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RESEARCH

REASONS FOR PERFORMING A CESAREAN SECTION ACCORDING TO THE PUERPERAL WOMEN REPORTS AND THE REGISTRY OF MEDICAL RECORDS IN MATERNITY HOSPITALS IN BELO HORIZONTE

MOTIVO DA REALIZAÇÃO DE CESÁREA SEGUNDO RELATO DAS MÃES E REGISTROS DE PRONTUÁRIOS EM MATERNIDADES DE BELO HORIZONTE

MOTIVOS PARA LA REALIZACIÓN DEL PARTO POR CESÁREA SEGÚN LOS RELATOS DE LAS MADRES Y DE LOS EXPEDIENTES MÉDICOS DE MATERNIDADES DE BELO HORIZONTE

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ABSTRACT

The high prevalence of cesarean section is a public health problem because it is associated with increased maternal and neonatal morbidity and mortality, especially when performed without clinical justification. The present study aimed to evaluate the reason for the cesarean section according to the reports of the puerperal woman and the recording of the information in the medical record. It is a hospital-based cohort study, developed with data from the research "Birth in Belo Horizonte study: survey on labor and birth". The reason for performing the cesarean section was reported according to the mothers' reports and records in medical records regarding the method of payment of labor, labor and clinical or obstetric complications during pregnancy or delivery. Of the total of 1,088 postpartum women evaluated, 465 underwent a cesarean delivery and were included in this study. A statistically significant difference was observed between the reasons for the cesarean section reported by the puerpera and those recorded in the chart, which points to the need of reviewing the professional training and the care model, besides the need to qualify the work process and the practices and empower women to make informed choices.

Keywords: Cesarean Section; Maternal Health; Delivery, Obstetric; Health Education; Nursing.

RESUMO

A alta prevalência de cirurgia cesárea é um problema de saúde pública por associar-se ao aumento da morbimortalidade materna e neonatal, principalmente quando realizada sem justificativa clínica. O presente estudo objetivou avaliar o motivo da realização da cesárea segundo os relatos da puérpera e o registro das informações no prontuário. Trata-se de estudo de coorte de base hospitalar desenvolvido com dados da pesquisa "Nascer em Belo Horizonte: inquérito sobre parto e nascimento". Comparou-se o motivo de realização da cesárea segundo relato das mães e registros em prontuários em relação à intercorrência clínica ou obstétrica durante a gestação ou parto, trabalho de parto e forma de pagamento do parto. Do total de 1.088 puérperas avaliadas, 465 tiveram a cesárea como via de nascimento e foram incluídas neste estudo. Observou-se diferença estatisticamente significativa entre os motivos da realização da cesárea relatados pela puérpera e os registrados em prontuário, o que ressalta a necessidade de rever a formação profissional e o modelo de atenção, além da necessidade de qualificação do processo de trabalho e das práticas assistenciais e do fortalecimento da autonomia das mulheres para escolhas informadas.

Palavras-chave: *Cesárea; Saúde Materna; Parto Obstétrico; Educação em Saúde; Enfermagem.*

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RESUMEN

La alta prevalencia del parto por cesárea es un problema de salud pública porque se la asocia al aumento de la mortalidad materna y neonatal, especialmente cuando se realiza sin justificación clínica. El objeto del presente estudio fue evaluar el motivo de realización de cesáreas según los relatos de las parturientas y la información que consta en los expedientes médicos. Se trata de un estudio de cohorte basado en el hospital y desarrollado con datos de la encuesta "Nacer en Belo Horizonte: encuesta sobre el parto y el nacimiento." Se compararon los motivos de la cesárea según los relatos de las madres y la información de los expedientes con las complicaciones clínicas u obstétricas durante el embarazo, el parto, el trabajo de parto y la forma de pago del parto. Del total de 1.088 madres evaluadas, 465 habían realizado el parto por cesárea y fueron incluidas en este estudio. Hubo una diferencia estadísticamente significativa entre los motivos relatados por las madres y aquéllos en los expedientes médicos, lo cual indica la necesidad de rever la formación profesional y el modelo de atención, además de la necesidad de perfeccionar el proceso laboral y las prácticas asistenciales y de fortalecer la autonomía de las mujeres para que tomen decisiones informadas.

