BREASTFEEDING, COMPLEMENTARY FEEDING AND HEALTH

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Dimensions of social support and breastfeeding outcomes: the *Pró-saúde* study

Dimensões do apoio social e prática de aleitamento materno: estudo pró-saúde

Abstract

Objective: To estimate the association between social support and its dimensions and the prevalence of breastfeeding (BF) in the first two years of life. ***Methods***: Cross-sectional study with women (n = 1,634) participating in the Phase 1 of the Pró-Saúde Study (1999), with information collected through a self-completed questionnaire. The duration of breastfeeding was self-reported in months and, subsequently, prevalence rates were assessed at 6, 9, 12 and 24 months of age. Social support was assessed in three dimensions: positive social interaction / affective, information / emotional support, and material support. Odds ratios with 95% confidence intervals were estimated by logistic regression, adjusted for maternal confounders, with the outcome being the prevalence of breastfeeding in each age. ***Results***: The prevalence rates of breastfeeding at 6, 9, 12 and 24 months of age were 58.0%, 31.9%, 23.5% and 9.7%, respectively. The positive social interaction/affective dimension was the most important one for breastfeeding at six months (OR = 1.52 95%CI = 1.03-2.25) and also for breastfeeding at 24 months (OR = 2.38 95%CI = 1.03-5.49). ***Conclusion***: Social support is an important aspect to be considered when giving

support to the breastfeeding woman, especially in the first months of a child's life.

Keywords: Social support. Social support networks. Breastfeeding.

Resumo

Objetivo: Estimar associação entre o apoio social e suas dimensões e a prevalência do aleitamento materno (AM) nos dois primeiros anos de vida. *Métodos:* Estudo seccional com mulheres (n=1.634) participantes da fase 1 (1999) do Estudo Pró-Saúde, com informações coletadas por meio de questionário autopreenchível. A duração do AM foi autorrelatada em meses e, posteriormente, as prevalências foram avaliadas aos 6, 9, 12 e 24 meses. O apoio social foi avaliado em três dimensões: interação social positiva/afetiva, apoio de informação/emocional e apoio material. Foram estimadas razões de chances com intervalo de 95% de confiança via regressão logística, ajustadas por características maternas, e tendo por desfecho a prevalência de aleitamento materno em meses. *Resultados:* A prevalência de aleitamento materno aos 6, 9, 12 e 24 meses foi respectivamente, de 58,0%, 31,9%, 23,5% e 9,7%. A dimensão interação social positiva/afetiva foi a mais importante para o aleitamento materno aos seis meses (OR=1,52 IC95%=1,03-2,25) e também para o aleitamento materno aos 24 meses (OR=2,38 IC95%=1,03-5,49). *Conclusão:* O apoio social é um importante aspecto a ser considerado para dar suporte à mãe que amamenta, principalmente nos primeiros meses de vida da criança.

Palavras-chave: Apoio social. Redes de apoio social. Aleitamento materno.

INTRODUCTION

Breastfeeding is associated with short-term[1] and long-term[2] benefits for child and maternal health, protecting children from several morbidities and decreasing child mortality. As for maternal health, a recent meta-analysis[2] indicated that breastfeeding protects against breast and ovarian neoplasms, in addition to diabetes. However, in Brazil, despite the increase in the median duration of breastfeeding from 7.0 months in 1996 to 9.4 months in 2006 (PNDS),[3] this duration is still far from that recommended by the World Health Organization (WHO), which recommends that children be breastfed for up to 24 months or longer.[4] Factors such as place of residence, maternal age and schooling, Cesarean delivery, family income, maternal work, child's age, use of artificial nipples and pacifiers[5] can interfere with breastfeeding. Other important factors that can influence breastfeeding are the women's sociocultural context,[6] their personal experience, family traditions and social support.[7-9]

Social support, defined as the "support system formed by formal and informal relationships through which an individual receives emotional, cognitive and material support to cope with stressful situations",[10] may interfere with the duration of breastfeeding, since it is a period of adaptation for women to several changes in their lives.

