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Human milk donation and human milk banks: an extended typology cross-sectional study in the Chengalpattu district

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ABSTRACT

Background: Human milk banks (HMBs) provide an essential service by collecting, screening, processing, and distributing donor milk, particularly for infants who cannot access their mother's milk. Despite their importance, awareness and acceptance of HMBs remain limited in many regions. This study aims to assess the awareness, willingness, and perceived usefulness of HMBs and milk donation among reproductive-aged women in a tertiary care center in Chengalpattu district.

Methods: A cross-sectional study was conducted among 230 reproductive-aged women at Chettinad Hospital and Research Institute in private medical college, a tertiary care centre in the Chengalpattu district, Tamil Nadu, India from January 2025 to March 2025 for a period of 3 months. Participants were selected using a simple random sampling method. Data were collected using a pre-tested, semi-structured questionnaire that assessed knowledge, attitudes, and perceptions regarding human milk donation and HMBs. Statistical analysis was performed using IBM-SPSS version 21.0, with significance set at p<0.05.

Results: The mean participant age was 29.64 years (SD=5.78). While 79.1% had heard of milk donation, only 5.2% knew of a nearby HMB. Most acknowledged its benefits (97.4%) and were willing to donate (97.4%), citing altruism. Barriers included a lack of knowledge, kinship concerns, and logistics.

Conclusions: The study reveals a strong positive attitude toward human milk donation, despite limited awareness and exposure to HMBs. Educational interventions and awareness campaigns are necessary to bridge knowledge gaps and encourage milk donation, ultimately promoting better neonatal outcomes.

Keywords: Human milk banks, Breast milk donation, Awareness, Reproductive-aged women, Neonatal health, Lactation support

INTRODUCTION

Breastfeeding is the optimal source of infant nutrition, providing essential immunological, developmental, and long-term health benefits.^{1,2} However, not all mothers can breastfeed due to medical, social, or economic obstacles, causing increased dependence on the donor's breast milk

as the next best option.^{3,4} WHO and UNICEF have established human milk banking initiatives to support newborn health, particularly for preterm and low-birth-weight infants, by reducing infections, improving feeding tolerance, and promoting optimal nutrition.^{5,6} Despite these benefits, consciousness, cultural concerns, and access barriers limit the widespread use of donor milk.^{7,8}

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Globally, more than 600 breast milk banks operate mainly in North America, Europe, and Brazil, successfully integrating donor milk into newborn care. 9,10 In India, although expanding milk bank initiatives, use is relatively low, reflecting holes in consciousness and social acceptance. Studies show that education, socioeconomic status, social support, and cultural faith largely affect behavior regarding breast milk. 11,12 In addition, research highlights the role of health professionals in promoting milk banking, but many women still have a decrease in direct contact with milk banks and donation procedures. 13,14

This study aims to assess the desire, approach, and desire to donate breast milk among women in reproductive age class participating in a tertiary care center in the Chengalpattu district. This also wants to identify factors affecting charity behavior and interviews of consciousness, and provides insight into targeted educational interventions and policy recommendations to enhance milk donation rates and optimize neonatal care. ^{15,16}

Objectives

Objectives were to assess the level of knowledge regarding human milk donation and milk banks among reproductive-aged women visiting a tertiary care centre in Chengalpattu district, to identify the factors influencing participation in milk donation to HMBs and acceptance of donor breast milk among reproductive-aged women visiting a tertiary care center in Chengalpattu district, to create awareness among reproductive-aged women visiting the tertiary care centre in Chengalpattu district and to explore reasons for the preparedness of milk donation to human milk banks among reproductive-aged women visiting a tertiary care centre.

METHODS

Study design and settings

A cross-sectional study was conducted at Chettinad Hospital and Research Institute in private medical college, a tertiary care centre in the Chengalpattu district, Tamil Nadu, India from January 2025 to March 2025 for a period of 3 months. This study assessed the factors influencing willingness and attitudes towards breast milk donation to human milk banks among reproductive-aged women.

Study population and sample size

The sample size was determined based on the study by Jayanandan et al which reported a 20% prevalence of knowledge regarding breast milk donation and human milk bank services among reproductive-aged women.¹⁷ Using a 95% confidence interval and an allowable error of 6%, the sample size was calculated using the formula 4pq/d², yielding a minimum requirement of 205

participants. Accounting for a 5% non-response rate, the final adjusted sample size was 230 participants. A simple random sampling method was employed at the tertiary care centre in Chengalpattu district, ensuring equal representation. The lottery method was used to randomly select participants from the eligible population.

