ANALYSIS OF THE CARE PROVIDED TO WOMEN AND NEWBORNS DURING **DELIVERY AND BIRTH**

Gabriela Colombi de Lima* Graciela Dutra Sehnem** Fernanda Beheregaray Cabral*** Cristiane Cardoso de Paula**** Stela Maris de Mello Padoin***** Tassiane Ferreira Langendorf ******

ABSTRACT

Objective: to analyze the care provided to women and newborns during the labor and birth process. Method: a cross-sectional study using secondary data from 2020-2021, obtained from delivery monitoring forms of 3.547 women assisted at a university hospital in southern Brazil. Data analysis was descriptive and inferential, following approval by the ethics committee. Results: vaginal delivery showed a statistically significant association with timely umbilical cord clamping, breastfeeding, and skin-to-skin contact (p<0.001); Robson classification groups 1, 3, and 4 (p<0.001); freedom of position, aromatherapy, and immersion bathing (p<0.05). Physicians (99.9%) mostly attended deliveries, with the lithotomy position used during the expulsive phase (62.82%) and episiotomy performed in 8.2% of cases. Conclusion: good practices in delivery and birth care are implemented in this service and were associated with vaginal delivery; however, it is necessary to reduce the incidence of the lithotomy position and episiotomy and to expand the role of obstetric nurses.

Keywords: Nursing. Women's Health. Delivery. Obstetric Nursing. Perinatal Care.

INTRODUCTION

From the 1980s onwards, Brazil initiated a movement for the humanization of delivery, linked to the process of democratization and social participation. This movement granted space for the role of the Obstetric Nurse (ON) in direct delivery assistance, since the traditional model of healthcare for women and newborns (NB) began to generate criticism for its highly medicalization and technocratic approach. It proposed a more welcoming, safe, and woman-centered approach to care(1). However, it was in the 1990s that the movements gained strength and changes were demanded in the obstetric setting, which was shown to be inadequate, with excessive and unnecessary interventions, disrespecting women's rights⁽²⁾.

In 1996, the World Health Organization (WHO) published the guide entitled Good Practices for Delivery and Birth Care, which advocates for delivery care to be based on valuing the woman's protagonism⁽³⁾. Its aim was to guide

care for pregnant women by emphasizing the physiology of delivery and birth, humanized and respectful care, and the avoidance of unnecessary interventions⁽⁴⁾. From then on, the movement in favor of obstetric care based on good practices also intensified in the national scenario(5) and more recently, has as an international benchmark the Recommendations for intrapartum care for a positive delivery experience⁽⁶⁾.

Evaluation studies including 606 Brazilian maternity hospitals have shown that wellimplemented public policies, combined with actions based on the best scientific evidence, can promote a positive delivery experience while achieving the goal of reducing adverse maternal and neonatal outcomes⁽⁷⁾.

Despite the efforts embedded in public policies in the field of obstetric care, routine interventionist practices, fragmentation, and low-quality care still occur and negatively impact maternal health outcomes. Among the main interventions during labor and delivery are: the use of intravenous

^{***}Nurse. Doctor in Nursing. Professor of Undergraduate and Graduate Nursing at UFSM. Palmeira das Missões, RS, Brazil. Email: cabralfernandab@gmail.com. ORCID ID: 0000-0002-4809-278X **Nurse. Doctor of Nursing, Professor of Undergraduate and Graduate Nursing at UFSM. Santa Maria, RS, Brazil. Email: cris depaula1@hotmail.com. ORCID: 0000-0003-4122-5161.

^{*****}Nurse. Doctor of Nursing. Professor of Undergraduate and Graduate Nursing at UFSM. Santa Maria, RS, Brazil. Email: stelamaris_padoin@hotmail.com. ORCID ID: 0000-0003-3272-054X

^{******}Nurse. Doctor of Nursing. Professor of Undergraduate and Graduate Nursing at UFSM. Santa Maria, RS, Brazil. Email: tassi.lang@gmail.com. ORCID ID: 0000-0002-5902-7449

oxytocin, restriction of food intake or movement, enemas, episiotomy, and the Kristeller maneuver⁽⁸⁾.

The adherence to best practices in healthcare institutions remains inadequate, as several barriers to implementation persist. Among these are professional barriers (interventionist practices, limited knowledge, medicalization), followed by institutional barriers (lack of infrastructure, ineffective management, shortage of human resources⁽⁹⁾).

