

INFLUENCE OF GUIDANCE ABOUT BREASTFEEDING IN THE BEHAVIOR OF A UNIVERSITY HOSPITAL USERS

Influência da orientação sobre aleitamento materno no comportamento das usuárias de um hospital universitário

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ABSTRACT

Purpose: to determine the influence of received guidance about breastfeeding on the knowledge and practices of mothers attending a university hospital. **Methods:** descriptive observational study conducted with 250 mothers, aged between 18 and 45 years, who were in the Phonoaudiology Clinic for conducting newborn hearing screening and had their babies no later than six months ago. These mothers, who were previously oriented or not, answered a questionnaire about breastfeeding. **Results:** mothers who received previous guidance showed greater knowledge about: the appropriate age to offer other foods ($p = 0.001$), the utensils used for food ($p = 0.031$), the disadvantage of bottle-feeding ($p = 0.037$) and pacifier ($p = 0.019$). Only mothers guided both on pre and post-natal reported using a syringe for feeding ($p = 0.045$). Moreover, the percentage of mothers who breastfeed on demand and new how to store milk was higher among those who had received guidance on the subject ($p < 0.001$ and $p = 0.027$). The preparation of the breasts was best performed by mothers not previously guided ($p = 0.002$). **Conclusion:** this study showed that receiving guidance on breastfeeding did not determine greater knowledge on the subject, emphasizing the need of having a multidisciplinary team working in guidance of mothers as well as the importance of participation of the phonoaudiologist, who is the qualified professional to address issues of prevention of orofacial disorders.

KEYWORDS: Orientation; Breast Feeding; Knowledge; Mothers

■ INTRODUCTION

Breast milk is the most complete food for infants in the first six months of life, since its rich and balanced composition contains all the essential nutrients for a proper growth. Besides these advantages, breast milk also prevents child mortality,

diarrhea, malnutrition, respiratory infections, miofunctional orofacial disorders and decreases the risk of allergies, hypertension, high cholesterol rate, diabetes and obesity¹⁻³.

Breastfeeding is a perfect bond between a mother and her child, fulfilling a function of an external "umbilical cord". A breastfeeding woman sees comforted their ability to continue to generate life through the food that she offers¹. In addition, mothers who breastfeed have a lower chance of developing breast cancer in the future. Breastfeeding may also act as an adjunct in the prevention of a new pregnancy, it has low financial cost, provides satisfaction, and, in advance, creates a mother-baby bond.

Currently is recommended exclusive breastfeeding for six months, and maintaining breastfeeding supplemented by two years or more⁵. Despite abundant scientific evidence regarding

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Conflict of interest: non-existent

the superiority of breast milk over the other types of milk, the number of women who breastfeed their children in accordance with these recommendations still low², since there is a large number of cases of early weaning. Thus, the situation of breastfeeding in Brazil is still far from advocated by the World's Health Organization^{6,7}. In part, this fact may often arise from ignorance on some part of the mothers, regarding the importance of breastfeeding for a longer period of time⁸⁻¹¹.

Considering the importance of the subject to the child's health, it becomes essential the promotion of campaigns aiming to inform mothers about the benefits of breastfeeding. However, other actions may also contribute significantly to increase the breastfeeding's duration, such as the training of health professionals to encourage breastfeeding and directing actions to promote it, protect and support breastfeeding for primiparous mothers and adolescents with a lower educational degree than high school.

To investigate the level of knowledge of the mothers regarding breastfeeding and the practice of it allows improving the quality of guidelines that are passed on to pregnant women, both prenatally and in the immediate postpartum period.

Thus, the aim of this study was to investigate the influence of the guidance received about breastfeeding knowledge and adopted by patient children of mothers at the Federal University of Minas Gerais Hospital ducts.

■ METHODS

This study consisted of a cross-sectional evaluation with 250 mothers between 18 and 45 years (mean 26.5, ± 6.2 years) who were referred to the Speech-Language and Hearing Pathology Outpatient Clinic, Federal University of Minas Gerais Hospital (HC – UFMG) for the accomplishment of the Universal Newborn Hearing Screening (UNHS).

Mothers aged 18 years, who had child in a maximum period of six months, were included in this research and signed a consent form (ICF). Mothers of children who had conditions that prevented breastfeeding and/or were suffering from syndromes were excluded from this study.

The research was done through the application of a semi-structured questionnaire containing 30 open and closed questions, developed by the researchers, aiming to investigate the knowledge and practices adopted by mothers about breastfeeding (Figure 1).

