

## Adherence of professionals to good obstetric practices and interventions performed with parturients

Adesão de profissionais às boas práticas obstétricas e intervenções realizadas com parturientes

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### ABSTRACT

**Objective:** to analyze the association between good obstetric practices and types of delivery. **Methods:** a cross-sectional study, carried out with 207 pregnant women admitted to two reference maternity hospitals, whose data were collected through a questionnaire and chart analysis and analyzed by Pearson's chi-square test. **Results:** it was observed that the parturients with vaginal delivery were oriented about relaxation techniques and non-pharmacological measures for pain relief, encouraged not to remain in bed and to use the Swiss ball. In contrast, women who underwent a cesarean section reported not receiving such interventions. The use of squatting exercises, massages, hot baths and encouragement not to wander were mentioned less frequently by the participants, regardless of the route of delivery. **Conclusion:** it was observed that good obstetric practices were associated with the normal delivery route, while in cesarean delivery, such practices were implemented less frequently. **Descriptors:** Humanizing Delivery; Obstetrics; Natural Childbirth; Humanization of Assistance.

### RESUMO

**Objetivo:** analisar a associação entre as boas práticas obstétricas e os tipos de parto. **Métodos:** estudo transversal, realizado com 207 parturientes internadas em duas maternidades de referência, cujos dados foram coletados por questionário e análise do prontuário e analisados pelo teste Qui-quadrado de Pearson. **Resultados:** observou-se que as parturientes com desfecho de parto vaginal foram orientadas quanto às técnicas de relaxamento e medidas não farmacológicas para o alívio da dor, estimuladas a não permanecer no leito e a utilizar-se da bola suíça. Em contrapartida, as mulheres que foram submetidas à cesariana referiram não receber tais intervenções. O uso de exercícios de agachamento, massagens, banho quente e o estímulo a não deambular foram citados com menor frequência pelas participantes, independentemente da via de parto. **Conclusão:** observou-se que as boas práticas obstétricas estavam associadas à via de parto normal, enquanto, no parto cesáreo, tais práticas foram implementadas com menos frequência. **Descritores:** Parto Humanizado; Obstetrícia; Parto Normal; Humanização da Assistência.

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## Introduction

Humanized childbirth care has been the subject of national and international discussions, especially regarding the conduct used during labor and birth, women's sexual and reproductive rights, and changing the current biomedical model<sup>(1-2)</sup>.

Birth is considered a natural, physiological, and private event that, in the past, occurred at home. However, it was gradually transferred to the hospital environment, adapting to the routines and norms of the hospital institutions and the medical team<sup>(3)</sup>.

It is emphasized, considering that maternal and perinatal morbidity and mortality rates have reduced considerably, that the evolution of Obstetrics and the expansion of assistance programs for pregnant women and newborns have contributed to this, but have originated a new perspective that sees the naturalness of pregnancy and childbirth as a disease, using interventions in an abusive and often inappropriate manner<sup>(4)</sup>. In contrast, recent studies have shown that in normal birth centers there is a lower chance of fetal dystocia and postpartum hemorrhage, and neonatal morbidity and mortality rates are similar to those in hospital settings<sup>(5-6)</sup>.

The Ministry of Health, to compel humanized care to pregnancy, implemented programs and national directives, such as the National Guideline for Assistance to Normal Childbirth, which aims to guide women, health professionals, and managers, in the public and private spheres, on issues related to childbirth routes, respective indications and conduct. The Stork Network and the Program Mother of Paraná emerged to stimulate the autonomy and the rights of women regarding reproductive planning, delivery, and puerperium<sup>(4)</sup> and the implementation of good obstetric practices, which involve actions to humanize care, such as offering liquids, health education, and the use of non-pharmacological methods for pain relief<sup>(2)</sup>.

There are many factors that interfere in the experience of childbirth, such as cultural aspects, the education of the parturients, the access to information, the family support, the experiences in previous

pregnancies and childbirth, the physical space of the institutions, the presence of a companion<sup>(7)</sup> and the attention of the health team that provides care to the pregnant woman and her family, thus making this experience satisfying, cordial, empathetic and humanized<sup>(1)</sup>.

The adherence to good practices, especially by Nursing, as well as the dissemination of this knowledge and its applicability in health services, improves the quality and effectiveness of care. The valorization and the search for humanized normal birth are reflections of a movement in Nursing as well, in an attempt to reduce the high rates of cesarean sections. However, on a daily basis, nurses do not have the authority to autonomously conduct the birth process, which makes it difficult to stimulate the active action of pregnant women, placing them as protagonists<sup>(2)</sup>.

Thus, the relevance of this study is evidenced by the absence of research in the selected region that highlights the adherence to good practices by maternity hospital professionals and, concomitantly, evaluates the interventions performed with the parturient women. In addition, the study may contribute to changes in the current biological model, the stimulus to the implementation of good obstetric practices by health professionals and the encouragement of the autonomy of nurses in the implementation of these behaviors.