Given this scenario, analyzing the care provided to women and newborns during the delivery and birth process becomes an important monitoring tool, serving as an indicator of the quality of obstetric care. Through such monitoring, it is possible to identify which actions are being implemented and which still need improvement to align with public policies and the recommendations of national and international organizations for a positive delivery experience.

Thus, the guiding question is: "What are the clinical-obstetric and care characteristics provided to women and newborns during the delivery and birth process, considering best obstetric practices, in a Delivery Center (DC) that serves as a referral for high-risk pregnancies in a university hospital in Rio Grande do Sul (RS)?" This study aimed to analyze the care provided to women and newborns during the delivery and birth process.

METHOD

This is a retrospective cohort study, of a documentary nature, carried out using secondary data. It followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guideline for quality and transparency of the writing.

The study was conducted in the DC of a university hospital located in Rio Grande do Sul, which is characterized as a medium-sized, high-complexity public institution and a health reference for the region in which it is located. It is noteworthy that this setting is a training field for medical residency in gynecology and obstetrics, thus there is a predominance of delivery assistance by residents. In this context, to meet the objectives and goals proposed by the Improvement and Innovation in Care and Teaching in Obstetrics and Neonatology Project (Apice On), in which the hospital participated during this period, there was encouragement and reorganization of human

resource management to promote the performance of ON in this DC.

The data collection period took place from March to May 2023, and the data analyzed corresponded to the years 2020 and 2021. The study population consisted of women and newborns assisted in the aforementioned setting. The inclusion criterion was women assisted in the Delivery Center (DC), considering both delivery modes—vaginal and cesarean—regardless of gestational risk. The methodology employed was that of a census-type study, collecting data from all members of the population of interest, without the need for sample size calculation.

The data source was the safe delivery checklist, which contains information about the woman and the newborn. Obstetric nurses working in the study setting developed this checklist and aims to record the care provided to women and newborns. Its creation involved internal discussions with the obstetric professionals of the service, and it was implemented in 2020. Nurses fill out the checklist and the data are continuously updated.

The checklist is organized into eight sections, allowing for records such as: hospitalization data (age group, municipality of origin, gestational risk, clinical diagnoses); obstetric history (parity, type of pregnancy, gestational age); labor monitoring (venous puncture, physiotherapy, diet, labor induction, analgesia); vaginal delivery data (mode of delivery, obstetric professional, position during the expulsive stage, episiotomy, degree of laceration, intramuscular oxytocin in immediate postpartum period); birth data (umbilical cord clamping time, skin-to-skin contact, Apgar score, stillbirth, weight, and capurro score); postpartum (breastfeeding within the first hour of life, presence of a companion); sentinel events; and hospital discharge data. These data comprised the variables analyzed in the present study.

The data collected were entered into a spreadsheet using Microsoft Office Excel® software, and the statistical analysis was performed using the Statistical Package for Social Science (SPSS) professional version for Windows.

Categorical variables were described by measures of absolute and relative frequency. To verify the association between the independent variables and the outcome (delivery method), the Chi-square and Fisher's exact tests of association were used. A result of p<0.05 was considered statistically significant.

Regarding ethical issues, Resolution No. 466/12 was followed, and approval was obtained from the Research Ethics Committee under registration number 4,646,734. Considering that the research did not involve direct contact with the participants, it was not necessary to use the Informed Consent Form (ICF). Therefore, the request for exemption from the ICF was approved.

RESULTS

The study included 3547 women, of whom 539 (12.4%) were under 20 years of age, 1742 (49.2%) were between 20 and 29 years old, 1201 (33.9%) were between 30 and 39 years old, and 161 (4.5%) were between 40 and 55 years old; 2595 (99.0%) resided in municipalities in the central region of the state (RS).

Regarding gestational risk, 446 (13%) were classified as usual and 2977 (87%) as high risk. Among the clinical diagnoses of women classified as high risk, 662 (23.2%) cases of Pregnancy-Specific Hypertensive Syndrome (PSHS), 651 (22.9%) of Gestational Diabetes Mellitus (GDM), 610 (21.4%) of Preeclampsia (PE), 392 (13.8%) of iterativity (from two cesarean sections), 197 (6.9%) of preterm labor (PTL), and 90 (3.1%) of fetal growth restriction were evidenced. It is reiterated that a woman could present more than one diagnosis. Cephalic presentation predominated in 2946 (93.6%) of the cases. 1672 (66.1%) of the pregnant women progressed to spontaneous labor.

