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Donor mothers portrayal and associated variables with breast milk donation in a Human Milk Bank

Retrato das mães doadoras e variáveis associadas à doação de leite materno em um Banco de Leite Humano

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ABSTRACT

Objective
To describe and analyze the donor mothers' profile and variables associated with breast milk donation at Human Milk Bank in the municipality of Guarapuava, Paraná, Brazil.

Methods
This was a cross-sectional study obtained from information contained in the donor registration form between the period July 2013 (implementation of the service) to December 2019. The collected data were tabulated and descriptive analysis of variables and Chi-square and Fischer's exact association tests were performed.

Results
Of 1,491 records analyzed, this research identified that 70.73% of donors were between 20 to 34 years old; 67.69% had prenatal care at public health network and 61.37% have had cesarean delivery. Most mothers (61.44%) remained as donor for 29 days and 53.83% of them donated up to 500 ml of milk. In addition, statistically significant association was observed between milk volume donated and donation time for the following variables: prenatal place care, gestational age, child's birth weight, child age, and smoking. Maternal age was associated with a higher volume of donated milk.

Conclusion
The study's findings reinforce the approaching importance the possibility of human milk donation during prenatal care, with emphasis on private health service, and throughout the women's and children's health care network, as well as on the community.

Keywords: Infant, newborn. Lactation. Milk banks. Mothers. Public health.

RESUMO

Objetivos

Descrever e analisar o perfil de mães doadoras e as variáveis associadas à doação de leite materno em um Banco de Leite Humano no município de Guarapuava, Paraná, Brasil.

Métodos

Trata-se de um estudo transversal obtido a partir de informações constantes no formulário de cadastro de doadoras entre o período de julho de 2013 (implementação do serviço) até o mês de dezembro de 2019. Os dados coletados foram tabulados e posteriormente foi feita a análise descritiva das variáveis e testes de associação do Qui-quadrado e exato de Fischer.

Resultados

Das 1.491 fichas analisadas, a presente pesquisa identificou que 70,73% das doadoras tinham entre 20 e 34 anos de idade; 67,69% realizaram o pré-natal na rede pública de saúde e 61,37% realizaram parto cesárea. A maioria das mães, 61,44%, permaneceu como doadora por 29 dias e 53,83% delas doaram o volume de até 500ml de leite. Além disso, observou-se associação estatisticamente significativa entre o volume de leite doado e o tempo de doação para as seguintes variáveis: local de realização do pré-natal, idade gestacional, peso ao nascer, idade da criança e tabagismo. A idade materna se associou ao maior volume de leite doado.

Conclusão

Os achados do estudo reforçam a importância da abordagem ainda no pré-natal sobre a possibilidade de doação de leite humano, com ênfase no serviço privado de saúde, e, em toda a rede de atenção à saúde da mulher e da criança, bem como na comunidade.

Palavras-chave*: *Recém-nascido. Lactação. Bancos de leite humano. Mães. Saúde pública.

INTRODUCTION

The importance of breastfeeding is widely recognized. Scientific highlight shows that its health benefits for women and children extend beyond the Breastfeeding (BF) period. Therefore, Human Milk (HM) is perfectly adjusted food, offered at unique moment in the time infant, when gene expression is being adjusted for life [1-2].

However, even with evidence about its importance, according to data from the National Study of Child Food and Nutrition, the donation HM prevalence in Brazil was only 4.80%, with the highest predominance was recorded in the southern Brazil region (7.10%) [3].

Thereby, the service provided by Human Milk Banks (HMB) – organized in Brazil at *Rede Brasileira de Bancos de Leite Humano* (r-BLH-BR, Brazilian Network of Human Milk Banks) – are important assistance centers for BF and deserve to be highlighted for work done on behalf of lactation and BF allowance in babies who cannot breastfeed. These developed actions have positive impact on the morbimortality reduction of these babies [4-5].

In 2022, Brazil have had 227 HMB, 93 in Southeast region, 53 in Northeast, 38 in South, 27 in Midwest and 16 in North region. This service individually assisted 2,077,523 women, registered 197,757 donors and 222,750 recipients, with a total of 170,429.7 HM liters distributed [6].

