

## RESEARCH ARTICLE

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## Evaluation of North Syrian Women Knowledge, Opinions and Attitudes Regarding Milk Banks and Milk Donation

### ABSTRACT

**Objective:** To investigate Syrian mothers' knowledge, attitudes, and opinions on milk banks and raise awareness of the opening of milk banks in the region.

**Methods:** Our study was conducted hospitals in North Syria between 02/12/2020 and 02/03/2021. 536 women included in our study. Our questionnaire, which was written in Arabic to assess knowledge, opinions and attitudes toward milk donation and milk banks, was administered to participants during face-to-face interviews.

**Results:** All participants were female and Muslim, with a mean age of 29.79±7.69 years. 47.2% of the participants agreed that a milk bank should be established, while 37.5% of the participants were against it. 81.3% women favored establishing a milk bank said that they would use the milk bank if they could not breastfeed (p=0.000). 49.4% were against establishing milk banks due to religious inconvenience. 41.5% of participants who favored establishing a milk bank and 14.4% of those who were against it indicated that the facility would have a positive impact on them under the guarantee of Turkey (p=0.000).

**Conclusions:** Due to religious views in Muslim societies, there is a negative attitude toward milk banks. Therefore, establishing robust registration systems, involving religious leaders in the process, providing accurate information, and educating the society will raise awareness and change the negative view.

**Keywords:** Milk Bank, Milk Donation, Syria, Wet Nursing.

## Kuzey Suriyeli Kadınların Süt Bankaları ve Süt Bağışına İlişkin Bilgi, Görüş ve Tutumlarının Değerlendirilmesi

### ÖZET

**Amaç:** Araştırmamızda Suriyeli annelerin süt bankası hakkındaki bilgi, tutum ve görüşlerini değerlendirmeyi ve bölgede süt bankalarının açılması için farkındalık oluşturmayı amaçladık.

**Gereç ve Yöntem:** Çalışmamıza Kuzey Suriye bölgesindeki hastanelere 02/12/2020-02/03/2021 tarihleri arasında başvuran 536 anne dahil edilmiştir. Süt bağışı ve süt damlası merkezi'ne ilişkin bilgi, görüş ve tutumları değerlendirmeye yönelik Arapça olarak hazırlanan anketimiz katılımcılara yüz yüze görüşme tekniğiyle uygulanmıştır.

**Bulgular:** Katılımcıların tamamı kadın ve Müslüman, yaş ortalaması 29.79±7.69 yıl idi. 47.2% katılımcı süt bankası kurulmalı, 37.5% katılımcı kurulmamalı görüşündeydi. Süt damlası merkezi kurulmasını onaylayanların 81.3%'ü bebeğini emziremediği durumda süt damlası merkezinden yararlanmak istediğini belirtti (p=0.000). Süt bankası kurulmamalı diyenlerin %49.4'ü dini sakıncalar nedeniyle istemediğini belirtti. Süt damlası merkezi kurulmasını destekleyen katılımcıların 41.5%'i, karşı çıkanların da 14.4% ü Türkiye güvencesi altında süt bankaları kurulmasının kendilerini olumlu etkileyeceğini ifade etti (p=0.000).

**Sonuç:** Müslüman toplumlarda dini çekinceler nedeniyle süt bankalarına olumsuz bir bakış mevcuttur. Bu nedenle sağlam kayıt sistemlerinin oluşturulması ve dini önderlerin de sürece katılması, yine toplumun doğru bilgilendirilmesi ve eğitilmesi farkındalık yaratacak ve olumsuz bakış açısını değiştirecektir.

**Anahtar Kelimeler:** Süt Bankası, Süt Bağışı, Suriye, Süt Annelik.

## INTRODUCTION

Breast milk plays a critical and indispensable role in the nutrition of infants. The World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF) recommend that infants be fed exclusively on breast milk for the first six months and continue to receive breast milk with complementary foods until at least two years of age (1). Despite this, breastfeeding rates are declining in many societies (2). The reason may be various problems caused by mother and baby. Prematurity and low birth weights are two important reasons.

