

## Knowledge, attitudes and practices about breastfeeding among postpartum women in rooming-in

*Conhecimentos, atitudes e práticas sobre aleitamento materno entre puérperas em alojamento conjunto*

*Conocimientos, actitudes y prácticas sobre la lactancia materna entre personas en alojamiento conjunto*

### ABSTRACT

**Purposes:** To evaluate the knowledge, attitude, and practices related to breastfeeding among postpartum women in a maternity ward which holds the Child-Friendly Hospital seal (*Selo Hospital Amigo da Criança*) and to describe the reasons for early weaning in previous pregnancies. **Method:** A survey with 157 postpartum women at a joint maternity ward with descriptive and inferential analysis. **Results:** Age and parity were associated with knowledge and attitude. Women over 26 (OR=0.672 [CI=0.564-0.801]) and multiparous women (OR = 0.750 [CI =0.661-0.851]) are more likely to have adequate knowledge. Higher ages (OR =0.356 [CI =0.172-0.735]), pregnancy planning (OR =0.275 [CI =0.093-0.815]) and multiparity (OR =0.475 [CI =0.229-0.985]) were associated to protection and attitude. Prenatal consultation was associated with practice (p=0.023), while protective factor (OR=0.313 [CI=0.112-0.873]) was associated to breastfeeding. **Conclusion:** Nursing can be a positive assistance when it comes to knowledge, attitude, and practice about breastfeeding, helping in the preventive care of nipple trauma becoming an important cause of early weaning.

**Descriptors:** Knowledge; Attitudes and Practice in Health; Breastfeeding; Odds Ratio; Joint Accommodation; Nursing.

### RESUMO

**Objetivos:** Avaliar o conhecimento, atitude e prática sobre aleitamento materno entre puérperas, em alojamento conjunto de uma maternidade com selo de Hospital Amigo da Criança e descrever os motivos do desmame precoce em gestações anteriores. **Método:** Inquérito com 157 puérperas em alojamento conjunto com análise descritiva e inferencial. **Resultados:** Faixa etária e paridade associaram-se ao conhecimento e à atitude. Mulheres acima de 26 anos (OR=0,672 [IC=0,564-0,801]) e múltiplas (OR =0,750 [IC =0,661-0,851]) têm mais chance de possuírem saberes adequados. A idade mais elevada (OR =0,356 [IC =0,172-0,735]), planejamento da gravidez (OR =0,275 [IC =0,093-0,815]) e multiparidade (OR =0,475 [IC =0,229-0,985]) foram fatores de proteção à atitude. A consulta pré-natal associou-se à prática (p=0,023) e enquanto fator de proteção (OR=0,313 [IC=0,112-0,873]) ao aleitamento. **Conclusão:** A Enfermagem pode auxiliar positivamente no conhecimento, na atitude e na prática sobre aleitamento, auxiliando no cuidado preventivo do trauma mamilar como causa importante do desmame precoce.

**Descritores:** Conhecimentos; Atitudes e Prática em Saúde; Aleitamento Materno; Razão de Chances; Alojamento Conjunto; Enfermagem.

### RESUMEN

**Objetivos:** Evaluar el conocimiento, la actitud y la práctica de la lactancia materna entre las puérperas en una sala de maternidad con un sello del Hospital Amigo del Niño y describir las razones del destete temprano en embarazos anteriores. **Método:** Se trata de una encuesta con 157 mujeres puérperas en alojamiento conjunto con análisis descriptivo e inferencial. **Resultados:** El grupo de edad y la paridad se asociaron con el conocimiento y la actitud. Las mujeres mayores de 26 años (OR=0,672 [CI=0,564-0,801]) y las mujeres multiparasas (OR = 0,750 [CI =0,661-0,851]) son más propensas a tener un conocimiento adecuado. La edad más alta (OR =0,356 [CI =0,172-0,735]), la planificación del embarazo (OR =0,275 [CI =0,093-0,815]) y la multiparidad (OR =0,475 [CI =0,229-0,985]) fueron factores protectores a la actitud. La consulta prenatal se asoció con la práctica (p=0,023) y como factor protector (OR=0,313 [CI=0,112-0,873]) con la lactancia materna. **Conclusión:** La enfermería puede ayudar positivamente en el conocimiento, la actitud y la práctica sobre la lactancia materna, ayudando en la atención preventiva del trauma mamilar, como una causa importante del destete temprano.

**Descriptores:** Conocimiento; Actitudes y Práctica en Salud; Lactancia Materna; Razón de Probabilidades; Alojamento Conjunto; Enfermería.

Viviane Cordeiro de Queiroz<sup>1</sup>

 [0000-0002-2037-921X](http://orcid.org/0000-0002-2037-921X)

Smalyanna Sgren da Costa  
Andrade<sup>2</sup>

 [0000-0002-9812-9376](http://orcid.org/0000-0002-9812-9376)

Edna Samara Ribeiro César<sup>2</sup>

 [0000-0002-1150-5157](http://orcid.org/0000-0002-1150-5157)

Karen Krystine Gonçalves de  
Brito<sup>2</sup>

 [0000-0002-2789-6957](http://orcid.org/0000-0002-2789-6957)

Cintia Bezerra Almeida Costa<sup>1</sup>

 [0000-0002-1179-5852](http://orcid.org/0000-0002-1179-5852)

Simone Helena dos Santos  
Oliveira<sup>1</sup>

 [0000-0002-9556-1403](http://orcid.org/0000-0002-9556-1403)

<sup>1</sup> Universidade Federal da Paraíba, PB, Brasil.