The HM donation can be made by the woman at any lactation stage voluntarily, by completing donation registration form and providing tests according to RDC nº 171/2006 [7]. Medical professional responsible for HMB will verify that woman meets the minimum to milk donation requirements [8].

Studies of HM donation topic and HMB services mostly address the description of maternal and child characteristics, motivation for donating milk, demand for service and the vision of health professionals [9-19]. Research on variables that interfere with time and volume of donated milk is scarce.

In this perspective, policies to favor the HM donation deserve to be highlighted [5]. According to National Policy for Promotion, Protection and Support of BF, the organization of health care network must involve meeting needs of women-mothers and their families. This network organization is under the coordination of Primary Health Care (PHC). Furthermore, it is recommended that intersectoral and interinstitutional articulations of interest entities with health sector be adequately operationalized in benefit of this policy [20].

Thus, r-BLH-BR operates in Brazilian Unified Health System as a strategy to qualify neonatal care in sustain of BF in terms of food and nutritional security [21].

In view of the above, the present investigation purpose was to describe and analyze the donor mothers' profile and variables associated with the breast milk donation in a Human Milk Bank located at a city of Paraná State, Brazil.

METHODS

A cross-sectional study was carried out based on information available in a form for registering of HMB donors [7-8] in Guarapuava (PR), Brazil, from the period of service implementation in July 2013 until to December 2019.

This HMB is linked to Saint Vincent Paul Charity Hospital, a philanthropic institution that is reference for high-income pregnancies, and primarily cares for newborns hospitalized in neonatal intensive care unit. Guarapuava is seat of 5th Health Regional of the state Parana, being a reference in health for 19 municipalities in the region [22-23].

The information was part of the research data included: mother's birthday; attendance date at the HMB; mother's full name; marital status; profession; address (number, neighborhood, reference point); baby name; baby's birth weight; how donor became aware of HMB; total children number; prenatal care mother place; gestational age at delivery; delivery hospital and type; current history data (smoking, alcoholism, medication use, breast procedures, blood transfusions, breast evaluation, evaluation of home conditions); suitability to be a donor; guidance types provided to mothers; milk donation period (days and months) to HMB and; amount/volume of milk donated (ml).

For some variables, cutoff points already established in literature were adopted, namely: "baby's birth weight," in which values below 1,500 grams (g) were considered very low weight; low birth weight, equal to or greater than 1,500 g and below 2,500 g; and adequate weight, equal to or greater than 2,500 g [24]; and; "gestational age", preterm, less than 37 weeks of gestation; term, between 37 and 41 weeks and; post-term, greater than or equal to 42 weeks [25]. For the following variables: "maternal age" [11], "lives with a partner" [9,12-13], "maternal work" [19], "maternal parity" [9,12-13], "prenatal service" [13,19], "delivery type" [9,12-13,19], "smoking" [12,18] and "alcoholism" [18] the categorization we employed was utilized in studies with donor mothers of HM. For variables "child age", "donated milk amount" and "donation time", these categories were adopted in order to facilitate data analysis, as there was information in registration form frequently recorded in different and non-standard ways.

For checking and statistical analysis, collected data were typed into Microsoft Excel® spreadsheets by three previously trained undergraduate nutrition students and analyzed using Stata software version 12.0 (Stata Corp., College Station, Texas, USA). Descriptive statistics were used to describe the donor mother's profile.

The Shapiro-Wilk test was performed to verify distribution variables of donated milk amount and donation time, and both variables did not present adherence to the normal distribution. Thus, to correlation test between them, Spearman's rank correlation coefficient was performed. To verify the variables that were associated with the volume and time of breast milk donation the Chi-square and Fischer's exact tests were used, in which were considered statistically significant associations those with a value of $p<0.05$.

The research was approved by the UNICENTRO Research Ethics Committee Certificate of Submission for Ethical Appreciation (CAAE 15324919.4.0000.0106, protocol 3.407.091) on June 24, 2019. As this study used secondary data, the dismissal of Informed Consent Form was requested.

RESULTS

Data were collected from 1,814 records of nursing mothers registered in HMB, between 2013 and 2019. However, 323 mothers records who went through the registry, but did not donate HM were excluded, totaling 1,491 donor mothers considered for the purposes of this study. Also, for the present analysis, variables with a range from 1,204 to 1,490 records were considered, since it was verified the absence of some information not filled in the registration forms.