Mothers whose babies are in the intensive care unit usually cannot provide enough breast milk to meet the needs of these babies. In such cases, donor breast milk is the best alternative (3). The risk of necrotizing enterocolitis (NEC) increases with the use of formula in high-risk infants, especially in preterm infants with very low birth weight (4). In cases where the mother's own breast milk cannot be used, the World Health Organization (2011) recommends the use of pasteurized donor breast milk from milk banks in preference to the use of infant formula (5). Studies have shown that the incidence of late-onset sepsis and food intolerances in infants fed on banked milk is low and the duration of discharge is shortened (1, 6).

In the Ottoman Empire, during the rule of Abdulhamid II., milk drop foundations and centers were established to provide breast milk to infants who could not receive it. Although wet nursery was practiced in Europe in the 19th century for infants who could not receive breast milk, it was not widely preferred due to the risk of infection. Breast milk banks were discovered as an alternative to wet nursery. The first breast milk bank was established in Vienna in 1909, followed by Boston (7). Milk banks spread throughout Europe in the 1930s and 1940s, but many of them closed with the advent of AIDS in the 1980s (8). In 1939, the number of milk banks in North America reached 12 and the standards for these facilities published by the American Academy of Pediatrics in 1943 were put into practice. In 1985, the North American Breastmilk Banks Association was founded (6). In turn, the European Milk Bank Association (EMBA) was founded in 2010. The European Milk Bank Association has 280 affiliated milk banks with members from 29 countries (9). The largest breast milk bank system in the world is in Brazil; there are approximately 200 milk banks (10). The first milk bank in South Africa was established in 2000, and its number has since increased to 37 (11). Although the number of children who can benefit from milk banks is high in many developing and underdeveloped countries, the number of milk banks is very low (12). Breast milk banks are a

system that is not yet accepted, especially in Muslim societies. This is because, according to religious beliefs, if a baby is nursed by a wet nurse, then that baby is considered milk sibling with the wet nurse's own children, even though they are not related to blood. These children are forbidden to marry each other (13). However, the first human milk bank in Iran was established in July 2016 at Al-Zahra Teaching Hospital in Tabriz (14).

Babies with premature births, anomalies, or low birth weight are often cared for in the intensive care units of Afrin, Azez Vatan, Jarablus, and Telabyad hospitals affiliated with Turkey's Ministry of Health in the Euphrates Shield area of operation. These infants have difficulty getting breast milk, so total parenteral nutrition therapy is provided. This treatment also comes at a high cost and cannot replace breast milk for a preterm infant. In this study, we aimed to determine the knowledge, attitudes, and opinions of Syrian women about milk banks and raise awareness about opening milk banks in the region.

## MATERIAL AND METHODS

**Study Design:** Our study included randomly selected women over 18 years old who presented to Afrin, Azez Vatan, Jarablus, and Telabyad hospitals between 02/12/2020 and 02/03/2021 and volunteered to participate in the study. Participants were initially informed about the study and their written and verbal consent were obtained according to the principles of the Helsinki Declaration. Questionnaires were applied face-to-face to women who applied to the obstetrics outpatient clinics of these hospitals or whose babies were admitted to the neonatal intensive care units.

**Study Setting and Selection Participants:** In determining the population, women (34545 people) who applied to the obstetrics clinics of the hospitals or whose babies were hospitalized in the neonatal intensive care unit between 1/12/2019 and 1/12/2020 were taken as the basis. The sample size and population of the study were calculated using the sample determination formula (Power analysis) in certain groups. According to this formula, the sample size was determined as 380, taking the reliability of 95%. A survey was conducted with 750 people who agreed to participate and were randomly selected from these applicants. We excluded the questionnaires that did not contain data and did not meet the inclusion criteria, and the questionnaires of 536 subjects were included in the study. Patients who were over 18 years of age and volunteered to participate in the study were included. Exclusion criteria were age less than 18 years, known mental disabilities, communication problems, requesting a fee for the survey by the applicants, and undetermined identities.

**Obtaining Data:** In our study, the questionnaire "Milk Drop Center Questionnaire", which determined the knowledge, opinions and attitudes about milk donation and milk drop centers, was completed by trained interviewers in face-to-face interviews. The name "Milk Drop Center", one of the first steps of milk bank in Ottoman period, was used in our survey. Our survey consisted of 2 sections and 27 questions. Nine (9) questions in the socio-demographic characteristics survey questionnaire were questions used in the general literature. Participants were asked; age, religion and religious denomination, educational and occupational status, ages and number of children, breastfeeding and pregnancy situation. Eighteen (18) questions in the "Information Form on Information, Opinions, and Attitudes Regarding Milk Donation and Milk Drop Center" were in accordance with the literature review of milk banks. With these questions, the need and importance of breast milk, their views on breastfeeding, their perspectives on milk bank in case of establishment of a milk bank, and the benefit status in case of establishment of a milk bank were evaluated. The Arabic of the questionnaire was translated by sworn translators with notarization.

