



PRENATAL CARE AND ITS ASSOCIATION WITH THE TYPE OF CHILDBIRTH IN THE SUPPLEMENTARY HEALTH NETWORK

Zelina Hilária de Sousa Rosa*
Rosemeire Sartori de Albuquerque**
Maria Cristina Gabrielloni***
Márcia Barbieri****

ABSTRACT

Objective: to analyze the factors associated with prenatal care with the type of childbirth in the supplementary health network. **Method:** epidemiological, cross-sectional study conducted by secondary analysis of part of the research data 'Healthy Birth: a prospective study to evaluate the implementation and effects of a multifaceted intervention to improve the quality of childbirth and birth care in hospitals in Brazil'. The sample included 2,435 women, admitted to five maternity hospitals in the cities of São Paulo and Santos through interviews in the postpartum period, consultations in medical records and prenatal card. The data were analyzed descriptively. Chi-square and Fisher's exact test was used for association between variables and, for comparison of means between groups, the *Student t* test. **Result:** prenatal care for most pregnant women (44.6%) was performed in a private office followed by an outpatient clinic of the health plan (38.3%). The predominance of care for pregnant women was done by the doctor (92.5%). The outcome of childbirth, mostly cesarean (76.6%), followed by 23.4% of vaginal childbirths. **Conclusion:** puerperal women who performed prenatal care in the private office with private financing of childbirth had a greater chance of cesarean section. The joint participation of the obstetrician nurse with the doctor showed a slight tendency to impact the vaginal childbirth route.

Keywords: Prenatal Assistance. Maternal Health. Humanized Childbirth. Supplemental Health.

INTRODUCTION

Prenatal follow-up is intended to reduce maternal and perinatal mortality, as well as women's access to qualified services for risk identification and control in order to ensure the evolution of pregnancy, prepare the pregnant woman for childbirth, postpartum, lactation, in addition to early identification of possible risk situations, in order to prevent more frequent complications in the pregnancy-puerperal cycle⁽¹⁾.

Adequate prenatal care favors safer childbirth, with a chance of less complications and less unfavorable outcomes, as well as provides women's satisfaction with the birth process⁽²⁾.

In this sense, it is essential to know the physiology in the process of gestation and childbirth to be able to guide and stimulate the participation of women in safe decision-making

guided by good practices in care, with respect to their rights. The assistance provided by doctors and nurses can be performed through interspersed consultations performed in normal-risk prenatal care⁽³⁾.

As important links, nurses who work in prenatal care are fundamental professionals to guide, stimulate and empower women so that they can express their needs and desires, promoting protagonism during pregnancy, childbirth and puerperium⁽⁴⁾.

The role of nurses in prenatal care is of paramount importance for the guarantee of comprehensive and quality care and to create subsidies for the construction of effective and useful communication for the monitoring and embracement of pregnant women throughout the pregnancy-puerperal process⁽⁴⁾.

Normative Resolution n. 398/2016 of the National Supplementary Health Agency is an important document that favors the participation

*Nurse, Master in Nursing, E-mail: zelina.rosa@unifesp.br, ORCID ID <https://orcid.org/0000-0002-0885-1622>

**Nurse, PhD in Nursing, professor at the School of Arts, Sciences and Humanities at the University of São Paulo, E-mail: rosemeiresartori@usp.br, ORCID ID <https://orcid.org/0000-0001-8593-5080>

***Nurse, PhD in Nursing, professor at the Paulista School of Nursing at the Federal University of São Paulo, E-mail: gabrielloni@unifesp.br, ORCID ID <https://orcid.org/0000-0003-2395-9161>

****Nurse, PhD in Nursing, professor at Paulista School of Nursing, Federal University of São Paulo, E-mail: mbarbieri@unifesp.br, ORCID ID <https://orcid.org/0000-0002-4662-1983>

of nurses in obstetric care. It discusses the inclusion and mandatory accreditation of obstetric nurses and obstetricians in health care and childbirth. This is an unprecedented resolution in the country, since only medical professionals, until then, were accredited to health plan operators⁽⁵⁾.

In prenatal care, the professional should guide about labor and childbirth(?), being fundamental to reduce anxiety, fear and insecurity, and stimulate the pregnant woman herself to exercise autonomy in choosing this process, which protects against decisions that may compromise maternal and fetal well-being. Prenatal care involves a qualitative and welcoming relationship and not only quantitative^(6,7).

Given the above, it has been of great importance to evaluate prenatal care and its relationship with the outcome of childbirth, since qualified care during pregnancy implies the prevention of specific circumstances and morbidities that may occur. In this context, the present study aimed to analyze the factors associated with prenatal care with the type of childbirth in the supplementary health network.

METHOD

Cross-sectional epidemiological study conducted through secondary analysis of research data 'Healthy Birth: a prospective study evaluating the implementation and effects of multifaceted intervention to improve the quality of childbirth and birth care in hospitals in Brazil', submitted to and approved by MCTI/CNPq/MS/SCTIE/Decit/Bill & Melinda Gates Foundation N. 47/2014.