<sup>2</sup> Faculdade de Enfermagem Nova Esperança, PB, Brasil.

**Corresponding author:**

Viviane Cordeiro de Queiroz

E-mail: [vivicordeiroqueiroz35@gmail.com](mailto:vivicordeiroqueiroz35@gmail.com)

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## INTRODUCTION

Pregnancy can be defined as a natural and transformative phenomenon, causing several changes in the maternal organism, whether of physical nature, so that there is an adaptation to the pregnancy and puerperal condition, or emotional, in order to prepare them for the moment of delivery and the acceptance of the new identity resulting from motherhood<sup>(1)</sup>. A modification of the puerperal period for the woman's life is breastfeeding, which is an important milestone in the first months of the baby's life. It is responsible for providing the newborn with all the nutritional needs, in addition to reinforcing the increase of antibodies, weight gain, providing greater bond between mother and child and promoting the development of oral structures, which are responsible for the proper functioning of the stomatognathic system, whose functions are breathing, suction, swallowing, chewing and speech<sup>(2)</sup>.

Under this point of view, the breastfeeding decision is not only biologically determined, but also emotional and socioculturally. Breastfeeding (isolated or not), as well as ablactation, tends to be a decision to be made mainly by the mother. This choice is influenced by her life history, support network, physical and emotional conditions, even as the baby's health status and the social value instilled in breastfeeding and motherhood<sup>(3)</sup>.

Regarding the hospital space aimed at encouraging breastfeeding, rooming-in in institutions emerges, as a way to bring more integration between mother and baby, contributing to establish a favorable affective relationship since the birth. In addition, in rooming-in, family-oriented health guidelines are implemented, allowing the development of skills and abilities, favoring emotional security, regarding the care of the newborn and enabling the reduction of the incidence of early ablactation<sup>(4)</sup>. Beyond the breastfeeding advantages and recommendations, during the first six months of life, special events may disturb the exclusive breastfeeding, such as reduction of schooling level, low income and no partner marital status. Among this factors, insecurity, low self-esteem, the fear of not having enough milk, scarce support network, whether from the family, the partner, community and/or professionals, emotional immaturity and problems with the self-image are

also contributing elements to the reduction of the breastfeeding satisfactory indexes<sup>(4)</sup>.

However, for the successful initiation and establishment of breastfeeding, the nurses' performance is considered a relevant element to the success of breastfeeding and must be performed from prenatal care to the puerperium, whether in the rooming-in and/or in primary health care<sup>(5)</sup>. Verifying that the knowledge of the reality of puerperas can contribute to the promotion of maternal and child health, and finally, understanding that the survey of the main points related to the potentialities and difficulties in breastfeeding is a considerable factor in the clinical and care decision-making of the health professional, the aim of this study was to evaluate the knowledge, attitude and practice of breastfeeding among puerperas in a maternity rooming-in with a Child-Friendly Hospital seal and to describe the reasons for early weaning in previous pregnancies.

## METHOD

This is an evaluative and cross-sectional survey of the knowledge, attitude and practice type, of quantitative approach. The "knowledges, attitudes and practice" research is based on the construct of competence and ability. Therefore, it doesn't show theoretical reference. The collection was carried out at the Rooming-In of the Cândida Vargas Institute, a maternity hospital reference in the care of pregnant women, puerperal women and newborns and at the Child-Friendly Hospital Initiative (IHAC), located in the city of João Pessoa, Paraíba, Brazil, held from July to September 2019, with puerperal women hospitalized in the rooming-in.

The selection criteria were puerperas aged 18 years or more, primiparous or multiparous. Those who were not cognitively or emotionally apt (self-reported), puerperal women whose children have malformations or syndromes, mastectomized puerperal women, infected with HIV and Hepatitis B that prevented breastfeeding were excluded. The sample was calculated by means of Simple Random Sampling (SRS) for finite sample, with an annual population of 5,320 puerperas met at the maternity. The confidence level was 95%, with a margin of error of 5%, i.e.,  $\alpha = 0.05$  ( $z = 1.96$ ). The proportion was 12% ( $p=0.12$ ), according to World Health Organization (WHO) indicators for exclusive breastfeeding. The

probabilistic sample was calculated in 157 puerperal women and there was no losses.

The sociodemographic variables were age, time of schooling, occupation, city of origin, geographic space, religion, ethnicity, monthly income, workload, marital status, prenatal consultations, milk complementation. Sexual and reproductive aspects were sexarche, contraceptive use, delivery route, parity, abortion, sexually transmitted infections and planned pregnancy. The life habits investigated were related to smoking, alcohol consumption and sedentary lifestyle.