A study carried out in the city of Rio de Janeiro found that mothers with high social support and a greater number of relatives they could count on were more likely to exclusively breastfeed. In the study by Vieira *et al.*, carried out in Florianópolis, affective/positive interaction support were associated with longer duration of breastfeeding.[11,12]

Social support has been studied as a factor related to other health outcomes [13-17] and has a validated scale for use in the Brazilian population.[18] However, few studies have used this scale to assess its association with eating habits in childhood.[9] This study tested the hypothesis that women with high social support score would breastfeed longer when compared to those with lower social support score; moreover, the association between the different dimensions of social support and breastfeeding was evaluated. Social support and its dimensions may have different interactions with breastfeeding practice at each stage of child development and at different age groups.

METHODS

Study design

This was a cross-sectional epidemiological study, carried out with the population of the *Pró-Saúde* Study (EPS), a longitudinal investigation of technical and administrative staff of a university in Rio de Janeiro, Brazil, of which first phase took place in 1999 (n=4,030).[19] The study participants answered a multidimensional, self-completed questionnaire, which was applied at the workplace by a trained team. The reliability study was performed, and the questionnaire used was tested and retested in a sample (n = 192) of employees of the same university who did not belong to the permanent staff.[12] The original objective of the *Pró-Saúde* Study was to assess social determinants and their influence on issues such as quality of life, morbidity, dietary patterns, physical activity, smoking, and use of health services and medication.[20] More details about the study can be obtained from Faerstein et al.[19,20]

In phase 1 (1999), the EPS interviewed 2,238 women, but for the present study the selected subpopulation consisted only of women participating in this phase who reported having live births (n = 1,634).

The main study exposure was social support and its dimensions. The Medical Outcomes Study social support scale was originally designed to be evaluated in five functional dimensions: instrumental (material), affective, emotional, positive social interaction, and information.[21] More recently, psychometric performance assessments of the Brazilian-adapted version suggested its reduction to three dimensions: positive social interaction and affective support; information and emotional support; and material support.[18]

The scores in social support dimensions were calculated as the ratio between the score achieved by the participant and the maximum score that could be attained in that dimension, multiplied by 100. More details can be found in Griep et al.[18,22] The scale was categorized into *tertiles* (lower, intermediate and upper), both for social support and for each of its three dimensions.

Breastfeeding duration was the outcome of interest. This variable originated from the sequence of questions: "Did you breastfeed your first child?", And "How old was your first child when you stopped breastfeeding completely?" (in months). Based on this duration in months, cutoff points were created to define the prevalence of breastfeeding at 6, 9, 12 and 24 months.

The choice of these cutoffs followed the logical assumption that the prevalence of breastfeeding at six months reflects a period when breastfeeding should be exclusive.[5] At nine

months, it is the period when the child should receive complementary feeding; therefore, the prevalence of breastfeeding in this period is usually lower, when compared to the prevalence at six months,[3] as the prevalence at 12 months may also be lower, reflecting this process of introducing the child to foods eaten by the family, with the WHO recommending that the duration of breastfeeding should be up to 24 months or longer.[4,23]

The covariates used in the analysis were self-reported skin color/ethnicity, maternal age at the birth of the first child, schooling, income, marital status, type of delivery and decade of birth. Skin color/ethnicity was classified according to the Brazilian Statistical Institute (IBGE) as black, brown, white, Asian or indigenous. Age was categorized as: ≤20 years, from 21 to 25 years; 26 to 30 years, 31 to 35 years and ≥36 years old. Schooling was categorized into: up to complete Elementary School, complete High School and College/University or more. The household income for the month prior to the interview was divided by the number of dependents, being transformed into *per capita* income and classified into: up to 3 minimum wages; from 3 to 6 minimum wages; higher than 6 minimum wages, based on the 1999 minimum wage in Brazil (R$ 136.00).