QUESTIONNAIRE

Date: _____

Name: _____ Age: _____

Address: _____ Phone.: _____

1. Until which serie have you studied?

- No schooling
 Incomplete elementary school
 Complete Primary school
 High school / incomplete technical
 High school / complete technical
 Incomplete higher education
 Full Higher Education
 Graduate
 Do not know / No answer

2. What is your family income?

- No income
 Less than 1 minimum wage
 1 minimum wage
 Between 1 and 2 minimum wages
 Between 2 and 3 minimum wages
 Between 3 and 5 minimum wages
 Over 5 minimum wages
 Do not know / No answer

3. Are you working? () Yes, Occupation: _____ () No**4. What is the current age of the baby?** _____**5. Your baby was born within how many weeks?** _____**6. Type of partum?** () Normal () Cesarean**7. Have you done a prenatal care?**

- Yes, at the Hospital
 Yes, at another place: _____
 No

8. How many children do you have? (counting with the current one)

- 1 () 2 () 3 () 4 () 5 () More than 5: _____

9. You received instructions regarding breastfeeding in your last pregnancy?

- Yes. On prenatal care, at the Hospital.
 Yes. On prenatal, elsewhere: _____
 Yes. In the immediate postnatal (hospitalized) at the Hospital.
 Yes. In the immediate postnatal (hospitalized), elsewhere: _____

- Yes. After postnatal (after discharge). Location: _____
 No.

10. If yes, what kind of guidance?

- Advantages of breastfeeding
 Position of the baby and mother
 Preparation of the breasts
 Time to offer
 Milk storage
 Correct handling
 Until when to breastfeeding
 Other: _____

11. Do you know any advantages of breastfeeding? Which one? _____**12. Are you still breastfeeding?**

- Yes, I am giving only breast milk
 Yes, but I have already introduced other foods
 No, my milk dried
 No, I had to get back to work
 No, other reason _____

13. How do you positioning your child during breastfeeding?

- Lying down () Inclined () Other: _____
 Sitting () Upstanding

14. How do you prepare(ed) the breasts?

- Only washed with water () Performs massages
 Wash with soap and water () Performs friction
 Usage of cream () None

15. What was (is) the interval of breastfeeding your child?

- 1 in 1 hour () 3 in 3 hours () At the time he wants
 2 in 2 hours () 4 in 4 hours () Other: _____

16. How much time do your child spends (spent) on breastfeeding?

- 0 to 10 minutes () 30 to 40 minutes
 10 to 20 minutes () more than 40 minutes
 20 to 30 minutes

17. Have you already stored milk to offer it at another time?

- Yes. How? _____
 No. How would you storage it? _____

18. Until what age do you consider important to offer only your milk?

- 2 months () 4 months old () 6 months
 3 months () 5 months () Other: _____

19. Have you received guidance on the introduction of new foods and the ideal moment for it to happen?

- Yes. Age: _____
 No

20. Have you received instructions regarding the use of any of the utensil below?

- Bottle-feeding () Syringe () Spoon
 Glass () Cup-feeding

21. What do you use to feed your child?

- Bottle-feeding. Since ___ months.
 Glass. Since ___ months.
 Syringe. Since ___ months.
 Cup-feeding. Since ___ months.
 Spoon. Since ___ months.
 Other: _____ From ___ months.
 Only the breast.

22. Do you know the advantages of using the cup-feeding as a replacement to the womb? () Yes () No**23. Have you received information about the disadvantage of bottle-feeding?** () Yes () No**24. Does your child uses a pacifier?** () Yes () No**25. Have you received information about the disadvantage of using a pacifier?** () Yes () No**26. Do you offer anything as a substitute for breast milk to your child?**

- Infant formula. Since ___ months.
 Cow's milk. Since ___ months.
 Cow's milk with cornstarch. Since ___ months.
 Cow's milk with water. Since ___ months.
 Milk from another mother who is breastfeeding. Who: _____

27. What have you offered to your child?

- Water () Food sieved
 Juice fruit () Porridge
 Scraped fruit () Processed food
 Soup () Other _____

28. Since when do you offer these other foods?

- 2 months () 4 months old () 6 months
 3 months () 5 months () Over 6 months

29. Have you ever had any difficulty in breastfeeding? What was it? _____**30. Have you looked for help from someone? Who?** _____

Figure 1 – Questionnaire applied to mothers

First, a pilot study with 15 mothers was performed, which revealed the clarity of the questions.

The interviews were conducted in a waiting room of Outpatient Clinic. For the study, information about the voluntary nature of the research were transferred to the participating mothers, as well as its objectives and impact. Then was told that they would read and sign the consent form. The work approved by the Ethics Committee of the Federal University of Minas Gerais under ETIC 0332.0.203.000-10.

In the present study, the variables of interest have been received or not the guidance on breastfeeding, regardless of where the guidance has been received, the professional to which the held, and when this orientation occurred: only prenatal, only postpartum or both. The analysis of the issues related to the correct positioning of the baby during breastfeeding, the correct preparation of the breasts at the time of milk supply and milk storage was performed by categorizing the responses as "adequate" or "inadequate". For both, it was considered appropriate responses "inclinade position"¹³, "only water hygiene"¹³, "feeding in free demand"^{2,13,14}, and "milk storage for up to 24 hours in the refrigerator and up to 15 days in freezer"¹⁵, respectively.

For input, processing and data analysis, we used the "EpiInfo" Version 6.04, program with the chi-square and Fisher's exact test applied and adopted a significance level of 5%.

■ RESULTS

Demographic and socioeconomic characteristics of mothers interviewed are shown in Table 1, which observed that most of them had completed high school (44.4%), family income between one and two minimum wages (39.0%) and had never formally worked (54.4%).

Regarding the age of the baby, this range from 10 days to six months, with an average of 1.07 months (± 0.8). Of all mothers interviewed, 36 (6.4%) had preterm, 160 (64.0%) normal childbirth and 123 (49.2%) were primiparous.