Among participating donors, it was found that majority, 70.73% of donors were between 20 to 34 years old, 67.69% had prenatal care at public health network, and 61.37% had cesarean delivery. Regarding the time as a donor and the volume donated, the majority, 61.44% remained for 29 days; and 53.83% donated up to 500ml. As for the children's characteristics, majority, 79.02%, were born with weight equal to or greater than 2,500 grams and 35.59% were up to 5 days old when mother registered with the HMB. Data regarding the characterization of these mothers and children are shown in Table 1.

Table 1 – Characteristics of donor mothers and children from a Human Milk Bank in Guarapuava (PR), Brazil, 2019.

Variable / Categories	Frequency (n)	Percentage (%)
Mother's age		
≤19 years old	268	18.16
20-34 years	1,044	70.73
35 years or more	164	11.11
Lives with partner		
Yes	1,093	80.01
No	273	19.99
Formal job		
Yes	620	51.32
No	588	48.68
Maternal parity		
Primiparous	816	57.30
Multiparous	608	42.70
Prenatal Service		
Public network	880	67.69
Private Network	388	29.85
Public and private network	32	2.46
Gestational Age		
Preterm (<37 weeks)	284	22.17
Term (37-41 weeks)	985	76.89
Post-term (≥42 weeks)	12	0.94
Type of delivery		
Vaginal	549	38.63
Cesarean section	872	61.37

Table 1 – Cont.

Variable / Categories	Frequency (n)	Percentage (%)
Birth Weight		
<1,500 grams	77	5.33
≥1,500 and <2,500 grams	226	15.65
≥2,500 grams	1,141	79.02
Child's age at the time of registration		
Up to 5 days old	525	35.59
6 to 29 days old	440	29.83
1 month or more	510	34.58
Medications		
Yes	223	15.78
No	1,190	84.22
Smoking		
Yes	68w	4.78
No	1,356	95.22
Alcoholism		
Yes	6	0.42
No	1,425	99.58
Mother's time as a donor		
Up to 29 days	910	61.44
1 to 4 months	474	32.01
5 months or more	97	6.55
Volume of milk donated by the mother		
Up to 500 ml	802	53.83
501 to 5,000 ml	565	37.92
5,001 ml or more	123	8.26

This study's outcome variables presented a positive correlation (r=0.74; p<0.001), that is, the higher the time as a donor, the higher donated milk volume (Figure 1). It was possible to observe an average of 35.03 days±60.16 as a donor to HMB and a volume average of 1,812ml±4,646 to donated milk.