Regarding the characterization of obstetric history, in terms of parity (n=3501), 1177 (33.6%) were nulliparous and 2324 (66.4%) multiparous; 3387 (98.0%) had a single pregnancy. Concerning Gestational Age (GA), 2831 (82.6%) were

classified as term pregnancies, above 37 weeks. In monitoring labor, it was observed that 2063 (74.6%) women in labor underwent venipuncture, and 1512 (55.1%) were submitted to some type of delivery induction, the most commonly used being misoprostol, followed by intravenous oxytocin and Foley catheter (FC). Regarding delivery outcomes, there were 1996 (56.3%) cesarean sections and 1549 (43.7%) vaginal deliveries (VD). As for the obstetric professional attending the delivery, 2946 (99.9%) of the births were assisted by physicians and 80 (2.7%) by obstetric nurses (ON). Table 1 presents the variables concerning characterization of the care provided to women and newborns (NB) during the delivery and birth process.

Among the newborns (n=3618), there were multiple pregnancies (2%) and stillbirths (0.3%). Regarding care provided during the first hour of life (the "golden hour") (n=3348), 2368 (68.6%) had timely umbilical cord clamping, and 2786 (83.8%) were placed in skin-to-skin contact (SSC) with the mother. When this did not occur, the reasons were: 28 (0.8%) due to maternal conditions; 256 (7.7%) due to newborn conditions; and 163 (4.9%) due to admission to the Neonatal Intensive Care Unit (NICU). 2741 (81.5%) were breastfed within the first hour of life; among those who were not breastfed, 425 (12.6%) had unfavorable clinical conditions (e.g., need for ventilatory support), 38 (1.1%) due to adverse maternal conditions (e.g., postpartum hemorrhagic syndromes), and in 95 (2.8%) breastfeeding was contraindicated (Table 1).

It is reiterated that there is variation in the total "n" analyzed for each variable due to missing information in the evaluated document (safe delivery checklist).

Table 1. Characterization of care provided to women and newborns during the delivery and birth process (N=3547). Santa Maria, RS, Brazil, 2020 and 2021

Variables	Categories	N (%)
Assistance provided to women		
Venipuncture		
	Yes	2063 (74.6)
	No	704 (25.4)
Physiotherapy at the TP		,
•	Yes	707 (20.0)
	No	2834 (80.0)
Diet		` '
	Free	1694 (56.5)
		` '

	Liquid	107 (3.6)
	Zero	1197 (39.9)
Induction of Labor		
Misoprostol	Yes	784 (30.4)
-	No	1795 (69.6)
Oxytocin	Yes	707 (27.4)
Oxytoeni	No	1872 (72.6)
	110	10/2 (/2.0)
Foley catheter	Yes	22 (0.9)
	No	2557 (99.1)
Delivery analgesia	Yes	38 (1.6)
	No	2392 (98.4)
Episiotomy	Yes	212 (8.2)
spinowing	No	2372 (91.8)
0.11		· ·
Delivery route	Cesarean section	1996 (56.3)
	Vaginal Vaginal	1549 (43.7)
Professional who assisted in the delivery	v agmai	1347 (43.7)
Physicians	Yes	2946 (99.9)
7	No	2 (0.1)
Obstetric nurse	Yes	80 (2.7)
	No	2868 (97.3)
Position during the expulsion phase		
	Lithotomy position	948 (62.8)
	Lying down	538 (35.6)
	Squatting position	13 (0.9)
	All fours	6 (0.4)
	Sitting position	1 (0.1)
	Other	3 (0.2)
Laceration		
	1 st degree	492 (61.0)
	2 nd degree	297 (36.8)
	3 rd and 4 th degree	18 (2.2)
Assistance provided to the newborn		
Umbilical cord clamping time	<1	1002 (21.4)
	≤1 minute	1083 (31.4)
Skin-to-skin contact	≥1 minute	2368 (68.6)
JKIII-10-5KIII CUIIIACI	Yes	2786 (83.8)
	No	536 (16.2)
Birth weight	110	330 (10.2)
	≤ 2500 g	431 (13.2)
	≥2500 g	2824 (86.8)
Capurro		(00.0)
.	≤37 weeks	664 (19.8)
	≥37 semanas	2696 (80.2)
Breastfeeding in the first hour of life	- · · · · · · · · · · · · · · · · · · ·	
	Yes	2741 (81.5)
	No	621 (18.5)

Legend: N (population analyzed); L (labor); VD (vaginal delivery); ON (Obstetric Nurse).