In this sense, the question-problem was: "What are the good obstetric practices employed by health professionals in normal delivery and cesarean section in two maternity hospitals? Thus, the objective was to analyze the association between good obstetric practices and types of delivery.

## Methods

Cross-sectional study conducted in a city in the southwest of Paraná, Brazil. The municipality has four hospital institutions of which two maternity hospitals of reference were chosen for the research. One maternity hospital provides care for pregnant women at usual risk through the offer of private services, agreements, and the Unified Health System, and the other

provides care for pregnant women at intermediate and high risk.

The sites were chosen for the study for their very similar characteristics of care to the population, but with the differential of the management of the hospital unit and the risk stratification of the pregnant woman. In both institutions, there is an absence of obstetric nurses, and deliveries, regardless of the route, are conducted by the medical team.

The convenience sample consisted of 207 pregnant women hospitalized in the institutions and researched between June and August 2019, the period in which data collection was performed. The selection of participants considered the pregnant women who were hospitalized in labor and, for identification and control, a daily list offered by the institutions was used. Thus, puerperal women who were hospitalized during the data collection period and who agreed to participate in the research by signing the Informed Consent Form were included. There were no exclusion criteria.

Data collection occurred between June and August 2019 through the application of a questionnaire prepared by the authors based on the literature pertinent to the theme. This is an instrument comprising closed questions with the following variables: age; obstetric history; quality of care provided; interventions performed; choice of delivery route; presence of a companion and applicability of good obstetric practices (fluid and food intake, privacy, no enema, no use of invasive procedures and pharmacological drugs, introduction of relaxation techniques and measures).

The women were approached individually, receiving guidance about the research, and the questionnaire was filled out. To verify the reference to good obstetric practices performed by the health team, the medical records were analyzed, followed by the recording of the information in the same instrument.

The data collected was transferred to an Excel spreadsheet and subsequently submitted to descriptive analysis, with absolute and percentage frequencies, using the Statistical Package for the Social Sciences, version 25.0. The association between good practices

and birth routes was assessed using Pearson's chi-square test ( $p \leq 0.05$ ).

The research was approved by the Ethics Committee on Research Involving Human Beings of the Paranaense University according to Opinion No. 3,364,970/2019 and Certificate of Submission for Ethical Appreciation no. 71855817.0.0000.5188, and was conducted according to the required ethical standards. It is emphasized that the ethical precepts were preserved in accordance with Resolution No. 466/12 of the National Health Council.

## Results

A total of 207 women in labor participated in the study. Of these, 70.5% were between 16 and 34 years old. As for education, most had completed high school (49.3%) and 43.5% lived, on average, with two minimum wages. It was also observed that 32.9% were primigravidae and 79.7% had no history of abortion. Moreover, it is noteworthy that 72.5% of pregnant women had cesarean sections and 27.5% had vaginal deliveries.

Table 1 presents the associations between the characteristics of the care provided to the parturient women and the type of delivery. It was found that 89.5% of the participants who underwent vaginal delivery reported being able to choose the delivery route ( $p=0.000$ ), 89.5% reported having privacy ( $p=0.020$ ) and 77.2% were informed about the interventions used ( $p=0.000$ ). As for cesarean delivery, 91.3% were restricted from drinking liquids or food ( $p=0.000$ ).

When the interventions used during labor and delivery were evaluated, it was observed that, for the parturients with vaginal delivery, 96.5% were submitted to vaginal touch by multiple professionals ( $p=0.000$ ) and 93.0% said they were encouraged to push when expelling the fetus ( $p=0.000$ ). About episiotomy, 57.9% of the parturient women in cesarean delivery denied undergoing it ( $p=0.000$ ), 59.6% had no laceration ( $p=0.000$ ) and 98.0% were not submitted to episiorrhaphy ( $p=0.000$ ), as shown in Table 2.

**Table 1** – Data obtained according to the characteristics of the care provided to parturients in two maternity hospitals. Francisco Beltrão, PR, Brazil, 2019

Variables	Vaginal birth	Cesarean section	Value of p
	n (%)	n (%)	
There was a choice of delivery route			0.000*
Yes	51 (89.5)	35 (23.3)	
No	6 (10.5)	115 (76.7)	
Participated in activities at the institution			0.801
Yes	27 (47.4)	74 (49.3)	
No	30 (52.6)	76 (50.7)	
Has been restricted from drinking liquids or food			0.000*
Yes	14 (24.6)	137 (91.3)	
No	43 (75.4)	13 (8.7)	
Privacy was guaranteed			0.020*
Yes	51 (89.5)	112 (74.7)	
No	6 (10.5)	38 (25.3)	
The companion was of their choice			0.258
Yes	43 (75.4)	101 (67.3)	
No	14 (24.6)	49 (32.7)	
The attendant was informed of the patient's condition			0.227
Yes	44 (77.2)	103 (68.7)	
No	13 (22.8)	47 (31.3)	
Information was passed on about the interventions used			0.000*
Yes	44 (77.2)	49 (32.7)	
No	13 (22.8)	101 (67.3)	