Inclusion criteria

Women aged 20-43 years, those who had given birth during the last two years or were currently pregnant and ready to give informed consent were included.

Exclusion criteria

Women with contraindications for breastfeeding (e. g., HIV-positive status, some metabolic disorders) and those who are not ready to participate were excluded.

Data collection

Data was collected using a structured questionnaire managed through face-to-face interviews by trained research workers. The questionnaire covered sociological details, knowledge, attitude, sources of consciousness, desire to donate and alleged obstacles to donations of breast milk.

Statistical analysis

Data were entered into IBM SPSS version 26 and analyzed using descriptive and inferential statistics. Frequencies and percentages were used to summarize categorical variables. Mean and standard deviation (SD) were used for continuous variables. Chi-square tests assessed associations between categorical variables, while ANOVA analyzed differences between groups. A p<0.05 was considered statistically significant.

Ethical considerations

Ethical approval was obtained from the institutional ethics committee. Written informed consent was obtained from all participants before data collection, ensuring confidentiality, voluntary participation, and the right to withdraw at any stage.

RESULTS

A total of 230 reproductive-aged women participated in the study, with a mean age of 29.64 years (SD=5.783), ranging from 20 to 43 years. The majority (62.6%) were between 20-30 years of age. Most participants were married (98.3%, p<0.000), and the predominant religion was Hinduism (83.5%), followed by Christianity (11.3%) and Islam (5.2%) (p<0.000). In terms of education, 37.8% were graduates, while 37.4% had completed high school, with smaller proportions having professional qualifications (14.8%), intermediate/diploma education (5.7%), or middle school education (4.3%) (p<0.000).

The largest proportion of participants belonged to class 2 (upper middle) (35.7%), followed by class 1 (upper) (23.5%) and class 3 (middle) (21.7%), with the majority (71.7%) living in smaller family units of 1-4 members (p<0.000).

A significant proportion of participants were unemployed (71.3%, p<0.000), while 8.3% were professionals and 7.4% worked as unskilled laborers. Among their spouses, 33.5% were unskilled workers, followed by 23.9% in professional roles and 21.3% in skilled or semi-skilled work (p<0.000). More than half of the participants were multiparous (53.5%), while 43.9% were primiparous, and only 2.6% were nulliparous (p<0.000). A notable proportion (44.3%) had no children, while 35.2% had two children, 18.3% had one child, and only 2.2% had more than two children (p<0.000).

The majority of participants expressed highly positive perceptions of human milk donation. Nearly all participants (97.4%) believed that milk donation benefits mothers both physically and mentally (p<0.000). Furthermore, an overwhelming 99.1% of participants considered milk donation a form of helping others, and an equal percentage regarded it as a rewarding experience for mothers (p<0.000). Additionally, 94.8% recognized that feeding premature infants with banked breast milk is a life-saving procedure (p<0.000), highlighting strong awareness of the medical benefits of donor milk. These findings indicate a strongly favorable attitude toward human milk donation, with participants acknowledging both maternal and neonatal benefits.

All participants agreed that a mother's own milk is beneficial for her baby (p<0.000), and 97.4% supported encouraging breastfeeding women to donate (p<0.000). However, only 10% considered donor character traits important, suggesting that availability outweighs concerns about the donor's background (p<0.000). Additionally, 94.8% opposed financial incentives, emphasizing donation as a non-commercial, altruistic act (p<0.000). These results reflect strong support for milk donation as a selfless practice, with minimal concerns regarding donor characteristics or financial compensation.

A considerable proportion of participants (79.1%) had heard about milk donation to human milk banks (p<0.000), but only 5.2% were aware of the existence of a human milk bank in their locality (p<0.000). More than half of the participants (58.7%) knew about places where breast milk can be collected, while 41.3% remained unaware (p=0.008). The majority (92.6%) understood that using milk from human milk banks is a gracious act (p<0.000), indicating strong support for donor milk. However, only 34.3% were aware that milk donation creates kinship ties, while 65.7% were unaware (p<70.000), highlighting a gap in cultural and social understanding.

The primary sources of knowledge regarding milk donation were media (49.6%), followed by health professionals (22.2%), health facilities (17.4%), and friends (10.9%) (p<0.000). These findings indicate that mass media plays a crucial role in shaping awareness, whereas health professionals and institutions contribute significantly but remain underutilized as sources of information.