It refers to a cross-section of the survey on childbirth, a multicenter hospital-based study with national coverage, coordinated by the National School of Public Health Sérgio Arouca –Fiocruz, in which, after the development of a series of strategies for dissemination and mobilization of hospitals, 42 institutions were enrolled, of which 20 were among the 100 most relevant in volume of deliveries from the private sector in Brazil, among which 19 belonged to the network of health plan operators, hospitals that belonged to the supplementary network⁽⁸⁾.

The Healthy Birth (HB) survey is a case

study of the degree of implementation of the strategies proposed by the Adequate Childbirth Project (ACP) and its effects on perinatal results, especially in the cesarean section rate.

According to the number of childbirths, cesarean section rate, geographic location by macro-region, location in the city (capital or interior) and proportion of private beds, hospitals were selected for data collection from the 'Healthy Birth' survey in 2017.

This study will present the data collected from five hospitals in the city of São Paulo and one in the city of Santos.

All women admitted to the maternity hospitals selected at the time of childbirth care participated.

The inclusion criteria were: puerperal women admitted to the maternity hospitals selected at the time of childbirth and their living conceptuses, regardless of gestational age or birth weight or dead with gestational age ≥ 20 weeks and/or birth weight $\geq 500g$.

The exclusion criteria adopted were applied to women who: gave birth at home, had some serious mental illness, did not understand the Portuguese language, had the right to abortion assured by justice, with multiple pregnancy and those who did not agree to participate in the research.

All eligible puerperal women were invited to participate in the research and only after signing the Informed Consent Form (ICF), the face-to-face interview was started in a reserved place, previously identified by the research team together with the responsible for the hospitalization unit, in order to ensure the privacy of the participants.

To record the interviews, a mobile device (tablet) was used with a software Research Electronic Data Capture (Redcap). The data collected were exported daily by the interviewer, directly to the research portal, in order to feed the database hosted on the server of the National School of Public Health - ENSP-Fiocruz in the city of Rio de Janeiro.

The childbirth route categorized as vaginal and cesarean was considered a dependent variable. The independent variables were divided into two categories: sociodemographic data: age, color, schooling, marital status, economic class, paid work and health plan.

Obstetric and prenatal care data: number of pregnancies including the current, total number of previous abortions (previous pregnancy), parity, surgical childbirth in previous cesarean section, previous vaginal childbirth, gestational trimester of beginning of prenatal, type of pregnancy, place of prenatal care, professional who provided prenatal care, number of consultations, beginning of prenatal care, information on non-pharmacological actions for pain and anxiety relief (ball, shower, bathtub, ambulation and horse) that they could receive during labor to facilitate the birth of the baby, source of information about pregnancy, risks and benefits of each type of childbirth, safest type of childbirth, plan of childbirth respected, preference about the type of childbirth in early pregnancy and change in preference over the type of childbirth throughout pregnancy.

Initially, the data were analyzed descriptively. For the categorical variables, absolute and relative frequencies were presented and, for the numerical variables, summary measures (mean, quartiles, minimum, maximum and standard deviation). The comparison of means between two groups was performed using the Student's t-test for independent samples.

This study was approved by the Research

Ethics Committee (REC) under number 3,317,623 and CAAE 11886919.6.0000.5505.

RESULTS

The participants were 2,435 puerperal women, who were interviewed, with data collection from their respective medical records and their babies, in addition to the prenatal card. As for sociodemographic characteristics, 60.6% were aged 30 to 39 years, 63.7% were white, 5.2% had 11 to 14 years of schooling (regardless of having postgraduate education). In addition, 53.7% belonged to economic class B and 77.6% had some paid work. Regarding having supplementary health care, 97.7% were entitled to some health plan, private, company or public body. Concerning obstetric characterization, 48.2% of the puerperal women were in the first pregnancy, and among the women with previous pregnancy, 36.3% had at least one abortion. 56.4% of the participants were primiparous, 31.2% had previous cesarean section and only 14.9% had previous vaginal childbirth. At the beginning of prenatal care, 94.1% of women were up to 12 weeks and 3.3% had twin pregnancies (Table 1).

Table 1. Distribution of puerperal women, according to sociodemographic characteristics.

Variables	N	%
Age Group	2,434	100.0%
10 - 19 years	58	2.4%
20 - 24 years	236	9.7%
25 - 29 years	504	20.7%
30 - 34 years	840	34.5%
35 - 39 years	635	26.1%
40 years or more	161	6.6%
Uninformed	1	
Color	2,433	100.0%
White	1,550	63.7%
Black/Brown/Tanned	819	33.7%
Yellow/Oriental	62	2.5%
Indigenous	2	0.1%
Uninformed	2	
Schooling	2,426	100.0%
1 - 10 years of study	127	5.2%
11 - 14 years of study	1,156	47.7%
15 years or more without post-graduation	634	26.1%
15 years or more with post-graduation	509	21.0%
Uninformed	9	
Marital status	2,427	100.0%
Single	167	6.9%

Married/living with partner	2,230	91.9%
Separated/Divorced	29	1.2%
Widow	1	0.0%
Uninformed	8	
Economic Class according to the Brazilian Economic Classification Criteria	2,435	100.0%
Class E + D (0 - 16)	7	0.3%
Class C (17 - 28)	532	21.8%
Class B (29 - 44)	1,308	53.7%
Class A (45 - 100)	588	24.1%
Paid Work	2,427	100.0%
No	543	22.4%
Yes	1,884	77.6%
Uninformed	8	
Health Plan	2,434	100.0%
No	55	2.3%
Yes	2,379	97.7%
Uninformed	1	

In the associations between obstetric and prenatal care data with the childbirth performed, Table 2, below, shows that for both vaginal childbirth and cesarean section, about 80% of women performed prenatal care in private offices or outpatient clinics of the health plan, but those who were assisted in the public service had a higher proportion of normal childbirths (5.1%) when compared to those undergoing cesarean childbirth (2.6%).

