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Satisfaction with childbirth care in Brazilian maternity hospitals participating in the Stork Network program: women's opinions

Satisfação com a assistência ao parto em maternidades brasileiras que participam da Rede Cegonha: opinião das mulheres

Satisfacción con la atención del parto en maternidades brasileñas que participan de la Red Cigüeña: la opinión de las mujeres

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Abstract

This study aimed to describe maternal satisfaction with their experience during childbirth and birth and their association with sociodemographic, clinical and obstetric, and good practice characteristics during childbirth care. The sample included 2,069 women who wanted to express their opinions at the end of the interview of the Stork Network Assessment *survey. Exploratory factor analysis was performed to summarize the variables of interest, creating latent variables, for input in the multiple logistic regression model. Six factors were created and tested in the model. Respect for the puerperal women was associated with satisfaction (vaginal delivery: 1.40; cesarean section: 1.47). Regarding those who underwent a cesarean section, satisfaction was associated with living in the Central-West (1.91) and South (2.00) regions and the presence of a companion during hospitalization (1.25). However, for women who had vaginal delivery, satisfaction was inversely associated with large hospitals (0.62) and undergoing interventions during labor and delivery (0.83), but positively with multiparity (1.98), receiving good care practices for labor and delivery (1.24), and having immediate contact with the newborn (1.20). The better understanding of the factors associated with mothers' care satisfaction for labor and delivery can improve care quality provided in public hospitals in the Brazil.*

Patient Satisfaction; Pregnancy; Birth

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Introduction

The Brazilian Unified National Health System (SUS) was instituted with the enactment of the 1988 *Federal Constitution* [1]. In addition to universality, integrality, and equity principles, SUS is based on popular participation and social control [2]. Actions by the Brazilian Ministry of Health demonstrate the importance of the opinion and participation of users in the construction and search for quality and improvement of the entire health system. The Brazilian National Policy for Strategic and Participative Management (ParticipaSUS) [3] values the different mechanisms of popular participation and social control. ParticipaSUS encourages the population's protagonism in the struggle for health by the expansion of public spaces for debates and knowledge construction. Moreover, the Brazilian National Program for the Evaluation of Health Services (PNASS), reformulated in 2015 [4], had as one of its specific objectives to measure user satisfaction with the care provided by SUS facilities.

Despite significant improvements in recent years [5], Brazil still has a low quality of care for childbirth and birth, and high rates of maternal mortality and obstetric violence [6]. To face these issues, in 2011, the Brazilian Ministry of Health launched the Stork Network program, to promote the implementation of a new model of care for women's and children's health, ensuring access, reception, and resolution of the network care and reduce maternal and child mortality rates. This strategy aims to guarantee women the right to reproductive planning and humanized care for pregnancy, childbirth, and the puerperium [7]. More than 600 maternity hospitals, public or SUS-affiliated, participate in this program.

To evaluate the extent of implementation of the new care model proposed by the Stork Network program, a cycle of assessment of good practices in childbirth and maternity care was carried out in 2016 and 2017. This cycle investigated the changes in the management model of services and the perception of users, managers, and health professionals to obtain information that can support decision-making on better practices of obstetric care in Brazil.

Women's satisfaction with the quality of care during childbirth and birth is a crucial source of information for identifying aspects that need to be reviewed and improved in the health system [8] and for preventing long-term negative health outcomes for the mother and the child [9]. The World Health Organization (WHO) [10] recommends assessing and monitoring of maternal and community satisfaction with the healthcare received to enhance quality and efficiency of the health system during pregnancy, childbirth, and postpartum. Moreover, WHO highlighted the importance of a positive birth experience for women in its guideline on intrapartum care [11].

User satisfaction with health services depends on factors related to the users themselves and on factors inherent to health services [12]. Satisfaction with childbirth is a complex and multifactorial construct, and the quality of the relationship between women and their care provide is essential for a good maternal experience [9]. In delivery and birth care, satisfaction with maternal care is associated with maternal characteristics, sociodemographic and cultural aspects [8,13], number of interventions performed during labor [14], and attitudes and behaviors of health professionals [15], among others [16,17].