Social support plays a crucial role in shaping attitudes toward human milk donation. In this study, 87.8% of participants reported that their husbands supported milk donation (p<0.000), while 75.2% received encouragement from family members (p<0.000), and 78.7% were encouraged by friends (p<0.000). These findings suggest that spousal support was the strongest, followed by encouragement from friends and family members. However, a minority of participants (12.2%) did not receive support from their husbands, and 24.8% and 21.3% lacked encouragement from family and friends, respectively, indicating the need for greater awareness within social circles.

Mothers' knowledge and attitudes toward human milk donation varied significantly. While 93.0% of participants had heard about breast milk expression (p<0.000), only 19.1% had been encouraged to donate breast milk to human milk banks (p<0.000), and a mere 2.6% had ever visited a milk bank in their locality (p<0.000). Despite this, there was a high willingness to receive and donate donor milk. If their own milk supply was insufficient, 83.9% of participants expressed willingness to receive milk from human milk banks (p<0.000), while 98.3% were willing to donate milk to sick neonates in the NICU (p<0.000). Similarly, 98.3% of mothers considered milk from human milk banks to be a safer alternative than formula (p<0.000), and 97.4% were open to donating their excess milk (p<0.000).

Mothers reported multiple motivations for considering breast milk donation. The most common reasons included a strong desire to help sick infants (96.5%, p<0.000), a belief that breast milk should not be wasted (86.1%, p<0.000), and the influence of family and friends (74.3%, p<0.000). Additionally, 90.9% of participants stated they would donate milk, if necessary, regulations were in place (p<0.000), indicating that structural and policy factors play a role in donation willingness. However, only 26.5% of participants had already made a donation (p<0.000), and a mere 2.2% were registered as donors at a nearby human milk bank (p<0.000), suggesting that while intent and willingness are high, actual participation remains low. This highlights a gap between positive attitudes and actual engagement in donation programs.

While a majority of participants expressed willingness to donate breast milk, some concerns and barriers were identified. The most common reasons for reluctance included insufficient knowledge about the donation procedure (10.4%, p<0.000), discomfort with feeding their infant donor milk from an unknown woman (10.4%,

p<0.000), and the unavailability of milk banks nearby (11.7%, p<0.000). Cultural concerns were also noted, with 6.1% of participants fearing kinship implications related to milk donation (p<0.000), while 2.6% expressed concerns about pain or adverse outcomes (p<0.000). Despite these concerns, the overwhelming majority of mothers (93.9% to 97.4%) did not perceive kinship, pain, or adverse health effects as significant barriers. These findings indicate that logistical challenges, lack of

awareness, and cultural concerns play a role in hesitancy toward milk donation, emphasizing the need for educational interventions and improved accessibility to milk banks.

These results highlight the need for awareness campaigns, trust-building initiatives, and better access to milk banks to address misconceptions and improve participation in human milk donation programs.

Table 1: Demographic characteristics of study participants (n=230).

Variables	Categories	N	Percentage (%)
	20-25	61	26.5
	26-30	83	36.1
Age (in years)	31-35	36	15.7
	36-40	38	16.5
	41-45	12	5.2
	Middle school	10	4.3
	High school	86	37.4
Education level	Intermediate/diploma	13	5.7
	Graduate	87	37.8
	Professional	34	14.8
	Married	226	98.3
Marital status	Living separately	2	0.9
	Widow	2	0.9
	Class 1 (Upper)	54	23.5
Socioeconomic class	Class 2 (Upper middle)	82	35.7
(Modified B.G. Prasad scale)	Class 3 (Middle)	50	21.7
	Class 4 (Lower middle)	31	13.5
	Class 5 (Lower)	13	5.7
Family size	1-4 members	165	71.7
Family size	5-10 members	65	28.3

Table 2: Occupational and religious characteristics of study participants (n=230).

Variables	Categories	N	Percentage (%)
Occupation	Unemployed	164	71.3
	Unskilled worker	17	7.4
	Skilled or the semi-skilled worker	16	7.0
	Clerical/shop/farm	14	6.1
	Professional	19	8.3
	unemployed	4	1.7
	unskilled worker	77	33.5
Occupation of spouse	Skilled or the semi-skilled worker	49	21.3
•	Clerical/shop/farm	21	9.1
	Semi-Professional	24	10.4
	Professional	55	23.9
	Hindu	192	83.5
Religion	Christian	26	11.3
	Muslim	12	5.2
	Nulliparous	6	2.6
Parity status	Primiparous	101	43.9
-	Multiparous	123	53.5
Number of children	0	102	44.3
	1	42	18.3
	2	81	35.2
	>2	5	2.2

Table 3: Mothers' perceptions regarding human milk donation.