For the analyses performed after the data description, marital status was categorized as "was never married or lived with a partner" and "others", since with the exception of this marital status, the information about the others (married, separated and widowed) was not contemporary to breastfeeding. The variable "decade of birth" was created based on the date of birth of the first child informed by the participant, being categorized into: prior to 1960, 1960, 1970, 1980 and 1990.

Data analysis

Initially, the prevalence rates of the study variables were obtained. Subsequently, the prevalence of breastfeeding at the cut-off points at 6, 9, 12 and 24 months was compared according to the maternal and social support characteristics, using Pearson's chi-square test, with a significance level of 5%. Finally, the odds ratios with a 95% confidence interval were estimated using logistic regression models, with the prevalence of breastfeeding being treated as a binary outcome for each cutoff (6, 9, 12, and 24 months) and adjusted for the maternal characteristics: maternal age, Cesarean delivery, skin color/ethnicity, *per capita* income, schooling, marital status and decade of birth. Two models were estimated for each cut-off point: one with a total social support score in tertiles, and another with the three social support dimensions estimated together. The outcome (prevalence of breastfeeding) had non-

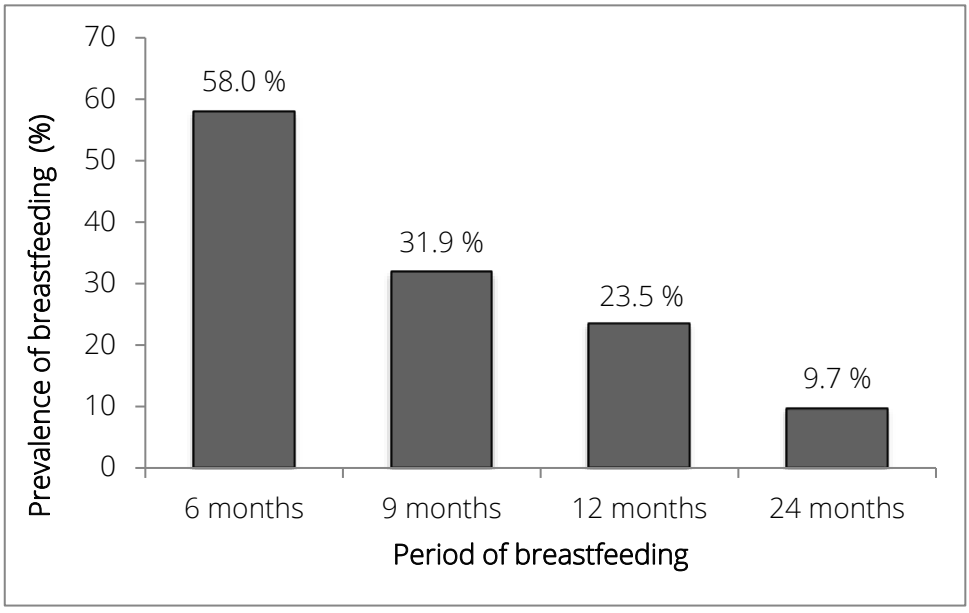
breastfeeding as the reference category, meaning that positive associations estimate the chance of breastfeeding at the period.

In the adjusted model, all confounding variables were considered simultaneously to allow comparability, as the importance of the variables was different for each period of breastfeeding. The statistical program SPSS, version 19.0, was used for data analysis. The *Pró-Saúde* Study was approved by the Research Ethics Committee of Hospital Universitário Pedro Ernesto (registry n. 224/1999).

RESULTS

Considering the total of women, 92% started breastfeeding their first child (Table 1). The prevalence of breastfeeding at 6, 9, 12 and 24 months were 58.0%, 31.9%, 23.5% and 9.7 %, respectively (Figure 1). The median social support score was 84.3, considering a scale renging from 20 to 100.