This study aimed to describe the satisfaction of puerperal women with their experience in childbirth and birth care and its association with sociodemographic, clinical and obstetric, and good practices during childbirth care, in maternity hospitals affiliated with Stork Network, in Brazil.

Methods

In this study, data were acquired by the survey *Stork Network Assessment* (SNA) conducted by the Oswaldo Cruz Foundation, the Federal University of Maranhão, and the Brazilian Ministry of Health. SNA was carried out in 606 public and mixed health facilities. Interviews were carried out with health professionals, managers, and puerperal women and information was collected from the women's medical records, documentary analysis, and a script for observing the maternity facilities. Only the data from the questionnaire applied to the puerperal women and their medical record were used, which addressed sociodemographic characteristics, labor, and delivery, and the care provided in the maternity hospital [18]. The sample included public and mixed hospitals that, in 2015, met the following criteria: performed 500 or more deliveries in a health region with Stork Network action plan, despite

the funding; performed less than 500 deliveries, in a health region with Stork Network action plan and releasing resources. In total, 10,665 women were interviewed and the sampling process can be seen in Vilela et al. [19].

The outcome "satisfaction with childbirth care" was obtained with the open-ended question "Would you like to say anything else?", at the end of the questionnaire. The answers were then categorized by two researchers according to the content. Answers classified as "satisfied" were those that praised the institution and/or professionals; made positive comparisons to previous experiences of childbirth and expressed the idea that the woman's expectations for the moment of childbirth were met. Answers were classified as "dissatisfied" when contained information about dissatisfaction or complaints against the institution and/or professionals, reports of lack of something that the woman expected at the time of delivery and that her expectations were not met. In total, 2,185 women (20.5%) expressed an interest in exposing their opinions on their experience with the care received in the maternity facilities associated with the Stork Network. The reports were divided into two groups: satisfied and dissatisfied. However, 116 reports (5.3%) reflected aspects that simultaneously covered both categories of satisfaction and dissatisfaction and their responses were disregarded. In the end, 2,069 women composed the population of this study.

Variables were used to characterize the hospital and the woman: geographic macroregion (North, Northeast, Southeast, South, and Central-West), hospital size (≤ 1,499, from 1,500 to 2,999, ≥ 3,000 births/year), age (< 20, from 20 to 34, ≥ 35 years old), education (< elementary, complete elementary, ≥ complete high school), race/skin color (white, black, brown, others), marital status (without a partner, with a partner), parity (primiparous, 1, 2, and 3 or more previous deliveries), planned pregnancy (yes, no), mode of delivery (vaginal, cesarean), newborn admitted to the internsive care unit (ICU) (yes, no), and fetal death (yes, no). Furthermore, questions about the care received at the maternity hospital, waiting time at the reception, and good practices and interventions performed in labor and delivery were used.

First, an exploratory analysis of the data was performed by comparing the women who wanted to speak with those who did not want to speak at the end of the study. Subsequently, the characteristics of the hospital and the mothers who wanted to speak at the end of the questionnaire were analyzed according to satisfaction with care. The analyses were presented with absolute and relative frequencies. Pearson's chi-square and Fisher's exact tests were used to compare the groups.

Since many variables were considered, the method of exploratory factor analysis (EFA) was used to summarize them, for later input in the statistical model, which aimed to identify factors associated with the satisfaction of the puerperal woman with motherhood. Thus, it was possible to construct latent variables by analyzing the correlation patterns. To verify whether the data supported the EFA, Bartlett's test of sphericity was applied and the Kaiser-Meyer-Olkin (KMO) statistic was , in which cut-off points considered were: < 0.5 unacceptable; 0.5-0.6 weak; 0.6-0.7 median, 0.8-0.9 good; and 0.9-1.0 very good [20].

Two EFAs were performed, one including the whole study population with the variables of respectful care for the puerperal woman and the other considering those of care during labor/delivery and the newborn, applicable only to women who went into labor and had a vaginal delivery. As a criterion for selecting the number of factors, a parallel analysis was considered. Retained factors were those with a self-value greater than the average of the random sample.