Questions	Yes, N (%)	No, N (%)	P value
Will milk donation be useful to mothers physically?	224 (97.4)	6 (2.6)	< 0.000
Will milk donation be useful to mothers mentally?	224 (97.4)	6 (2.6)	< 0.000
Is milk donation a kind of help to others?	228 (99.1)	2 (0.9)	< 0.000
Do you believe milk donation is a reward to mothers?	228 (99.1)	2 (0.9)	< 0.000
Feeding premature infants with banked breast milk is lifesaving procedure	218 (94.8)	12 (5.2)	< 0.000

Table 4: Mothers' perceptions regarding milk donation in human milk banks.

Questions	Agree, N (%)	Disagree, N (%)	P value
Mothers' own milk is beneficial for their baby?	230 (100)	0 (0)	-
The character traits of donors are important to me.	23 (10)	207 (90)	< 0.000
All breastfeeding women should be encouraged to donate milk in human milk banks	224 (97.4)	6 (2.6)	< 0.000
A certain amount of money should be paid to mothers who donate their milk to human milk banks.	12 (5.2)	218 (94.8)	< 0.000

Table 5: Mothers' knowledge regarding human milk banks and milk donation.

Questions	Aware, N (%)	Unaware, N (%)	P value
Knowledge of places where breast milk can be collected?	135 (58.7)	95 (41.3)	0.008
Are you aware of existence of human milk bank in your nearby locality?	12 (5.2)	218 (94.8)	< 0.000
Have you ever heard about milk donation to human milk banks?	182 (79.1)	48 (20.9)	< 0.000
Knowledge of the fact using milk from human milk banks is gracious?	213 (92.6)	17 (7.4)	< 0.000
Knowledge of the fact that milk donation creates kinship?	79 (34.3)	151 (65.7)	< 0.000

Table 6: Family and friends' attitudes toward milk donation.

Questions: your opinion	Yes, N (%)	No, N (%)	P value
Does your husband support milk donation to human milk banks?	202 (87.8)	28 (12.2)	< 0.000
Do your family members encourage milk donation to human milk banks?	173 (75.2)	57 (24.8)	< 0.000
Do your friends encourage milk donation to human milk banks?	181 (78.7)	49 (21.3)	< 0.000

Table 7: Mothers' knowledge and attitudes towards milk donation.

Questions	Yes, N (%)	No, N (%)	P value
Encouraged to donate breastmilk to human milk banks	44 (19.1)	186 (80.9)	< 0.000
Have you ever visited human milk banks in your nearby locality?	6 (2.6)	224 (97.4)	< 0.000
Have you ever heard about breast milk expression?	214 (93)	16 (7.0)	< 0.000
Would you like to receive milk from human milk banks if your milk is insufficient for your infant?	193 (83.9)	37 (16.1)	< 0.000
Would you like to donate your breastmilk to sick neonates admitted to NICU?	226 (98.3)	4 (1.7)	< 0.000
Would you think milk from human milk banks is a safe alternative to your baby rather than formula milk?	226 (98.3)	4 (1.7)	< 0.000
Would you like to donate milk to human milk banks if you have excess milk?	224 (97.4)	6 (2.6)	< 0.000

Table 8: Reasons for the desire to donate breast milk to human milk banks.

Questions	Yes, N (%)	No, N (%)	P value
Had already made a donation	61 (26.5)	169 (73.5)	< 0.000
Wanted to do something good for infants?	222 (96.5)	8 (3.5)	< 0.000
Registered as a donor to human milk banks in a nearby location	5 (2.2)	225 (97.8)	< 0.000
Thinking breastmilk not to be wasted	198 (86.1)	32 (13.9)	< 0.000

Continued.

Questions	Yes, N (%)	No, N (%)	P value
Self-motivated to help sick infants	222 (96.5)	8 (3.5)	< 0.000
Motivation by family/friends for milk donation	171 (74.3)	59 (25.7)	< 0.000
May donate milk to human milk banks if necessary, regulations are established	209 (90.9)	21 (9.1)	< 0.000

Table 9: Reasons for unwillingness to donate milk to human milk banks.