Figura 1. Breastfeeding prevalence per period. Pró-Saúde Study, Rio de Janeiro, 1999



The assessed mothers had their first child mainly between 21 and 30 years of age. Cesarean delivery was performed in 49.8% of the participants, and regarding ethnicity, 49.2% self-declared as White. *Per capita* income between 3.0 and 6.0 minimum wages was the most prevalent range. The most prevalent level of schooling among the participants was a College/University degree or more; 60.0% of the participants were married and there was a higher prevalence of women who had their first child in the 1980s (Table 1).

Table 1. Maternal sociodemographic characteristics, childbirth care, and breastfeeding. *Pró-Saúde* study, Rio de Janeiro, RJ, 1999.

Variable	N	%
Breastfed the 1st child		
Yes	1354	92.0
No	117	8.0
Maternal age when the 1st child was born		
≤ 20	240	16.4
21 to 25	466	31.9
26 to 30	456	31.2
31 to 35	214	14.6
36 or older	87	5.9
C-section		
Yes	706	49.8
No	712	50.2
Skin color [a]		
Black	313	19.3
Brown	466	28.8
White	797	49.2
Asian and Indigenous	44	2.7
Per capita income[b]		
Up to 3 minimum wages	418	27.2
3.0 to 6.0 minimum wages	619	40.3
> 6.0 minimum wages	500	32.5
Level of schooling[c]		
Up to complete Elementary School	404	25.1
Complete High School	579	35.4
Complete College/University or more	625	38.2
Marital status		
Single	154	9.8

Table 1. Maternal sociodemographic characteristics, childbirth care, and breastfeeding. *Pró-Saúde* study, Rio de Janeiro, RJ, 1999. (Continues)

Variable (continues)	N	%
Married	945	60.0
Separated	384	24.4
Widowed	92	5.8
Birth decades		
<1960	28	1.9
1960	145	9.9
1970	307	21.0
1980	560	38.3
1990	423	28.9

[a] According to IBGE, 2010.
[b] Per capita income in minimum wages: refers to the minimum wage of R$ 136.00 in 1999, when the participants completed the questionnaire.
[c] Level of schooling and marital status refers to the year of 1999.
Note: Totals may vary depending on the losses.

We found a higher prevalence of breastfeeding at 12 months among women who self-declared as Black, and at 24 months among those who self-declared as Asian or Indigenous, and with a monthly *per capita* income of up to 3.0 minimum wages. Moreover, there was a higher prevalence of breastfeeding at 24 months among women who did not undergo a Cesarean delivery and who had finished Elementary school. Regarding the marital status, the prevalence of breastfeeding was higher among single women for BF at 12 months (p = 0.050). There was no difference between maternal ages when having the first child and prevalence of breastfeeding in each cut off points (Table 2).

Regarding the decades of birth, there was a higher prevalence of breastfeeding at 6 months among participants who had their first child in the 1990s, and at 9 months among participants who had them before the 1960s (Table 2).

Table 2. Prevalence of breastfeeding at 6, 9, 12, and 24 months according to maternal sociodemographic characteristics, childbirth care, and social support. *Pró-Saúde* study, Rio de Janeiro, RJ, 1999.