Weighted least squares was the method for factor extraction. Considering that the data had a binary character, the tetrachoric correlation matrix was used in the EFA. Moreover, seeking a better interpretation of the factors found for the set of data for labor and delivery and the newborn, a rotation in the load matrix was performed using the varimax method. The cut-off point used for the factorial loads was 0.40.

For the model, the outcome variable was satisfaction with the care received; the explanatory variables were the characterization of the hospital, the sociodemographic characteristics of the puerperal women, and the factors generated by the EFA. Considering the binary outcome, logistic regression was chosen. Thus, it was possible to estimate the adjusted odds ratios and their confidence intervals. Since some factors only apply to those women who underwent vaginal delivery, a model was made for this group (1,156 women) and another for women who underwent cesarean section (913 women). To verify the association between the outcome and the other variables, simple models were first made.

Variables whose simple models gave a p-value greater than 0.20 were not considered for the multiple model. In the multiple model, the variables were included according to the manual backward method, that is, all variables were included in the model and removed one by one according to theoretical and statistical relevance. To assess the model adequacy, the Hosmer-Lemeshow test was used.

All tests considered a 5% significance level and the R programming language was used, version 3.6.1 (http://www.r-project.org), "*psych*" package, and SPSS, version 23 (https://www.ibm.com/).

Results

Most women who spoke lived in Southeast (26%), Central-West (22%), and the capitals and respective metropolitan areas (82.9%). Regarding sociodemographic profile, 70.2% were aged from 20 to 34 years old and had a high education level (50.8%). When giving their opinion, 52.4% of them did so to express their satisfaction with care, and almost half to make complaints. Women in the Southeast (26.3%), Central-West (24.6%), and South (18.7%) regions declared to be more satisfied, in the same way as women who had a vaginal delivery (59.2%) and were attended in smaller hospitals (19.3%) (Table 1).

Table 1

Hospital and postpartum characteristics according to interest to speak at the end of the questionnaire and the satisfaction with the care received. Brazil, 2017.

Characteristics	Interest to speak (%)			Satisfaction with the care received (%)		
	Yes (n = 2,069)	No (n = 8,480)	p-value *	Satisfaction (n = 1,084)	Dissatisfaction (n = 985)	p-value *
Region						
North	14.3	19.9	< 0.001	11.0	17.9	< 0.001
Northeast	21.1	20.2		19.4	22.9	
Southeast	26.0	23.1		26.3	25.6	
South	16.7	20.6		18.7	14.6	
Central-West	22.0	16.1		24.6	19.1	
Location			< 0.001			
Capital or metropolitan area	82.9	77.7		82.3	83.5	0.489
Other municipalities	17.1	22.3		17.7	16.5	
Hospital size (births/year)						
Up to 1,499	16.5	16.7	0.080	19.3	13.3	0.001
1,500 to 2,999	29.0	31.3		28.1	30.0	
≥ 3,000	54.5	52.0		52.6	56.6	
Age (years)						
< 20	17.1	21.6	< 0.001	18.0	16.2	0.332
20 to 34	70.2	68.1		68.8	71.8	
≥ 35	12.6	10.3		13.2	12.0	
Education						
< Primary education	22.1	27.0	< 0.001	23.0	21.2	0.542
Complete primary education	27.0	29.5		27.2	26.8	
≥ Complete high school	50.8	43.5		49.8	52.0	
Race/Skin color						
White	28.1	29.4	0.182	29.9	26.1	0.115
Black	13.8	12.4		12.9	14.9	
Brown	58.1	58.2		57.2	59.0	

(continues)

Table 1 (continued)