\*Statistical significance for Chi-square test (p&lt;0.05)

**Table 2** – Obstetric interventions used during labor, identified through interviews with parturient women assisted in two maternity hospitals. Francisco Beltrão, PR, Brazil, 2019

Variables	Vaginal birth	Cesarean section	Value of p
	n (%)	n (%)	
Use of enema			0.259
Yes	5 (8.8)	7 (4.7)	
No	52 (91.2)	143 (95.3)	
Received intravenous hydration during labor			0.392
Yes	45 (78.9)	126 (84)	
No	12 (21.1)	24 (16)	
Vaginal touches performed by more than one professional			0.000*
Yes	55 (96.5)	78 (52)	
No	2 (3.5)	72 (48)	
Stimulated to push at the moment of fetal expulsion/directed pulling			0.000*
Yes	53 (93.0)	2 (1.3)	
No	4 (7.0)	148 (98.7)	
Episiotomy is performed			0.000*
Yes	24 (42.1)	2 (1.3)	
No	33 (57.9)	148 (98.7)	
There was a laceration			0.000*
Yes	23 (40.4)	3 (2.0)	
No	34 (59.6)	147 (98.0)	
Episiorraphy is performed			0.000*
Yes	41 (71.9)	3 (2.0)	
No	16 (28.1)	147 (98.0)	

\*Statistical significance for Chi-square test (p&lt;0.05)

Table 3 shows the good obstetric practices adopted by professionals regarding the route of delivery. It was found that women in vaginal labor reported the use of practices with greater frequency when compared to women who underwent cesarean section, and 71.9% of patients received guidance on forms of relaxation for pain relief ( $p=0.000$ ); 73.7% of them used non-pharmacological techniques ( $p=0.000$ );

70.2% did not stay most of the time in bed during labor ( $p=0.000$ ); 78.9% were encouraged to walk and change position ( $p=0.000$ ), and the swiss ball was used by 63.2% of the parturients ( $p=0.000$ ). There is a statistically significant association between not performing squatting, massage, shower referral, and walking exercises with cesarean delivery ( $p=0.000$ ).

**Table 3** – Good obstetric practices adopted by professionals to improve care in two maternity hospitals. Francisco Beltrão, PR, Brazil, 2019

Variables	Vaginal birth	Cesarean section	Value of p
	n (%)	n (%)	
Received guidance on ways to relax for pain relief			0.000*
Yes	41 (71.9)	32 (21.3)	
No	16 (28.1)	118 (78.7)	
Received non-pharmacological techniques for pain relief			0.000*
Yes	42 (73.7)	21 (14.0)	
No	15 (26.3)	129 (86.0)	
During labor, she stayed longer in bed			0.000*
Yes	17 (29.8)	115 (76.7)	
No	40 (70.2)	35 (23.3)	
Durante o trabalho de parto, foi estimulada a caminhar e mudar de posição			0.000*
Yes	45 (78.9)	31 (20.7)	
No	12 (21.1)	119 (79.3)	
Skin-to-skin contact between mother and child was promoted in the first hour after delivery			0.073
Yes	39 (68.4)	82 (54.7)	
No	18 (31.6)	68 (45.3)	
Exercises/ squatting			0.000*
Yes	25 (43.9)	19 (12.7)	
No	32 (56.1)	131 (87.3)	
Massages			0.000*
Yes	23 (40.4)	19 (12.7)	
No	34 (59.6)	131 (87.3)	
Shower			0.000*
Yes	14 (24.6)	6 (4.0)	
No	43 (75.4)	144 (96.0)	
Walks			0.000*
Yes	12 (21.1)	3 (2.0)	
No	45 (78.9)	147 (98.0)	
Swiss ball			0.000*
Yes	36 (63.2)	17 (11.3)	
No	21 (36.8)	133 (88.7)	
Breathing techniques			0.262
Yes	6 (10.5)	9 (6.0)	
No	51 (89.5)	141 (94.0)	

\*Statistical significance for Chi-square test ( $p<0.05$ )

## Discussion

The study analyzed the adherence of professionals to good practices in obstetric care and its association with birth routes and had as limitations the difficulty in finding recent research to compare data and the fact that it was carried out in only one medium-sized city. On the other hand, it provided the participants with a deeper understanding of the theme, as well as an assessment of the assistance provided by health services.

