

Professional who attended childbirth and breastfeeding in the first hour of life

Profissional que assistiu o parto e amamentação na primeira hora de vida
Profesional que asistió al parto y amamantamiento en la primera hora de vida

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ABSTRACT

Objectives: To investigate the association between the professionals who attended vaginal delivery and breastfeeding in the first hour of life. **Methods:** This is a cross-sectional study with data from the *Nascer no Brasil* (Born in Brazil) survey, conducted in the 2011-2012 period. Data from 8,466 puerperae were analyzed using a logistic regression model with a hierarchical approach. **Results:** The proportion of mothers who breastfed at birth was higher in deliveries attended by nurses (70%). A nurse-assisted delivery was 64% more likely to breastfeed in the first hour of life. Other factors associated with the outcome: residing in the North; age less than 35 years; multiparity; prenatal guidance on breastfeeding in the first hour of life; birth at Baby-Friendly Hospital; companion at birth; and female newborn. **Conclusions:** Obstetrician nurse/nurse-assisted delivery was a significant independent factor associated with breastfeeding in the first hour of life, suggesting the importance of strengthening the role of the obstetrician nurse.

Descriptors: Nurse Midwives; Midwifery; Postpartum Period; Breast Feeding; Cross-Sectional Studies.

RESUMO

Objetivos: investigar a associação entre o profissional que assistiu o parto vaginal e a amamentação na primeira hora de vida. **Métodos:** estudo transversal com dados da pesquisa *Nascer no Brasil*, conduzida em 2011/2012. Foram analisados dados de 8.466 puérperas por meio de modelo de regressão logística com abordagem hierarquizada. **Resultados:** A proporção de mães que amamentaram ao nascimento foi maior nos partos assistidos pelo enfermeiro (70%). O parto assistido por enfermeiro apresentou chance 64% maior de amamentação na primeira hora de vida. Outros fatores associados ao desfecho: residir no Norte; idade inferior a 35 anos; multiparidade; orientação no pré-natal sobre amamentação na primeira hora de vida; nascimento em Hospital Amigo da Criança; acompanhante no parto; e recém-nascido de sexo feminino. **Conclusões:** O parto assistido pelo enfermeiro/enfermeiro obstetra foi importante fator independente associado à amamentação na primeira hora de vida, sugerindo a importância do fortalecimento do papel do enfermeiro obstetra.

Descritores: Enfermeiras Obstétricas; Tocologia; Período Pós-Parto; Aleitamento Materno; Estudos Transversais.

RESUMEN

Objetivos: investigar la asociación entre el profesional que asistió al parto vaginal y la lactancia en la primera hora de vida. **Métodos:** estudio transversal con datos de la investigación *Nascer no Brasil* (Nacer en Brasil), conducida en el periodo de 2011-2012. Se analizaron datos de 8.466 puérperas por medio de modelo de regresión logística con abordaje jerarquizado. **Resultados:** La proporción de madres que amamantaron al nacimiento fue mayor en los partos asistidos por el enfermero (70%). El parto asistido por enfermero presentó una probabilidad un 64% mayor de lactancia en la primera hora de vida. Otros factores asociados al desenlace: residir en el Norte; edad inferior a 35 años; multiparidad; orientación en el prenatal sobre lactancia materna en la primera hora de vida; nacimiento en el Hospital Amigo del Niño; acompañante en el parto; y el recién nacido de sexo femenino. **Conclusiones:** El parto asistido por el enfermero/enfermero obstetra fue un importante factor independiente asociado a la lactancia materna en la primera hora de vida, sugiriendo la importancia del fortalecimiento del papel del enfermero obstetra.

Descriptorios: Enfermeras Obstetricas; Partería; Periodo Posparto; Lactancia Materna; Estudios Transversales.