Regarding prenatal, 248 (99.2%) of the mothers held, of whom 171 (69.0%) at health centers, 44 (17.7%) in public hospitals, and 44 (17.7%) in private hospitals.

Table 1 – Demographic and socioeconomic characteristics of interviewed mothers

Characteristics	n (%)
Education	
Incomplete primary	45 (18.0%)
Complete primary	29 (11.6%)
Incomplete secondary	44 (17.6%)
Complete secondary	111 (44.4%)
Incomplete college	11 (4.4%)
Complete college	9 (3.6%)
Postgraduate	1 (0.4%)
Family income *	
Without any income	3 (1.3%)
<1 minimum wage	7 (3.0%)
1 minimum wage	47 (19.9%)
1-2 minimum wages	92 (39.0%)
2-3 minimum wages	52 (22.0%)
3-5 minimum wages	21 (8.9%)
> 5 minimum wages	14 (5.9%)
Work	
No formal work	136 (54.4%)
Saleswoman	14 (5.6%)
Domestic	9 (3.6%)
Administrative assistant	8 (3.2%)
Clerk	7 (2.8%)
Attendant	6 (2.4%)
Autonomous	4 (1.6%)
Merchant	4 (1.6%)
Other	62 (24.8%)

* n = 236

By dividing the sample into "oriented mothers" and "not oriented mothers" regarding breastfeeding (Table 2), was concluded that mothers whom received guidance had major knowledge about the appropriate age to offer other nutriment (p=0.001), the utensils used for feeding (p=0.031), the disadvantage of bottle-feeding (p=0.037) and a pacifier (p=0.019). Regarding the time that these mothers received orientation, was only associated with the use of the syringe as a route of administration other nutriment (p=0.045).

Table 2 – Profile of the interviewed mothers and practices adopted by them

	Received orientation		p-value	Moment of the Orientation			p-value
	Yes (N=197) n(%)	No (N=53) n(%)		Pre (N=40) n(%)	Post (N=92) n(%)	Pre and Post (N=65) n(%)	
Education							
<8 years	90(45.7%)	28(52.8%)	0.355 ¹	17(42.5%)	43(46.7%)	30(46.2%)	0.900 ¹
≥ 8 years	107(54.3%)	25(47.2%)		23(57.5%)	49(53.3%)	35(53.8%)	
Family income *							
Wages up to 2 min.	112(60.2%)	37(74.0%)	0.073 ¹	26(66.7%)	50(60.2%)	36(56.3%)	0.578 ¹
Over 2 min wages.	74(39.8%)	13(26.0%)		13(33.3%)	33(39.8%)	28(43.7%)	
Breastfeeding							
Yes	188(95.4%)	53(100%)	0.113 ²	38(95.0%)	87(94.6%)	63(96.9%)	0.776 ¹
No	9(4.6%)	0(0.0%)		2(5.0%)	5(5.4%)	2(3.1%)	
Only breastmilk**							
Yes	140(74.5%)	40(75.5%)	0.882 ¹	27(71.1%)	64(73.6%)	49(77.8%)	0.728 ¹
No	48(25.5%)	13(24.5%)		11(28.9%)	23(26.4%)	14(22.2%)	
Proper positioning							
Yes	110(55.8%)	28(52.8%)	0.696 ¹	19(47.5%)	50(54.3%)	41(63.1%)	0.274 ¹
No	87(44.2%)	25(47.2%)		21(52.5%)	42(45.7%)	24(36.9%)	
Properly breast prep.							
Yes	154(78.2%)	40(75.5%)	0.675 ¹	31(77.5%)	67(72.8%)	56(86.2%)	0.137 ¹
No	43(21.8%)	13(24.5%)		9(22.5%)	25(27.2%)	9(13.8%)	
Appropriate range							
Yes	123(62.4%)	31(58.5%)	0.600 ¹	23(57.5%)	56(60.9%)	44(67.7%)	0.528 ¹
No	74(37.6%)	22(41.5%)		17(42.5%)	36(39.1%)	21(32.3%)	
Properly milk storage							
Yes	20(10.2%)	2(3.8%)	0.114 ²	1(2.5%)	9(9.8%)	10(15.4%)	0.104 ¹
No	177(89.8%)	51(96.2%)		39(97.5%)	83(90.2%)	55(84.6%)	
Appropriate age to offer milk							
Yes	134(68.0%)	40(75.5%)	0.295 ¹	25(62.5%)	58(63.0%)	51(78.5%)	0.088 ¹
No	63(32.0%)	13(24.5%)		15(37.5%)	34(37.0%)	14(21.5%)	
Appropriate age to offer food							
Yes	87(44.2%)	10(18.9%)	0.001 ¹	18(45.0%)	36(39.1%)	33(50.8%)	0.349 ¹
No	110(55.8%)	43(81.1%)		22(55.0%)	56(60.9%)	32(49.2%)	
Information about utensils							
Yes	96(48.7%)	17(32.1%)	0.031 ¹	21(52.5%)	45(48.9%)	30(46.2%)	0.818 ¹
No	101(51.3%)	36(67.9%)		19(47.5%)	47(51.1%)	35(53.8%)	
Uses bottle-feeding							
Yes	61(31.0%)	20(37.7%)	0.350 ¹	14(35.0%)	29(31.5%)	18(27.7%)	0.725 ¹
No	136(69.0%)	33(62.3%)		26(65.0%)	63(68.5%)	47(72.3%)	
Uses "glass"							
Yes	10(5.1%)	1(1.9%)	0.282 ²	3(7.5%)	4(4.43)	3(4.6%)	0.734 ¹
No	187(94.9%)	52(98.1%)		37(92.5%)	88(95.7%)	62(95.4%)	
Use syringe							
Yes	3(1.5%)	0(0.0%)	0.488 ²	0(0.0%)	0(0.0%)	3(4.6%)	0.045 ¹
No	194(98.5%)	53(100%)		40(100%)	92(100%)	62(95.4%)	
Uses spoon							
Yes	3(1.5%)	1(1.9%)	0.617 ²	1(2.5%)	1(1.1%)	1(1.5%)	0.831 ¹
No	194(98.5%)	52(98.1%)		39(97.5%)	91(98.9%)	64(98.5%)	
Uses only the breast							
Yes	128(65.0%)	31(58.5%)	0.384 ¹	23(57.5%)	60(65.2%)	45(69.2%)	0.472 ¹
No	69(35.0%)	22(41.5%)		17(42.5%)	32(34.8%)	20(30.8%)	
Know the cup-feeding advantages							
Yes	36(18.3%)	8(15.1%)	0.589 ¹	8(20.0%)	18(19.6%)	10(15.4%)	0.761 ¹
No	161(81.7%)	45(84.9%)		32(80.0%)	74(80.4%)	55(84.6%)	
Known bottle-feeding disadvantages							
Yes	83(42.1%)	14(26.4%)	0.037 ¹	18(45.0%)	39(42.4%)	26(40.0%)	0.879 ¹
No	114(57.9%)	39(73.6%)		22(55.0%)	53(57.6%)	39(60.0%)	
Pacifier use							
Yes	88(44.7%)	19(35.8%)	0.249 ¹	17(42.5%)	41(44.6%)	30(46.2%)	0.935 ¹
No	109(55.3%)	34(64.2%)		23(57.5%)	51(55.4%)	35(53.8%)	
Know pacifier disadvantages							
Yes	83(42.1%)	13(24.5%)	0.019 ¹	19(47.5%)	34(37.0%)	30(46.2%)	0.384 ¹
No	114(57.9%)	40(75.5%)		21(52.5%)	58(63.0%)	35(53.8%)	
Breastfeeding difficulties							
Yes	88(44.7%)	17(32.1%)	0.099 ¹	18(45.0%)	34(37.0%)	36(55.4%)	0.073 ¹
No	109(55.3%)	36(67.9%)		22(55.0%)	58(63.0%)	29(44.6%)	