Characteristics	Interest to speak (%)			Satisfaction with the care received (%)		
	Yes (n = 2,069)	No (n = 8,480)	p-value *	Satisfaction (n = 1,084)	Dissatisfaction (n = 985)	p-value *
Marital status						
Without a partner	19.3	20.4	0.298	20.5	18.1	0.156
With a partner	80.7	79.6		79.5	81.9	
Parity						
Primiparous	44.3	45.2	0.767	43.6	45.0	0.274
1 previous birth	28.4	27.8		27.4	29.4	
2 previous deliveries	15.9	15.3		16.4	15.4	
3 or more previous deliveries	11.4	11.8		12.6	10.1	
Current pregnancy was planned						
No	63.2	64.1	0.657	63.2	63.2	0.990
Yes	36.8	35.9		36.8	36.8	
Mode of delivery						
Vaginal	56.4	55.4	0.580	59.2	53.3	0.007
Cesarean	43.6	44.6		40.8	46.7	
Newborn admitted to the ICU						
No	95.8	96.4	0.145	95.6	95.9	0.773
Yes	4.2	3.6		4.4	4.1	
Fetal or neonatal death						
No	99.0	99.1	0.718	99.1	99.0	0.832
Yes	1.0	0.9		0.9	1.0	

ICU: intensive care unit.

* Pearson's chi-square test for independence.

Their satisfaction was related to the care received at the hospital (Table 2): little waiting time for registration at the reception (84.1%); experiencing good practices of labor and delivery, such as being allowed to walk (74.4%), eat (50.5%), having access to non-pharmacological methods for pain relief (65.9%); being able to breastfeed the newborn in the delivery room (34.5%); making skin-to-skin contact (54.6%); receiving information (72.2%), and having a companion during hospitalization (96.3%). Another component associated with women's satisfaction was the constant presence of a health professional (64.7%); being called by their name (84.6%); allowed to answer questions (77.3%); felt welcomed (94.7%), not mistreated (93.5%), and had their doubts answered (88.6%).

In the EFA (Table 3), three factors were generated: the first was positively related to questions about respectful care to the puerperal woman and negatively to the mistreatment – identified as "respect to the puerperal woman"; in the second, the latent variable extracted was "presence of the companion" and the questions about the presence of the companion were positively correlated; the third, entitled "delay in care", was positively related to the waiting time at the reception. The three factors explained 53.3% of the total data variance. The results of the KMO (0.63) and Bartlett's sphericity test (p-value < 0.001) showed that the data supported the EFA.

Regarding the set of variables of good practices in labor, delivery, and to the newborn, three factors were extracted: the first, entitled "good practices", was positively correlated with pain relief practices during labor; the second was positively related to interventions performed during labor and delivery; the third presented a positive relationship with breastfeeding and skin-to-skin contact practices, entitled "contact with the baby". Together, the three latent variables explain 43% of the total data variance. The variable whose variance was mostly explained by common factors was "use of non-pharmacological methods" since the variance that was least explained was skin-to-skin contact (Table 4). The results of KMO and Bartlett's sphericity test were 0.75 and p-value < 0.001, respectively.

Table 2

Characteristics of care to puerperal women in the hospital according to satisfaction with the care received. Brazil, 2017.