Regardless of the type of childbirth, prenatal care was mostly performed by doctors, about 90.0%, but it can be seen that, when there was the participation of the nurse together with the doctor, the proportion of vaginal childbirths (9.9%) was higher.

Most women who underwent both vaginal childbirth (81.4%) and cesarean section (72.8%) reported having received information related to non-pharmacological actions that could be used

during labor, such as: ball, shower, bathtub, walking and horse, to facilitate the birth of the baby.

Regarding information on the safest type of childbirth, the data show that women who underwent cesarean section had less information about vaginal childbirth (8.2%). Among those who had information about the type of vaginal childbirth at the beginning of pregnancy, 83.2% performed this type of childbirth, in contrast, 41.1% of those who had information about cesarean childbirth performed it. Most women, both those undergoing vaginal childbirth and cesarean section, did not change their preference over the type of childbirth throughout pregnancy. The opinion about the type of planned childbirth prevailed, however, in an important portion of the puerperal women (44.2%) who had cesarean childbirth, the decision was made along with the doctor.

Table 2. Distribution of puerperal women by factors associated with prenatal care, according to the childbirth.

Variable	Type of childbirth				p
	Vaginal		Cesarean Section		
	N	%	N	%	
Prenatal place	567	100.0%	1,865	100.0%	0.006
Hospital	22	3.9%	109	5.8%	
Private office	246	43.4%	838	44.9%	
Health plan outpatient clinic	214	37.7%	718	38.5%	
Public service	29	5.1%	48	2.6%	
More than one place	56	9.9%	146	7.8%	
Other place	0	0.0%	6	0.3%	
Professional responsible for the prenatal care	564	100.0%	1,853	100.0%	0.026 ^a
Just the doctor	507	89.9%	1,728	93.3%	
Just the nurse	1	0.2%	2	0.1%	

Doctor and nurse	56	9.9%	123	6.6%	
Information about the actions during the labor to facilitate childbirth	570	100.0%	1,865	100.0%	<0.001
No	106	18.6%	508	27.2%	
Yes	464	81.4%	1,357	72.8%	
Information about risks and benefits of each type of childbirth	566	100.0%	1,864	100.0%	0.039
No	191	33.7%	544	29.2%	
Yes	375	66.3%	1,320	70.8%	
Information about the safest type of childbirth for mother and baby	567	100.0%	1,864	100.0%	<0.001
Vaginal	394	69.5%	767	41.1%	
Cesarean section	4	0.7%	153	8.2%	
Both vaginal childbirth and cesarean section	159	28.0%	874	46.9%	
Not clear	10	1.8%	70	3.8%	
Preference for the type of childbirth in the beginning of pregnancy	570	100.0%	1,864	100.0%	<0.001
Vaginal childbirth	474	83.2%	944	50.6%	
Cesarean section	69	12.1%	771	41.4%	
No preference	27	4.7%	149	8.0%	
Change of the type of childbirth throughout pregnancy	541	100.0%	1,714	100.0%	<0.001
No	482	89.1%	1,397	81.5%	
Yes	59	10.9%	317	18.5%	
Responsible for the decision about the type of childbirth	568	100.0%	1,862	100.0%	<0.001^a
Puerperal woman	364	64.1%	694	37.3%	
Doctor	41	7.2%	338	18.2%	
Nurse	1	0.2%	2	0.1%	
As a team	157	27.6%	823	44.2%	
Other person	5	0.9%	5	0.3%	

Note: p - descriptive level of the Chi-Square or Fisher's exact test

According to Table 3, distinct distributions by desired childbirth and performed for the variables of prenatal care were identified, except for the professional who provided prenatal care ($p=0.226$) and information about the risks and benefits of each type of childbirth ($p=0.061$). Therefore, in relation to the place of prenatal care, there was a higher frequency (50.7%) of women with a preference for cesarean section and who had the outcome of vaginal childbirth among those who attended the health plan outpatient clinic, than those in the private office (29.0%). Regarding the safest type of childbirth for mother and baby, in the group of women who underwent vaginal childbirth, regardless of preference (71.5%) or absence of initial preference (56.0%), they received information that 'Vaginal childbirth is safer for mother and baby'.

Regarding the puerperal women who wanted

vaginal childbirth and so it happened, 70.3% prevailed among those whose decision about the type of childbirth was theirs, while for those who wanted vaginal childbirth and a cesarean section occurred, the highest proportion was of joint decision between them and their doctors (48.3%), as well as when the preference for cesarean childbirth occurred and the vaginal childbirth occurred (37.7%). But relevant data are evidenced by the fact that the woman did not show preference, higher percentage (57.5%) was cesarean section and lower (40.7%) was vaginal childbirth.