The sources of information related to knowledge about exclusive breastfeeding were also evaluated. Knowledge, attitude and practice in this study were determined as: knowledge, opinions and behaviors before the object of study<sup>(6)</sup>. To define the satisfactoriness of constructs knowledge, attitude and practice (KAP), the cutoff point used was above 70% of the criteria defined for each one, according to the adaptation of studies on knowledge<sup>(7)</sup>.

Regarding the criteria of satisfactoriness, the knowledge was considered satisfactory when the puerperal woman pointed out at least: two benefits/advantages for the mother-child binomial of breastfeeding; two precautions in relation to the correct position for the baby to latch on; two factors that maximize breast milk production; that exclusive breastfeeding takes place for six months and the dairy supplement, after this period. And unsatisfactory: when at least two of the criteria listed above were not met by the puerperal woman and/or did not express an opinion about it. The attitude was satisfactory when mentioned: the desire to breastfeed the baby; that breastfeeding is essential for healthy infants up to six months of age; complementation after six months; and that exclusive breastfeeding is always necessary for the healthy baby. It is unsatisfactory when the puerperal woman did not meet at least one of the aforementioned criteria and/or had no opinion about it.

To classify the practice as satisfactory in multiparous women, the criteria were when the puerperal woman mentioned having breastfed all previous children exclusively up to six months of age, without complement prior to this period. As an unsatisfactory practice in multiparous, when at least one criterion was not met by the puerperal woman.

For data collection, a form with 39 questions was used, constructed for the research,

with questions about sociodemographic, reproductive characterization, life habits and breastfeeding knowledge, attitude and practice of puerperas in the rooming-in. The content of the KAP construct was adapted<sup>(6)</sup>.

The research instrument was applied with the puerperas, in an appropriate place, in the maternity itself, ensuring confidentiality. On pre-established days and times, in the morning and night shifts. The data collection procedure followed the systematic sampling plan, with a "jump" of one among the research participants to meet the probabilistic criterion. With the help of the IBM Statistics Package for the Social Sciences (SPSS) program, version 21, data analysis was performed. The results were displayed containing absolute and percentage frequency, means and standard deviation. For the association, the Chi-square and Fisher's Exact Tests were used, with significance  $\leq 0.05$ .

The odds ratio and the confidence interval were used, which in turn suggested the chance or protection generated by the selected variables with significance for results and that did not cross the nullity, i.e. 1. Regarding the value of the odds ratio, there was an indication of risk for results greater than 1 (one), as well as those below 1 (one) indicated a protective factor. The reading occurred in the latter, in the form of a percentage indicating a higher chance of the positive outcome evaluated. The study was approved by the Research Ethics Committee at the Nova Esperança Nursing School, opinion 3.389.184, protocol n. 51/2019, Certificate of Presentation for Ethical Appreciation n. 15259319.4.0000.5179.

## RESULTS

In relation to the sociodemographic characterization of puerperas, the mean age was 25.92 (SD  $\pm 4.601$ ), with 61 (38.9%) women between 18-25 years and 96 (61.1%)  $\geq 26$  years of age. Concerning schooling, 90 (57.3%) participants had up to 9 years of schooling and 67 (42.7%)  $\geq 10$  years. About occupation, 86 (54.8%) women had no remuneration and 71 (45.2%) had paid occupation. Regarding city of origin, 111 (70.7%) women were from the capital and 46 (29.3%) from other cities in the state, of whom 145 (92.4%) from the urban area and 11 (7.0%), rural areas. Regarding religion, 82 (52.2%) participants were catholic, 61 (38.9%) evangelicals and 14 (8.9%) had other religious beliefs. About self-reported ethnicity/color, 130 (82.8%) puerperas

were *pardas*, 13 (8.3%) white, 7 (4.5%) yellow and 7 (4.5%) Black. Monthly income showed 116 (73.9%) women living with less than one minimum wage, 40 (25.5%) with 1-2 minimum wages. The workload showed that 60 (38.2%) worked more than 40 hours per week, 12 (7.6%) 30-40 hours, and two (1.3%) up to 20 hours per week. Finally, 128 (81.5%) women lived with a partner and 29 (18.5%) without partner.

On the sexual and reproductive characteristics of pregnant women, the mean age of the sexarche was 17.53 years (SD±2.608), with 48 (30.6%) women with sexarche up to 15 years and 109 (69.4%) ≥ 16 years. Regarding unwanted pregnancy, 142 (90.4%) puerperas planned the pregnancy and 15 (9.6%) did not. In addition, 98 (62.4%) women used contraceptives before pregnancy and 59 (37.6%) did not use any contraceptive method. Of those who used them, 50 (31.8%) were taking pills, 29 (18.5%) condoms, 12 (7.6%) injectable contraceptive, 5 (3.2%) IUD. The type of delivery elicited by 121 (77.1%) puerperas were vaginal and 36 (22.9%) caesarean surgery. Regarding parity, 80 (51%) were primiparous and 77 (49%) multigravidas, 129 (82.2%) had never aborted and 28 (17.8%) had aborted, of whom 27 (17.2%) had only one episode and one (6%) more than one episode of abortion. Concerning the occurrence of sexually transmitted infections, 153 (97.5%) did not present and four (2.5%) had some kind of sexual infection.