Characteristics	Satisfaction with the care received (%)			
	Satisfaction (n = 1,084)	Dissatisfaction (n = 985)	Total (n = 2.069)	p-value *
As soon as you arrived at the maternity hospital, how long did you wait to register at reception?				
Up to 10 minutes	84.1	79.0	81.6	0.006
More than 10 minutes	15.9	21.0	18.4	
Did they allow you stay out of bed and walk during labor?				
No	25.6	31.4	28.3	0.017
Yes	74.4	68.6	71.7	
Did the staff offer liquids, water, juices, soups, or any food during your labor?				
No	49.5	57.2	53.1	0.003
Yes	50.5	42.8	46.9	
Did you use any non-pharmacological methods to relieve pain during labor?				
No	34.1	44.3	38.9	< 0.001
Yes	65.9	55.7	61.1	
Did you receive pain relief medication during labor?				
No	79.1	79.0	79	0.252
Yes	20.9	21.0	21	
When you were in labor, was IV in the vein?				
No	38.9	33.0	36.2	0.018
Yes	61.1	67.0	63.8	
At delivery, did someone squeeze/climb on your belly to help the baby out?				
No	85.9	81.6	84	0.051
Yes	14.1	18.4	16	
Did you cut your perineum (vagina) at delivery?				
No	69.6	64.3	67.3	0.06
Yes	30.4	35.7	32.7	
After birth, did you breastfeed at the birthplace?				
No	65.5	74.3	69.7	< 0.001
Yes	34.5	25.7	30.3	
Immediately after birth, still at the birthplace, was your baby in skin-to-skin contact with you?				
No	45.4	53.9	49.5	< 0.001
Yes	54.6	46.1	50.5	
Did you receive information about your right to choose a companion during your stay?				
No	27.8	38.6	33	< 0.001
Yes	72.2	61.4	67	
Did they allow you to have a companion during your stay?				
No	3.7	9.3	6.4	< 0.001
Yes	96.3	90.7	93.6	
How many health professionals came forward, informing their name and function?				
None or minority	35.3	52.5	43.5	< 0.001
Majority or all	64.7	47.5	56.5	
How many health professionals are calling you by name?				
None or minority	15.4	25.6	20.2	< 0.001
Majority or all	84.6	74.4	79.8	

(continues)

Table 2 (continued)

Characteristics	Satisfaction with the care received (%)			
	Satisfaction (n = 1,084)	Dissatisfaction (n = 985)	Total (n = 2.069)	p-value *
How often did you feel comfortable talking about your doubts, complaints, fear, and expectations?				
Never or few times	22.7	33.5	27.9	< 0.001
Always or often	77.3	66.5	72.1	
How often did you feel welcome, well treated and respected during your stay in this maternity hospital?				
Never or few times	5.3	19.6	12.1	< 0.001
Always or often	94.7	80.4	87.9	
Did you feel offended or treated badly by any professional in this maternity hospital?				
No	93.5	88.0	90.8	< 0.001
Yes	6.5	12.0	9.2	
How often do you feel that the health team at this maternity hospital seeks to provide answers and resolve your doubts and / or requests?				
Never or few times	11.4	28.2	19.4	< 0.001
Always or often	88.6	71.8	80.6	

* Pearson's chi-square test for independence.

Table 3

Exploratory factor analysis of the variables of general care to puerperal women. Brazil, 2017.

Variables	Respect for the puerperal woman	Companion presence	Service delay	Communalities (h^2)
How long did you wait to register at reception?	0.00	-0.01	**0.97**	0.94
How many health professionals introduced themselves, informing their name and function?	**0.60**	0.22	0.07	0.52
How many health professionals called you by your name at the maternity hospital?	**0.54**	0.07	0.02	0.33
How often did you feel comfortable talking about your doubts, complaints, fears and expectations?	**0.70**	0.07	-0.04	0.56
How often did you feel welcomed, well treated and respected during your stay in the maternity hospital?	**0.90**	-0.06	0.00	0.75
How often did you feel that the health team at the maternity hospital sought to provide answers and resolve your doubts and requests?	**0.89**	-0.03	-0.02	0.77
Did you feel offended or mistreated by any professional of the maternity?	**-0.52**	0.02	0.00	0.26
Did you receive information about your right to choose a companion during your stay?	-0.02	**0.82**	-0.02	0.66
Did they allow you to have a companion during your stay?	0.09	**0.51**	-0.02	0.32
Eigenvalue	3.12	1.27	0.95	
Explained variance (%)	31.16	12.67	9.50	
Accumulated variance (%)	31.16	43.83	53.33	

Table 4

Exploratory factor analysis of the variables of good practices and interventions for women who have recently delivered vaginally. Brazil, 2017.