Obstetric nurses were represented in childbirth care in only 1.8% of cases, the majority (98.2%) being assisted by the doctor, with 97.4% accompanied by an acquaintance. Regarding newborns, 99.2% were born alive, of these 7.4% with low weight and 4.9% had macrosomia.

Table 3. Distribution of puerperal women by prenatal variables, according to desired and performed childbirth.

Desired and performed childbirth														p
	Vaginal childbirth (preference)		Cesarean section (preference)		Vaginal childbirth (preference)		Cesarean section (preference)		No preference Vaginal childbirth (performed)		No preference Cesarean section (performed)			
	N	%	N	%	N	%	N	%	N	%	N	%		
													Vaginal childbirth (performed)	
Prenatal place	473	100.0%	771	100.0%	944	100.0%	69	100.0%	25	100.0%	149	100.0%	<0.001 ^a	
Hospital	17	3.6%	55	7.1%	49	5.2%	5	7.2%	0	0.0%	5	3.4%		
Private office	213	45.0%	324	42.0%	427	45.2%	20	29.0	13	52.0%	87	58.4%		
Health plan outpatient clinic	168	35.5%	321	41.6%	355	37.6%	35	50.7%	11	44.0%	42	28.2%		
Public service	28	5.9%	20	2.6%	26	2.8%	1	1.4%	0	0.0%	2	1.3%		
More than one place	47	9.9%	49	6.4%	83	8.8%	8	11.6%	1	4.0%	13	8.7%		
Other place	0	0.0%	2	0.3%	4	0.4%	0	0.0%	0	0.0%	0	0.0%		
Professional responsible for the prenatal care	470	100.0%	764	100.0%	940	100.0%	69	100.0%	25	100.0%	149	100.0%	0.226 ^a	
Just the doctor	420	89.4%	712	93.2%	874	93.0%	64	92.8%	23	92.0%	142	95.3%		
Just the nurse	1	0.2%	0	0.0%	2	0.2%	0	0.0%	0	0.0%	0	0.0%		
Doctor and nurse	49	10.4%	52	6.8%	64	6.8%	5	7.2%	2	8.0%	7	4.7%		
Information about the actions during the labor to facilitate childbirth	474	100.0%	771	100.0%	944	100.0%	69	100.0%	27	100.0%	149	100.0%	<0.001	
No	78	16.5%	286	37.1%	185	19.6%	22	31.9%	6	22.2%	36	24.2%		
Yes	396	83.5%	485	62.9%	759	80.4%	47	68.1%	21	77.8%	113	75.8%		
Risks and benefits for the type of childbirth	472	100.0%	771	100.0%	944	100.0%	69	100.0%	25	100.0%	149	100.0%	0.061	
No	158	33.5%	235	30.5%	275	29.1%	21	30.4%	12	48.0%	34	22.8%		
Yes	314	66.5%	536	69.5%	669	70.9%	48	69.6%	13	52.0%	115	77.2%		
Safest type of childbirth for mother and baby	473	100.0%	771	100.0%	944	100.0%	69	100.0%	25	100.0%	149	100.0%	<0.001 ^a	
Vaginal childbirth	338	71.5%	240	31.1%	495	52.4%	42	60.9%	14	56.0%	32	21.5%		
Cesarean section	3	0.6%	105	13.6%	39	4.1%	1	1.4%	0	0.0%	9	6.0%		
Both	125	26.4%	390	50.6%	379	40.1%	23	33.3%	11	44.0%	105	70.5%		
Not clear	7	1.5%	36	4.7%	31	3.3%	3	4.3%	0	0.0%	3	2.0%		
Change of the type of childbirth in pregnancy	472	100.0%	770	100.0%	944	100.0%	69	100.0%	-	-	-	-	<0.001	
No	448	94.9%	706	91.7%	691	73.2%	34	49.3%	-	-	-	-		
Yes	24	5.1%	64	8.3%	253	26.8%	35	50.7%	-	-	-	-		
Responsible for the decision about the type of childbirth	472	100.0%	770	100.0%	943	100.0%	69	100.0%	27	100.0%	149	100.0%	<0.001 ^a	
Yourself	332	70.3%	409	53.1%	245	26.0%	21	30.4%	11	40.7%	40	26.8%		
Doctor	18	3.8%	77	10.0%	238	25.2%	19	27.5%	4	14.8%	23	15.4%		
Nurse	1	0.2%	1	0.1%	1	0.1%	0	0.0%	0	0.0%	0	0.0%		
As a team	120	25.4%	282	36.6%	455	48.3%	26	37.7%	11	40.7%	86	57.7%		
Other person	1	0.2%	1	0.1%	4	0.4%	3	4.3%	1	3.7%	0	0.0%		

Nota: p - nível descritivo do teste de Qui-Quadrado ou exato de Fisher^(a)

Table 4 shows that 31.7% of the puerperal women answered that they desired and were submitted to cesarean childbirth, while 19.5% desired and performed vaginal childbirth. There is

a high percentage (38.8%) of women who, although initially preferring vaginal childbirth, ended up performing cesarean childbirth, while the reverse was only 2.8%.