***Palabras clave**: Cesárea; Salud Materna; Parto Obstétrico; Educación en Salud; Enfermería.*

INTRODUCTION

During a long period, the cesarean surgery was responsible for the reduction of fetal and maternal mortality, and was mostly performed in cases of clinical need. However, from the twentieth century, with the technological advance, the cesarean surgery has become a routine operation, reaching unjustifiable levels with negative maternal and neonatal repercussions.[1-4]

The unnecessary performance of this procedure leads to an increase in maternal and neonatal morbidity and mortality and it is associated with a longer hospitalization period, puerperal infection, maternal hemorrhage, delayed postpartum recovery time, late onset of breastfeeding, prematurity, and increased expenses for the health system.[1,5,6]

Even in the face of these complications, the cesarean surgery continues to be indicated and performed without obeying the indications advocated by the official organs. Thus, the information transmitted by health professionals to women, especially to the primigravidae, can influence the choice of birth route[6] and, in this context, the strengthening of women's autonomy, with qualified information, at times such as preconception and prenatal consultations, is one of the determinants. According to Vogt[7], the women with the highest number of prenatal consultations performed in the private service had an increased chance of undergoing the cesarean surgery, whereas for those who received prenatal care provided predominantly by the National Health System (SUS), there was less frequency of this procedure.

According to the World Health Organization (WHO), the overall proportion of cesarean surgery is 10 to 15%.[8] In Brazil, this proportion reaches 80% in the supplementary sector and around 30% in the public sector. Among the Brazilian macro-regions, the Southeast region has the highest prevalence (51.7%) of this procedure.[6] In the city of Belo Horizonte, according to data from the Perinatal Commission of the Municipal Health Secretary (2015), the prevalence is 69.5% in private institutions and 28.0% in public institutions. This indicates that this procedure has been performed indiscriminately and in many cases without the adequate indication, diverging from the initial goal, which is to reduce the risk of maternal and fetal complications during labor and delivery.[1,5,6]

The indications for the cesarean surgery may be absolute or relative. Absolute indications are those in which performing the cesarean section is the safest option for mother and child. And the main indications are dystocia or failure in labor progression, cephalopelvic disproportion, poor fetal position in persistent posterior, and transverse position varieties, pelvic, face and corneal presentation, anterior cesarean section, non-calming fetal heart rate, presence of meconium and centralization fetal.[9]

As an aggravating factor in this scenario, there is still a culture that mythologizes the process of delivery and birth. Many women opt for the surgical route as a form of birth because they believe that the vaginal delivery is unsafe and overvalue the use of technologies, such as the cesarean surgery: "cleaner, fast and safe". Aspects such as fear of pain and fear of changes in the anatomy of the genitalia give rise to apprehension in the parturients, who often hear reports of negative experiences of women who underwent harmful interventions during the vaginal delivery, in addition to the belief that the cesarean section generates less risks to the fetus.[10,11]

Thus, the existing care model, the care practice and the role of women and their families in the process of labor and childbirth are relevant for the empowerment of pregnant women in the sense that they can choose, in fact, the way of delivery of their preference. In this context, nurses play a relevant role: evidences show that care models involving these professionals are associated with low intervention rates and greater satisfaction among women.[7,12] In addition, the nurse professional is considered the appropriate individual to provide care to women with a regular risk pregnancy, since, in addition to technical and scientific knowledge, they have a humanized view of the pregnancy-puerperal cycle.[7,13]

In addition to the consultations, other individual or collective actions to strengthen women's empowerment and their empowerment contribute to the inclusion of women in the free and informed choice of birth and delivery elements, which may have an impact on the reduction of caesarean sections.[14]

In the care field, besides the groups of pregnant women, performed by the nurse and other professionals of the multidisciplinary team, it is possible to mention other actions that promote the autonomy of women, as the pregnant women circles, considering the potential of networks and social movements as possible facilitators.[15]

Although the participation of women in the discussion about the delivery mode is fundamental, research shows that parturients generally do not actively participate in this decision.[6,16,17] In addition, the delivery mode may be influenced by socioeconomic, ethnic, demographic factors, form of payment of the childbirth, and by the type of financing of the health subsystem - private or public.[1,5,6,18]

Therefore, it is necessary to understand if women submitted to a cesarean section have information on the reason for performing it and if the justifications of the professionals who performed it are in agreement with the information given to the women, as well as if they obey the obstetric criteria recommended for the practice of this procedure. Identifying these issues will undoubtedly make it possible to develop effective strategies for reducing unnecessary caesarean sections. Therefore, the present study aimed at evaluating the reason for the cesarean section according to the reports of the puerperae and the registers of the health professionals in the medical records, also verifying if there were differences according to clinical or obstetric intercurrence during pregnancy or labor and the form of payment of the childbirth.