**Ethical Approval:** Ethics committee approval for our study was obtained from The Ethics Committee of Hatay Mustafa Kemal University for non-interventional research (resolution number: 17) in 06/05/2021.

**Statistical Analysis:** Statistical analysis of the study were performed using Statistical Package for Social Sciences version 25.0 software for Windows (IBM SPSS Statistics for Windows version 21.0. Armonk, NY: IBM Corp., USA). Normality assumption was tested using Kolmogorov-Smirnov and Shapiro-Wilk tests. Explanatory statistics of variables are reported as mean±standard deviation, median (min-max), and n(%). For univariate analysis, Kruskal-Wallis, chi-square test, and Fisher-Freeman-Halton test were used, depending on the type of variable and availability of assumptions. In all statistical analysis, cases with a P value less than 0.05 were interpreted as statistically significant.

**RESULTS**

A total of 536 individuals participated in the study. All participants were female and the mean age was 29.79±7.69 years. While all individuals

were Muslims, the majority of them belonged to the Hanafi (67.7%, n=363) and Shafi (29.7%, n=159) sects. The educational and occupational status of the participants is shown in Table 1. The mean number of children the participants had was 3 (0-12). Among all participants, 482 (89.9%) of them reported that they were breastfeeding their child.

**Table 1.** Educational status and occupational distribution of the participants

<i>Education</i>	<i>n (%)</i>
Illiterate	81 (15.1%)
Literate	122 (22.8%)
Primary School	188 (35.1%)
Secondary School or higher	145 (27.1%)
<i>Occupation</i>	
Homemaker	339 (63.2%)
Nurse	40 (7.5%)
Teacher	37 (6.9%)
Cleaning staff	25 (4.7%)
Police	13 (2.4%)
Worker	13 (2.4%)
Computing	10 (1.9%)
Other	59 (11%)

When analyzing the responses to the Information Form on Information, Opinions and Attitudes Regarding Milk Donation and Milk Drop Center, 529 (98.7%) participants agreed that breast milk is important. Eighty-three (15.5%) participants indicated that they themselves had been wet nurses before, and 138 (25.7%) participants indicated that their children had ever been wet nursed before. Of the participants whose children were wet nursed, 25 (4.7%) were nursed by their sister, 21 (3.9%) by their co-sister-in-law, 21 (3.9%) by their neighbor, and 18 (3.4%) by their sister-in-law. 64.9% (n=348) of the participants reported that they would not want their baby to be breastfed by another mother even if they could not breastfeed their baby. The babies of 150 (28%) participants were treated in the ICU after delivery. When asked their opinion on the establishment of a milk drop center, 253 (47.2%) participants said it should be established, 174 (32.5%) said it should not be established and 109 (20.3%) participants were undecided. The answers given by the people to the questions about wet nursery and bank milk were as shown in Table 2.