Table 4. Distribution of puerperal women by desired and performed childbirth.

Preference	N	%
Initial preference and performed childbirth	2,434	100.0
Vaginal childbirth (pre) - Vaginal childbirth (performed)	474	19.5
Cesarean section (pre) - Cesarean section (performed)	771	31.7
Vaginal childbirth (pre) - Cesarean section (performed)	944	38.8
Cesarean section (pre) - Vaginal childbirth (performed)	69	2.8
No preference (pre) - Vaginal childbirth (performed)	27	1.1
No preference (pre) - Cesarean section (performed)	149	6.1
Uninformed	1	

DISCUSSION

The data found in the study allowed the identification of little divergence of the sociodemographic characteristics of women who had childbirth in private institutions, when compared with the study Birth in Brazil, carried out in hospitals of the public health network. This

investigation shows that there was a predominance in the increase of maternal age and higher education, being the majority of white ethnicity, revealing that in the private sector women become pregnant in an ideal fertile period and the access of the black population is lower, whose sample of black puerperal women was 3.3% in the private sector⁽⁸⁾. Regarding education,

the study obtained results with about half of the postpartum women with 11 to 14 years of schooling, and this level was considered good to contribute to the development of prenatal care, due to greater understanding of the information⁽⁹⁾.

Most of the puerperal women were married or lived with a partner, belonged to economic class B, in addition to having paid work and being entitled to some private health plan. These data are similar to other studies found in the literature⁽⁹⁾.

Another study analyzed factors that influenced the choice of childbirth route by the pregnant woman in the public and supplementary health system and found disparity between cesarean sections in the public and private health services, being the findings comparable to that of this study regarding the higher prevalence of cesarean sections in women assisted in private services⁽¹⁰⁾.

It is evident that the frequency of use of the private medical office and outpatient clinic of the health plan was higher for both women who had vaginal childbirth and those who underwent cesarean section; however, those who were assisted in the public service had a higher proportion of normal childbirth than of cesarean section. In this sense, a study conducted in Rio Grande do Sul, in 2019, showed that, when the same doctor monitors prenatal care and childbirth, the situation favors the transformation of the type of childbirth into a consumption item, which is accessible according to the patient's purchasing power⁽¹¹⁾.

The fact that the minority of women in this study changed their choice of surgical childbirth during pregnancy to vaginal childbirth is not a reality in most private services in Brazil. An integrative review study on the choice of the mode of childbirth and autonomy of women in Brazil concluded that users of the supplementary network, unlike the public network, feel the receptivity of the doctor before the cesarean section, but they do not feel adequately informed about the childbirth routes during their follow-up, which characterizes the assistance provided⁽¹²⁾.

It is known that excessive use of caesarean sections can increase the chances of risks and harm to the mother and baby. When follow-up is performed by a multidisciplinary team and not focused only on the doctor, the chances of vaginal childbirth increase and, as such, the outcomes of

childbirth tend to be beneficial for women. Study published in the Lancet Journal on the impact of care provided by obstetric nurses in reducing maternal and neonatal mortality conducted in 88 countries showed that the presence of the professional can help reduce 40% of maternal and neonatal deaths and 26% of stillbirths in low and middle income countries. Thus, it can be understood that, when care is led by obstetric nurses/obstetricians, it is strongly associated with a higher number of physiological and safe childbirths⁽¹³⁾.

In this context, national research points to the importance of the insertion of obstetric nurses in maternity hospitals, in order to enable humanized care at childbirth and birth, reducing the number of unnecessary interventions, in addition to promoting information about the childbirth process, favoring women's autonomy and protagonism^(14,15).

Therefore, it is important to take into account the inclusion of other professionals in direct care of low-risk childbirth, such as obstetric nurses and/or obstetricians, as already occurs in other countries, such as the Netherlands, where medical intervention is lower, showing positive results that demonstrate a positive impact on the reduction of cesarean section⁽¹⁶⁾.

In the city of São Paulo, where most of the present study was conducted, prenatal care by nurses in the private sector is almost non-existent (0.3%). The lack of knowledge about the participation of nurses in prenatal care and childbirth shows that we still need to advance in the participation of this professional in gestational care. This is distinguished from the North (50.4%) and Northeast (51.6%) of the country and among indigenous women, where the highest concentration of prenatal care is performed in the public service by nurses, probably due to the lower availability of doctors in these regions, particularly in inland cities⁽¹⁷⁾.

Decree 94.406/1987 on the Law of Professional Exercise of Nursing informs that low obstetric risk prenatal care can be fully monitored by nurses⁽¹⁸⁾. Moreover, one of the guidelines for prenatal care recommended by the Humanization Program in Prenatal and Birth (HPPB)⁽¹⁹⁾ and by the Maternal-Child Care Network⁽¹⁾ is the participation of the nurse as a member of the health team that provides direct care to the

woman during the pregnancy-puerperal cycle.

Study on the contribution of the obstetric nurse in good practices showed that, with the performance of the professional, the humanized form of assistance in the context of scientific evidence becomes clear as recommended by the Ministry of Health, performing quality work and being able to develop care practices that provide benefits for both mother and newborn. They use care technologies to provide comfort and help in the process of labor, childbirth and birth and stimulate parturient women to perceive their bodies with autonomy in the birth process⁽²⁰⁾.