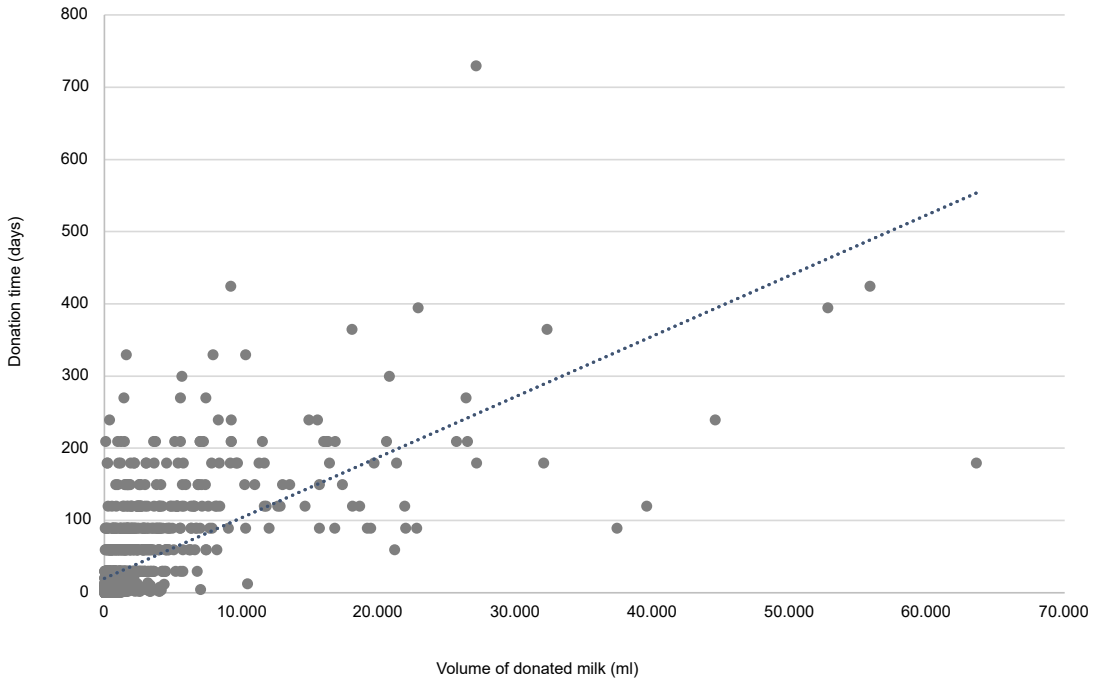

Figure 1 – Scatter diagram of the time as a donor and donated milk volume to the Human Milk Bank in Guarapuava (PR), Brazil, 2019.

The variables maternal parity (p=0.156; p=0.340), lives with a partner (p=0.362; p=0.423), maternal work (p=0.836; p=0.677), delivery type (p=0.381; p=0.386), medication use (p=0.334; p=0.510), and alcoholism (p=1.000; p=0.215) were not related to donated milk volume or time as a donor to HMB, respectively.

A statistically significant association (p<0.05) was observed between milk donated volume and donation period and following variables described in Tables 2 and 3: prenatal care place, gestational age, child's birth weight, child age, and smoking. Maternal age from 20 to 34 years old was associated with higher donated milk volume when compared to ages up to 19 years old and 35 years old or older (p=0.036) (Table 2), but not to donation time (p=0.336) (Table 3).

Table 2 – Factors associated with the volume of milk donated in a Human Milk Bank in Guarapuava (PR), Brazil, 2019.

Variable	Volume of donated milk (ml)						*p*-value
	Up to 500 ml n		501 to 5,000 ml		5,001 ml or more		
	n	%	n	%	n	%	
Mother's age							0.036
≤19 years old	146	18.27	108	19.42	14	11.67	
20-34 years	550	68.84	401	72.12	92	76.67	
35 years or more	103	12.89	47	8.45	14	11.67	
Lives with partner							0.362
Yes	592	80.22	411	78.74	89	84.76	
No	146	19.78	111	21.26	16	15.24	
Formal job							0.836
Yes	314	50.48	250	51.98	55	52.88	
No	308	49.52	231	48.02	49	47.12	
Maternal parity							0.156
Primiparous	422	55.02	323	60.26	71	59.17	
Multiparous	345	44.98	213	39.74	49	40.83	
Prenatal service							<0.001*
Public Network	475	70.06	345	68.05	60	52.63	
Private Network	180	26.55	155	30.57	52	45.61	
Public and private network	23	3.39	7	1.38	2	1.75	
Gestational Age							<0.001*
Preterm	202	29.45	71	14.49	10	9.62	
Term	476	69.39	417	85.10	92	88.46	
Post-term	8	1.17	2	0.41	2	1.92	
Type of delivery							0.381
Vaginal	303	39.56	209	38.63	37	32.74	
Cesarean section	463	60.44	332	61.37	76	67.26	
Birth Weight							<0.001*
<1,500 grams	47	5.99	27	4.95	2	1.77	
≥1,500 and < 2,500 grams	157	20.03	62	11.36	7	6.19	
≥2,500 grams	580	73.98	457	83.70	104	92.04	
Child's Age							<0.001
Up to 5 days old	353	44.46	150	26.93	21	17.07	
6 to 29 days old	217	27.33	162	29.08	61	49.59	
1 month or more	224	28.21	245	43.99	41	33.33	
Medications							0.334
Yes	128	16.86	80	14.90	14	12.07	
No	631	83.14	457	85.10	102	87.93	
Smoking							0.001*
Yes	51	6.68	15	2.78	2	1.68	
No	713	93.32	525	97.22	117	98.32	
Alcoholism							1.000*
Yes	4	0.52	2	0.37	0	0.00	
No	763	99.48	540	99.63	121	100.00	

Note: *Fischer's exact test.