Variables	N	BF[a] 6m %	p-value[b]	BF 9m %	p-value	BF 12m %	p-value	BF 24m %	p-value
Maternal age (years)									
≤ 20	215	61.9		34.0		29.8		14.0	
21 to 25	424	51.4		28.1		20.5		8.0	
26 to 30	416	62.0		32.2		22.4		8.7	
31 to 35	176	58.5		36.9		26.1		9.7	
36 or older	66	56.1	0.20	28.8	0.229	18.2	0.065	10.6	0.168
Skin color [c]									
Black	238	56.3		37.4		32.4		16.8	
Brown	382	59.7		30.1		25.1		10.7	
White	660	57.0		30.3		18.5		6.1	
Asian and indigenous	35	65.7	0.602	40.0	0.127	31.4	0.000	20.0	0.000
Per capita income [d]									
Up to 3 MW	356	55.1		34.6		28.7		13.2	
3.0 to 6.0 MW	489	60.1		32.7		23.9		9.4	
> 6.0 MW	415	58.8	0.325	29.9	0.372	19.3	0.009	7.0	0.014
C-section									
Yes	632	60.6		32.4		21.7		7.9	
No	642	56.1	0.101	32.1	0.894	25.5	0.104	11.7	0.024
Schooling level [e]									
Up to Elementary School	329	54.7		30.1		27.1		13.1	
Complete High School	454	56.8		31.9		24.7		10.8	
Complete College/University or more	521	61.6	0.106	33.4	0.602	20.5	0.075	6.7	0.006
Marital status [e]									
Single	62	59.7		41.9		33.9		12.9	
Others	1237	58.1	0.809	31.6	0.089	23.0	0.050	9.3	0.344
Decades of birth									
<1960	25	68.0		48.0		48.0		16.0	

Table 2. Prevalence of breastfeeding at 6, 9, 12, and 24 months according to maternal sociodemographic characteristics, childbirth care, and social support. *Pró-Saúde* study, Rio de Janeiro, RJ, 1999. (Continues)

Variables (continues)	N	BF[a] 6m %	p-value[b]	BF 9m %	p-value	BF 12m %	p-value	BF 24m %	p-value
1960	129	59.7		28.7		24.8		10.9	
1970	273	45.1		20.9		17.2		8.1	
1980	503	53.3		30.0		21.9		10.1	
1990	367	71.9	0.000	41.7	0.000	27.5	0.075	9.0	0.646
Social support									
Lower tertile	421	56.1		30.4		23.8		8.6	
Intermediate tertile	428	60.0		33.2		23.1		10.5	
Upper tertile	428	58.9	0.480	32.5	0.667	23.4	0.977	9.1	0.600
Social support dimensions									
Positive social interaction / affective									
Lower tertile	410	52.9		30.0		22.4		7.8	
Intermediate tertile	455	63.5		33.2		24.4		10.1	
Upper tertile	428	57.2	0.006	32.5	0.579	23.1	0.787	10.3	0.392
Information/ Emotional support									
Lower tertile	427	55.3		30.0		23.2		8.9	
Intermediate tertile	468	63.0		36.3		25.0		10.3	
Upper tertile	402	55.7	0.030	28.9	0.036	21.6	0.503	9.2	0.766
Material support									
Lower tertile	466	57.9		30.3		23.6		9.9	
Intermediate tertile	353	56.7		30.6		22.4		9.6	
Upper tertile	482	59.3	0.737	34.2	0.357	23.7	0.894	8.9	0.875
Total	1634								

[b] Pearson's chi-square test
[c] According to IBGE, 2010.
[d] *Per capita* income calculated based on the minimum wage (MW) of R$ 136.00 in 1999, when the participants completed the questionnaire.
[e] Information related to the time of the questionnaire completion, the year 1999.

Considering the total social support score categorized into tertiles, there was no difference between social support tertiles and the prevalence of breastfeeding (Table 2). Regarding the social support dimensions, the participants classified in the intermediate tertile of the positive social interaction/affective dimension showed a higher prevalence of breastfeeding at 6 months (p = 0.006), according to Table 2.

For the information / emotional support dimension, there was a higher prevalence of breastfeeding among women classified in the intermediate tertile of this dimension for breastfeeding at 6 and 9 months (p = 0.030 and p = 0.036, respectively). There was no difference between the perceived material support and the prevalence of breastfeeding (Table 2).

In the model adjusted for confounding factors, no associations were found between the total social support score and the chance of the participant breastfeeding at 6, 9, 12 and 24 months. However, when analyzing the three dimensions of social support, the positive social interaction / affective dimension was positively associated with a higher chance of breastfeeding at six months among women classified in the intermediate tertile of this dimension (OR = 1.52; 95%CI = 1.03-2.25). The same was observed for breastfeeding at 24 months, but among women classified in the upper tertile of this dimension (OR = 2.38; 95%CI= 1.03-5.49), (Table 3).