Regarding the information received during prenatal consultations, this study identified that 69.8% of pregnant women were informed about the risks and benefits of each type of childbirth. The lack of clarification about the risk of cesarean section leaves pregnant women vulnerable and prone to be induced by the professionals assisting them in prenatal care, by the choice of the type of childbirth, since these professionals supposedly hold the knowledge. It should be noted that, although there is the idea that pregnant women understand the risks of cesarean childbirth and have a preference for vaginal childbirth, fear of pain and fear of the unknown ends up impairing the final decision of the type of childbirth to be chosen, causing a high rate of cesarean sections, as observed in Brazil.

When participants in this study were asked about the safest type of childbirth, 8.2% of them who underwent cesarean section had less information about vaginal childbirth being safer for the mother and the baby. It is known that information should be individualized and based on the health needs of each woman. Current evidence reinforces the importance of guidelines on childbirth, so that women can have sufficient knowledge about their possibilities and best practices, so that they can make safe decisions and have their choices respected.⁽²¹⁾ When women make the choice of their childbirth individually, most of them opt for normal childbirth. On the other hand, when the doctor decides alone on the type of childbirth to be performed, most indicate caesarean section⁽²²⁾.

Data from this study show that there was participation of women in the decision for the type of childbirth predominantly among those who wanted vaginal childbirth and the outcome

was the desired (70.3%) compared to the group that preferred and had cesarean childbirth (53.1%). For those who had a different type of childbirth to the one initially desired, they had a higher percentage of the decision to have been made by the doctor (25.2%) compared to the others. The fact emphasizes the importance of the treatment of pregnant women by the professionals who assist them throughout the process of parturition. The way information and guidance on the gestational and parturitive process are transmitted to the pregnant woman strongly interferes with the expectation of childbirth and birth, contributing or not to a positive experience of childbirth⁽²³⁾.

When the woman is informed about the types of childbirth, there is a low proportion of reports, either for the preference for vaginal childbirth or cesarean section, showing that the decision-making process of Brazilian women has no relevance, unlike international studies that show information as a factor of great relevance for the participation of pregnant women in the decision and in the satisfaction with childbirth⁽²³⁾.

The data found in this study show that it is fundamental that the health professional who assists women develops qualified listening, provides explanations or develops educational technologies so that she can understand the 'literacy', being available to clarify any doubts that arise, in a clear, objective and understandable manner, instructing on the options and alternatives that allow a safe decision on the type of procedure or treatment, and encouraging the questioning when needed⁽²⁴⁾.

A limitation of the study concerns that essential information that should be extracted from the prenatal card was compromised by its absence or by scarce and still illegible information when present, which can be improved with a standardization of prenatal cards or similar document that belongs to women, which contains necessary data on the gestational development of those assisted in the private network, as it happens in the public network. Professionals who assist pregnant women should be made aware of the importance that pregnancy data should be available for continuation and facilitation of care in childbirth and at birth.

CONCLUSION

The analysis of factors associated with prenatal care and the type of childbirth in the supplementary health network showed that the puerperal women who underwent prenatal care in the private office of the doctor with private source of financing for childbirth were more likely to undergo cesarean section compared to those who received prenatal care in the public health service, which had a higher percentage of vaginal childbirth.

Of the women assisted simultaneously by the doctor and nurse, even if the participation of the obstetric nurse was small, there was a slight tendency to impact the vaginal childbirth route. Those who had a preference for vaginal childbirth

at the beginning of pregnancy, decided more about their childbirth route, understood this safer route and changed less than those who underwent cesarean section.

The study reveals little participation of the obstetric nurse and none of the obstetrician in prenatal care in the Supplementary Network, favoring a greater chance of unnecessary interventions.

Nursing has an important and significant role in the operation of the entire process and actions, whether acting in care, as in the interaction of the link between the pregnant woman and the other health team professionals, thus making the presence of the obstetric nurse in prenatal care vital.

ASSISTÊNCIA PRÉ-NATAL E SUA ASSOCIAÇÃO COM O TIPO DE PARTO NA REDE SUPLEMENTAR DE SAÚDE

RESUMO

Objetivo: analisar os fatores associados à assistência pré-natal com o tipo de parto na rede suplementar de saúde. **Método:** estudo epidemiológico, transversal conduzido por análise secundária de parte dos dados da pesquisa "Nascer Saudável: estudo prospectivo de avaliação da implantação e efeitos de intervenção multifacetada para melhoria da qualidade da atenção ao parto e nascimento em hospitais no Brasil". Foram incluídas 2 435 mulheres, admitidas em cinco maternidades das cidades de São Paulo e Santos mediante entrevistas no período pós-parto, consultas em prontuários e cartão de pré-natal. Os dados foram analisados descritivamente. Foi utilizado teste qui-quadrado e exato de Fisher para associação entre variáveis e para comparação de médias entre grupos o teste *t Student*. **Resultado:** o pré-natal, para a maioria das gestantes (44,6%), foi realizado em consultório particular seguido de ambulatório do plano de saúde (38,3%). A predominância dos atendimentos às gestantes foi feita pelo médico (92,5%). O desfecho do parto, majoritariamente cesariana (76,6%), seguido de 23,4% de partos vaginais. **Conclusão:** puérperas que realizaram o pré-natal no consultório particular com financiamento privado do parto tiveram maior chance de parto cesárea. A participação conjunta da enfermeira obstetra com o médico mostrou leve tendência a impactar na via de parto vaginal.