INTRODUCTION

The leading global initiative for the promotion of breastfeeding in maternal and child services is the Baby-Friendly Hospital Initiative (IHAC). Of the “Ten Steps to Successful Breastfeeding” advocated by the IHAC, Step 4, referring to breastfeeding in the first hour of life⁽¹⁾, is highlighted in order to contribute to the reduction of neonatal mortality⁽²⁻³⁾. Studies indicate that differences in maternity care models may interfere with the early initiation of breastfeeding when mothers’ decision-making power tends to be more limited, making them dependent on the institutional and professional protocols involved in childbirth⁽⁴⁻⁵⁾.

In 2014, Brazil included in the criteria for qualification to the IHAC the “Women-Friendly Care” (CAM)⁽⁶⁾, aiming to promote “Good Delivery and Childbirth Care Practices”⁽⁷⁾, since the indiscriminate use of interventions has been a feature of the Brazilian obstetric care model⁽⁸⁾. One of the strategies of the Ministry of Health, based on the humanization of delivery and childbirth, and due to the need to change the current technocratic care model, was the implantation of low-risk normal delivery by the obstetrician nurse, following successful international examples⁽⁹⁾. Obstetrical Nursing Specialization Courses and Residency Programs have been funded since the early 2000s with the aim of training nurses incorporated into the Unified Health System (SUS)⁽¹⁰⁾, along the lines of the *Rede Cegonha* (Stork Network)⁽¹¹⁾.

According to The Lancet, obstetrical care provides better results in reducing maternal and neonatal mortality when performed by trained midwives, and in collaborative work with a multidisciplinary team⁽¹²⁻¹³⁾. The Brazilian Association of Obstetrician Nurses (ABNFO) adopted the “Essential Competencies for Basic Midwifery” of the International Confederation of Midwives (ICM), the Pan-American Health Organization (PAHO) developed the “Toolkit for Strengthening Professional Midwifery in the Americas”, adapted to the Brazilian context⁽¹⁴⁾, and in 2017, the Ministry of Health published the “National Guidelines for Normal Childbirth Care”⁽¹⁵⁻¹⁶⁾.

This study is part of international recognition of the role of the professional midwife as a strategy to improve delivery and childbirth care. The practices adopted by the obstetrician nurse regarding breastfeeding in the first hour of life can be an essential marker of the delivery model.

OBJECTIVES

To investigate the association between the professional who attended vaginal delivery and breastfeeding in the first hour of life.

METHODS

Ethical aspects

This study considered the ethical precepts of Resolution 466/2012 of the National Health Council. The Research *Nascer no Brasil* (Born in Brazil) was approved by the Research Ethics Committee of the National School of Public Health/Oswaldo Cruz Foundation and the consent obtained in digital format, and puerperae received the printed version of the informed consent form.

Design, place of study and period

This is a cross-sectional hospital-based study with a national scope, based on data from the study *Nascer no Brasil: Pesquisa Nacional sobre Parto e Nascimento* (Born in Brazil: National Survey on Delivery and Childbirth), conducted from February 2011 to October 2012.

Sample and inclusion/exclusion criteria

A probabilistic complex sample was used to represent all births occurring in hospitals with 500 or more births per year, stratified by the five geographic macro-regions, by location (capital or non-capital) and hospital type (private, public or mixed). Then, the necessary days were selected to reach 90 puerperae (a minimum of seven days in each hospital). In the third stage, the sample consisted of the puerperae. A total of 266 hospitals were sampled from 191 Brazilian municipalities, and 23,894 puerperae were interviewed. The detailed description of the sample design is found in Vasconcellos et al.⁽¹⁷⁾.

For the present study, single-gestation vaginal deliveries with term birth (37-41 gestation weeks) were performed by doctors or nurses/obstetrician nurses. Fetal or neonatal deaths, maternal deaths, maternal near miss at delivery, HIV-positive women, newborns with an Apgar score below seven in the 5th minute of life, newborns who required resuscitation in the delivery room and whose destination was the ICU – characteristics that could prevent or delay the initiation of breastfeeding were excluded. After applying these criteria, the final sample included 8,466 puerperae for analysis.