Legend: 1 – Chi-square test, 2 – Fisher's exact test, min. = Min, adeq. = Adequate, std. = Disadvantage *N=236, **N=241

The fact of having received guidance did not influence the mothers' knowledge about the advantages of breastfeeding, since the answers submitted by the targeted and non-targeted interviewed showed no significant difference (Table 3).

There was no association between the type of food offered by mothers to their children during the interview and the fact that they have received information about breastfeeding, and even when the orientation happened (Table 4).

Comparing the guidance received by mothers regarding specifically on breastfeeding issues adopted by them (Table 5), was observed that having received guidance on the appropriate time to offer milk and on its storage determined a major knowledge of the subject ($p < 0.001$ and $p = 0.027$). Regarding to the preparation of the breasts, there was a higher proportion of the mothers who prepare it properly among those who were not oriented on the subject ($p = 0.002$).

Regarding to the knowledge about the use of the cup-feeding as a substitute for mother's womb, only 44 (17.6%) of mothers knows the advantages of this tool, of whom 13 (29.6%) use a bottle-feeding to feed their children. Meanwhile, among the 206

(82.4%) mothers who did not have such knowledge, 68 (33.0%) also use a bottle-feeding. Thus, it was observed that having received guidance on the using of the cup-feeding was not enough to educate mothers about the disadvantages of bottle-feeding and decrease the use of this tool ($p = 0.656$).

When asked about the difficulties encountered during breastfeeding, 105 (42.0%) of mothers reported having some difficulty. Of these, 62 (56.2%) reported injuries and/or cracks, 27 (25.7%) reported baby difficulties in picking up the mama, 21 (20.0%), pain / burning, 20 (19.1%) no milk and / or "down" from the same eight (7.6%) adverse nipple, five (4.8%) with difficulty positioning, two (1.9%) and two breast inflammation (1.9%) did not know what to do when the baby was choking. There was a significant association between difficulty in breastfeeding and the fact that primiparous ($p = 0.002$).

Of all those interviewed, 77 (30.8%) reported that they had to seek help for breastfeeding, being 33 (42.9%) sought nurses, 14 (18.2%) own mother, 11 (14.3%) the physician, 11 (14.3%) the milk bank, six (7.8%) Health Center and three (3.9%) his sister. Other people were cited for six (7.8%) of these mothers.