Table 3. Association between social support and its dimensions with breastfeeding. *Pró-Saúde* study, Rio de Janeiro, RJ, 1999.

	Breastfeeding at 6 months		Breastfeeding at 9 months		Breastfeeding at 12 months		Breastfeeding at 24 months	
Variable	Crude OR[a] (95%CI)	Adjusted OR[b] (95%CI)	Crude OR[a] (95%CI)	Adjusted OR[b] (95%CI)	Crude OR[a] (95%CI)	Adjusted OR[b] (95%CI)	Crude OR[a] (95%CI)	Adjusted OR[b] (95%CI)
Social support								
Lower tertile	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Intermediate tertile	1.18	1.07	1.14	1.22	0.97	1.12	1.26	1.53
	(0.90-1.55)	(0.79-1.44)	(0.85-1.52)	(0.89-1.67)	(0.70-1.33)	(0.79-1.60)	(0.79-1.99)	(0.91-2.56)
Upper tertile	1.12	1.02	1.10	1.17	0.98	1.15	1.07	1.43
	(0.85-1.47)	(0.75-1.38)	(0.82-1.47)	(0.85-1.61)	(0.71-1.34)	(0.81-1.64)	(0.67-1.72)	(0.85-2.41)
Positive social interaction / affective dimension								

Table 3. Association between social support and its dimensions with breastfeeding. *Pró-Saúde* study, Rio de Janeiro, RJ, 1999.(Continues)

Variable (continues)	Breastfeeding at 6 months		Breastfeeding at 9 months		Breastfeeding at 12 months		Breastfeeding at 24 months	
	Crude OR[a] (95%CI)	Adjusted OR[b] (95%CI)	Crude OR[a] (95%CI)	Adjusted OR[b] (95%CI)	Crude OR[a] (95%CI)	Adjusted OR[b] (95%CI)	Crude OR[a] (95%CI)	Adjusted OR[b] (95%CI)
Lower tertile	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Intermediate tertile	1.69	1.52	1.11	1.02	1.22	1.16	1.84	1.66
	(1.18-2.42)	(1.03-2.25)	(0.76-1.61)	(0.68-1.53)	(0.81-1.84)	0.74-1.81)	(1.01-3.36)	(0.85-3.25)
Upper tertile	1.46	1.18	1.34	1.17	1.34	1.28	2.41	2.38
	(0.92-2.32)	(0.71-1.94)	(0.82-2.17)	(0.70-1.99)	(0.78-2.28)	(0.72-2.27)	(1.12-5.20)	(1.03-5.49)
Information/ Emotional support dimension								
Lower tertile	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Intermediate tertile	1.05	0.99	1.09	1.11	0.95	1.03	0.83	1.03
	(0.73-1.50)	(0.67-1.46)	(0.74-1.58)	(0.74-1.67)	(0.63-1.44)	(0.66- 1.61)	(0.46-1.51)	(0.53-2.01)
Upper tertile	0.75	0.73	0.58	0.59	0.70	0.72	0.67	0.78
	(0.46-1.21)	(0.44-1.20)	(0.35-0.97)	(0.34-1.02)	(0.40-1.22)	(0.39-1.31)	(0.30-1.48)	(0.32-1.86)
Material support dimension								
Lower tertile	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Intermediate tertile	0.80	0.87	0.99	1.10	0.89	1.06	0.78	0.91
	(0.58-1.11)	(0.59-1.20)	(0.70-1.40)	(0.76-1.60)	(0.61-1.30)	(0.70-1.59)	(0.46-1.34)	(0.50-1.66)
Upper tertile	1.00	1.13	1.38	1.63	1.03	1.22	0.67	0.80
	(0.70-1.44)	(0.76-1.68)	(0.95-2.01)	(1.09-2.46)	(0.68-1.55)	(0.78-1.92)	(0.37-1.22)	(0.41-1.55)

[a] Odds ratio (OR) with 95% confidence interval;
[b] Logistic regression adjusted by: maternal age, C-section, skin color, *per capita* income, schooling, marital status and birth decade, with a 95% confidence interval.