Study protocol and variables

The research team consisted of executive, regional and state coordinators, 50 supervisors and 200 interviewers, who received local training for five consecutive days. Interviews were held with the puerperae during hospitalization at the health service, using a standardized electronic questionnaire, and their prenatal cards were photographed. Data were also extracted from the medical records of the puerperae and the newborns. The supervisor of each unit sent data to a central search server for real-time storage and monitoring. The hospital interview data collection instrument contained 397 questions, including blocks of repeated questions for up to quadruplets. The instrument used to collect data from the medical record contained 265 items.

In this study, the exposure variable investigated was the professional who attended the delivery (doctor or nurse/obstetrician nurse), obtained by consulting the medical records. The outcome variable was breastfeeding in the first hour of life (yes/no), categorized based on questions related to the time of onset of breastfeeding and breastfeeding in the delivery room.

It may be that outside urban centers some nurses without specialization in obstetrics attend vaginal deliveries. Therefore, in this study, professionals with an undergraduate degree and nurses with a specialization in obstetrics were considered. In the *Nascer no Brasil* study, there were no obstetricians graduated in obstetrics working in maternity hospitals, since their professional registration has been recently regulated in Brazil⁽¹⁸⁾.

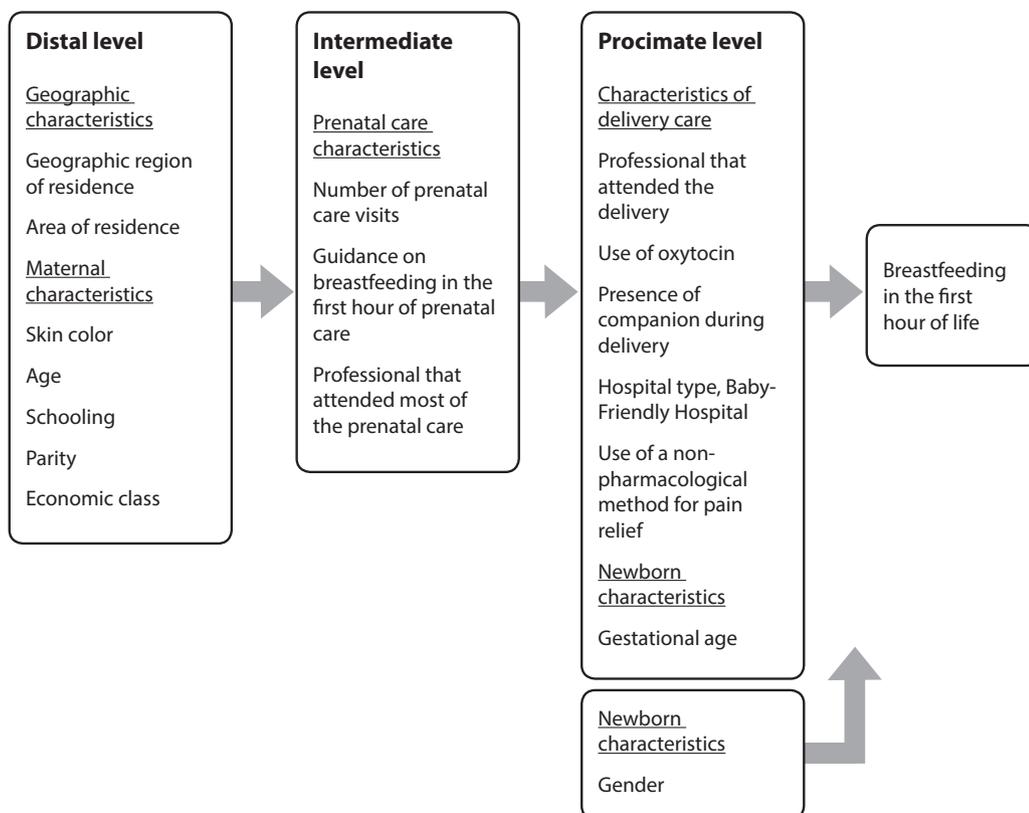


Figure 1 - Conceptual model of breastfeeding in the first hour of life at hierarchical levels of determination