Regarding life habits, of the 157 puerperas participating in the study, 153 (97.5%) were non-

smokers, 145 (92.4%) non-alcoholics and 96 (61.1%) were sedentary. Of the non-sedentary women, 40 (66.6%) practiced physical activity 1-2 times a week and 20 (33.3%) practiced 2-3 times a week. About the complement given in the hospital environment, 147 (93.6%) stated that the baby did not receive milk formula and 10 (6.4%) said their babies were complemented in the hospital. About prenatal care visits, 89 (56.7%) attended more than six consultations and 68 (43.3%) women, up to five consultations.

Regarding the sources of information related to knowledge about breastfeeding, women elicited 321 responses, namely: 86 (26.7%) were family, 85 (26.4%) health professionals, 37 (11.5%) school, 34 (10.5%) friends, 23 (7.1%) posters and folders, 22 (6.8%) internet, 19 (5.9%) television, 15 (4.6%) campaigns and lectures. Table 1 shows the criteria related to knowledge about breastfeeding among pregnant women.

Concerning the breastfeeding-related knowledge, the benefits such as providing all nutrients, contribution to the growth and development of the baby and maternal weight loss were the most elicited. The maximum opening of the baby's mouth and adequate body support were the main care for positioning and correctly latching on. The intake of water, juices and teas was the most cited strategy for increasing milk production. The majority indicated exclusive breastfeeding for a minimum period of six months according to Table 1.

**Table 1** – Breastfeeding knowledge of puerperas in a rooming-in. João Pessoa, PB, Brazil, 2019. (n=157)

Knowledge	f	%
Benefits (N=731)*		
All baby's necessary nutrients	123	16,8
Contributes to baby's development and growth	106	14,5
Maternal weight loss	88	12,0
Serves as natural vaccine for baby	74	10,1
Baby's colic reduction	56	7,6
Reduced risk of breast and ovarian cancer	54	7,3
Edema improvement	51	6,9
Reduced risk of postpartum depression	45	6,1
Reduced postpartum bleeding	44	6,0
Decreased uterine/menstrual cramps	34	4,6
Uterus returning to pre-pregnancy size	34	4,6
Maturation of the baby's gastrointestinal tract	22	3
Care while latching on (N=474)*		
Baby's mouth wide open	114	24
More areola visible above baby's mouth	109	23
Baby's chin touching breast	102	21,5
Take up much of the areola	75	15,8
Baby facing the breast, with nose at nipple height	74	15,6
Care with positioning (N=395) *		

(Keep Going)

**Table 1** – Breastfeeding knowledge of puerperas in a rooming-in. João Pessoa, PB, Brazil, 2019. (n=157)

Conhecimentos	f	%
The baby must be well supported	99	25
Baby's body next to mother	89	22,5
Baby's head and trunk well aligned	78	19,7
Sitting/lying and well supported	68	17,2
Baby facing the breast, with nose at nipple height	61	15,4
Ways to increase production (N=414)*		
Drink plenty of water, juices and teas	115	27,7
Balanced diet	113	27,2
Sleep properly	101	24,4
Properly latching on and positioning	85	20,5
For how long the baby must be breastfed (N=157)		
Up to 6 months	77	49
After 6 months	57	36,3
Before 6 months	23	14,6
Foods for the first six months of life (N=157)		
Breast milk only	118	75,2
Breast milk and more	30	19,1
No opinion	9	5,7
<b>Attitudes (N=157)</b>		
Desire to breastfeed		
Up to 6 months	78	49,7
Up to 24 months	77	49
No desire to breastfeed	2	1,3
Complemented breast milk		
After six months of age of a healthy baby	115	73,2
Before six months of age of a healthy baby	34	21,7
At any age of a healthy baby	6	3,8
No opinion	2	1,3
Exclusive breastfeeding		
Always necessary	140	89,2
Little necessary	15	9,6
Unnecessary	2	1,3
<b>Practices (N=77)†</b>		
Previously breastfed		
All previous children	72	45,9
Not all of previous children	3	1,9
I don't know/I don't want to answer	2	1,3
Exclusive breastfeeding		
Baby up to 6 months old	65	41,4
After 6 months of age	8	5,1
From 1 to 5 months old	4	2,5
Complemented breastfeeding		
6 to 12 months old	58	36,9
After 12 months of age	11	7
From 1 to 5 months old	8	5,1

\*Variables with multiple answers; †Multiparous.

Source: Prepared by the autor.

Regarding attitudes, the majority expressed the desire to breastfeed exclusively, believed that breastfeeding has many advantages and that complementary feeding should be given after six months of age, whose exclusive breastfeeding (EBF) is always necessary. About the practice of multiparous women, the reasons for not breastfeeding exclusively reported by them were: 64 (32.4%) reported pain, 55 (27.9%) breast traumas, 37 (18.7%) absence of the support network, 20 (10.1%) engorgement, 19 (9.6%) mastitis and 2 (1%) cited insufficient milk, with no

desire to breastfeed and postpartum maternal complication.