Palavras-chave: Assistência Pré-Natal. Saúde materna. Parto Humanizado. Saúde suplementar.

ASISTENCIA PRENATAL Y SU ASOCIACIÓN CON EL TIPO DE PARTO EN LA RED SUPLEMENTARIA DE SALUD

RESUMEN

Objetivo: analizar los factores asociados a la atención prenatal con el tipo de parto en la red suplementaria de salud. **Método:** estudio epidemiológico, transversal realizado por análisis secundario de parte de los datos de la investigación "Nacer Saludable: estudio prospectivo de evaluación de la implantación y efectos de intervención multifacética para la mejora de la calidad de la atención al parto y nacimiento en hospitales en Brasil". Se incluyeron 2 435 mujeres, admitidas en cinco maternidades de las ciudades de São Paulo y Santos-Brasil mediante entrevistas en el período posparto, consultas en los registros médicos y en la tarjeta de prenatal. Los datos fueron analizados descriptivamente. Se utilizó la pruebas chi-cuadrado y exacta de Fisher para la asociación entre variables y para la comparación de promedios entre grupos de prueba *t Student*. **Resultado:** el prenatal, para la mayoría de las embarazadas (44,6%), fue realizado en consultorio privado seguido de ambulatorio del plan de salud (38,3%). La predominancia de las atenciones a las gestantes fue hecha por el médico (92,5%). El resultado del parto, principalmente cesárea (76,6%), seguido de 23,4% de partos vaginales. **Conclusión:** las puérperas que realizaron el prenatal en el consultorio privado con financiación privada del parto tuvieron mayor probabilidad de parto cesárea. La participación conjunta de la enfermera obstetra con el médico mostró ligera tendencia a impactar en la vía de parto vaginal.

Palabras clave: Atención Prenatal. Salud materna. Parto Humanizado. Salud suplementaria.