A hierarchical conceptual model was constructed at the distal, intermediate and proximal levels (Figure 1) based on a systematic review of the factors associated with breastfeeding in the first hour⁽¹⁹⁾ in order to perform a multivariate analysis approach. The variables used were obtained from the maternal hospital interview and the maternal medical record, defined as follows: Geographic region of residence (North, Northeast, Southeast, South or Midwest); area of residence (capital/inland); self-reported maternal skin color (white/non-white); maternal age (12-19 years/20-34 years/ ≥ 35 years); maternal schooling (<11 years of schooling / ≥ 11 years of schooling); parity (primiparous / multiparous); economic class (A/B, C or D/E, based on the criteria of the Brazilian Association of Research Companies - ABEP/2010); number of prenatal visits (did not do prenatal care/1-5/6 or more); guidance on breastfeeding in the first hour of prenatal care (yes/no); health professional who attended most of the prenatal visits (doctor/nurse); care attendant (physician/nurse or obstetrician nurse); use of oxytocin in labor (yes/no); presence of companion at delivery (yes/no); hospital type (public/mixed/private); Baby-Friendly Hospital (no/underway/yes); use of some non-pharmacological method for pain relief (yes/no); gestational age at birth (preterm: 37 to <39 weeks / term: 39 to <41 weeks / late term: 41 to <42 weeks) and baby gender (female/male).

Analysis of results and statistics

The software used in the statistical analysis was the data analysis package with SPSS 22.0 complex samples. Initially, bivariate

analysis of the outcome with each variable was performed using Pearson's chi-square test, and crude odds ratios (OR) were estimated. The variables whose association with the outcome showed p -value ≤ 0.20 were selected for the construction of a logistic regression model, following a three-level hierarchical approach. At each level, variables were included following the forward selection method, with a criterion of $p < 0.05$ to remain in the model. The adjusted ORs with the respective 95% confidence intervals (95% CI) were estimated, and the variables with p -value ≤ 0.05 were considered statistically significant with the outcome. Interactions between the variables "Baby-Friendly Hospital", "presence of companion at delivery" and "hospital type" were tested.

RESULTS

Of the 8,466 puerperae who delivered vaginally, 60.9% breastfed their infants in the first hour after birth. Most of the puerperae were non-white, in the 20-34 years' age group, had less than 11 years of study, were multiparous and of economic class C (Table 1). Regarding the prenatal care characteristics, most attended six prenatal visits or more, reported having received guidance on breastfeeding in the first hour of life and was attended by the doctor in most visits (Table 2). Regarding delivery, most puerperae were attended by doctors (83%). The proportion of mothers who breastfed in the first hour of life was higher in deliveries attended by a nurse/obstetrician nurse (70%) than in those attended by the doctor (59%). There was a preponderance of births without the presence of companions (66%) and in public or mixed hospitals (97%). Non-pharmacological methods for pain relief were used in one-third of the sample (Table 3).

After the bivariate analysis, the following maternal sociodemographic variables showed p -value ≤ 0.20 in the test of association with the outcome: geographical region, age, schooling and parity (Table 1); among the variables related to prenatal care: guidance on breastfeeding in the first hour of life (Table 2); and among the variables related to childbirth care and characteristics of the newborn: professional attending delivery, presence of companion at delivery, hospital type, Baby-Friendly Hospital, use of

some non-pharmacological method for pain relief during labor, gestational age and gender of the newborn (Table 3).