Regarding the criteria of satisfactoriness, 137 (87.3%) postpartum women had satisfactory knowledge and 20 (12.7%) unsatisfactory. Regarding attitude, 115 (73.2%) had a satisfactory opinion and 42 (26.8%) unsatisfactory. Regarding practice, among the 77 who had breastfed, 55 (71.4%) women had satisfactory practice and 22 (28.5%) unsatisfactory. Therefore, in this study, the breastfeeding knowledge, attitude and practice were satisfactory.

According to table 2, age group ( $p < 0.0001$ ), sexarche ( $p < 0.0001$ ), abortion episode ( $p = 0.025$ ) and parity ( $p < 0.0001$ ) were statistically associated with knowledge. The highest prevalences indicated satisfactory knowledge for women aged  $\geq 26$  years, with sexarche  $\geq 16$  years, without abortion episode and multiparous. Furthermore, more mature women (OR=0.672 [CI=0.564-0.801]), with sexarche after 16 years (OR=0.185 [CI=0.068-0.500]) and multiparous (OR=0.750

[CI=0.661-0.851]) have 67%, 18% and 75% more likely to have satisfactory knowledge, respectively, being these variables considered protective factors for breastfeeding. Non-white women have a higher chance of having unsatisfactory knowledge (OR=1.161 [CI=1.088-1.240]). The same is true for those who did not suffer abortion, with a higher chance of 1.18 (OR=1.183 [CI=1.099-1.274]).

**Table 2** - Odds ratio and association between breastfeeding knowledge and sociodemographic, sexual, reproductive and care variables. João Pessoa, PB, Brazil, 2019. (n=157)

Variables	Knowledge				p*	OR <sup>s</sup> (CI) <sup>II</sup>
	Satisfactory		Unsatisfactory			
	f	%	f	%		
Age group						
18-25 years	41	26,1	20	12,7		
$\geq 26$ years	96	61,1	0	0	<0,0001 <sup>†</sup>	0,672 (0,564-0,801)
Education						
Up to 9 years	75	47,7	15	9,5		
$\geq 10$ years	62	39,4	5	3,1	0,087 <sup>†</sup>	0,403 (0,139-1,172)
Occupation						
Unpaid	78	49,6	8	5,1		
Paid	59	37,5	12	7,6	0,155 <sup>†</sup>	0,504 (0,194-1,312)
Religion (N=143)						
Catholic	71	49,6	11	7,6		
Evangelical	53	37	8	5,5	0,958 <sup>†</sup>	0,974 (0,366-2,590)
Color						
White	13	2,5	0	0		
Non-White	124	84,7	20	12,7	0,376 <sup>†</sup>	1,161 (1,088-1,240)
Smoker						
Yes	4	8,1	0	0		
No	133	78,1	20	11,7	1,000 <sup>†</sup>	1,150 (1,082-1,223)
Alcoholic						
Yes	9	5,7	3	1,9		
No	128	81,5	17	10,8	0,183 <sup>†</sup>	0,398 (0,098-1,618)
Physical activity						
Yes	52	33,1	9	5,7		
No	85	54,1	11	7,0	0,546 <sup>†</sup>	0,748 (0,290-1,926)
Sexarche						
Up to 15 years	35	22,2	13	8,2		
$\geq 16$ years	102	64,9	7	4,4	<0,0001 <sup>†</sup>	0,185 (0,068-0,500)
Marital status						
With partner	113	71,9	15	9,5		
Without partner	24	15,2	5	3,1	0,421 <sup>†</sup>	1,569 (0,520-4,733)
Planned pregnancy						
No	12	7,6	3	1,9		
Yes	125	79,6	17	10,8	0,410 <sup>†</sup>	0,544 (0,139-2,126)
Delivery route						
Vaginal	104	66,2	17	10,8		
Cesarean	33	21	3	1,9	0,569 <sup>†</sup>	1,798 (0,496-6,521)

(Keep Going)

**Table 2** - Odds ratio and association between breastfeeding knowledge and sociodemographic, sexual, reproductive and care variables. João Pessoa, PB, Brazil, 2019. (n=157)

Variables	Knowledge				p*	OR <sup>§</sup> (CI) <sup>  </sup>
	Satisfactory		Unsatisfactory			
Abortion						
Yes	21	14	0	0		
No	109	72,6	20	13,3	0,025 <sup>†</sup>	1,183 (1,099-1,274)
Parity						
Primiparous	60	38,2	20	12,7		
Multiparous	77	49	0	0	<0,0001 <sup>‡</sup>	0,750 (0,661-0,851)
Consultations						
Up to 5	56	35,6	12	7,6		
≥ 6	81	51,5	8	5,1	0,107 <sup>†</sup>	0,461 (0,177-1,200)
Complementation						
Yes	10	6,3	0	0		
No	127	80,8	20	12,7	0,363 <sup>‡</sup>	1,157 (1,086-1,234)

\*p = Statistical significance; <sup>†</sup>P value obtained by the Chi-square test; <sup>‡</sup>P value obtained by Fisher's exact test; <sup>§</sup>OR = Odds Ratio; <sup>||</sup>CI = 95%Confidence Interval.