METHODS

This is a hospital-based cohort study developed with data from the survey "Birth in Belo Horizonte: survey on childbirth and birth", carried out in 11 maternity hospitals in Belo Horizonte, Minas Gerais, being seven of them of public care and four of private care.

The information came from interviews carried out by trained nurses, performed with the puerperae face to face, at least six hours after the delivery, from November 2011 to March 2013. Data from maternal medical records were also used.[19] Further information on the sample design is detailed in another publication.

All puerperal women with single gestational hospital delivery were considered as eligible, those who had newborns (NB) at 22 gestational weeks or more, NB alive, with weight over 500 grams at birth. Thus, we performed the analysis by selecting the subpopulation of interest.

In addition, in this study, women who underwent a cesarean delivery as a way of birth were included, totaling 465 women. The final sample was assessed and there were no significant differences in the initial sample. The variables included in this study refer to sociodemographic, economic and obstetrical, clinical, gestational, delivery and care history characteristics and to the reasons for cesarean delivery, according to the report from the puerpera and data from the medical record.

The reason for the cesarean section was analyzed according to labor (presence or absence), the form of payment of the childbirth (public or private) and clinical or obstetric complications during pregnancy or labor and which could be associated with a cesarean indication. Intercurrence was considered if there were at least one of the following conditions: preexisting clinical conditions, hypertensive syndromes, diabetes, gestational diabetes, HIV infection, restricted intrauterine growth (RIUG), oligodramnia, polydramnia, isoimmunization, placenta previa, placental abruption, fetal distress, preterm labor, severe congenital malformation, two or more previous cesarean sections, failure to induce labor and complications in the evolution of labor, in addition to istmocervical incompetence (IIC), premature amniorrexis, eclampsias, previous uterine surgeries (myomectomy, microcesarea or other body surgeries) and others.[18]

For the data analysis, the Software Statistical Software, version 14.0 (Stata Corp., Texas, USA) was used. The data analysis was performed by describing and comparing the mothers' reports and the records of health professionals' information in the medical records about the reason for the cesarean section, being verified differences according to the form of payment of the childbirth, labor and clinical or obstetric intercurrence during the pregnancy or childbirth.

The difference between the frequencies was tested using the Pearson's chi-square or the Fisher's exact test and, for the variables that had a statistical difference, an adjusted residue analysis was performed. The frequencies, the proportions and the 95% CI of the proportions were calculated for the categorical variables. For the quantitative variables, the median and the interquartile range (IQ) were used, due to the asymmetry of the variables. The level of significance of 0.05 was adopted in all analytical procedures. The results were described and presented by means of tables and figures. It should be highlighted that the totals of the numbers of women may vary, due to the absence of some data, for the variables studied.

This study was approved by the Ethics Committee of the Federal University of Minas Gerais under the protocol CAAE-0246.0.203.000-11 and by the ethics committees of the maternity hospitals involved.

RESULTS

Of the 1,088 postpartum women interviewed, 465 (42.7%) underwent a cesarean section and were considered eligible to participate in this study. Regarding the socio-demographic and economic characteristics (Table 1), it was found that 73.12% of

the women were aged between 20 and 34 years old (median of 31 years old), with a predominance of brown-skinned, mulatto-skinned (57, 42%) and complete high school (50.75%). Approximately 57.42% of the puerperal women were married or in a stable union and 61.72% had a paid job. Half of the women had at least one previous birth, with a predominance of puerperae who reported previous cesarean sections (84%).

Regarding the prenatal care, almost all (99.35%) of the puerperae reported having being provided care, with six or more consultations (93.47%). More than 55% of the prenatal consultations and also deliveries were performed and paid for by the private system.

Approximately 47% of the women presented clinical or obstetric complications during pregnancy or delivery, and in 50% of the cases, it was decided that the delivery would be by cesarean section still in the prenatal care.