Table 4 shows the models as per the level of proximity to the outcome, considering the level of significance of 5%. The likelihood of breastfeeding at birth was higher in newborns whose mothers were residents in the North; adolescents or adults between 20 and 34 years of age; multiparous; who received guidance on breastfeeding in the first hour of life in prenatal care; had their

children in Baby-Friendly Hospital; nurse/obstetrician nurse attended delivery; presence of companion at delivery; and female newborns. The characteristics with a higher association with the outcome were maternal age from 12 to 19 years, with a 61% likelihood ($p=0.001$), birth at a Baby-Friendly Hospital, with a 66% likelihood ($p=0.004$), and delivery attended by a nurse/obstetrician nurse, associated with a 64% likelihood of breastfeeding in the first hour of life ($p=0.004$) (Table 4).

Table 1 - Breastfeeding in the first hour of life, per maternal geographic and sociodemographic characteristics - Distal level, Brazil, 2011-2012

Variables	n (%)	Breastfeeding in the first hour of life (%)	Crude OR (95%CI)	p value
Geographic region (n=8,466)				
North	759 (9.0)	71.8	1.78(1.16-2.75)	0.008
Midwest	509 (6.0)	66.2	1.37(0.88-2.15)	0.159
South	1.013 (12.0)	65.3	1.32(0.84-2.09)	0.224
Northeast	2.405 (28.4)	58.0	0.97(0.68-1.37)	0.864
Southeast	3.780 (44.7)	58.7	1	
Area of residence (n=8,466)				
Capital	3.372 (39.8)	61.5	1	
Inland	5.093 (60.2)	60.5	0.95(0.70-1.29)	0.781
Skin color (n=8,464)				
White	2.401 (28.4)	60.8	1	
Non-white	6.062 (71.6)	61.0	1.00(0.84-1.20)	0.931
Maternal age (n=8,466)				
12-19 years	2.032 (24.0)	62.3	1.45(1.12-1.88)	0.004
20-34 years	5.805 (68.6)	61.3	1.40(1.11-1.75)	0.004
≥ 35 years	629 (7.4)	53.1	1	
Schooling (n=8,466)				
≥ 11 years of study	3.117 (36.8)	59.3	1	
< 11 years of study	5.349 (63.2)	61.8	1.11(0.96-1.28)	0.157
Parity (n=8,466)				
Primiparous	3.544 (41.9)	58.9	1	
Multiparous	4.922 (58.1)	62.4	1.15(1.00-1.33)	0.044
Economic class (n=8,404)				
A; B	1.261(15.0)	59.9	1	
C	4.598 (54.7)	59.4	0.97(0.79-1.20)	0.840
D; E	2.544 (30.3)	63.8	1.17(0.91-1.52)	0.212

Table 2 - Breastfeeding in the first hour of life, by prenatal care characteristics – Intermediate Level. Brazil, 2011-2012

Variables	n (%)	Breastfeeding in the first hour of life (%)	Crude OR (95%CI)	p value
Number of PN visits* (n=8,290)				
Did not perform PN	125 (1.5)	56.5	1	
1-5 visits	2.545 (30.7)	63.6	1.34(0.77-2.34)	0.293
6 or more visits	5.620 (67.8)	59.8	1.14(0.65-1.99)	0.634
Guidance on breastfeeding in the first hour of life in PN (n=8,421)				
No or did not perform PN	3.278 (38.9)	57.8	1	
Yes	5.143 (61.1)	62.8	1.23(1.02-1.48)	0.031
Health professional who attended most PN visits (n=8,193)				
Doctor	5.820 (71)	60.8	1	
Nurse	2.373 (29)	61.3	1.02(0.83-1.25)	0.841

*PN – Prenatal care.