Variables	Good practices	Interventions	Contact with the baby	Communalities (h^2)
Episiotomy	-0.04	**0.60**	-0.07	0.63
Serum in vein	0.09	**0.53**	-0.04	0.71
Kristeler	-0.02	**0.47**	-0.27	0.70
Analgesia	0.08	**0.62**	0.11	0.60
Ambulation	**0.59**	0.00	0.14	0.64
Food supply	**0.55**	0.09	0.29	0.60
Use of a non-pharmacological method	**0.90**	0.06	0.01	0.81
Breastfeeding	0.15	-0.09	**0.47**	0.75
Skin-to-skin	0.13	-0.02	**0.82**	0.31
Eigenvalue	1.51	1.27	1.09	
Explained variance (%)	16.82	14.15	12.11	
Accumulated variance (%)	16.82	30.97	43.08	

Table 5 shows the results of the multifactorial analysis for mothers' satisfaction according to the mode of delivery. For vaginal delivery, satisfaction was inversely associated with admission to larger hospitals (0.62) and suffering interventions during labor and delivery (0.83). Satisfaction was positively associated with multiparity (three or more children) (1.98), receiving good care practices for labor and delivery (1.24), respecting the puerperal woman (1.40), and having contact with the newborn immediately after birth (1.20). For cesarean section, satisfaction was positively associated with living in the Central-West (1.91) and South (2.00), respect for the puerperal woman (1.47), and the presence of a companion (1.25).

Discussion

Among the women who decided to speak at the end of the interview, most reported satisfaction with the healthcare received, lived in capitals and metropolitan areas, had a high education level, and were older. Regarding cesarean sections, maternal satisfaction was positively associated with living in the Central-West and South regions and the presence of a companion during hospitalization. For vaginal delivery, satisfaction was inversely associated with large hospitals and suffering interventions during labor and delivery; however, it was positively associated with multiparity, good practices for labor and birth care, and having contact with the newborn immediately after birth. Respect for the puerperal woman was associated with satisfaction both in cesarean sections and in vaginal delivery.

Most women who shared their opinion had a high education level, since it can lead to greater knowledge about their rights in birth care and to recognize the importance of expressing issues considered relevant by them for the study results and the improvement of the care provided by the health system [21].

Among satisfied women, we found a higher percentage of multiparous women, who, due to shorter periods between labors, are subjected to fewer interventions and can also compare the current experience with previous ones, when these changes in the offer of proper technologies to childbirth were probably not implemented in the health services. Most dissatisfied women lived in the Northern Brazil, demonstrating that significant inequalities between assistance to labor and childbirth persist [16,18].

Table 5

Odds ratios (OR) and their 95% confidence intervals (95%CI) for the satisfaction of the puerperal women, according to the characteristics of the hospital, maternal and delivery care. Brazil, 2017.

Characteristics	Vaginal delivery		Cesarean section	
	OR	95%CI	OR	95%CI
Region				
Central-West	-	-	1.91	1.12-.326
North	-	-	1.00	1.00-1.00
Northeast	-	-	1.45	0.85-2.47
Southeast	-	-	1.47	0.88-2.45
South	-	-	2.00	1.14-3.51
Hospital size (births/year)				
< 1,499	1.00	1.00-1.00	-	-
1,500 to 2,999	0.78	0.48-1.27	-	-
≥ 3,000	0.62	0.40-0.96	-	-
Parity				
Primiparous	1.00	1.00-1.00	-	-
1 previous delivery	0.95	0.66-1.37	-	-
2 previous deliveries	1.47	0.91-2.37	-	-
3 or more previous deliveries	1.98	1.19-3.29	-	-
Respect for the puerperal woman	1.40	1.21-1.61	1.47	1.22-1.77
Companion presence	-	-	1.25	1.02-1.53
Good practices	1.24	1.06-1.45	-	-
Interventions	0.83	0.70-0.98	-	-
Contact with the baby	1.20	1.01-1.42	-	-

Our findings corroborate with previous studies that receiving good labor and delivery practices is associated with puerperal women satisfaction [22,23]. Ambulation and the use of non-pharmacological methods are practices that can help pain relief and the establishment of bonds with professionals who monitor labor [24]. Offering food during labor is an important part of birth care for pregnant women [11].

