense	74	77.9	76	80.0
Income more than expenses	20	21.1	16	16.8
<b>Family type</b>				
	<b>Parents</b>			
	<b>n</b>		<b>%</b>	
Nuclear family	80		84.2	
Extended family	15		15.8	
<b>Number of living children</b>				
1 child	39		41.1	
2 children	33		34.7	
3 children	23		24.2	
<b>Longest living settlement</b>				
	<b>Mother</b>		<b>Father</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
Province	50	52.6	51	53.7
County	31	32.6	38	40.0
Village-town	14	14.7	6	6.3
<b>Longest living region</b>				
Northern Anatolia Region	12	12.6	7	7.4
Southern Anatolia Region	50	52.6	56	58.9
Western Anatolia Region	12	12.6	8	8.4
Eastern Anatolia Region	14	14.7	15	15.8
Central Anatolia Region	7	7.4	9	9.5

SD=standard deviation

The mean knowledge score of the mothers about the human milk bank was 32.93±19.69 points, while the mean score was 33.73±18.05 points among fathers ( $p>0.05$ ). Overall, the total knowledge score of the parents was 33.33±18.84 points. The lowest score obtained from the human milk banking knowledge test was 0 and the highest score was 80.95 (see Table 3).

The distribution of the mean knowledge scores about human milk banking according to the views of the parents about wet nursing is given in Table 4. The mean knowledge score of the mothers who thought that wet nursing was beneficial for the baby was found to be significantly higher ( $p<0.05$ ). The mean knowledge score of fathers who thought that wet nursing was beneficial for the baby was determined as 31.97±18.58 points. The mean knowledge score of fathers who did not want someone else to breastfeed their baby (52.38±13.46) was significantly higher than the mean knowledge score of fathers who thought otherwise ( $p<0.05$ ). In further analysis, the significance stemmed from the knowledge score difference between fathers who thought that breast milk was healthier than formula and those who did not want someone else to breastfeed their baby (see Table 4).

## Discussion

With the understanding of the value of breast milk, breast milk banks have become a matter of curiosity and extensive research has begun on breast milk. While mothers' knowledge and opinions about breast milk banks were recorded in studies, fathers' opinions were often excluded. The formation of a secure bond between the baby and the parents can only be possible by meeting the needs of the baby with the participation of the parents (24). With this emerging secure attachment, the physical, emotional and social development of babies is supported (25,26). However, when the domestic and foreign literature on breast milk banks was examined, no study was found that included the views of fathers on milk banks. Some studies conducted in our country show that mothers want breast milk banks to be established and they will support these banks (17,21), but fathers were not included in these studies. In our study, it was determined that approximately half of the mothers (46.3%) supported the establishment of a breast milk bank, and approximately half of the fathers (46.3%) were undecided on this issue. These results suggest that the reasons for parents to support or not support breast milk banks should be investigated. It is thought that these results are due to the differences in the religious and cultural beliefs of the sampled parents and the region where the study was conducted. It also suggests that the reasons for

**Table 2.**  
**Distribution of Parents' Opinions on Human Milk Banking (n=190)**

Item	Parents	Disagree		Undecided		Agree		p*
		n	%	n	%	n	%	
Human milk banks must be established in our country.	Mother	20	21.1	25	6.3	50	52.6	0.760
	Father	17	17.9	29	30.5	49	51.6	
When my baby needs it, I get milk from the human milk bank.	Mother	21	22.1	34	35.8	40	2.1	0.987
	Father	21	22.1	35	36.8	39	41.1	
I would like to donate my milk/wife's milk to the human milk bank for babies in need.	Mother	30	31.6	28	29.5	37	38.9	0.427
	Father	22	23.2	31	32.6	42	44.2	
I recommend that mothers get human milk from the human milk bank when they need it.	Mother	23	24.2	41	43.2	31	32.6	0.682
	Father	19	20.0	40	42.1	36	37.9	
I support the establishment of a human milk bank in our country.	Mother	18	18.9	33	34.8	44	46.3	0.080
	Father	22	23.2	44	46.3	29	30.5	
It is a sin, according to my religious belief, to feed the baby with milk from the human milk bank.	Mother	35	36.9	33	34.7	27	28.4	0.599
	Father	34	35.8	28	29.5	33	34.7	
I believe there is a need for a human milk bank in our country.	Mother	21	22.1	35	36.8	39	41.1	0.387
	Father	23	24.2	42	44.2	30	31.6	
The human milk bank is a good opportunity for babies who cannot get enough human milk.	Mother	14	14.8	46	48.4	35	36.8	0.478
	Father	18	18.9	38	40.0	39	41.1	
Quality milk and formula replace the human milk bank.	Mother	39	41.1	29	30.5	27	28.4	0.485
	Father	31	32.6	33	34.7	31	32.6	

\*Student's t-test

parents to support or not support breast milk banks should be investigated in depth.