In this study, the high cesarean rate confronts the current World Health Organization recommendation, since several factors are associated with a higher risk of maternal peripartum infections, which favor maternal and neonatal morbidity and mortality, among them, the attendant's initiative during labor<sup>(8)</sup>.

The choice of the type of delivery by the woman is linked to her knowledge on the subject, to the information transmitted by professionals during prenatal care, to her expressed desire and to her gynecological/obstetrical conditions<sup>(9)</sup>. Thus, one can see that many pregnant women do not receive guidance and clarification about each type of delivery to choose one of them and, when the choice is made, the desire of the parturient woman is not implemented due to complications during the process or simply because of the technical and biomedical way many professionals act.

In addition, institutional protocols foresee water and food restriction as a prerequisite of at least eight hours before the surgical procedure. And, in relation to cesarean sections, such practice generates questioning, since some authors describe that the restriction of oral intake during cesarean section is related to maternal mortality by aspiration. However, authors also point out that the release of oral intake has advantages in low-risk birth, providing energy and reducing changes in metabolic pathways<sup>(10)</sup>.

Regarding privacy during labor and delivery, which was understood as the right to an environment that preserves and respects the intimacy of the par-

turient woman, it was found that the participants did not allude to this violation, regardless of the route of delivery, just as in a study conducted in ten health units in which, among the 550 pregnant women questioned, 89.2% reported having privacy when giving birth<sup>(11)</sup>. In this research, a significant association was observed between normal delivery and multiplicity of vaginal touches. It was found<sup>(12)</sup> that 63.0% of the pregnant women interviewed underwent this practice with an interval of less than one hour.

Usually, the vaginal touch is performed for monitoring the evolution of labor. However, the recommendation of the World Health Organization is to perform the procedure, when necessary, in the active phase of labor and with the consent of the woman, and at four-hour intervals for those at low risk. Such a procedure can cause pain and discomfort, as well as promote the development of infections in the maternal peripartum<sup>(8)</sup>.

Regarding the stimulus to exert force at the moment of expulsion of the fetus, there was a statistically significant association with normal delivery. This result is corroborated by a study developed at *Mãe Luzia* Women's Hospital with a sample consisting of 280 puerperae. In this study, 79.3% of pregnant women underwent this practice<sup>(13)</sup>. However, this practice is not recommended, since it compromises the pelvic floor, as well as leads to increased intra-abdominal pressure and may decrease maternal and fetal oxygenation<sup>(14)</sup>.

Another research, developed in a public maternity hospital with 1,524 women, observed that 441 and 429 women were submitted to episiotomy and laceration, respectively<sup>(15)</sup>. However, the study highlighted that these practices are harmful to the usual use during labor, because there is no scientific evidence that proves an advantage for its use, being responsible for perineal and genital traumas<sup>(16)</sup>.

Regarding non-pharmacological techniques, it is emphasized that they are considered non-invasive practices and, whenever possible, should be offered

to the woman for pain relief, making the moment of birth more physiological and natural, reducing the use of drugs and interventions, and stimulating maternal autonomy<sup>(17)</sup>.

Thus, the implementation of these methods, by the nursing team, provides professional autonomy and the rescue of scientific knowledge, using safe practices that reduce unnecessary interventions<sup>(18)</sup>. During the expulsion period, it is paramount that women are free to position themselves and move in a way that makes them feel comfortable, always with a companion to assist them<sup>(19)</sup>.

In this context, it was verified that the application of the Swiss ball was also referred predominantly during vaginal labor, a method that stimulates maternal-fetal circulation, the evolution of uterine contractions, fetal attachment, and provides a decrease in pain in the lumbar region, besides reducing the discomfort caused by pain<sup>(20)</sup>. Similarly, 13.0% of the mothers were encouraged to use the Swiss ball during labor because it is a low-cost method that is easy to apply<sup>(18)</sup>.

## Conclusion

The study shows that the two maternity hospitals adhere to good obstetric practices in labor and birth. It is perceived that the assistance provided to the parturients is based on the guarantee of the right to privacy, encouragement of the presence of a companion, and promotion of skin-to-skin contact in the first hour after birth for both delivery routes.

However, it is noteworthy that good practices were implemented more frequently for women who delivered vaginally compared to those who underwent a cesarean section, while there was also the practice of interventions considered inappropriate, such as vaginal touches by multiple professionals. In normal birth, encouragement of directed pulling and episiorrhaphy due to spontaneous laceration or episiotomy procedure were observed.

## Colaborations

Costa LD, Zonta FNS, Trevisan MG, and Cavaleiri JC contributed to the conception and design, analysis and interpretation of the data, writing of the article, relevant critical review of the intellectual content, and final approval of the version to be published. Warmling KM, Dal Cero T, and Dalorsoletta K contributed to conception and design, analysis and interpretation of data, writing of the article, and relevant critical review of the intellectual content.

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