Almost 75% of postpartum women did not go into labor. Regarding the gestational age, women (37.3%) had more frequency (82.31%) with delivery between 37 and 41 weeks of gestation.

Table 1 - Distribution of sociodemographic, economic and obstetric history, clinical characteristics of gestation and delivery. Belo Horizonte, 2011-2013

Maternal characteristics	n (%)	CI 95%	Median (IQ)
Age (years old)			
<20	20 (4.30)	02.45-06.15	
20-34	340 (73.12)	69.07-77.16	31 (25-34)
35 or over	105 (22.58)	18.76-26.39	
Skin color			
White	150 (32.26)	27.99-36.52	
Black	36 (7.74)	05.30-10.18	
Brown-skinned/Mulatto	267 (57.42)	52.90-61.93	
Asian/indigenous	12 (2.58)	01.13-04.02	
Schooling			
Higher education	128 (27.53)	23.45-31.60	
High school	236 (50.75)	46.16-55.31	
Elementary School	101 (21.72)	17.95-25.48	
Marital status			
Married/stable union	375 (80.65)	77.04-84.24	
Single	80 (17.20)	13.76-20.64	
Separated/widow	10 (2.15)	00.82-03.47	
Location of the prenatal care			
Public	179 (38.74)	34.28-43.20	
Private	257 (55.63)	51.08-60.17	
Mixed	26 (5.63)	03.51-07.73	
Number of prenatal consultations			
≥6	358 (93.47)	90.08-95.95	
<6	25 (6.53)	04.04-09.01	

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Table 1 - Distribution of sociodemographic, economic and obstetric history, clinical characteristics of gestation and delivery. Belo Horizonte, 2011-2013

Maternal characteristics	n (%)	CI 95%	Median (IQ)
Gestational age (weeks)			
37-41	107 (82.31)	75.66-88.95	
≥42	3 (2.31)	00.30-04.92	39 (38-40)
<37	20 (15.38)	09.09-21.66	
Parity			
Nulliparous	35 (14.00)	09.66-18.33	
1 previous delivery	125 (50.00)	43.75-56.24	
2 previous deliveries	55 (22.00)	16.82-27.17	
3 or more previous deliveries	35 (14.00)	09.66-18.33	
Interactivity			
None or 1 previous cesarean section	156 (73.24)	67.24-79.23	
≥ 2 previous cesarean section	57 (26.76)	20.76-32.75	
Source of payment of the childbirth			
Public or mixed	208 (44.73)	40.19-49.26	
Private	257 (55.27)	50.73-59.80	
When it was decided that the delivery route would be cesarean			
During childbirth	48 (10.39)	07.59-13.18	
Pre-delivery	115 (24.89)	20.93-28.84	
Admission	68 (14.72)	11.47-17.96	
Prenatal	231 (50.00)	45.42-54.57	
Clinical or obstetric complications in pregnancy or in childbirth			
No	243 (52.26)	47.70-56.81	
Yes	222 (47.74)	43.18-52.29	
Labor			
Yes	117 (25.27)	21.29-29.24	
No	346 (74.73)	70.75-78.70	

Source: elaborated for the purposes of this study.

The main reasons for the cesarean delivery reported by the puerperal women were: "the baby was big / there was no passing" (28.24%) and "high blood pressure" (9.17%). The puerperae also mentioned: "I had already had a previous cesarean" (8.27%), "the babe was sitting" (4.49%), "little amniotic fluid" (4.31%), "I already had two or more previous cesareans" (3.95%), "I wanted to do tubal ligation" (3.23%), "the babe got into suffering" (3.05%), "I wanted cesarean section" (2.33%) and "There was no time" (2.15%). The most frequent reasons for cesarean indications registered in the women's records were, in turn: occurence of a previous cesarian (40.46%), cephalopelvic disproportion (13.74%), pre eclampsia (10.31%), fetal distress (5.73%), progression stop (5.34%), pelvic presentation (4.58%), induction failure (4.20%) and premature amniorrexis (3.82%) (data not shown in the tables).

According to tables 2a/b-4a/b, there was a statistically significant difference between the reasons for the cesarean section according to the reports of the puerpera and the register of the health professionals in the records according to the form of payment of the childbirth (p<0.016 and p<0.001, respectively), labor (p<0.001, in both) and at least one clinical or obstetric intercurrence during gestation or delivery (p<0.001, in both).