**Table 2.** Participants' responses to the questions on the use of banked milk and wet-nursery

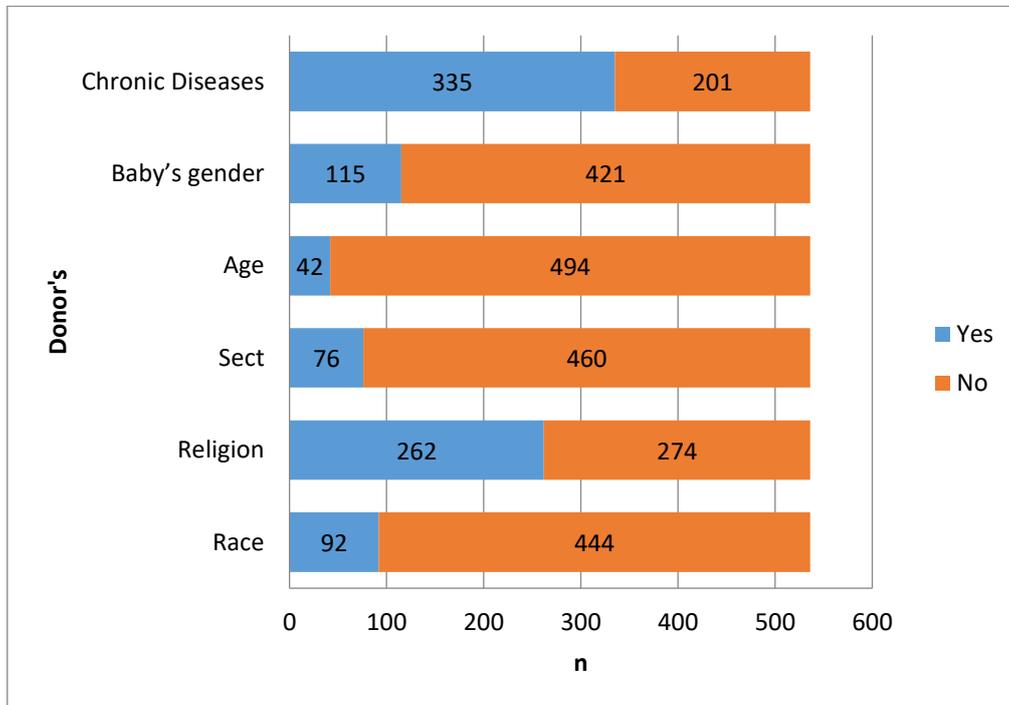
	<b>Yes n (%)</b>	<b>No n (%)</b>	<b>Undecided n (%)</b>
Is it all right to use the milk drop center when the mother's milk is insufficient?	191(35.6%)	277(51.7%)	68(12.7%)
In cases where breast milk is insufficient, is it appropriate to buy breast milk from trusted people?	182(34.0%)	291(54.3%)	63(11.8%)
Would you donate your milk to the milk drop center?	189(35.3%)	256(47.8%)	91(17.0%)
If a baby in the ICU needed breast milk, would you voluntarily donate your milk to them?	449(83.8%)	53(9.9%)	34(6.3%)
Do you think another mother's milk would be sufficient to feed your baby?	136(25.4%)	281(52.4%)	119(22.2%)
Would you use the milk drop center if you could not breastfeed your baby?	160(29.9%)	308(57.5%)	68(12.7%)

Most participants (59.6%, n=309) answered "negative" to the question "How does feeding your

baby with another mother's milk affect the emotional bond between you and your baby?".

When asked what information should be obtained about the people who donate breast milk to the milk drop center, 335 (62.5%) of the participants answered "information about chronic diseases" and 262 (48.9%) participants answered "religion" (Figure 1). 76.7% (n=133) of the participants who did not want a milk bank to be established, stated that they did not want it because of the risk of

disease transmission and 49.4% (n=86) because of religious objections. When asked about their opinion on the benefits of a center under the guarantee of Turkey, 166 (31%) people said that their opinion would not be influenced at all, 155 (28.9%) people said that it would be influenced positively, and 120 (22.4%) people said that it would be influenced negatively.



**Figure 1.** The characteristics required to know about the people who will donate breast milk to the milk drop center

The impact of the factors discussed in the study on the views on the establishment of the milk drop point is shown in Table 3. The mean age of those who were favored the establishment of milk drop point was higher than those who were against it or undecided about it (p=0.002). The number of children of the women who were favored establishing a milk drop point was also significantly higher (p=0.000). Most of those who were negative (90.2%) and undecided (88.1%) about the establishment of a milk drop point did not previously wet nurse (p=0.004). It was found that 86.2% of the participants who had a negative opinion about the establishment of a milk drop center had not previously had their children wet nursed (p=0.000). The participants who had a positive opinion about the establishment of a milk drop center were also significantly more likely to donate their milk if the center was established (p=0.000). Again, 81.3% of those who agreed with the establishment of a milk drop center indicated that they would be happy to use the milk drop center if they were unable to breastfeed their baby (p=0.000). A significant association was found

between the idea of establishing a milk drop center and those who indicated that they would benefit from this center if it was established under the guarantee of Turkey (p=0.000). In our study, 41.5% of the participants who supported the establishment of a milk drop center indicated that it would affect them somehow if the center was established under the guarantee of Turkey. Of these individuals, 14.4% indicated that it would have a positive impact on them and 34.5% indicated that it would have a negative impact on them. 43.1% of those who support a milk drop center stated that they believed that another mother's milk would be enough to feed their baby, while 73.6% of those who did not support the milk bank stated that another mother's milk would not be enough to feed their baby (p=0.000). Most of those who did not support the establishment of a milk drop center (76.4%) felt that feeding their baby on another mother's milk would negatively affect the emotional bond between the mother and the baby. Among those who supported the establishment of a milk drop center, this percentage decreased to 14.9% (p=0.000).