Questions	Yes, N (%)	No, N (%)	P value
Insufficient knowledge about procedure of milk donation to milk banks	24 (10.4)	24 (10.4)	< 0.000
No idea to feed my infant with the milk of a woman whom I don't know	24 (10.4)	24 (10.4)	< 0.000
Fear of kinship on donating/receiving milk from human milk banks	14 (6.1)	216 (93.9)	< 0.000
Fear of pain and other adverse outcomes	6 (2.6)	224 (97.4)	< 0.000
The existence of milk banks far away from my residence	27 (11.7)	203 (88.3)	< 0.000

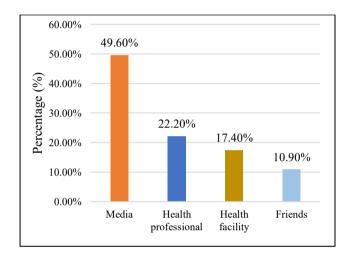


Figure 1: Sources of knowledge about milk donation to human milk banks.

DISCUSSION

In our study, the mean age of participants was 29.64±5.78 years, with the majority (62.6%) falling within the 20-30year age group (p<0.000). This finding aligns with Shanigaram et al where 74% of participants belonged to the same age group, as well as Kaur et al where 75% of mothers were aged 21-30 years, and Patel et al where 67.3% were between 21-25 years. 18,19 The predominance of younger participants suggests that awareness and willingness to consider breast milk donation may be influenced by reproductive age and breastfeeding experience. Marital status was nearly universal in our study (98.3% married, p<0.000), consistent with Namuddu et al who reported 96.3% married women. Religious affiliation also played a role, with 83.5% of our participants identifying as Hindu, similar to Salvi et al (90%) and Kaur et al (76.7%) reinforcing the cultural context in which human milk donation is perceived. 9,21

Educational attainment varied across studies. In our study, 37.8% were graduates and 37.4% had completed high school, contrasting with Shanigaram et al where only 18 participants had education beyond the 12th grade, and

Kaur et al where 50% had no prior knowledge about the human milk banking.^{20,21} Patel et al reported 47.3% with higher education, aligning more closely with our findings.¹⁹ Socioeconomic classification differed significantly, with our study showing 35.7% in class 2 (upper middle) and 23.5% in Class 1 (upper), whereas Salvi et al found 47.3% in the lower middle class, and Patel et al reported 68.7% in the same category. 9,19 Employment status was another key factor, as 71.3% of our participants were unemployed (p<0.000), similar to Kaur et al (88.3% housewives) and Patel et al (70.7% unemployed), suggesting that non-working women may be a key target group for breast milk donation awareness programs. 19,21 Parity and family structure also showed variability across studies. In our study, 53.5% of participants were multiparous, lower than Shanigaram et al (64.6%) but comparable to Doshmangir et al (47.1% multiparous in the donor group, p=0.162).⁷ The proportion of participants with two or more children in our study (37.4%) was lower than Patel et al where 63.7% had one child and 31.7% had two children. 19 Additionally, 71.7% of our participants lived in smaller family units (1-4 members, p<0.000), contrasting with Patel et al where 88% of participants were from nuclear families. 19

The present study demonstrates a highly favorable attitude toward human milk donation, with 97.4% of participants acknowledging its physical and psychological benefits for mothers (p<0.000) and 99.1% considering it a rewarding and altruistic act (p<0.000). This aligns with findings from Patel et al, where more than half (56.5%) of postnatal mothers expressed willingness to donate if provided with proper guidance, although concerns regarding milk supply and infection risks persisted. The perception of donor milk as a life-saving intervention for premature infants was also strongly supported in our study, with 94.8% recognizing its critical role (p<0.000), which is consistent with Sivanandan et al who highlighted that structured educational initiatives significantly improved voluntary milk donation rates. ¹

Despite this overwhelmingly positive outlook, a significant gap in awareness persists. While 79.1% of participants in our study had heard about human milk

donation (p<0.000), only 5.2% were aware of an existing human milk bank in their locality (p<0.000). This is comparable to findings from Kaur et al who reported that only 12% of mothers had good knowledge about human milk banking, while 40% exhibited poor knowledge. Additionally, 58.7% of our participants knew where breast milk could be collected, yet 41.3% remained unaware (p=0.008), highlighting the need for targeted educational interventions to bridge this knowledge gap. Another key finding in our study was the altruistic nature of human milk donation, with 94.8% of participants opposing financial incentives (p<0.000). This is in contrast to concerns in Patel et al where socio-cultural factors influenced milk donation, with joint families demonstrating a higher inclination toward donation.¹⁹ Furthermore, the cultural and social implications of milk donation remain inadequately understood, as evidenced by the fact that only 34.3% of participants were aware that milk donation creates kinship ties, while 65.7% were unaware (p<0.000). This lack of awareness echoes previous research emphasizing the need for culturally sensitive awareness campaigns to address misconceptions about donor milk.