Table 2a - More frequent reasons for the cesarean section according to the report of the puerpera according to the form of payment. Belo Horizonte, 2011-2013

Reason for the cesarean section	Form of payment		Value of p
	Public n (%)	Private n (%)	
Big fetus / there was no passage***	64 (40.76)	93 (59.24)	<0.001*
Hypertension	24 (47.06)	27 (52.94)	
Previous cesarean section	23 (50.00)	23 (50.00)	
Fetus was sitting***	18 (72.00)	7 (28.00)	
Two or more previous cesareans	16 (72.73)	6 (27.27)	
Fetus went into suffering***	14 (82.35)	3 (17.65)**	
I wanted to do tubal ligation	11 (61.11)	7 (38.89)	
Little amniotic fluid	11 (45.83)	13 (54.17)	
It was over time	6 (50.00)	6 (50.00)	
Wanted to do a cesarean	4 (30.77)**	9 (69.23)	

Source: elaborated for the purposes of this study.
Notes: *Pearson's chi-square, **Fisher's exact test, ***adjusted residue analysis; p-value in bold ≤0.05 (p=0.023; 0.044 and 0.025, respectively).

Table 2b - Reason for the performance of the cesarean section according to the data of the medical record according to the form of payment. Belo Horizonte, 2011-2013

Reason for the cesarean section	Form of payment		Value of p
	Public n (%)	Private n (%)	
Previous cesarean section***	69 (65.09)	37 (34.91)	0.016*
Cephalopelvic disproportion	18 (50.00)	18 (50.00)	
Hypertension (pre-eclampsia)	15 (55.56)	12 (44.44)	
Progression stop	14 (100.0)	0 (0.00)**	
Fetal distress***	13 (86.67)	2 (13.33)**	
Pelvic presentation	9 (75.00)	3 (25.00)**	
Induction failure	6 (54.55)	5 (45.45)	
Premature amniorrexis	5 (50.00)	5 (50.00)	
Others**	16 (51.61)	15 (48.39)	

Source: elaborated for the purposes of this study.
Notes: *Pearson's chi-square, **Fisher's exact test, ***adjusted residue analysis; p-value in bold ≤0.05 (p=0.003 and 0.022, respectively).
**It includes placental abruption, HELLP syndrome, oligodramnia, post-maturity, malformation, previous placenta, HIV infection, clinical presentation and eclampsia.

Table 3a - Most frequent reasons for performing the cesarean section according to the mother's report, considering the occurrence of labor. Belo Horizonte, 2011-2013

Reason for the cesarean section	Labor		Value of p
	Yes n (%)	No / Elective n (%)	
Big fetus / there was no passage***	53 (33.75)	104 (66.24)	<0.001*
Hypertension***	5 (9.80)	46 (90.19)	
Previous cesarean section***	5 (10.86)	41 (89.13)	
Fetus was sitting***	5 (20.83)	19 (79.16)	
Two or more previous cesareans***	2 (9.09)**	20 (90.90)	
Fetus went into suffering	11 (64.70)	6 (35.29)	
Wanted to do a tubal ligation***	2 (11.11)**	16 (88.88)	
Little amniotic fluid***	3 (12.50)**	21 (87.50)	
It was over time	0 (0.00)**	12 (100.00)	
Wanted to do a cesarean	1 (7.69)**	12 (92.30)	

Source: elaborated for the purposes of this study.
Notes: *Pearson's chi-square, **Fisher's exact test, ***adjusted residue analysis; p-value in bold ≤0.05 (p<0.001; <0.001; <0.001; 0.014; 0.003; 0.009 and 0.003, respectively).