**Source:** Prepared by the autor.

Regarding attitudes, there was a statistical association with age group (p=0.004), planned pregnancy (p=0.014) and parity (p=0.043), indicating a higher prevalence for satisfactory attitudes among women aged ≥26 years, who planned pregnancy and multiparous. The highest

age (OR=0.356 [CI=0.172-0.735]), pregnancy planning (OR=0.275 [CI=0.093-0.815]) and multiparity (OR=0.475 [CI=0.299-0.985]) were protective factors for breastfeeding, with respectively 35%, 27% and 47% more chance of satisfactory attitude according to Table 3.

**Table 3** - Odds ratio and association between breastfeeding attitude and sociodemographic, sexual, reproductive and care variables. João Pessoa, PB, Brazil, 2019. (n=157)

Variables	Attitude				p*	OR <sup>§</sup> (IC) <sup>  </sup>
	Satisfactory		Unsatisfactory			
	f	%	f	%		
Age group						
18-25 years	37	23,5	24	15,4		
>26 years	78	49,6	18	11,4	0,004 <sup>†</sup>	0,356 (0,172-0,735)
Education						
Up to 9 years	65	41,4	25	15,9		
≥10 years	50	31,8	17	10,8	0,736 <sup>†</sup>	0,884 (0,431-1,813)
Occupation						
Unpaid	67	42,6	19	12,1		
Paid	48	30,5	23	14,6	0,147 <sup>†</sup>	0,592 (0,290-1,206)
Religion (N=143)						
Catholic	62	43,3	20	13,9		
Evangelical	41	28,6	20	13,9	0,269 <sup>†</sup>	1,512 (0,725-3,153)
Color						
White	12	7,6	1	0,6		
Non-White	103	65,6	41	26,1	0,187 <sup>†</sup>	4,777 (0,602-37,925)
Smoker						
Yes	2	1,2	2	1,2		
No	113	71,9	40	25,4	0,290 <sup>†</sup>	0,354 (0,048-2,597)
Alcoholic						
Yes	6	3,8	6	3,8		
No	109	69,4	36	22,9	0,058 <sup>†</sup>	0,330 (0,100-1,089)

(Keep Going)

**Table 3** - Odds ratio and association between breastfeeding attitude and sociodemographic, sexual, reproductive and care variables. João Pessoa, PB, Brazil, 2019. (n=157)

Variables	Attitude				p*	OR <sup>§</sup> (IC) <sup>  </sup>
	Satisfactory		Unsatisfactory			
Physical activity						
Sim	42	26,7	19	12,1	0,321 <sup>†</sup>	0,696 (0,340-1,426)
Não	73	46,5	23	14,6		
Sexarche						
Up to 15 years	35	22,2	13	8,2	0,950 <sup>†</sup>	0,976 (0,454-2,098)
≥16 years	80	50,9	29	18,4		
Marital status						
With partner	93	59,2	35	22,2	0,725 <sup>†</sup>	0,845 (0,332-2,154)
Without partner	22	14	7	4,4		
Planned pregnancy						
No	7	4,4	8	5,1	0,014 <sup>†</sup>	0,275 (0,093-0,815)
Yes	108	68,7	34	21,6		
Delivery route						
Vaginal	88	56	33	21	0,787 <sup>†</sup>	1,125 (0,479-2,642)
Cesarean	27	17,2	9	5,7		
Abortion						
Yes	21	13,3	7	4,4	0,817 <sup>†</sup>	1,117 (0,437-2,858)
No	94	59,8	35	22,2		
Parity						
Primiparous	53	33,7	27	17,2	0,043 <sup>†</sup>	0,475 (0,229-0,985)
Multiparous	62	39,4	15	9,5		
Consultations						
Up to 5	46	29,3	22	14	0,166 <sup>†</sup>	0,606 (0,298-1,234)
≥ 6	69	43,9	20	12,7		
Complementation						
Yes	6	3,8	4	2,5	0,459 <sup>†</sup>	0,523 (0,140-1,954)
No	109	69,4	38	24,2		

\*p = Statistical significance; †P value obtained by the Chi-square test; ‡P value obtained by Fisher's exact test; §OR = Odds Ratio; ||CI = 95%Confidence Interval.

Source: Prepared by the autor.

In relation to the practice, prenatal consultations were statistically significant (p=0.023), indicating a higher prevalence for suitability among women with more than six prenatal care. Furthermore, the highest number of consultations was a protective factor for breastfeeding (BF) in 31%

(OR=0.313 [CI=0.112-0.873]). Non-smoking women were 1.4 times (OR=1.415 [CI=1.223-1.637]) more likely to breastfeed, while planning pregnancy increases 3.6 times (OR=3.619 [CI=2.515-5.207]) the chance of proper practice (Table 4).