There was no association between the information/emotional support dimension and breastfeeding. Regarding the dimension of material support, there was a positive association with breastfeeding at 9 months among women classified in the upper tertile of this dimension (OR = 1.63; 95%CI = 1.09-2.46), as shown in Table 3.

DISCUSSION

Morgado et al.,[11] in a study carried out in the city of Rio de Janeiro, Brazil, observed the importance of social support for breastfeeding, showing that social support was associated with a lower chance of offering foods other than breastmilk before six months of age. However, in the present study, we found no association between the report of greater social support and a higher prevalence of breastfeeding, with this association being found only for some analyzed dimensions.

The prevalence of breastfeeding start found in the present study (92.0%) was close to the national one (96.4%) found in the PNDS 2006[3] for children who were ever breastfed. For breastfeeding at 6 months, it was 58.0%, higher than the prevalence found in the Southeast Region in 1999, which was 34.6%, according to data from the Maternal Breastfeeding Prevalence Survey.[24] For 9 and 12 months, the combined prevalence of these two periods is around 55.4%, which is close to the prevalence found for the city of Rio de Janeiro (58.7%) in 2006 for children aged between 9 and 12 months.[3] However, it should be mentioned that the prevalence rates found in the present study reflect breastfeeding practices in the years before 1999.

Previous studies have shown that breastfeeding may benefit from support by family members and health professionals,[25,26] as demonstrated by Humphreys et al.[27] in a study carried out in the United States. The authors found a positive association between the intention to breastfeed and having heard about the benefits of breastfeeding from lactation consultants and the baby's father, with the father and grandmothers appearing as the main sources of support for breastfeeding. In a study performed in Northern California, the same percentages of participants believed they were encouraged to breastfeed by nurses and by the baby's father (46.3%), by their mothers (34.0%) or by the breastfeeding support group (36.0%).[8]

A Spanish study, however, found that the most important source of support may differ, according to the woman's sociocultural class. The authors observed that for women with a higher sociocultural level, the opinion and emotional support of the baby's father were the most important factors for the decision to breastfeed, while for women of lower sociocultural level, other women in the family, such as sisters, mothers and mothers-in-law had been more

important regarding this decision-making.[28] A study carried out in the state of Rio Grande do Sul, Brazil, also verified the importance of sisters, mothers-in-law and grandmothers as sources of social support for breastfeeding women.[9]

The present study used the social support scale of the *Pró-Saúde* study validated for the Brazilian population; however, social support can be measured in a variety of ways, including through scales different than those used here or by qualitative methods. However, a review study that sought to evaluate how social support was assessed in Brazilian studies during the 20-year period found that most studies used the *Pró-Saúde* study social support scale, despite the existence of several tools and techniques, such as interviews, scales or inventories, questionnaires, relationship mapping tools and focus groups.[29]

However, regarding the topic of social support and breastfeeding, most studies use qualitative approaches, such as collective subject discourse techniques, focus group and semi-structured interviews.[21,30-32]

The dimensions of social support and its different agents are important for breastfeeding, as observed in a qualitative study carried out in the city of São Paulo, Brazil, with women who had children aged up to six months old. They recognized the importance of support from their partners and health professionals, and practical help, which can be understood as material support, was considered the most important one.[30]

In the present study, the association between the positive social interaction/affective dimension and the woman's chance of breastfeeding at 6 and 24 months demonstrated that social support has different interactions with the breastfeeding practice in different phases of child development. The relevance of this dimension involves the availability of people with whom one can have leisure or recreational activities, that is, people to have fun and relax with,[33,34] including expressions of love and affection, which make the supported person feel respected and esteemed. A similar result was found in the study by Vieira, carried out in Florianópolis, Brazil,[12] which showed that children whose mothers perceived more support in the positive social interaction/affective dimension had a shorter hospital length of stay and were breastfed longer.