Table 3b - Reason for the performance of the cesarean section according to the data of the medical record considering the occurrence of labor. Belo Horizonte, 2011-2013

Reason for the cesarean section	Labor		Value of p
	Yes n (%)	No / Elective n (%)	
Previous cesarean section***	10 (9.43)	96 (90.57)	<0.001*
Cephalopelvic disproportion	21 (58.33)	15 (41.67)	
Hypertension (pre-eclampsia)***	2 (7.69)**	24 (92.31)	
Fetal distress***	13 (86.67)	2 (13.33)**	
Progression stop	10 (71.43)	4 (28.57)**	
Pelvic presentation	3 (27.27)**	8 (72.73)	
Induction failure	6 (54.55)	5 (45.45)	
Premature amniorrexis	2 (20.00)**	8 (80.00)	
Others***	3 (9.68)**	28 (90.32)	

Source: elaborated for the purposes of this study.
Notes: *Pearson's chi-square, **Fisher's exact test, ***adjusted residue analysis; v ≤0.05 (p<0.001; 0.0001; 0.022 and <0,001, respectively).
Others - include premature placental abruption, HELLP syndrome, oligodramnia, post-maturity, malformation, previous placenta, HIV infection, corneal presentation, and eclampsia.

Table 4a - Most frequent reasons for performing the cesarean section according to the mother's report considering complications during the pregnancy or delivery. Belo Horizonte, 2011-2013

Reason for the cesarean section	Complications		Value of p
	No n (%)	Yes n (%)	
Big fetus / there was no passage**	100 (63.69)	57 (36.30)	<0.001*
Hypertension**	14 (27.45)	37 (72.54)	

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Table 4a - Most frequent reasons for performing the cesarean section according to the mother's report considering complications during the pregnancy or delivery. Belo Horizonte, 2011-2013

Reason for the cesarean section	Complications		Value of p
	No n (%)	Yes n (%)	
Previous cesarean section	26 (56.52)	20 (43.47)	<0.001*
Fetus was sitting	16 (64.00)	9 (36.00)	
Two or more previous cesareans	22 (50.00)	22 (50.00)	
Fetus went into suffering	6 (35.29)	11 (64.70)	
Wanted to do a tubal ligation	5 (27.77)	13 (72.22)	
Little amniotic fluid**	6 (25.00)	18 (75.00)	
It was over time	7 (58.33)	5 (41.66)	
Wanted to do a cesarean	7 (53.84)	6 (46.15)	

Source: elaborated for the purposes of this study.
Notes: *Pearson's chi-square, **adjusted residue analysis; p-value in bold ≤0.05 (p = 0.001, 0.003 and 0.028, respectively).

Table 4b - Reason for the performance of the cesarean section according to data of the medical record considering complications during the pregnancy or childbirth. Belo Horizonte, 2011-2013

Reason for the cesarean section	Complications		Value of p
	No n (%)	Yes n (%)	
Previous cesarean section***	36 (33.96)	70 (66.04)	<0.001*
Cephalopelvic disproportion***	25 (69.44)	11 (30.56)	
Hypertension (pre-eclampsia)	1 (3.70)**	26 (96.30)	
Fetal distress***	2 (13.33)**	13 (86.67)	
Progression stop	5 (35.71)	9 (64.29)	
Pelvic presentation	8 (66.67)	4 (33.33)**	
Induction failure	5 (45.45)	6 (54.55)	
Premature amniorrexis	2 (20.00)**	8 (80.00)	
Others***	6 (19.35)	25 (80.65)	

Source: elaborated for the purposes of this study.
Notes: *Pearson's chi-square, **Fisher's exact test, ***adjusted residue analysis; p-value in bold ≤0.05 (p = 0.002, 0.029, 0.022 and 0.003, respectively).
Other - includes premature placental abruption, HELLP syndrome, oligodramnia, post-maturity, malformation, previous placenta, HIV infection, corneal presentation, and eclampsia.

DISCUSSION

The results showed a significant difference between the reasons for the cesarean section according to the reports of the puerpera and the information registered by the health professionals in the medical records, according to the form of payment of the childbirth, the occurrence of labor and the presence of at least one clinical or obstetric complication during pregnancy or labor.

The sociodemographic characteristics of the women submitted to a cesarean section, in this study, evidenced predominantly parturients with a better level of schooling and paid job. A study conducted in Florianópolis, in 2015, revealed a relation between better socioeconomic status and cesarean preference,[20] however, in their work, Domingues *et al.*[18] showed an initial preference for the parturients, regardless of socioeconomic status, for the vaginal delivery, with a higher proportion of women with an initial cesarean preference in the private payment source.