Table 3 – Cited breastfeeding advantages by mothers

	Received orientation			Moment of the Orientation			p-value
	Yes (N=197) n(%)	No (N=53) n(%)	p-value	Pre (N=40) n(%)	Post (N=92) n(%)	Pre and Post (N=65) n(%)	
Protects against diseases							
Yes	142(72.1%)	36(67.9%)	0.553 ¹	30(75.0%)	64(69.6%)	48(73.8%)	0.756 ¹
No	55(27.9%)	17(32.1%)		10(25.0%)	28(30.4%)	17(26.2%)	
Better nutrition							
Yes	52(26.4%)	9(17.0%)	0.157 ¹	11(27.5%)	22(23.9%)	19(29.2%)	0.746 ¹
No	145(73.6%)	44(83.0%)		29(72.5%)	70(76.1%)	46(70.8%)	
Child's development							
Yes	20(10.2%)	5(9.4%)	0.557 ²	5(12.5%)	8(8.7%)	7(10.8%)	0.786 ¹
No	177(89.8%)	48(90.6%)		35(87.5%)	84(91.3%)	58(89.2%)	
Mother's weight return							
Yes	20(10.2%)	3(5.7%)	0.237 ²	1(2.5%)	10(10.9%)	9(13.8%)	0.166 ¹
No	177(89.8%)	50(94.3%)		39(97.5%)	82(89.1%)	56(82.2%)	
Mother / baby bound							
Yes	15(7.6%)	2(3.8%)	0.259 ²	3(7.5%)	7(7.6%)	5(7.7%)	0.999 ¹
No	182(92.4%)	51(96.2%)		37(92.5%)	85(92.4%)	60(92.3%)	
Practicality							
Yes	8(4.1%)	2(3.8%)	0.642 ²	2(5.0%)	3(3.3%)	3(4.6%)	0.864 ¹
No	189(95.9%)	51(96.2%)		38(95.0%)	89(96.7%)	62(95.4%)	
Prevents cancer in mother							
Yes	5(2.5%)	1(1.9%)	0.626 ²	2(5.0%)	1(1.1%)	2(3.1%)	0.399 ¹
No	192(97.5%)	52(98.1%)		38(95.0%)	91(98.9%)	63(96.9%)	
"Aux. Invol. Intrauterine"							
Yes	5(2.5%)	0(0.0%)	0.299 ²	0(0.0%)	3(3.3%)	2(3.1%)	0.516 ¹
No	192(97.5%)	53(100%)		40(100%)	89(96.7%)	63(96.9%)	
Prevents dental alteration							
Yes	5(2.5%)	0(0.0%)	0.301 ²	0(0.0%)	2(2.2%)	3(4.6%)	0.329 ¹
No	192(97.5%)	53(100%)		40(100%)	90(97.8%)	62(95.4%)	
No cost							
Yes	2(1.0%)	2(3.8%)	0.198 ²	1(2.5%)	0(0.0%)	1(1.5%)	0.368 ¹
No	195(99.0%)	51(96.2%)		39(97.5%)	92(100%)	64(98.5%)	
Previne M.O. alterations							
Yes	4(2.0%)	0(0.0%)	0.383 ²	0(0.0%)	2(2.2%)	2(3.1%)	0.550 ¹
Locality: No	193(98.0%)	53(100%)		40(100%)	90(97.8%)	63(96.9%)	
Pleasure for mother							
Yes	2(1.0%)	2(3.8%)	0.198 ²	0(0.0%)	1(1.1%)	1(1.5%)	0.744 ¹
No	195(99.0%)	51(96.2%)		40(100%)	91(98.9%)	64(98.5%)	
Stimulates intelligence							
Yes	2(1.0%)	2(3.8%)	0.198 ²	1(2.5%)	1(1.1%)	0(0.0%)	0.461 ¹
No	195(99.0%)	51(96.2%)		39(97.5%)	91(98.9%)	65(100%)	
Prevents diarrhea							
Yes	2(1.0%)	1(1.9%)	0.512 ²	1(2.5%)	1(1.1%)	0(0.0%)	0.461 ¹
No	195(99.0%)	52(98.1%)		39(97.5%)	91(98.9%)	65(100%)	
Prevents anemia in mothers							
Yes	1(0.5%)	1(1.9%)	0.380 ²	1(2.5%)	0(0.0%)	0(0.0%)	0.139 ¹
No	196(99.5%)	52(98.1%)		39(97.5%)	92(100%)	65(100%)	
Pleasure for the baby							
Yes	1(0.5%)	0(0.0%)	0.787 ²	0(0.0%)	1(1.1%)	0(0.0%)	0.567 ¹
No	196(99.5%)	53(100%)		40(100%)	91(98.9%)	65(100%)	
Prevents obesity in babies							
Yes	1(0.5%)	0(0.0%)	0.788 ²	0(0.0%)	1(1.1%)	0(0.0%)	0.564 ¹
No	196(99.5%)	53(100%)		40(100%)	91(98.9%)	65(100%)	

Legend: 1 – Chi-square test, 2 – Fisher's Exact Test, DEVELOPMENT. = Development, aux. = Assists, invol. = involution, alt. = Alteration, M.O. = orofacial motricity.