Our study found that mass media (49.6%) was the primary source of knowledge about human milk donation, followed by health professionals (22.2%), health facilities (17.4%), and friends (10.9%) (p<0.000). While media shapes public awareness, healthcare professionals remain underutilized despite their credibility. Velmurugan et al similarly reported that social media (42%) was the leading source, with only 16% receiving information from healthcare workers, and Salvi et al emphasized the limited influence of professionals in milk donation awareness. 9,22 In contrast, Shanigaram et al found that 68.7% of participants relied on healthcare workers, suggesting regional variations. 18 The lower percentage in our study may reflect a lack of routine discussions in clinical settings, highlighting the need to integrate milk donation education into maternal and child health programs. Jayanandan et al further noted that while media plays a key role, it lacks personalized counseling, which is crucial for addressing concerns about human milk banking.¹⁷

Social support significantly influences attitudes toward human milk donation, with our study showing that spousal support (87.8%) was strongest, followed by encouragement from friends (78.7%) and family (75.2%) (p<0.000). Doshmangir et al and Patel et al similarly reported that family and social networks were key motivators, while lack of spousal support discouraged donation. Pespite high awareness of breast milk expression (93.0%), only 19.1% had been encouraged to donate, and 2.6% had ever visited a milk bank, reflecting findings from Salvi et al and Shanigaram et al who noted that hesitancy toward milk donation persisted despite awareness, largely due to misconceptions and lack of direct exposure to milk banks. Ph. The primary motivation for donation in our study was altruism (96.5%) and the

belief that breast milk should not be wasted (86.1%), aligning with Jayanandan et al where nearly all donor mothers (98.6%) were motivated by the desire to help sick neonates. ¹⁷ However, actual participation remained low, with only 26.5% having donated, similar to Smyk et al who found that logistical barriers and lack of awareness limited engagement despite willingness. Cultural concerns also played a role, with 6.1% fearing kinship implications, which is consistent with Doshmangir et al who identified religious beliefs about consanguinity as a significant deterrent. ⁷

This study provides valuable insights into the sociodemographic factors, awareness, and attitudes influencing human milk donation, highlighting strong acceptance yet limited actual participation.²⁴ A key strength is the large sample size and comprehensive analysis of social influences, but limitations include self-reported data and potential selection bias. To bridge the gap between willingness and donation, targeted educational programs, improved accessibility to milk banks, and stronger involvement of healthcare professionals are recommended.²⁵ Addressing cultural concerns and logistical barriers is crucial to enhancing donor engagement and strengthening human milk banking initiatives.

Limitations

The findings of this study should be interpreted in light of certain limitations. Conducting the study within a single tertiary care hospital may limit the generalizability of the results to other geographic regions or healthcare settings, particularly in rural or underserved populations. The use of self-reported responses introduces the possibility of social desirability and recall biases, which may have influenced participants' expressions of willingness or awareness. Additionally, the absence of perspectives from healthcare providers and male partners, who often play a pivotal role in decision-making regarding infant feeding practices, may have constrained a more comprehensive understanding of the sociocultural dynamics influencing human milk donation. Broader, multicentric studies incorporating diverse stakeholders could offer deeper insights into the structural and cultural factors shaping milk donation behavior.

CONCLUSION

This study highlights the high acceptance of human milk donation among reproductive-aged women, with strong altruistic motivations and a widespread understanding of its benefits for maternal and neonatal health. However, despite positive attitudes, actual participation in milk donation remains low, primarily due to limited awareness, accessibility challenges, and cultural concerns. Mass media emerged as the dominant source of information, while healthcare professionals, though trusted, were underutilized in promoting milk donation. Spousal and social support played a crucial role, reinforcing the need

for community-driven awareness programs. To enhance milk donation rates, integrating education into maternal healthcare, expanding milk bank accessibility, and addressing cultural misconceptions through targeted interventions are essential. Strengthening policy frameworks and support systems will further facilitate human milk donation, ensuring optimal neonatal nutrition and improved public health outcomes.

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