**Table 4** - Odds ratio and association between breastfeeding practice and sociodemographic, sexual, reproductive and care variables. João Pessoa, PB, Brazil, 2019. (n=157)

Variáveis	Prática				p*	OR <sup>§</sup> (IC) <sup>  </sup>
	Satisfatório		Insatisfatório			
	f	%	f	%		
Escolaridade						
Até 9anos	25	32,4	9	11,6	0,717 <sup>†</sup>	1,204 (0,442-3,279)
≥10 anos	30	38,9	13	16,8		
Ocupação						
Não remunerada	41	53,2	13	16,8	0,181 <sup>†</sup>	0,493 (0,174-1,401)
Remunerada	14	18,1	9	11,6		

(Keep Going)



**Table 4** - Odds ratio and association between breastfeeding practice and sociodemographic, sexual, reproductive and care variables. João Pessoa, PB, Brazil, 2019. (n=157)

Variables	Practice				p*	OR <sup>§</sup> (IC) <sup>  </sup>
	Satisfactory		Unsatisfactory			
Religion (N=68)						
Catholic	21	30,8	10	14,7	0,637 <sup>†</sup>	0,778 (0,273-2,213)
Evangelical	27	39,7	10	14,7		
Color						
White	4	5,1	5	6,4	1,000 <sup>‡</sup>	0,267 (0,064-1,108)
Non-White	51	66,2	17	22		
Smoker						
Yes	2	2,6	0	0	0,601 <sup>‡</sup>	1,415 (1,223-1,637)
No	53	68,8	22	28,5		
Alcoholic						
Yes	1	1,3	1	1,3	0,492 <sup>‡</sup>	0,389 (0,023-6,507)
No	54	70,1	21	27,2		
Physical activity						
Yes	16	20,7	9	11,6	0,317 <sup>†</sup>	0,593 (0,212-1,660)
No	39	50,6	13	16,8		
Sexarche						
Up to 15 years	7	9	4	5,1	0,719 <sup>‡</sup>	0,656 (0,171-2,513)
≥16 years	48	62,3	18	23,3		
Marital status						
With partner	52	67,5	20	25,9	0,620 <sup>‡</sup>	1,733 (0,269-11,157)
Without partner	3	3,9	2	2,6		
Planned pregnancy						
No	0	0	1	1,3	0,286 <sup>‡</sup>	3,619 (2,515-5,207)
Yes	55	71,4	21	27,2		
Delivery route						
Vaginal	37	48	13	16,8	0,497 <sup>†</sup>	0,703 (0,253-1,948)
Cesarean	18	23,3	9	11,6		
Abortion						
Yes	9	11,6	5	6,4	0,513 <sup>†</sup>	0,665 (0,195-2,268)
No	46	59,7	17	22		
Consultations						
Up to 5	15	19,5	12	15,5	0,023 <sup>†</sup>	0,313 (0,112-0,873)
≥ 6	40	51,9	10	12,9		
Complementation						
Yes	5	6,4	2	2,6	1,000 <sup>‡</sup>	1,000 (0,179-5,584)
No	50	64,9	20	25,9		

\*p = Statistical significance; †P value obtained by the Chi-square test; ‡P value obtained by Fisher's exact test; §OR = Odds Ratio; ||CI = 95% Confidence Interval.

Source: Prepared by the autor.

## DISCUSSION

The characterization of women in this study is similar to other national and international studies regarding the profile of users between 21 and 44 years old, with complete high school education, without work activity<sup>(8)</sup>, although the literature points to nuances of higher education and prevalence of unemployed women<sup>(9)</sup>.

Concerning sexual characteristics, reproductive characteristics and life habits, a study in São Paulo identified planned pregnancy and sexarche similar to the results of this research. The use of contraceptive methods and the expansion of information may be a safety factor for young people not to become pregnant earlier and to desire their pregnancies<sup>(7)</sup>. KAP survey conducted in the urban area of Dakar

found that the most observed type of delivery was vaginal<sup>(9)</sup>.

In a public maternity hospital in Rio de Janeiro, most puerperal women were not smokers/alcoholics, although there are cities with smokers in the early stages of pregnancy<sup>(10)</sup>, which was not the case of this sample. Regarding prenatal consultations in Minas Gerais, puerperas attended the appropriate number according to government programs with a higher percentage among the most mature<sup>(11)</sup>. Early initiation of prenatal care is recommended with at least six follow-up consultations, preferably one in the first trimester, two in the second trimester and three in the third trimester of pregnancy<sup>(12)</sup>.

In the studied sample, the number of appointments merged with the government and the practice recommendations. Over six appointments showed as a protection factor to the BF practice. In this context, the Nursing becomes relevant, since part of the primary care health team acts early in the capture of pregnant women in the first trimester, favoring the minimum number of appointments recommended for a quality prenatal care, promoting the sharing of breastfeeding knowledge during the pregnancy. On the sources of information, international studies pointed out the health professional<sup>(9-10,13-15)</sup>, in addition to electronic media<sup>(15)</sup>. However, others point to the family as the main primary support network<sup>(13-14,16)</sup>.

In this research, the family and the health professionals were the main information sources about breastfeeding. The way the family defines its priorities, as well as its way of seeing and valuing women and children can exert positive (help) or negative (impediment) influence in this breastfeeding process<sup>(15)</sup>.

The guidelines on breastfeeding during pregnancy are salutary elements to the understanding of its importance. Nevertheless, a research found that, although mothers had received information about breastfeeding from health professionals, most did not know that exclusive breastfeeding protected the baby against diarrhea<sup>(10)</sup>. In another study, knowledge stimulated behavior, when in Ethiopia, 88.8% of mothers practiced exclusive breastfeeding in the first six months of life, concluding that the information shared to mothers by the health team positively influenced the support<sup>(16)</sup>.