Table 3 – Factors associated with the time of donation in a Human Milk Bank in Guarapuava (PR), Brazil, 2019.

Variable	Donation time (days/months)						*p*-value
	Up to 29 days		1 to 4 months		5 months or more		
	n	%	n	%	n	%	
Mother's age							0.336
≤19 years old	168	18.50	85	18.32	13	13.68	
20-34 years	630	69.38	337	72.63	72	75.79	
35 years or more	110	12.11	42	9.05	10	10.53	
Lives with partner							0.423
Yes	670	79.86	341	79.12	75	85.23	
No	169	20.14	90	20.88	13	14.77	
Formal job							0.677
Yes	368	50.41	211	53.15	40	51.95	
No	362	49.59	186	46.85	37	48.05	
Maternal parity							0.340
Primiparous	486	55.80	265	58.76	58	62.37	
Multiparous	385	44.20	186	41.24	35	37.63	
Prenatal service							0.043*
Public Network	549	69.58	280	66.67	46	54.12	
Private Network	223	28.26	127	30.24	37	43.53	
Public and private network	17	2.15	13	3.10	2	2.35	
Gestational Age							<0.001*
Preterm	215	27.49	57	13.90	9	10.84	
Term	558	71.36	350	85.37	74	89.16	
Post-term	9	1.15	3	0.73	0	0.00	
Type of delivery							0.386
Vaginal	347	39.93	164	36.04	34	38.64	
Cesarean section	522	60.07	291	63.96	54	61.36	
Birth Weight							<0.001*
<1,500 grams	52	5.84	23	5.02	2	2.30	
≥1,500 and <2,500 grams	182	20.43	37	8.08	5	5.75	
≥2,500 grams	657	73.74	398	86.90	80	91.95	
Child's Age							<0.001
Up to 5 days old	408	45.28	99	21.11	16	16.49	
6 to 29 days old	250	27.75	147	31.34	41	42.27	
1 month or more	243	26.97	223	47.55	40	41.24	
Medications							0.510
Yes	144	16.74	67	14.69	12	13.48	
No	716	83.26	389	85.31	77	86.52	
Smoking							0.002*
Yes	53	6.11	14	3.06	0	0.00	
No	814	93.89	444	96.94	91	100.00	
Alcoholism							0.215*
Yes	6	0.69	0	0.00	0	0.00	
No	864	99.31	461	100.00	92	100.00	

Note: *Fischer's exact test.

Mothers who have had prenatal care in public health network donated a greater milk volume, as well as remained longer as donors when compared to mothers who have had prenatal care in private network or concomitantly in public and private network. The child being born at term (37-41 weeks) and with adequate weight (≥2,500 grams) also have had positive influence on greater milk donated volume and longer donation time.

Despite the associations found between the highest donated milk volume and the longest donation time among non-smoking mothers, it is noteworthy that in this study most donors were non-smokers (95.22%), which limits our interpretations.

The child's age at the time of the mother's registration was also associated with volume and time milk donation (p<0.001), as shown in Tables 2 and 3 that both the highest milk donated volume (5,001 ml or more) as well as the longest time as a donor (5 months or more) was associated with child's age between 6 and 29 days old at the registration time. Whereas, lower milk donated volume (up to 500 ml) as well as the shorter time as a donor (up to 29 days) was associated with the child being up to 5 days old. Intermediate donation volume and timing (501 to 5,000 ml and 1 to 4 months, respectively) were associated with child's age of one month or more.

DISCUSSION

This study traced a donor mothers' profile from a HMB service and analyzed variables associated with the donated milk volume as well as the donation time, seeking to understand what can interfere in this process, given the scarcity of studies in this regard.

Regarding the donor's profile, 70.73% of donors were between 20 to 34 years old, 80.01% lived with a partner and the most were primiparous (57.30%). Comparing data with the literature, in a cross-sectional study aimed at characterizing sociodemographic women-mothers profile, the authors feature that the mean age of the internal donors group (women who delivered in maternity hospital linked to the HMB) was 23.9 years and for external donors it was 31.4 years and most were primiparous [14].