Table 3 - Breastfeeding in the first hour of life, per delivery care and baby characteristics – Proximal level, Brazil, 2011-2012

Variables	n (%)	Breastfeeding in the first hour of life (%)	Crude OR (95%CI)	p value
Professional that attended delivery (n=8,466)				
Doctor	7.062 (83.4)	59.0	1	
Nurse/obstetric nurse	1.404 (16.6)	70.5	1.66(1.17-2.36)	0.005
Use of oxytocin during labor (n=8,466)				
Yes	4.087 (48.3)	60.0	1	
No	4.379 (51.7)	61.8	1.08(0.91-1.28)	0.365

To be continued

Table 3 (concluded)

Variables	n (%)	Breastfeeding in the first hour of life (%)	Crude OR (95%CI)	p value
Companion during delivery (n=8,465)				
No	5.572 (65.8)	58.0	1	
Yes	2.893 (34.2)	66.6	1.44(1.17-1.77)	0.001
Hospital type (n=8,466)				
Private	268 (3.2)	42.2	1	
Mixed	3.815 (45.1)	58.6	1.93(1.06-3.53)	0.031
Public	4.383 (51.8)	64.1	2.44(1.36-4.38)	0.003
Baby-Friendly Hospital (8,466)				
No	4.217 (49.8)	54.3	1	
Underway	789 (9.3)	61.6	1.34(0.81-2.22)	0.239
Yes	3.460 (40.9)	68.8	1.85(1.37-2.49)	<0.001
Use of non-pharmacological method for pain relief (n=8,466)				
No	5.621 (66.4)	59.4	1	
Yes	2.845 (33.6)	63.9	1.20(0.99-1.45)	0.051
Gestational age (n=8,465)				
37 to < 39 weeks	3.052 (36.1)	59.4	0.79(0.64-0.99)	0.048
39 to < 41 weeks	4.645 (54.9)	61.3	0.86(0.70-1.07)	0.185
41 to < 42 weeks	768 (9.1)	64.6	1	
Newborn gender (n=8,464)				
Male	4.338 (51.3)	59.4	1	
Female	4.126 (48.7)	62.5	1.13(1.00-1.28)	0.037

Table 4 - Models of factors associated with breastfeeding in the first hour of life, Brazil, 2011-2012

Variables	Distal model n=8,466		Intermediate model* n=8,421		Proximal model** n=8,418	
	Adjusted OR (95%CI)	p value	Adjusted OR (95%CI)	p value	Adjusted OR (95%CI)	p value
LEVEL 1						
Geographic region		0.032		0.034		0.050
North	1.73(1.12-2.67)		1.71(1.10-2.66)		1.74(1.12-2.71)	
Midwest	1.35(0.86-2.12)		1.31(0.83-2.05)		1.34(0.79-2.29)	
South	1.33(0.84-2.10)		1.31(0.83-2.07)		1.26(0.80-1.97)	
Northeast	0.97(0.68-1.38)		0.93(0.66-1.32)		0.99(0.70-1.42)	
Southeast	1		1		1	
Maternal age		0.001		0.001		0.001
12-19 years	1.67(1.26-2.21)		1.68(1.26-2.23)		1.61(1.22-2.13)	
20-34 years	1.45(1.16-1.81)		1.44(1.15-1.80)		1.42(1.13-1.77)	
≥ 35 years	1		1		1	
Parity		0.009		0.006		0.008
Multiparous	1.25(1.05-1.48)		1.26(1.07-1.50)		1.26(1.05-1.50)	
Primiparous	1		1		1	
LEVEL 2						
Guidance on breastfeeding in the first hour of life in prenatal care	-	-		0.016		0.016
Yes	-	-	1.24(1.04-1.49)		1.25(1.04-1.50)	
Did not receive or do prenatal care	-	-	1		1	
LEVEL 3						
Baby-Friendly Hospital	-	-	-	-		0.004
Yes	-	-	-	-	1.66(1.23-2.25)	
Underway	-	-	-	-	1.40(0.88-2.24)	
No	-	-	-	-	1	
Professional that attended the delivery	-	-	-	-		0.004
Nurse/obstetric nurse	-	-	-	-	1.64(1.17-2.29)	
Doctor	-	-	-	-	1	
Companion at delivery	-	-	-	-		0.005
Yes	-	-	-	-	1.33(1.09-1.64)	
No	-	-	-	-	1	
Newborn gender	-	-	-	-		0.010
Female	-	-	-	-	1.17(1.03-1.32)	
Male	-	-	-	-	1	

Note: * Intermediate model: adjusted for the statistically significant variables of the Distal Model ($p < 0.05$); ** Proximal model: adjusted for the statistically significant variables of the distal and intermediate models ($p < 0.05$).