Table 4 – Type of food offered to babies

	Received orientation			Moment of the Orientation			
	Yes (N=197) n(%)	No (N=53) n(%)	p-value	Pre (N=40) n(%)	Post (N=92) n(%)	Pre and Post (N=65) n(%)	p-value
Infant formula							
Yes	41(20.8%)	7(13.2%)	0.212 ¹	9(22.5%)	21(22.8%)	11(16.9%)	0.640 ¹
No	156(79.2%)	46(86.8%)		31(77.5%)	71(77.2%)	54(83.1%)	
Cow's milk							
Yes	7(3.6%)	3(5.7%)	0.358 ²	2(5.0%)	3(3.3%)	2(3.1%)	0.856 ¹
No	190(96.4%)	50(94.3%)		38(95.0%)	89(96.7%)	63(96.9%)	
Cow's milk and water							
Yes	2(1.0%)	0(0.0%)	0.620 ²	1(2.5%)	1(1.1%)	0(0.0%)	0.461 ¹
No	195(99.0%)	53(100%)		39(97.5%)	91(98.9%)	65(100%)	
Cow's milk with corn*							
Yes	2(1.0%)	0(0.0%)	0.620 ²	1(2.5%)	1(1.1%)	0(0.0%)	0.461 ¹
No	195(99.0%)	53(100%)		39(97.5%)	91(98.9%)	65(100%)	
Milk from another mother							
Yes	2(1.0%)	1(1.9%)	0.512 ²	1(2.5%)	0(0.0%)	1(1.5%)	0.368 ¹
No	185(99.0%)	52(98.1%)		39(97.5%)	92(100%)	64(98.5%)	
Water							
Yes	55(27.9%)	15(28.3%)	0.956 ¹	15(37.5%)	28(30.4%)	12(18.5%)	0.082 ¹
No	142(72.1%)	38(71.7%)		25(62.5%)	64(69.6%)	53(81.5%)	
Tea							
Yes	49(24.9%)	14(26.4%)	0.818 ¹	10(25.0%)	18(19.6%)	21(32.3%)	0.191 ¹
No	148(75.1%)	39(73.6%)		30(75.0%)	74(80.4%)	44(67.7%)	
Juice fruit							
Yes	8(4.1%)	3(5.7%)	0.423 ²	2(5.0%)	5(5.4%)	1(1.5%)	0.450 ¹
No	189(95.9%)	50(94.3%)		38(95.0%)	87(94.6%)	64(98.5%)	
Grated fruit							
Yes	5(2.5%)	0(0.0%)	0.301 ²	0(0.0%)	5(5.4%)	0(0.0%)	0.054 ¹
No	192(97.5%)	53(100%)		40(100%)	87(94.6%)	65(100%)	
Porridge							
Yes	5(2.5%)	0(0.0%)	0.301 ²	1(2.5%)	3(3.3%)	1(1.5%)	0.796 ¹
No	192(97.5%)	53(100%)		39(97.5%)	89(96.7%)	64(98.5%)	

Legend: 1 – Chi-square test, 2 – Fisher's Exact Test * corn = cornstarch

DISCUSSION

Despite being recommended exclusive breastfeeding until six months of life and its maintenance complemented by two years or more, the number of mothers who breastfeed until the appropriate age is still low. Health care professionals can improve this situation through actions that seek to promote breastfeeding and help mothers overcome obstacles encountered during this period. These professionals should advise mothers on prenatal care, guide them and help them in the period of lactation, judiciously assess the breastfeeding technique and intervene appropriately when obstacles arise².

In the present study, the mean age of mothers was 26 years, most did not work, had at least two children, had completed high school and family income between one and two minimum wages. In a previous study, pregnant women were on average 25 years and family income of three minimum wages, and half of these being primíparas¹⁶. In another work, most of the mothers had not completed high school and also had more than one child³. Note that

each region of the country has its own peculiarities, which turns difficult to realize a data comparison.

In the present work, the vast majority of mothers received prenatal as well as in other studies^{3,9,17,18}. However, a minority of these guidelines received during this period, which was also identified in the literature³, although other studies have found that most of the investigated sample received guidance during the prenatal^{9,17-19}. This result indicates that action is needed to improve these ratios, since the prenatal period is a good time to pass on important information for this population.

In this study, having received a proper knowledge determined a better understanding about the appropriate age for introducing new types of foods in children's diets, ie, after six months of life. However, this knowledge did not cause an approach's change, since 25.5% of mothers reported already offering other foods to their children. This fact agrees with the literature, regarding to the low prevalence of breastfeeding and the early introduction of complementary foods⁹, suggesting inefficiency or inadequacy of the guidelines, making these mothers do not recall the same or choose not to follow them. Professionals

Table 5 – Association between the specific guidelines received and behaviors of the interviewed mothers