Other studies that profiled the HM donors reported means of maternal age varying between 28.5 [10] to 30.3 years [13], and the percentage of adult mothers (older than 20) in a study at HMB of Maringá-PR was of 78.20% [9]. Another study showed that most women mothers are aged between 20 and 34 years old (76.50%) [11], close to numbers found in this study. Primiparity was also highlighted in two studies (64.30% and 71.93%), and it reinforces maternal breastfeeding insecurities to the first child [10,13].

Previous studies in donors profile show that most women lived with a partner, accounting for values greater than 75% [9-10,12-13], which can favor donation when you have a partner who supports and supports you for such decision.

Primiparity, despite representing greater insecurity for some mothers regarding their child's nutrition, on the other hand, may favor milk donation due to greater availability of time and dedication to milking and donation process.

However, in the present study, these variables were not associated with greater volume and milk donation time.

The biggest donation period was of 29 days (61.44%), with average of 35.03 days of donation. The average donated milk volume was 1,812 ml, and 53.83% mothers donated up to 500ml. Two studies reported donation time average to 50 and 90 days [13,10], higher numbers than those present in this study. Few studies explored donated milk volume by mothers. A study reported an average of 1.4 L of HM per donor during one-year period [15].

A positive correlation between two outcomes of this study was found (r=0.74), given that the higher donation period implies higher donated milk volume. This can explain the same relations found for both outcomes, with the exception to maternal age variable, which showed statistical association only for donated milk volume, with mothers aged between 20 and 34 years donating a greater milk volume.

Teenager mothers (<20 years old) and those aged 35 years or older seem to donate less milk. A study with adolescent donors showed that health professionals need skills to deal with peculiarities of this public and greater encouragement to BF practice, considering their unfavorable socioeconomic and perinatal conditions [9]. This study identified that most women have had prenatal care in public health network (67.69%), which run through protective factor for remaining as donors and donating greater volume of HM.

In support to the reported findings, a cross-sectional study found factors associated with donation were positively related to assistance received at the Basic Health Units [12]. Women who perform prenatal care in public health care can receive more information about the service provided by the HMB and about milk donation in waiting rooms, in meetings of pregnant women groups and in consultations by multidisciplinary teams of PHC.

After giving birth, these women can seek out the HMB in case of complications during breastfeeding or due to excess milk production, becoming a possible donor. While performing prenatal care in private health care may not favor this prior knowledge of HMB service, considering that pregnant woman is restricted to consultations with the obstetrician.

Two studies evidenced that most donor mothers received their prenatal care at private health system, with percentages of 64.30% and 57.14% [10,13], while another study showed that 64.50% of the donor mothers received their prenatal care in public health system [19], corroborating with the findings of this study. However, none of the other studies analyzed relationship between receiving prenatal care in private or public health systems with the HM volume and donation period time to HMB.

According to 2019 National Health Survey, 4.7 million women in Brazil were pregnant. Of these, 98.20% said they had prenatal appointments. Also, 88.80% of these women with term or post-term deliveries had attended six or more consultations. Moreover, about 70.10% had prenatal care in public facilities, with a predominance of 59.8% in Basic Health Units [26].

In addition to this study reinforcing the public health system use by donors, in 2019 year, the number of HM recipients (n=214,560) exceeded the donors number (n=188,686), that is, the demand for the service surpassed the number of donors nationwide. In view of the above, it is worth highlighting questions at the basic health care level, such as Family Health Strategy and other spheres related to the information quality provided during prenatal care in relation to BF and encouragement of HM donation [5,27].

A qualitative study that analyzed HM donation from the perspective of PHC professionals showed that suggesting HM donation is not a part of these professionals' routine during prenatal and post childbirth care. They even reported a lack of knowledge concerning the donation subject. The professionals suggested donation only during breastfeeding, after verifying the milk production excess, which may not be enough counseling for mother to become a donor [16]. Another study with donor mothers highlighted that breast milk excess production contributed to donation and made the extraction process easier, but 89% of mothers reported not receiving orientation on the importance of donation during prenatal, nor how to perform it [13].

A study conducted with women during immediate puerperium showed relation between receiving orientation about HM donation during prenatal care period and the wish to donate milk [18]. The prenatal consultations and groups for pregnant women are timely places to discuss the subjects of breastfeeding, breast engorgement, support in case of complications during breastfeeding, HM donation possibility, and service provided by the HMB and collection stations. It is important

to mention that permanent education on BF for health staff is fundamental to provide assistance during prenatal and postpartum periods.