DISCUSSION

In Brazil, in the 2011-2012 period, breastfeeding in the first hour of life was performed in 60.9% of vaginal deliveries, higher than that estimated by the 2006 National Survey of Demography and Health (PNDS), with a percentage of 51.1% of children breastfed in the first hour of life in vaginal deliveries⁽⁸⁾. These variations may result from different sampling strategies and a possible memory bias related to the methodology used. In the PNDS, data was collected with mothers whose children were up to five years of age, whereas in this study, information was collected directly from the mothers during the maternity stay. Also, until the data collection period of this research, government initiatives to promote and support breastfeeding possibly contributed to increased breastfeeding in the first hour of life.

The proportion of breastfeeding in the first hour of life in deliveries attended by nurse/obstetrician nurse was significantly higher. A Cochrane systematic review comparing models of care conducted by midwives versus other models of obstetric care has shown that women who received care from a model with midwives were 35% more likely to breastfeed⁽²⁰⁾. An issue that may have contributed to the timely initiation of breastfeeding in the presence of nurses concerns the adoption of a care model with reduced use of interventions that could delay the onset of breastfeeding by separating the mother from her child. In a nationwide study published in 2016, the authors highlighted the significantly higher frequency of good practices nurse-attended deliveries⁽²¹⁾. In this unique moment for the woman, it is crucial to provide emotional support during delivery, help in identifying the right moment to breastfeed the baby, and intermediation through constant dialogue, so that their wishes are considered. Thus, it may be possible to give the mother the physical and psychological support required to breastfeed in the first hour after giving birth.

Even with the initiatives for the incorporation of obstetrician nurses in delivery and childbirth care in Brazil, considering the importance of this professional to help reduce maternal and perinatal morbimortality⁽¹⁴⁾, of the vaginal deliveries analyzed in this study, only 16.6% were attended by the nurse/obstetrician nurse, mostly in the public health sector. It is essential to consider that the selected deliveries had sufficient conditions for an uncomplicated physiological follow-up. A study carried out in Minas Gerais pointed out that a model of collaborative delivery care, with a doctor-obstetrician nurse integration in the care team, can reduce the number of unnecessary interventions at childbirth without adversely interfering with neonatal outcomes⁽²²⁾. This model shows its importance when, in the context of maternity, the obstetrician nurse can act in the care of uncomplicated delivery experienced by most women.

Birth in Baby-Friendly Hospitals was significantly associated with breastfeeding soon after birth, an association also found in studies in the South of the country⁽²³⁾ and the city of Rio de Janeiro⁽²⁴⁾. The accreditation of these hospitals is subject to the adoption of the "Ten Steps", and Step 4 is precisely helping mothers realize when their babies are ready to be breastfed so they can start breastfeeding early⁽¹⁾. At the time of data collection of this research, the criteria for qualification in the IHAC had not yet been redefined with the inclusion of good delivery and childbirth care

practices and the assurance of the permanence of the mother or father with the newborn 24 hours a day and free access to both⁽⁶⁾.

In a randomized controlled study conducted in Nigeria, the presence of a companion in the delivery room was associated with the shorter time of onset of the first breastfeeding in vaginal deliveries⁽²⁵⁾. In our study, a significant association was found between the presence of companions at the time of delivery and breastfeeding after birth. A systematic review published in 2014 found no significant association with this outcome, but only one study evaluated this variable⁽¹⁹⁾. The presence of women's free choice companions is regulated by Ordinance N° 2.418/2005⁽²⁶⁾ and considered an essential element in the humanization of obstetric care. It may be that women receive emotional support from the companion, giving greater security in the immediate postpartum, favoring the initiation of breastfeeding.