	Specific guidelines		p-value
	Yes n(%)	No n(%)	
Position			
Adequate	45 (40.9%)	72 (51.4%)	0.098 ¹
Inadequate	65 (59.1%)	68 (48.6%)	
Preparation of the breasts			
Adequate	29 (25.2%)	59 (51.3%)	0.002¹
Inadequate	86 (74.8%)	76 (48.7%)	
Moment of milk supply			
Appropriate	68 (77.3%)	86 (53.1%)	<0.001¹
Inappropriate	20 (22.7%)	76 (46.9%)	
Milk storage			
Appropriate	8 (87.9%)	8 (4.3%)	0.027¹
Inappropriate	58 (12.1%)	176 (95.7%)	
Pacifier*			
Appropriate	50 (52.1%)	61 (39.6%)	0.197 ¹
Inappropriate	46 (47.9%)	93 (60.4%)	
Baby bottle-feeding**			
Appropriate	63 (65.0%)	106 (69.3%)	0.476 ¹
Inappropriate	34 (35.0%)	47 (30.7%)	
Cup-feeding***			
Appropriate	31 (70.4%)	138 (67.0%)	0.656 ¹
Inappropriate	13 (29.6%)	68 (33.0%)	

Legend: * Mothers who received information about the pacifier's downside. ** Mothers who received information about the disadvantage of the bottle-feeding. *** Mothers who know the advantages of using the cup-feeding as a substitute for breastfeeding. 1-chi-square test.

responsible for orientation must be prepared to deal with the ambiguity that presents the woman in the relationship that is established between the power and the desire to breastfeed, as a matter of taking risks or ensure benefits²⁰.

Although mothers who received counseling regarding breastfeeding have higher knowledge about the disadvantages of bottle-feeding and pacifier, ignorance on the subject is still high between these (57.9%). This fact highlights the need and importance of an audiologist participation in these guidelines, either in personally or through a health team training, since this is a qualified professional to guide about possible orofacial miofunctional changes caused by the use of these tools.

About the advantages of breastfeeding, the most remembered by interviewees was that it protects the baby against diseases (63.6%), the same occurred in other realized studies^{9,16,19}. However, this fact may be linked to the popular knowledge, since mothers without guidance also knew this advantage. The second most cited benefit was better nutrition

(24.4%). Noteworthy is the fact that this has been mentioned by a small number of mothers, since ignorance about this advantage will be an aggravating factor with regard to the possibility of early weaning. Now, the fact that breastfeeding prevent orofacial miofunctional change was cited by only 1.6% of mothers, indicating that probably there was not a speech-language pathologist in most of the orientation teams, or that the form of how the information was passed was not effective enough. Thus, it becomes evident the need for a multidisciplinary approach in order to motivate mothers to promote breastfeeding, since the lack of knowledge may be a barrier to breastfeeding, as well as the improper transmission or little consistency in the information^{16,21}.

Previous studies^{3,16} indicate that although mothers had received information about the importance of breastfeeding, they were unaware of many important facts related to its child development, which agrees with the results of this research factors.

As for breast milk substitutes, it was found that 19.2% and 4.0% of mothers provided infant formula and cow's milk, respectively, to their children. Considering other types of food, it was observed that 28.0% of mothers have tendered water, tea 25.2% and 4.4% juice fruit. In this aspect, was noted that the guidelines were not sufficient to promote exclusive breastfeeding up to six months, since 74.5% of mothers who received advice tendered milk and other foods, compared to 75.5 % of mothers who did not received guidance. In a conducted research in state capitals and the Federal District, the prevalence of breastfeeding in children under six months was 41.0%⁶. In the same study, the early introduction of tea, water and other types of milk in the first month of life and juice around the third month was also observed⁶. These data reinforce the need to increase the number and quality of protective actions, promote and support exclusive breastfeeding until six months of life^{22,23}, since it contains all the necessary nutrients for a proper growth in this period¹¹.

This research showed that mothers which received guidance on the positioning during breastfeeding did not perform better than those who did not. This, once more, brings us to the ineffectiveness of the guidance given to mothers and agrees with studies that emphasize the importance of improving the quality of orientations⁹.

In the present study, only 46.0% of mothers received information about the preparation of the breasts, compared to 78.4% of mothers of previous study¹⁶. The percentage of mothers who prepares the breasts properly, ie, so wash only with water and not realize any intervention¹³ was higher in the group of mothers who were not targeted. Most doctors, despite being supportive of breastfeeding, have not properly guided the pregnant women about the breasts care during pregnancy²⁴, which also demonstrates the importance of the speech-language therapist in prenatal care to complement the given guidelines²⁴.

Most mothers supply breast milk at the appropriate time, ie, breastfeeding her child on free demand, having it occurred in the same previous studies^{16,19} while in another study, the intervals of two to three hours were the most cited ones¹⁷.

Only 12.1% of mothers who receive guidance on how to storage milk usually do it correctly, ie, in the refrigerator or the freezer for up to 24 hours or 15 days, respectively¹⁵. Although the literature is sparse submit in relation to this aspect, these results reinforce the fact that the guidelines that are being passed on to mothers are not being effective. However, it is noteworthy that although small, this percentage was higher than that one found among

mothers who reported have not received guidance on this aspect.