In the literature on breast milk banks, it has been determined that mothers have different opinions about the milk taken from these banks. In our study, it was reported that approximately half of the mothers and fathers approved the use of milk from milk banks when necessary. In the study of Ekşioğlu et al. (17), it was determined that more than half of the mothers (52.5%) would buy breast milk from milk banks and would feed their babies with this milk when necessary. When the foreign literature is examined, we see that the rate of mothers who want to feed their babies with the milk they buy from breast milk banks is higher. Kimani-Murage et al. (27) in their study with 868 mothers with children under the age of 3, it was determined that 87% of the mothers stated that they could feed their babies/children with the milk they would buy from breast milk banks. In another study conducted in 2022, it was determined that 71% of mothers who have at least one child between the ages of 20-49, who are breastfeeding or who are breastfeeding their babies,

can feed their babies with milk from breast milk banks (28). However, in addition to positive opinions, there are also opinions that mothers will not feed their babies with the milk they buy from milk banks (22,29). It is thought that the emergence of different opinions in the literature may be due to cultural and religious differences and the parents' lack of knowledge about breast milk banks.

Mothers who cannot breastfeed their babies for various reasons can provide great support to their breast milk banks by expressing their milk and contributing to the breastfeeding of another baby. In our study, it was determined that 38.9% of the mothers donated their milk to breast milk banks, and 44.2% of the fathers were willing to donate their spouse's milk. In studies on breast milk banks in our country, it was determined that the majority of mothers stated that they willing to to donate their milk to these banks if milk banks were opened (21,22,30,31). In researches conducted abroad, it has been determined that the vast majority of mothers are willing to donate their milk to breast milk banks (26,32,33). Our research results show that especially fathers, respond

**Table 3.**  
**Distribution of Parents' Mean Knowledge Scores About Human Milk Banking (n=190)**

Mean knowledge scores about human milk bank	n	M	SD	Minimum score	Maximum score
Mother	95	32.93	19.69	0	80.95
Father	95	33.73	18.05	0	80.95
Total	190	33.33	18.84	0	80.95
p <sup>+</sup>	0.770				

\*Student's t-test, SD=standard deviation

**Table 4.**  
**Distribution of Mean Scores on Breast Milk Banking According to Mothers' and Fathers' Opinions (n=190)**

p	Mean knowledge scores of the mothers regarding human milk banking M SD	n	Opinions on wet nursing	n	Mean knowledge scores of the fathers regarding human milk banking M SD	p
			<b>Thinking that wet nursing is beneficial for baby<sup>+</sup></b>			
0.046	36.36 21.24	55	Beneficial	56	31.9 18.58	0.257
	28.21 16.43	40	Not beneficial	39	36.2 17.19	
			<b>Opinions regarding wet nursing<sup>++</sup></b>			
0.547	29.32 13.95	19	No idea (a)	7	36.73 13.94	0.034 b-d <sup>+++</sup>
	35.12 20.55	61	Breastmilk from a wet nurse is healthier than formula (b)	65	31.8 18.07	
	28.17 23.36	12	Formula is healthier than breastmilk taken from wet nurse (c)	16	31.8 17.70	
	30.15 19.24	3	I don't want another woman to breastfeed my baby (d)	7	52.3 13.46	

\*Student's t-test, \*\* One-Way ANOVA, \*\*\*Tukey test

positively to breast milk donation. This may contribute to the establishment of breast milk banks and, accordingly, to the change in health policies.

Although breast milk banks have many benefits, it should not be forgotten that they may cause some concerns due to ethical problems. Therefore, the government should regularly and comprehensively monitor these mechanisms and institutions. The reason why both mothers and fathers stated that they were hesitant about breast milk banking in our study may be that breast milk banking has just emerged in our country and there is no continuity of government studies on these banks. There are some concerns, not only for ethical reasons, but also for religious reasons. Because in predominantly Muslim societies, babies who receive breast milk from the same donor are considered milk siblings. According to the religion of Islam, it is forbidden for these siblings to marry. There is no study in the literature confirming that milk siblings can marry. However, in our study, it is a remarkable finding that 34.7% of fathers approve that milk siblings can get married. This result may be related to the higher education level of the fathers.

No study has been found that investigates the level of knowledge of parents about feeding their babies with the milk obtained from breast milk banks, which is critical for the originality of our research, and evaluates the views of parents on breastfeeding and their level of knowledge about breast milk banks. This situation can be associated with the fact that there is no breast milk bank in our country and therefore there is no institution where parents can get information about these banks. It is thought that the mother and father's views on breastfeeding, as well as the health of the mother and baby, affect the knowledge scores of breast milk banks. In our study, the mean score of mothers who found breastfeeding beneficial from the breast milk bank information form was found to be significantly higher. This can be explained by the high level of education of mothers (47% high school, 20% university graduate) and increased awareness of the importance of breast milk. Since there is no study in the literature that included fathers in studies on breast milk banks, it is a remarkable finding that fathers who did not want someone else to breastfeed their baby have a higher level of knowledge about breast milk banks than other fathers ( $p < 0.05$ ). This result may be related to the fact that fathers do not find breastfeeding beneficial regardless of their religious beliefs. This result may be related to the fact that fathers do not find breastfeeding beneficial regardless of their religious beliefs.