Interestingly, newborns were more likely to breastfeed in the first hour of life in this study. This association was also found in a study conducted in Uganda⁽²⁷⁾, Ethiopia⁽²⁸⁾ and a recent study with Hispanic mothers⁽²⁹⁾, revealing that the gender of the newborn can affect how these mothers see the nutritional needs of their children, possibly related to cultural aspects.

Of the characteristics of prenatal care, only receiving guidance on breastfeeding was associated with the outcome, also identified as a factor associated with early breastfeeding in a study conducted in Bahia⁽³⁰⁾ and another study in southern Ethiopia⁽³¹⁾. This association may be an indication that mothers who had already been advised about the importance of breastfeeding their child soon after birth became more available to this act, or asked for more help from health professionals who attended them in order to implement it. A study carried out in a maternity hospital in the city of Rio de Janeiro revealed that less than half of the puerperae knew about the possibility of breastfeeding in the delivery room⁽³²⁾.

The North region recorded the highest proportion of breastfeeding in the first hour of life, also verified in national studies conducted in 2006 and 2008^(8,33), which may be related to the cultural issues of the inhabitants of the region⁽³⁴⁾, percentage of the country's indigenous population⁽³⁴⁾ and where traditional midwives still work in places that are difficult to access⁽³⁵⁾.

In terms of maternal sociodemographic characteristics, the groups did not show significant variations, probably due to the relationship between economic class and delivery type⁽³⁶⁾. In a study carried out in a maternity hospital in Rio de Janeiro, multiparous women were more likely to breastfeed in the first hour⁽³²⁾, as in this study. It may be that multiparous women gave birth to their offspring in a short time and underwent actions favorable to early breastfeeding at first birth, which reflected positively on the second birth. Regarding maternal age, the association was also found in a study carried out in Pelotas, Rio Grande do Sul⁽²³⁾. One possible explanation is that adolescents suffer more educational actions in the health services, since there is concern about adolescent health and identification of their needs in the context of public health, as social subjects in transition from childhood to adulthood⁽³⁷⁾.

Limitations of the study

One limitation of this study is that the role of the obstetrician nurse in the delivery and childbirth care process is still being

strengthened in Brazil and, for this reason, we chose to include nurses without *lato sensu* training in obstetrics. Also, we could not differentiate the deliveries attended by trained professionals according to ICM standardized competencies. Another limitation concerns the cross-sectional epidemiological design, which hinders a clear causal time-related relationship between exposure and outcome.

Contributions to the nursing, health or public policy area

We know that the strengthening of the obstetrician nurse's presence involves the adoption of a policy of humanized birth in Brazil that can reverse the logic of obstetric and neonatal care. Continuous professional improvement, aimed at providing quality services, can overcome the obstacles to breastfeeding in the first hour of life within the delivery room. The results of this study may contribute to the strengthening of the IHAC and the Stork Network, and point to the relevance of the development of future research and the reflection on the value of evidence-based care practices, with emphasis on the importance of the role of the obstetrician nurse.

CONCLUSIONS

We verified that delivery attended by the nurse/obstetrician nurse was associated with a 64% likelihood of breastfeeding in the first hour of life, even after adjusting for confounding factors.

The association found in this study may be a reflection of the incentive to the professional formation and incorporation of the obstetrician nurse in delivery and childbirth care in Brazil. This study reveals an essential result regarding the promotion of breastfeeding in the first hour of life and may contribute to the strengthening of the obstetrician nurse's work field in the hospital attendance to normal low-risk delivery, in collaborative action with the other professionals. The incorporation of obstetrician nurses into childbirth care does not correspond to the technocratic biomedical model, requiring a review of the care model.

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