Interventions during labor and delivery are inversely associated with satisfaction [14]. Women who had fewer interventions during labor and delivery were more likely to be satisfied. Obstetric interventions in Brazil, although decreasing [6], are still frequent and occur in higher figures than recommended by the WHO and the Brazilian Ministry of Health [11,25]. The rush imposed on women during labor and childbirth, accelerating this complex process, leads to frustration and an unsatisfactory experience [26].

The puerperal women who are admitted to large hospitals for delivery are less likely to be satisfied with the care provided. This fact may be related to the volume of care provided by the hospital and its ability to manage space and health professionals. Women admitted to large hospitals can often be neglected due to a lack of staff [27].

Corroborating our findings, Martins et al. [23] reported that contact with the baby shortly after birth and breastfeeding the baby in the first hour after birth is associated with the satisfaction of the puerperal woman. Furthermore, the presence of a companion during hospitalization, which in Brazil has been guaranteed by law since 2005 [28], has a positive effect on women's satisfaction [29]. Another piece of evidence found is the association between women's satisfaction and the relationship with health professionals. The attitudes and behaviors of health professionals about the ability to provide adequate information and emotional support are the main predictors of satisfaction with childbirth care [15,16,17].

Some differences between factors associated with the satisfaction of the puerperal woman were observed for vaginal delivery and cesarean sections. Regarding cesarean section, women in the South and Central-West regions had a greater chance of being satisfied compared to those in the North.

The percentages of cesarean sections in Brazil vary among geographic regions: they are higher in the South, Southeast, and Central-West regions, often indicating an excess of interventions in childbirth. In the North and Northeast regions, the cesarean section rates are slightly lower than other regions. Moreover, the lack of adequate structure in these regions, with worse performance regarding equipment, medicines, and qualified professionals, may explain the greater dissatisfaction of women [30,31].

The participation of the pregnant woman in the decision-making process of childbirth and the reception and respect given to her was pointed out in several studies as determining factors for the satisfaction of the puerperal woman, overlapping sociodemographic characteristics such as age, education level, and race/skin color. In this study, these factors did not remain in the final model, corroborating these findings [15,16,17].

This study constructed six latent variables that represent summary measures of good practices and interventions during labor and delivery, contact between mother and newborn after birth, respect for the puerperal woman, presence of a companion during hospitalization, and the delayed care to pregnant women. By these indicators, we evaluated different aspects of childbirth care that can lead to differences in women's satisfaction.

Despite including only the opinions of women who, at the end of the interview, wanted to speak and demonstrated their satisfaction or not with the care received, the sample includes the report of about 2,000 women who attended maternity hospitals distributed in all regions of Brazil. The construction of the satisfaction variable was based on the free reports of women at the end of the questionnaire, being able to acquire a subjective character. During assessment, people who have more extreme reports, that is, those who felt very dissatisfied or satisfied are more likely to express themselves voluntarily. In our study, women from the Southeast and Central-West regions, living in capital cities, of older age, and those with high education levels were more represented in this study, and the proportion of satisfied and dissatisfied women was very similar in the sample. However, it is difficult to assess the impact of this on external validity because we do not have other variables in the study that can assess the satisfaction of women who did not express an opinion about the received care. In total, 116 women who reported mixed feelings (satisfaction and dissatisfaction) were excluded. If these were included in the analyses of the 2,069 women, they would not change the results and conclusions of the study.

In total, 25.5% of women went into labor but had cesarean sections. These women are more exposed to interventions during labor, which could generate differences in satisfaction in this subgroup. Furthermore, these women were included in the analysis group of women who underwent cesarean sections. Satisfaction with childbirth in this subgroup was 46.7% dissatisfied and 53.3% satisfied, very similar to the percentages found in the whole sample (47.7% and 52.3%). The inclusion of this subgroup in the cesarean section category did not bias the study results. Another limitation is related to the construction of the latent variables of good practices, interventions, and contact with the baby, which included only women with vaginal delivery, making it impossible to compare the two modes of delivery.