According to our research findings, mothers and fathers' knowledge of breast milk banking was found to be quite low (mother score average  $32 \pm 93$ , father score  $33 \pm 73$ ). It was observed that fathers who stated that religious belief affected their views on breastfeeding had a high mean of knowledge about breast milk banks, while fathers who stated that their milk siblings should not get married had a low average knowledge scores about breast milk banks. However, no study has been found in the literature on the

effect of parents' religious beliefs on the mean knowledge of breast milk banks. According to these results in our research, it can be said that the religious beliefs of the parents affect the information seeking processes.

## Conclusion

As a result, in our study, it was determined that although the education level of the parents was high, their level of knowledge about breast milk banks was low. This result is extremely important in terms of showing that parents need information about the purpose of human milk banks, how they work, their benefits and how human milk banks can be established and utilized in Islamic countries. Nurses should not forget that cultural values are important in meeting the information needs of individuals. Transcultural nursing care requires knowing how the serviced society perceives the situation in question and how they approach the fundamental features of the situation. These are critical points to be able to provide high-quality and efficient health care in different societies.

**Ethics Committee Approval:** Before collecting the research data, written approval from the Clinical Research Ethics Committee of the Mersin University (date: 7/11/2017, number: 32705888-903.99) and the necessary institutional permission from the university hospital where the study was conducted was obtained.

**Informed Consent:** Informed consent was obtained.

**Peer-review:** Externally peer-reviewed.

**Author Contributions:** Concept – Y.S., D.V.Y.; Design – Y.S., D.V.Y.; Supervision – D.V.Y.; Materials – Y.S.; Data Collection and/or Processing – Y.S.; Analysis and/or Interpretation – Y.S., D.V.Y.; Literature Search – Y.S., D.V.Y.; Writing – Y.S., D.V.Y.; Critical Review – Y.S., D.V.Y.

**Declaration of Interests:** The authors declare that they have no competing interest.

**Funding:** The authors declare that this study had received no financial support.

## References

1. World Health Organization (2019). World Breastfeeding Week. Available from: <https://www.who.int/news-room/events/detail/2019/08/01/default-calendar/world-breastfeeding-week-2019> [Crossref]
2. United Nations International Children's Emergency Fund (2019). Why Family-Friendly Policies Are Critical To Increasing Breastfeeding Rates World Widem. Available from: <https://www.unicef.org/turkiye/en/press-releases/why-family-friendly-policies-are-critical-increasing-breastfeeding-rates-worldwide> [Crossref]
3. World Health Organization and United Nations International Children's Emergency Fund. Baby-friendly hospital initiative: revised, updated and expanded for integrated care.