**Table 3.** Comparison of sociodemographic characteristics, breastfeeding, wet-nursing and views on milk donation with opinions on establishing a milk bank

	<b>What is your opinion on the establishment of a milk drop center?</b>			<b>P</b>
	<b>Positive</b> 253(47.2%)	<b>Negative</b> 174(32.5%)	<b>Undecided</b> 109(20.3%)	
<b>Age</b>	30(17-47)	27(16-49)	29(15-48)	<b>0.002</b>
<b>Number of children</b>	4(0-12)	3(0-9)	3(0-11)	<b>0.000</b>
<b>Sect</b>				
Hanafi	166(65.6%)	117(67.2%)	80(73.4%)	0.436
Shafi	81(32.0%)	51(29.3%)	27(24.8%)	
Maliki	5(2.0%)	6(3.4%)	1(0.9%)	
Hanbali	1(0.4%)	0(0.0%)	1(0.9%)	
<b>Education</b>				
Illiterate	46(18.2%)	20(11.5%)	15(13.8%)	0.132
Literate	55(21.7%)	40(23.0%)	27(24.8%)	
Primary School	93(36.8%)	54(31.0%)	41(37.6%)	
Secondary School or higher	59(23.3%)	60(34.5%)	26(23.9%)	
<b>Work status</b>				
Working	167(66.0%)	110(63.2%)	80(73.4%)	0.197
Not Working	86(34.0%)	64(36.8%)	29(26.6%)	
<b>Did you breastfeed your child / children?</b>				
Yes	226(89.3%)	154(88.5%)	102(93.6%)	0.357
No	27(10.7%)	20(11.5%)	7(6.4%)	
<b>Did you previously wet nurse?</b>				
Yes	53(20.9%)	17(9.8%)	13(11.9%)	<b>0.004</b>
No	200(79.1%)	157(90.2%)	96(88.1%)	
<b>Have your children been wet nursed before?</b>				
Yes	92(36.4%)	24(13.8%)	22(20.2%)	<b>0.000</b>
No	161(63.6%)	150(86.2%)	87(79.8%)	
<b>Has your baby been hospitalized in intensive care after birth?</b>				
Yes	82(32.4%)	43(24.7%)	25(22.9%)	0.092
No	171(67.6%)	131(75.3%)	84(77.1%)	
<b>Would you donate your milk to the milk drop center?</b>				
I would	112(44.3%)	45(25.9%)	32(29.4%)	<b>0.000</b>
I would not	91(36.0%)	116(66.7%)	49(45.0%)	
Undecided	50(19.8%)	13(7.5%)	28(25.7%)	
<b>Would you like to use the milk drop center if you are unable to breastfeed your baby?</b>				
Yes	130(81.3%)	15(8.6%)	15(13.8%)	<b>0.000</b>
No	97(38.3%)	150(86.2%)	61(56.0%)	
Undecided	26(10.3%)	9(5.2%)	33(30.3%)	
<b>Does the fact that the milk drop center is under the guarantee of Turkey influence your opinion on the use of the milk drop center?</b>				
Yes, positively	105(41.5%)	25(14.4%)	25(22.9%)	<b>0.000</b>
Yes, negatively	39(15.4%)	60(34.5%)	21(19.3%)	
No	68(26.9%)	71(40.8%)	27(24.8%)	
Undecided	41(16.2%)	18(10.3%)	36(33.0%)	

## DISCUSSION

Most of our participants indicated that they were against buying milk from a milk bank and donating milk to it. Similarly, in a study conducted in Turkey with health workers, it was found that most of them did not want to benefit from breast milk bank (1). In the study by Bhoola et al., most of the participants indicated that if it was culturally and religiously appropriate, they would be willing to become donors to a milk bank or purchase milk

from it (11). Additionally, majority of our participants indicated that they could donate their milk to a baby in the intensive care unit. In the study by Ergin et al., most of the participants indicated that they could donate milk to a baby in need, but they would not donate their milk to the milk bank (15). Although it appears that religious reservations in Muslim populations influence attitudes toward milk banks, one can say that they

feel it is safer and religiously appropriate to donate if they know the baby and family for whom the milk is being donated.