In Nigeria, postpartum women knew that EBF is up to six months old, but pointed out that only the baby benefited from breastfeeding, with

an advantage related to adequate nutrition for the infant. Less than half knew about the immunological benefits and the mother/baby biopsychosocial bond<sup>(17)</sup>. In Kenya, an investigation with 400 mothers showed that most mothers stated that breast milk is sufficient until the first six months of life and that complementary foods should be introduced<sup>(18)</sup>. This data are according to the results above mentioned results.

In Ghana, a study result showed that 34% of mothers supplemented with water and 22% of mothers reported that breast milk is not able to meet the nutritional needs of the infant<sup>(19)</sup>. In Punjab, Pakistan, mothers believe that the first thing given to a child after childbirth should not be breast milk, but honey, rose flower or goat's milk from the hands of a family priest or a religious person<sup>(20)</sup>. Despite the evidence on the benefits of exclusive breastfeeding, many women practice mixed breastfeeding, with the use of associated artificial milk. Other information should be incorporated into health guidelines, either on the positioning that helps in breastfeeding or in the reflection of this practice on the infant's healthy sleep<sup>(10,21-22)</sup>.

Among the factors preventing breastfeeding and contributing to early weaning are return to work, breast pain, backache, surgical incision, engorgement, fatigue<sup>(23)</sup> insufficient milk, religious beliefs, breast rejection<sup>(10)</sup>, metabolic syndrome of the baby, excessive workload of the mother, lack of social support, as well as strategies for promoting and marketing infant formula<sup>(24)</sup>. This research pointed out pain, nipple trauma and engorgement as the first three factors related to ab lactation.

In this study, there was association between age group and knowledge level, including major adequacy of knowledge among more mature and multiparous women. Besides, women over 26 years, delay in sexual initiation and multiparity are breastfeeding knowledge protection factors, i.e, multiparity is indicated as a protection factor to the exclusive breastfeeding decision.

It is believed that planning a family brings good expectations about motherhood and childcare, improving positive opinions about EBF. This belief can be confirmed by the data of research in Dakar, in which 96.8% of the multiparous women breastfed exclusively<sup>(25)</sup>.

In Curitiba, a history of maternal parity with previous breastfeeding may direct the next ones.

At the same time that primiparous women are more likely to start breastfeeding, they usually keep it for less time, introducing complementary foods early<sup>(15)</sup>, although a research indicates primiparous and multiparous women with common difficulty related to the recognition of breastfeeding as an exclusive important food in the first six months of the child's life<sup>(25)</sup>.

Smokers breastfeed less, in addition to the changes caused by smoking in milk composition and decreased production<sup>(20)</sup>. Although there is a scarcity of researches on the relationship between ethnicity and unsatisfactory knowledge about breastfeeding, satisfactory knowledge may be related to other factors such as higher education, paid employment and union stability, primiparity or multiparity<sup>(13-14)</sup>.

In relation to social support, the greater the support of primary and secondary networks, the greater the intention of mothers in breastfeeding<sup>(23)</sup>. Still about the data of other studies, Women who live without partners offer a higher risk of breastfeeding their babies for a shorter time, when compared to those with a partner<sup>(13-15)</sup>. Regarding KAP, there are agreements in the literature on the satisfactoriness of knowledge and attitude<sup>(11,22-23)</sup> with disagreements about the practice<sup>(22)</sup>.

The Nursing may be a part of the women secondary support network, being able to strengthen a satisfactory practice, from the technical-affective care in the rooming-in, as well as in the woman's homecoming, whether in the puerperal visit, or in the primary care childcare appointments. Therefore, one may infer that the Nursing bond and support can positively impact on the breastfeeding, whether in the hospital environment or in the care network counter-reference.

## CONCLUSION

The study's objectives were achieved, indicating that, in the studied sample, the knowledge, the attitude and the practice were satisfactory, existing several risk and protection factors to these constructs. Besides, pain, nipple trauma, lack of a support network, engorgement, mastitis, insufficient milk, absence of breastfeeding desire and postpartum maternal complication were mentioned as reasons related to early ab lactation.

The assessment, in a single Childfriendly Hospital (Hospital Amigo da Criança), disables the

results generalization and the cross-sectional design, which disables the following of these postpartum women, over time, to verify possible conceptions changes, were research limitations. This study contributes to the scientific community, since it offers evaluation data related to the services provided in a Childfriendly Hospital (Hospital Amigo da Criança), demonstrating that certification may match the government research locus strengthening efforts, as an institution that protects, supports and promotes breastfeeding.

Furthermore, the results and reflections obtained in this research may be able to guide professionals to develop health technologies (flyers, manuals and breastfeeding guides) for future training in similar hospitals. The risk and protection elements elucidated in this study enables viewing the profile of women that deserve a closer look to their knowledge gaps and vulnerabilities, intending to facilitate the opinion weaknesses reduction and encourage the satisfactory behavior regarding breastfeeding.

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#### Editores Responsáveis:

Juliana Dias Reis Pessalácia

Gisele Nepomuceno de Andrade

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