The study by Sachetti, also carried out in Florianópolis,[36] which investigated maternal beliefs about childcare, found that mothers living in the capital received more social support in the positive social interaction / affective dimension, while mothers who lived in the countryside received more material support, showing difference in the social support received in different sociocultural contexts.

The study by Laugen et al.,[37] which aimed to verify the association between social support and exclusive breastfeeding among Canadian mothers, separately analyzed the affective dimension from positive social interaction and showed the importance of the affective dimension (RR = 1.46; 95%CI = 1.46-24.18) during the first six months of breastfeeding. The study found that this dimension is particularly important for mothers with a level of schooling lower than High School education.

Other studies have found similar results between the information/emotional dimensions and breastfeeding. In the study by Leahy Warren,[38] four functional dimensions of social support – esteem, information, instrumental and emotional support – were analyzed in the mother-child context among primiparous women, and the esteem dimension and information social support were positively associated with these mothers' confidence in their childcare practices.

Laugen et al.[37] found that the emotional and information dimensions of social support were associated with exclusive breastfeeding when the mother's educational level was lower than High School. However, the different methods for assessing these dimensions are often not comparable, and the use of a standardized scale allows the comparison of results with studies using the same scale.

The fact that we did not find an association between the dimension of material support and breastfeeding is similar to the results found by Morgado et al.,[11] who also found no association between this dimension and breastfeeding.

This study, comparing different cutoff points of the infant's age range, is unprecedented in analyzing how social support and its dimensions may have a differentiated importance in breastfeeding patterns according to the binomial mother-baby moment in life.[36] Another important fact is that this scale passed the reliability test in a study with pregnant women, showing a high reliability index.[39]

The present study does not allow establishing causality between the social support received by the women and its dimensions and the higher chance of breastfeeding, due to the temporal difference between the measurement of social support and the occurrence of breastfeeding in the studied population. That is, the social support reported at the time of the interview may not reflect that at the time of breastfeeding. However, according to Schetter & Brooks,[40] social support is stable and is related to other characteristics of individuals, such as self-esteem, optimism, extroversion and having social skills. This stability makes the results presented in the study relevant, even after several years of data collection.

Laugen et al.[37] also studied social support and exclusive breastfeeding, with information on breastfeeding collected five years before the study. The authors raised the possibility of women reporting the social support they received several months after having lived the experience of breastfeeding, bringing a differential report of this information for the understanding of the topic. Moreover, there is the possibility of memory bias regarding the information about breastfeeding duration. However, the strategy of using decades of birth in the logistic model aimed to attenuate this possible bias.

Considering the relevance for public health and the relative uniqueness of the topic, an analysis of data collected in 1999 was necessary to assess the existence of an association between social support and breastfeeding. The time interval between data collection and analysis, a consequence, among other reasons, of the great diversity of possible outcomes and existing associations, was compensated by the quality and representativeness of the *Pró-Saúde* study[19,20] and the large number of subjects available for the analysis.

CONCLUSION

We conclude that the dimensions of social support are important for breastfeeding, especially in the first months of the child's life. However, further studies are needed on the subject, mainly seeking ways to provide effective social support for breastfeeding women through actions involving members of their social support network.

In addition, some reflections are necessary on social support: Do postpartum support groups act as sources of social support? Are postpartum support teams aware of social support needs and do they know the breastfeeding mother's support network? How can we improve institutional actions to support breastfeeding women?

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Contributors

Bertoldo LAA participated in the study design, data analysis, final writing of the manuscript and final review of the manuscript. Boccolini CS participated in the study design, data analysis and final review of the manuscript. Faerstein E is responsible for the original study, study design and final review of the manuscript.

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