In our study, similar to the literature, it was found that the major concern of participants who did not want a milk bank to be established was the risk of disease transmission. Similarly, in a study conducted in Kenya, it was found that most participants were concerned about the transmission of HIV and related diseases through breast milk. Also, in a study conducted in South Africa, it was found that most mothers were afraid of HIV transmission to their babies through donor milk (16, 17).

Most of our participants indicated that they would not prefer to use another person's milk or to benefit from milk delivery center, even if they could not breastfeed their own children. On the other hand, in a study conducted in Kenya, 59% of participants said they could use donor milk from a milk bank if they could not breastfeed their baby. Again, most of the participants who indicated that they could use donor milk were Christians (17). We believe that this difference is due to the different religious populations in the studies, with Muslim participants having a more negative opinion.

In a study conducted in Turkey, mothers indicated that they would not want to give their baby milk from a familiar person if their own milk was not sufficient (18). Similarly, most of the participants in our study indicated that it would not be appropriate to take breast milk from familiar people.

Wet nursing is a well-known and ancient method, especially in Muslim societies. Over time, the concept of wet infant feeding has also declined due to concerns such as infectious diseases. In our study, 15% of the participants used to be wet nurses. Again, it was found that 26% of the participants' children were wet nursed by one of their close relatives. In the study by Karadağ et al., most of the participants stated that it is possible to be breastfed by another person if the mother does not have milk (18). In another study conducted in Turkey, it was found that 8.7% of individuals wet breastfed and 7.2% of them had their babies wet breastfed by a relative (15). Considering that today's donor milk provided through milk banks has undergone serious screening and pasteurization processes, it is obvious that this milk is safer, but religious and cultural differences may prevent people from using milk banks.

Kimani et al. found that most participants did not think the race or ethnicity of the donors was important. Similarly, in our study, most participants stated that it was not necessary to ask about the donors' race or sect, and approximately half of them stated that it was not necessary to ask about their religion (17).

Even if the mothers did not openly state how they feel, there is a high possibility that they may feel helpless and inadequate if they cannot breastfeed their child and must use milk from another mother. These emotional conditions may lead the mothers to feel negative about using donor's milk. In parallel, most of our participants accept that breast milk plays an important role in infant health. However, most of them who did not support the establishment of a milk station stated that feeding their baby with another mother's milk would negatively affect the relationship between the baby and the mother. If mothers are more informed and educated about milk banks, their negative attitude toward the issue can be changed in positively and they can give their baby the proper attention and care without concerning about the misconceptions on the matter.

Similar to the literature, in this study, most mothers with babies in ICUs and more than half of the mothers whose babies were not in ICUs supported the establishment of milk banks. Pal et al. founded that the preference rate for donor milk was significantly higher among mothers whose babies were cared for in the ICU than among mothers with healthy babies (19).

The proportion of our participants who were positive about the establishment of a milk drop center was significantly higher than the proportion of those who would donate their milk if the center was established; however, most of them indicated that they would be happy to use the milk drop center if they were unable to breastfeed their baby. We see that proper information and education of mothers and expectant mothers about milk banks can positively change people's views.

In places where there is no central authority, the positive effects of friendly and allied support in the process of rebuilding social trust are undeniable. In fact, in our study, 41.5% of the participants who supported the establishment of a milk drop center stated that its establishment would have a positive impact on them under the guarantee of Turkey, while 14.4% of those who opposed the establishment stated that this situation would have a positive impact on them.

#### CONCLUSION

Breast milk is an essential nutrient for infant feeding. Moreover, many studies in the literature have shown that the best alternative for infants who cannot receive breast milk for various reasons is donor breast milk. In Muslim societies such as Syria, there is a negative attitude toward milk banks due to religious reservations. In particular, the concept of having considered as milk siblings if breastfed by same mother and the religious prohibition of marriage for these people are seen as the leading obstacles. For this reason, it is important to establish reliable registration systems and

involve religious leaders in the process. Proper information and education of society will raise awareness and change the negative perception. With the financial and advisory support of international organizations, the establishment of milk banks in these regions can be advanced.