REFERENCES

1. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Ações Programáticas Estratégicas. Portaria nº 715, de 4 de abril 2022. Institui a Rede de Atenção Materna e Infantil (Rami) [Internet]. Brasília; 2022. Available from: <https://www.in.gov.br/web/dou/-/portaria-gm/ms-n-715-de-4-de-abril-de-2022-391070559>
2. Campagnoli YM, Ghiraldelli D, Pfaffenbach G, de Castro CP, da Silva DL, Luciano MAL, et al. O impacto das tecnologias leves na assistência de enfermagem ao pré-natal. *Rev Eletron Acervo e Saude*. 2023;23(8): e13068. DOI: <https://doi.org/10.25248/reas.e13068.2023>
3. Brasil. Ministério da Saúde. Secretaria de atenção à saúde. Departamento de atenção básica. Atenção ao pré-natal de baixo risco. Cadernos de Atenção Básica. Brasília; [Internet] 2013. Available from: http://bvsmis.saude.gov.br/bvs/publicacoes/cadernos_atencao_basica_32_prenatal.pdf
4. Siqueira AL, Luz JS, Silva KA, Name KPO. O papel do enfermeiro obstetra no parto humanizado. *ReBIS*. 2019;1(3):1-5. Available from: <https://revistarebis.rebis.com.br/index.php/rebis/article/view/35>
5. Brasil. Ministério da Saúde. Agência Nacional de Saúde Suplementar. Resolução Normativa Nº 398, de 05 de fevereiro de 2016. Brasília; [Internet] 2016. Available from: https://bvsmis.saude.gov.br/bvs/saudelegis/ans/2016/res0409_22_07_2016.html
6. Carvalho SS, Cerqueira RFN. Influência do pré-natal na escolha do tipo de parto: revisão de literatura. *Rev. Aten. Saúde*. 2020 Jan-Mar; 18(6):120-28. DOI: 10.13037/ras.vol18n63.6315
7. Cunha AC, Lacerda JT, Alcauza MTR, Natal S. Evaluation of prenatal care in Primary Health Care in Brazil. *Rev. Bras. Saude Mater. Infant*. 2019 Abr-Jun;19 (2):459-70. DOI:10.1590/1806-93042019000200011
8. Leal MC, Bittencourt AS, Esteves-Pereira AP, Ayres BVS, Silva LBRAA, Thomaz EBAF et al. Progress in childbirth care in Brazil: preliminary results of two evaluation studies. *Cad. Saúde Pública* 2019; 35(7):e00223018. DOI:10.1590/0102-311X00223018
9. Sousa JDOP, C Innocência VTC, Brito RVC, Conceição RC. Avaliação epidemiológica comparativa dos índices de parto cesáreo e vaginal e fatores associados em hospitais público e privado da cidade de Juiz de Fora, Minas Gerais. *Rev Med Minas Gerais*. 2020;30:e-30121 DOI:10.5935/2238-3182.20200074
10. Souza EL, Carvalho ALC, Pereira BF, Souza BG de, Souza GR de, Ardisson GMC, et al. Fatores que influenciam a via de parto no Brasil. *Rev. Med.[Internet]*. 2022;101(5): e-172947. DOI: <https://doi.org/10.11606/issn.1679-9836.v101i5e-172947>
11. Rasador S, Abegg C. Factors associated with the route of birth delivery in a city in the Northeast region in the State of Rio Grande do Sul, Brazil. *Rev. Bras. Saude Mater. Infant*. 2019;19(4):807-15. DOI: <https://10.1590/1806-93042019000400004>
12. Rocha NFF, Ferreira J. A escolha da via de parto e a autonomia das mulheres no Brasil: uma revisão integrativa. *Saúde em Debate* [online]. 2020; 125(44): 556-68. DOI: <https://doi.org/10.1590/0103-1104202012521>
13. Nove A, Friberg IK, de Bernis L, McConville F, Moran AC, Najjemba M, et al. Potential impact of midwives in preventing and reducing maternal and neonatal mortality and still births: a Lives Saved Tool modelling study. *The Lancet Global Health* [Internet]. 2021;9(1):e24-e32. DOI: 10.1016/S2214-109X(20)30397-1
14. Oliveira OS, Couto TM, Oliveira GM, Pires JA, Lima KTRS, Almeida LTS. Obstetric nurse and the factors that influence care in the delivery process. *Rev Gaúcha Enferm*. 2021;42(esp):e20200200. DOI: <https://10.1590/1983-1447.2021.2020-0200>
15. Betrán AP, Temmerman M, Kingdon C, Mohiddin A, Opiyo N, Torloni MR, Zhang J, et al. Interventions to reduce unnecessary caesarean sections in healthy women and babies. *Lancet*. Oct 2018;392(10155):1358-68. DOI:10.1016/S0140-6736(18)31927-5
16. Duarte MR, Alves VH, Rodrigues DP, Souza KV, Pereira AV, Pimentel MM. Tecnologias do cuidado na enfermagem obstétrica: contribuição para o parto e nascimento. *Cogitare enferm*. 2019;28:e84830. DOI: <https://10.5380/ce.v24i0.54164>
17. Gama SGN, Viellas EF, Torres JA, Bastos MH, Brüggewmann OM, Theme Filha MM, et al. Labor and birth care by nurse with midwifery skills in Brazil. *Reprod Health* 2016;13(Suppl 1):123. DOI:10.1186/s12978-016-0236-7
18. Brasil. Ministério da Saúde. Decreto nº. 94.406 de 08 de junho de 1987, regulamenta a Lei nº 7.498, de 25 de junho de 1986: Dispõe sobre o exercício da Enfermagem, e dá outras providências. Brasília [Internet] 1987. [acesso em 15 ago.2022]. Available from: http://www.cofen.gov.br/decreto-n-9440687_4173.html
19. Brasil. Ministério da Saúde. Portaria n.º 569/GM de 1º de junho de 2000: Institui o Programa de Humanização do Pré-natal e Nascimento, no âmbito do Sistema Único de Saúde. Brasília; [Internet] 2000. [acesso em 15 ago.2022]. Available from: https://bvsmis.saude.gov.br/bvs/saudelegis/gm/2000/prt0569_01_06_2000_rep.html
20. Nery HC, Medeiros RMK, Alvares AS, Dalprá LAS, Beltrame RCT, Lima JF, Aguiar LSC. Boas práticas da enfermeira obstétrica na assistência ao parto em um centro de parto normal. *Cienc Cuid Saude* (online). 2023;22:e66061. DOI: 10.4025/cienccuidsaude.v22i0.66061
21. Baggio MA, Girardi C, Schapko TR, Cheffer MH. Parto domiciliar planejado assistido por enfermeira obstétrica: Significados, experiências e motivação para essa escolha. *Cienc Cuid Saude* (online). 2022;21:e57364. DOI: 10.4025/cienccuidsaude.v21i0.57364
22. World Health Organization. Who Recommendations: intrapartum care for a positive childbirth experience. Geneva: World Health Organization; 2018. Available from: <https://apps.who.int/iris/bitstream/handle/10665/260178/9789241550215-eng.pdf>
23. Loiola AMR de, Alves VH, Vieira BDG, Rodrigues DP, Souza KV de, Marchiori GRS. Plano de parto como tecnologia do cuidado: experiência de puérperas em uma casa de parto. *Cogitare enferm*. 2020;25:e66039. DOI: <http://dx.doi.org/10.5380/ce.v25i0.66039>
24. Honnef F, Silveira S, Quadros JS de, Langendorf TF, Paula CC de, Padoin SMM de. Tecnologias educacionais para promoção de experiência de parto positiva: revisão integrativa. *Cienc Cuid Saude* (online). 2022;21:e59213. DOI: 10.4025/cienccuidsaude.v21i0.59213

Corresponding author: Zelina Hilária de Sousa. Rua Benjamim de Oliveira, 450, CEP: 03006-020 - Brás – São Paulo. E-mail: zelina.rosa@unifesp.br,

Submitted: 17/01/2023

Accepted: 19/10/2023

FINANCIAL SUPPORT

This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – Brasil (CAPES) – Finance Code 001”