- Section 3, Breastfeeding Promotion and Support in a Baby Friendly Hospital, 2009:58. [Crossref]
4. Panczuk JS, O'Connor D, Lee SK. Human donor milk for the vulnerable infant: a Canadian perspective. *International Breastfeed Journal* 2014;9:4. [Crossref]
  5. Section on Breastfeeding. Breastfeeding and the use of human milk. *Pediatrics* 2012;129(3):e827-841. [Crossref]
  6. Utku N. Wet nursing in antiquity and Middle Ages: the biological, economic and cultural codes of another's milk. *Journal of Women's Studies* 2020;6(1):51-112. [Crossref]
  7. Güneş HN. A mezzanine floor in socially constructed maternity discourse: wet nursing. *Electronic Journal of Social Sciences* 2019;18(69):252-267. [Crossref]
  8. Fouts HN, Hewlett BS, Lamb ME. A biocultural approach to breastfeeding interactions in central Africa. *American anthropologist*, 2012;114(1):123-136. [Crossref]
  9. Sürmeli Y, Yılmaz-Vefikuluçay D. Nursing and breast milk banks in Turkey and the world. *International Referred Journal of Nursing Researches* 2018;14:114-127. [Crossref]
  10. Arslanoglu S. Establishment of human milk bank in Turkey. A new model suitable for beliefs and values: "Human Milk Center". In: Kılıç I, Ucar A. (editors), *Milk kinship and milk bank*. Isar Publications, 2016: 55-61. [Crossref]
  11. Italian Association of Human Milk Banks *Associazione Italiana Banche del Latte Umano Donato (AIBLUD: www.aiblud.org)*; Arslanoglu S, Bertino E, Tonetto P, De Nisi G, Ambruzzi AM, Biasini A, Profeti C, Spreghini MR, Moro GE. Guidelines for the establishment and operation of a donor human milk bank. *J Matern Fetal Neonatal Med* 2010;23(Suppl 2):1-20. [Crossref]
  12. Ramli N, Ibrahim NR, Hans VR. Human milk banks- The benefits and issues in an Islamic setting. *Eastern Journal of Medicine* 2010;15(4):163-167. [Crossref]
  13. European Milk Bank Association (EMBA). (2021). *Milk Bank*. Available from: <https://europeanmilkbanking.com/map> [Crossref]
  14. FIOCRUZ (2021). *Statistics*. Available from: [https://producao.redeblh.icict.fiocruz.br/portal\\_blh/blh\\_brasil.php](https://producao.redeblh.icict.fiocruz.br/portal_blh/blh_brasil.php) [Crossref]
  15. Kuluçtu A, Özerdoğan N. Human milk bank. *MCBU SBED* 2017;4(2):593-596. [Crossref]
  16. Senturk Erenel A, Ünal Toprak F, Golbasi Z, Pelit Aksu S, Arslan Gürcüoğlu E, Ucar T, et al. A multicenter study for the determination of health care staffs' knowledge and views about human milk banks. *Gazi Medical Journal* 2017;28(2):107-111. [Crossref]
  17. Ekşioğlu A, Yeşil Y, Çeber Turfan E. Mothers' views of milk banking: sample of İzmir. *Turk Pediatrisi Ars* 2015;50(2):83-89. [Crossref]
  18. Katke RD, Saraogi MR. Socio-economic factors influencing milk donation in milk banks in India: an institutional study. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology* 2014;3(2):389-393. [Crossref]
  19. Perrin MT, Goodell LS, Allen JC, Fogleman A. A mixed-methods observational study of human milk sharing communities on Facebook. *Breastfeeding Medicine* 2014;9(3):128-134. [Crossref]
  20. Cohen J. *Statistical power analysis for the behavioral sciences*, Lawrence Erlbaum Associates, Hillsdale, New Jersey, 1988. [Crossref]
  21. Gürol A, Özkan H, Çelebioğlu A. Turkish women's knowledge and views regarding mothers milk banking. *Collegian Journal of the Royal College of Nursing Australia* 2013;21(3):239-244. [Crossref]
  22. Dorum A. A study on difficulties that mothers of newborn at risk have and milk banking. Master's thesis, Sifa University, 2015. [Crossref]
  23. Yurdugül H, Bayrak F. Using Content Validity Indices for Content Validity in Scale Development Studies [Oral presentation]. 14th National Educational Sciences Congress, Denizli, Turkey:2005. [Crossref]
  24. Newland LA, Coyl DD, Chen H. Fathering and attachment in the USA and Taiwan: contextual predictors and child outcomes. *Early Child Development and Care* 2010;180:173-191. [Crossref]
  25. Ozkan H, Celebioglu A, Ust ZD, Kurudirek F. Investigation of the parenting behaviors of fathers in the postpartum period. *İzmir Journal of Behcet Uz Children's Hospital*, 2016;6(3):191-196. [Crossref]
  26. Turemen M. Effects of skin-to-skin contact of fathers with newborn babies in neonatal intensive care unit to father-infant attachment and marital adjustment. Master's thesis, Manisa Celal Bayar University, 2019. [Crossref]
  27. Kimani-Murage EW, Wanjohi MN, Kamande EW, Macharia TN, Mwaniki E, Zerfu T, et al. Perceptions on donated human milk and human milk banking in Nairobi, Kenya. *Matern Child Nutr* 2019;15(4):e12842. [Crossref]
  28. Jahan Y, Rahman S, Shamsi T, Sm-Rahman A. Attitudes and views concerning human milk banking among mothers residing in a Rural Region of Bangladesh. *J Hum Lact* 2022;38(1):108-117. [Crossref]
  29. Can Ş, Ünülü M. Knowledge of mother regarding wet nursery and breast milk banking. *Ankara Med J* 2019;(1):60-70. [Crossref]
  30. 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. *Journal of Tropical Pediatrics* 2015;61(3):188-196. [Crossref]
  31. Senol-Kaya D, Aslan E. Women's opinions on breast milk donation and human milk banking [Oral presentation]. 1st National Eastern Mediterranean Midwifery Congress: Adana, 2017. [Crossref]
  32. Jackson F, Obeng C. Perceptions of human milk banks as a response to the us infant formula shortage: a mixed methods study of US mothers. *Women* 2022;2(3):218-230. [Crossref]
  33. Velmurugan S, Prabakar V, Bethou A, Ramamoorthy L. Perceptions on human milk donation and banking: Maternal optimism. *J Family Med Prim Care* 2020;9(11):5820-5821. [Crossref]