**Limitations:** Since our study was conducted on the Muslims, the results reflect only the perspective of this population. Another limitation of

our study is that all of our participants were women; men could not be included in the study because sufficient number of participants could not be reached.

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## REFERENCES

1. Şentürk Erenel A, Ünal Toprak F, Gölbaşı Z, Aksu S, Gürcüoğlu Arslan E, Uçar T, et al. Sağlık Personelinin Anne Sütü Bankalarına İlişkin Bilgi ve Görüşlerinin Belirlenmesine Yönelik Çok Merkezli Bir Çalışma. *Gazi Medical Journal*. 2017;28(2):107-11.
2. Meeks M, Franks A, McGregor H, Webb G, Lamb R. Supporting mothers, protecting babies for long-term health: establishing a pasteurised human milk bank. *N Z Med J*. 2019;132(1505):83-91.
3. Gürol A, Özkan H, Çelebioğlu A. Turkish women's knowledge and views regarding mother's milk banking. *Collegian*. 2014;21(3):239-44.
4. Kantorowska A, Wei JC, Cohen RS, Lawrence RA, Gould JB, Lee HC. Impact of Donor Milk Availability on Breast Milk Use and Necrotizing Enterocolitis Rates. *Pediatrics*. 2016;137(3):e20153123.
5. WHO. Optimal feeding of low birthweight infants in low- and middle-income countries 2011 [cited 2021 12.08]. Available from: [https://www.who.int/maternal\\_child\\_adolescent/documents/9789241548366.pdf](https://www.who.int/maternal_child_adolescent/documents/9789241548366.pdf).
6. Demirtaş B. Türkiye'de Anne Sütü Bankaları Olmalı mı? *Anadolu Hemşirelik ve Sağlık Bilimleri Dergisi*. 2011;14(1):73-7.
7. Haiden N, Ziegler EE. Human Milk Banking. *Ann Nutr Metab*. 2016;69 Suppl 2:8-15.
8. Çalbayram N. Anne sütü bankaları. *Türk Dünyası Uygulama ve Araştırma Merkezi Yenidoğan Dergisi*. 2017;2(2):517-28.
9. European Milk Bank Association. About EMBA [cited 2021 12.08]. Available from: <https://europeanmilkbanking.com/about-emba/>.
10. Büyükcan T. Anne Sütü Bankacılığı ve Çeşitli Ülke Uygulamaları. *Türkiye Büyük Millet Meclisi Aylık Bülteni*. 2013;189:28-30.
11. Bhoola P, Biggs C. Factors Affecting the Decision of Postnatal Mothers to Donate Milk at a Government Satellite Human Milk Bank Site, in KwaZulu Natal, South Africa. *J Hum Lact*. 2021;37(1):95-104.
12. Noraida Ramli NRI, Van Rostenberghe Hans. Human milk banks – The benefits and issues in an Islamic setting. *Eastern Journal of Medicine*. 2010;15:163-7.
13. Kul Uctu A, Ozerdoğan N. Anne Sütü Bankası. *Manisa CBU Sağlık Bilimleri Enstitüsü Dergisi* 2017;4(2):593-6.
14. Hosseini M, Farshbaf-Khalili A, Seyyedzavvar A, Fuladi N, Hosseini N, Talashi S. Short-term Outcomes of Launching Mother's Milk Bank in Neonatal Intensive Care Unit: A Retrospective Study. *Arch Iran Med*. 2021;24(5):397-404.
15. Ergin A, Uzun SU. Turkish Women's Knowledge, Attitudes, and Behaviors on Wet-Nursing, Milk Sharing and Human Milk Banking. *Matern Child Health J*. 2018;22(4):454-60.
16. Coutsoudis I, Petrites A, Coutsoudis A. Acceptability of donated breast milk in a resource limited South African setting. *Int Breastfeed J*. 2011;6:3.
17. 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.
18. 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):188-96.
19. Pal A, Soontarapornchai K, Noble L, Hand I. Attitudes towards Donor Breast Milk in an Inner City Population. *Int J Pediatr*. 2019;2019:3847283.