The child being born at term and with adequate weight also have had positive influence in this research. A cross-sectional study found constituent factors related to the milk donation that was negatively bonded to baby's hospitalization in neonatal unit, usually premature and with low birth weight at birth [12].

Preterm and low birth weight babies may need intensive care, which hinders breastfeeding process and impairs the mothers emotional state, who may have difficulties producing and ordering their milk, which is a factor that limits this mother from being a donor. On other hand, some mothers are successful in expressing milk while their children are under intensive care and can express milk for their own child, and the surplus production can be donated to hospital's HMB.

Most children were up to 29 days old when mother was registered as a donor at program (65.42%). A study that aimed to understand donors profile reported that donations began one month after child was born, this being period with the most search for the HMB services and opportunity to attract donors [10]. Other study reported that mother-baby binomial who is referred or who seeks HMB service within first 25-48 hours after birth and is the main reasons were newborn weight loss and difficulty in handling in breastfeeding [17].

In the present study, the child's age range from 6 to 29 days was related to higher donated milk volume and time of the mother as a donor. What might explain this finding is that right from the breastfeeding beginning, there can be breast complications caused by incorrect baby grasp on mother's breast, caused by higher milk production, making fissures and breast engorgement common [28]. The HMB and milk collection stations are specialized services that assist mothers with these problems and, once complications are solved, mothers are encouraged to donate HM if there is a surplus production.

Despite the association found between non-use of cigarettes and longer duration and HM donation volume, it should be noted that most donors in the study did not use cigarettes, which limits our interpretation of this finding. According to RDC nº 171/2006, among the requirements for HM donation, it is important not to smoke more than 10 cigarettes a day, as well as not to use alcohol or illicit drugs [7].

Furthermore, there is scientific proofs showing that maternal nicotine is capable of causing several detrimental effects on child's health during breastfeeding, such as: changes in sleep patterns; reduction and deficiency in iodine supply; histopathological damage; intracellular oxidative damage; impaired glucose tolerance and others. In this perspective, the majority of women-mothers (95.22%) not being smokers, not only is protective constituent to remain longer as donors and donate more HM, but also protects the child's health [29].

Thus, corroborating foregoing works findings, recent literature highlights that the variables that disrupt with HM donation are generally of an operational, educational, and structural nature. Health professionals play a key role in encouraging donation and should be multipliers of good practices related to BF and HM donation. In this sense, it is important to intensify public policies for promotion, protection, and breastfeeding support by health services [30].

The connected data from this research was able to collect information regarding six-year period of HMB service implementation, gathering data on 1,491 registered donors who donated HM to service. However, as it is common for studies obtained from secondary data, there was an information lack on some variables not filled in at the registration time, which is a study limitation.

Another limitation is information concerning maternal education level, which may interfere with the results. However, this variable was not available on form utilized in this study, which follows document previously established by National Network of HMB [7-8]. Therefore, the approach presented here is essential to expand the understanding and reorganization of PHC public policies in Brazil aimed at the protection and promotion of BF, as well as the donation of HM.

Professional performance of health care network, with the PHC as the care organizer, responsible for referring mother-child dyad to the HMB, becomes fundamental for support in cases of intercurrences in breastfeeding process. However, primary care professionals should be trained to assist nursing mothers in the most common breastfeeding complications, seeking to help them establish breastfeeding, as well as recognizing potential HM donors. These professionals must have a reference in HMB specialized care at the lactation.

The organization and structuring of this care network directly imply an increase in BF prevalence as well as a rising of HM donors number, benefiting children breastfed by their mothers and those hospitalized in a neonatal intensive care unit. In the quest to attract donors to HMB, the establishment of partnership networks with the private health sector is also necessary.

CONCLUSION

The findings of this study reinforce the importance of informing the mother of the possibility of donating HM during prenatal care, with an emphasis on private health sector and maternal and child health network, as well as in the community.

In addition, it should be noted that the r-BLH-BR acts as an important structure in public health, being a strategy to support and encourage BF and food and nutritional security. Therefore, it is up to society to promote public policies in favor of this network.

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