The report of prenatal care of nearly 100% of parturients, with a desirable number of consultations, shows the universality and ease of access to this right, which guarantees safety during pregnancy for the mother and the fetus. However, it is important to highlight that enough consultations are not sufficient; it is necessary to guarantee prenatal quality, since it is the main moment for women to be informed about the gestation and the clinical, socio-cultural, emotional and individual elements, among others, that can influence the choice of women regarding the birth path.

The prenatal services according to the source of payment, public or private, are considered, by many authors, as a risk factor for elective cesarean sections.[18,21,22] In agreement with these authors, the present study revealed that more than half of the women who underwent a cesarean surgery performed the prenatal care in the private sector. Just like the prenatal care, the cesarean surgery performed also had as source the private payment. Many studies relate the increase in the prevalence of cesarean sections to the private service and also to the source of private payment of the childbirth.[6,18,21,22] Domingues *et al.*[18] emphasize, as a factor associated with this scenario, the possibility of scheduling the cesarean according to the convenience of the obstetrician or the woman in the supplementary health sector.

It is noteworthy, in this study, the fact that a high percentage of cesareans were defined in the prenatal care, even though the majority of parturients did not present clinical or obstetric complications during pregnancy that could be associated with the indication of this surgery. According to what has been showed by Copelli *et al.*[20] and according to scientific criteria, the definition of cesarean surgery as a prenatal birth route does not constitute justification, and they associate this decision to the model of care that is technocratic, biologicist and centered on the figure of the doctor.

It is possible to relate cost-benefit issues, as well as the convenience, to the decision time of the cesarean section in the prenatal care - since in a natural delivery there is unpredictability regarding the day and duration. Copelli *et al.*[20] ratify that the banalization of cesarean sections is related, in addition to economic interests, to aspects such as the responsibility of delivery to the doctor.

In most of the women in this study, the delivery occurred between 37 and 41 weeks of gestation, and almost 75% of them did not go into labor. Domingues *et al.*[18] also had a high percentage of cesareans without labor. This situation generates perinatal risks, since labor indicates the appropriate time of birth and that the fetus is most often "ready".[21]

Regarding the reasons for performing the cesarean section described in medical records and, in agreement with national and international studies,[5,23,24] it was observed in this study that a previous cesarean section surgery was the most described cause for the cesarean delivery performance. A study carried out in the state of São Paulo in 2012, with the objective of identifying the frequency and effects of previous cesarean deliveries, found that more than 40% of the cesarean deliveries were by repetition of this procedure.[23]

The impacts of repetitive cesarean surgeries are negative for the maternal health, since they are associated with a high risk of morbidity.[23] Brunacio[23] identifies the previous cesarean sections as an important predictor for the performance of a new cesarean, as verified in the present research. It should be highlighted, from these findings, that it is important to avoid a cesarean delivery in primiparous women due to its persistent impact on the outcome of the birth route in Brazil. It should be highlighted that scientific evidence shows that an earlier cesarean section does not, on its own, justify the indication of another in subsequent gestation.

In addition to a previous cesarean surgery, the cephalopelvic disproportion, pre-eclampsia, fetal distress, progression stop, pelvic presentation, induction failure and premature amniorrexis were cited in the medical records as reasons for the cesarean delivery. However, among the reasons reported by the parturients for performing the cesarean section, those who presented the highest proportion did not coincide with those in the medical record: "the baby was big / there was no passage" and "high blood pressure".

Finally, it should be emphasized as a limitation of this study the fact that the interviews were performed after the delivery, which may have altered the report of some women, due to the emotional issues that involve this moment.

FINAL CONSIDERATIONS

The findings of this study reveal that women are not always included in the discussions related to gestation and delivery or are not clearly informed about the actual indications of a cesarean delivery. Having that said, it is necessary to change the current care model to a more humanized, collaborative one, in which the professionals work together, which undoubtedly is associated with reduced intervention rates and more satisfaction among women.

It reiterates the importance of the use of national protocols that recommend to provide pregnant women with evidence-based information on the childbirth, as well as to include them in the decision-making process. In addition, it is essential the continuity of the development of public policies and multisectoral actions that encourage the natural birth and others aimed at minimizing the set of determinants that influence the banalization of the performance of cesarean surgeries in Brazil.

Finally, it should be highlighted that the information offered to pregnant women and parturients and their families, as well as the work of the multiprofessional team and the model of obstetric care, can directly involve decision making and the choice of birth route.

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