Studies show that the use of pacifiers and nipples can lead to a lower frequency of breastfeeding, as well as affecting the oral motor function and cause orthodontic problems^{14,22,25,26}. The nipples of any kind, when used for a certain period, can cause the phenomenon called nipple confusion, leading to early weaning²⁷. Nevertheless, increasingly dummies have been introduced early, regardless of the damage that the use of these can lead to the child posteriorly^{22,25}. This fact was evidenced in the present study since, although mothers were informed about the downside of the pacifier, they have not reduced their use, whereas 48.0% reported that the child uses a pacifier, compared to 39,6% of mothers who were not targeted. This result was not statistically significant, but consistent according to the researched literature^{22,25}, was high since the use of pacifiers (44.7%), and the same was offered early, with an average age of 1.07 (± 0.8) months. In a previous study, 60.8% of first-time mothers mentioned the intention to use the pacifier to leave the maternity²¹.

Only 38.8 % of mothers received information about the disadvantage of bottle-feeding, of which, 35.0% reported that the child uses, compared to 30.7% of mothers who were not targeted. In another study, 77.6% of first-time mothers mentioned the intention to use the bottle-feeding to leave the maternity²¹. Ignorance about the interference of the bottle-feeding in breastfeeding success was a fact that also drew attention in another research⁹. Moreover, is known that only 18.3% of mothers who received guidance knows about the cup-feeding, once again indicating the importance of the speech therapist on a health staff.

Among the difficulties encountered by mothers during breastfeeding, the most cited ones were wounds and / or cracks, difficulty in picking up the baby and breast pain / burning. In another study, the most frequently cited were "poor newborn latch" and pain²⁸. Primiparous mothers showed more difficulties in breastfeeding when compared to the others, a fact also observed in the study above²⁸. Only 30.8% of mothers reported difficulties looking for help, being nurses and doctors the most requested by mothers, ie, technicians and professionals with a relevant knowledge about breastfeeding. In another study, mothers sought help in the family environment¹⁶.

In the present study, mothers were unable to effectively absorb the information received or chose not to follow them, which may be associated with the quality of the instruction and the way it is being transmitted. The professional must be able to help the woman, must know how to listen and learn,

develop it's confidence and give support²⁹, besides making use of simple and appropriate language, considering the level of understanding of the mother, reinforcing the achieved result³⁰. It is important that mothers feel the interest of the health professional to gain confidence and feel supported².

One limitation of the research points up the fact that mothers under 18 years of age were excluded. In addition, information was provided by mothers, and these may not have remembered to mention a previously received guidance or even missed a orientation as such, configuring it as a memory bias.

Given the above research, it becomes clear the need to improve the quality of recommendations, as well as having a multidisciplinary team working on the orientation. Knowledge ensures a significant step towards awareness of mothers about the importance of breastfeeding, aiming thereby decreasing the rate of early weaning⁹. Many mothers have the knowledge of the subject by seeking information in another medias, such as internet, conversation with other people, and so. However, this area is restricted, as they are unaware of simple questions

about breastfeeding and its importance, which can lead to early weaning.

It is suggested that further studies be conducted on the subject, seeking to map both professionals responsible for guidance and the strategies employed by them.

■ CONCLUSION

The present study showed that the knowledge of the targeted mothers about breastfeeding was not significantly different of those not targeted. Furthermore, it was evident the need of a multidisciplinary team working on guidance to these mothers, since several essential issues to successful breastfeeding were not absorbed properly. We also emphasize the importance of the presence of a speech-language pathologist on the staff, which can relay important information about the disadvantages of pacifiers and bottle-feeding use, not only regarding to early weaning, but also to the prevention of orofacial motor changes as well, generally not addressed in interventions.

RESUMO

Objetivo: verificar a influência da orientação recebida acerca do aleitamento materno no conhecimento e condutas de mães usuárias de um hospital universitário. **Métodos:** estudo observacional descritivo realizado com 250 mães, previamente orientadas ou não, a respeito do aleitamento materno, com idade entre 18 e 45 anos, as quais se encontravam no Ambulatório de Fonoaudiologia do Hospital das Clínicas da UFMG para realização de triagem auditiva neonatal e haviam tido filho há no máximo seis meses. Estas mães responderam um questionário a respeito do aleitamento materno. **Resultados:** as mães que receberam orientação demonstraram maior conhecimento acerca da idade adequada para se ofertar outros alimentos ($p=0,001$), dos utensílios utilizados para alimentação ($p=0,031$) da desvantagem da mamadeira ($p=0,037$) e da chupeta ($p=0,019$). Somente as mães orientadas tanto no pré quanto no pós-natal relataram utilizar a seringa para alimentação ($p=0,045$). Além disso, o percentual de mães que amamentam em livre demanda e que sabem como armazenar o leite foi maior entre aquelas que haviam recebido orientação acerca do assunto ($p<0,001$ e $p=0,027$). Já a preparação das mamas foi melhor realizada pelas mães não orientadas sobre o assunto ($p=0,002$). **Conclusão:** o presente estudo evidenciou que, dentre as mães entrevistadas, ter recebido orientação sobre o aleitamento materno não determinou maior conhecimento acerca do assunto, ressaltando, assim, a necessidade de se ter uma equipe multidisciplinar atuando nas orientações às mães, bem como a importância da participação do fonoaudiólogo, o qual é o profissional habilitado para abordar questões referentes à prevenção de alterações de motricidade orofacial.

DESCRITORES: Orientação; Aleitamento Materno; Conhecimento; Mães

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