Notably, SNA showed significant improvements from 2011 to 2017. However, investments in Stork Network decreased in recent years, and in 2022 the Stork Network was extinguished and replaced by the Maternal and Child Care Network (RAMI) [32]. It is still not possible to know whether there has been a worsening in childbirth care due to the SUS dismantling in recent years. However, during the COVID-19 pandemic, maternal mortality in Brazil increased by 94.4% [33].

Women's satisfaction with labor and birth care is a complex task and can be influenced by subjective factors such as the expectations that women have for such an important moment as the birth of a child. A better understanding of the factors associated with the satisfaction of puerperal women with birth care can contribute to the elaboration of protocols and policies focused on relevant aspects for women and that impact on the quality of the service provided in public maternity hospitals in Brazil.

Contributors

Y. R. P. Santos contributed to the study conception, data analysis and interpretation, and writing; and approved the final version. T. D. G. Carvalho contributed to the study conception, and writing; and approved the final version. N. P. Leal contributed to the study conception, and review; and approved the final version. M. C. Leal contributed to the study conception, data collection and interpretation, and review; and approved the final version.

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Resumo

Este estudo descreve a satisfação das mães com sua experiência no atendimento ao parto e nascimento de seus filhos e sua associação com características sociodemográficas, clínico-obstétricas e de boas práticas durante a assistência ao parto. A amostra incluiu 2.069 mulheres que expressaram sua opinião ao final da pesquisa Avaliação da Rede Cegonha*. Foi realizada uma análise fatorial exploratória para resumir as variáveis de interesse, criando variáveis latentes para serem incluídas no modelo de regressão logística múltipla. Seis fatores foram criados e testados no modelo. O respeito pela puérpera foi associado à satisfação (parto vaginal: 1,40; parto cesáreo: 1,47). Para as mães que passaram por cesariana, houve associação com morar nas regiões Centro-oeste (1,91) e Sul (2,00) e com a presença de um acompanhante durante a internação (1,25). Para mulheres que tiveram parto vaginal, a satisfação foi inversamente associada a hospitais grandes (0,62) e à realização de intervenções durante o trabalho de parto e nascimento (0,83). A satisfação foi positivamente associada à multiparidade (1,98), recebimento de boas práticas de assistência durante o trabalho de parto e nascimento (1,24) e contato com o bebê logo após o nascimento (1,20). A melhor compreensão sobre os fatores associados à satisfação das mães com a assistência no trabalho de parto e nascimento pode contribuir para a qualidade do serviço prestado em hospitais públicos no país.*

Satisfação do Paciente; Gravidez; Parto

Resumen

Este estudio describe la satisfacción de las madres con su experiencia en la atención del parto y el nacimiento de sus hijos y su asociación con las características sociodemográficas, clínico-obstétricas y de buenas prácticas durante la atención del parto. La muestra contó con 2.069 mujeres que expresaron su opinión al final de la encuesta Evaluación de la Red Cigüeña*. Se realizó un análisis factorial exploratorio para resumir las variables de interés, creando variables latentes para ser incluidas en el modelo de regresión logística múltiple. En el modelo se crearon y probaron seis factores. El respeto por la puérpera se asoció con la satisfacción (parto vaginal: 1,40; parto por cesárea: 1,47). Para las madres sometidas a cesárea, hubo asociación con vivir en las regiones Centro-oeste (1,91) y Sur (2,00) y con la presencia de un acompañante durante la hospitalización (1,25). Para las mujeres que tuvieron parto vaginal, la satisfacción fue inversamente asociada a hospitales grandes (0,62) y a la realización de intervenciones durante el trabajo de parto y nacimiento (0,83). La satisfacción se asoció positivamente con la multiparidad (1,98), recibir buenas prácticas de cuidado durante el trabajo de parto y el nacimiento (1,24) y el contacto con el bebé poco después del nacimiento (1,20). Una mejor comprensión sobre los factores asociados a la satisfacción de las madres con la asistencia en el trabajo de parto y nacimiento puede contribuir para la calidad del servicio prestado en hospitales públicos en el país.*

Satisfacción del Paciente; Embarazo; Parto

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