Regarding the association between variables of care for the woman and the newborn in the delivery and birth process with the outcome of the delivery, it is evident that the care provided to the newborn at the golden hour and the route of delivery showed statistical significance (p <0.001). There was timely clamping of the umbilical cord, a time greater than or equal to one minute, in 1285 (65.7%) of births via cesarean section and in 1082 (72.4%) via vaginal delivery. Furthermore, of the newborns born vaginally, 1285 (89.2%) were placed in the SSC with the mother and 1264

(86.8%) were breastfed in the first hour. Thus, it is observed that there is a greater number of timely clamping of the umbilical cord, breastfeeding and SSC at the golden hour, when the outcome of the route of delivery is vaginal (Table 2).

Regarding the Robson classification and mode of delivery, the association between the variables corresponding to groups one, three, and four was statistically significant when related to the outcome of vaginal delivery, as well as between groups five and six to ten in the outcome of cesarean section (Table 2).

Table 2. Association between variables regarding assistance to the woman and the newborn during the delivery and birth process (N= 3547). Santa Maria, RS, Brazil, 2020 and 2021

Variables	Categories	Cesarean section N (%)	Vaginal delivery N (%)	p
Assistance to the Newborn				
Umbilical cord clamping time				0.001
	<1 min*	671 (34.3)	412 (27.6)	
	>1 min*	1285 (65.7)	1082 (72.4)	
Breastfeeding in the first hour of life				0.001
	Yes	1476 (77.5)	1264 (86.8)	
	No	428 (22.5)	193 (13.2)	
Skin-to-skin contact				0.001
	Yes	1500 (79.8)	1285 (89.2)	
	No	380 (20.2)	156 (10.8)	
Robson's Classification ***				
	Group 1	171 (38.3)	276 (61.7)	**
	Group 2	244 (52.0)	225 (48.0)	
	Group 3	72 (15.8)	385 (84.2)	**
	Group 4	106 (31.5)	231 (68.5)	**
	Group 5	806 (86.3)	128 (13.7)	**
	Group 6 to 10	481 (68.3)	223 (31.7)	**

Legend: N (population analyzed); ** (Values in bold show a statistically significant association (p<0.001), according to the standardized adjusted residual analysis); ***Group 1: Nulliparous, singleton pregnancy, cephalic presentation, >=37 weeks, in spontaneous labor; Group 2: Nulliparous, singleton pregnancy, cephalic presentation, >=37 weeks, with induction or cesarean section prior to labor; Group 3: Multiparous (excluding previous cesarean section), singleton pregnancy, cephalic presentation, >=37 weeks, in spontaneous labor; Group 4: Multiparous (excluding previous cesarean section). Single, cephalic presentation ≥37 weeks, with induction or cesarean section prior to labor, Group 5: With previous cesarean section, single, cephalic presentation ≥37 weeks, Group 6: All breech deliveries in nulliparous women, Group 7: All breech deliveries in multiparous women (including previous cesarean section), Group 9: All abnormal presentations (including previous cesarean section), Group 10: All single, cephalic presentations <37 weeks (including previous cesarean section).

The association between the use of non-invasive care technologies in the delivery and birth process and vaginal delivery showed statistical significance related to the following variables: freedom of position, aromatherapy, and shower

bath (p < 0.05). Other technologies were also used, such as: hot water bottle, music therapy, pelvic mobilization, dim lighting, ambulation, squatting, butterfly position, and foot bath; however, none of these showed statistical significance (Table 3).

Table 3. Association between the use of non-invasive care technologies in the delivery and birth process and the outcome of vaginal delivery (N=1787). Santa Maria, RS, Brazil, 2020 and 2021

Tecnologias não invasivas de cuidado	Categorias	Parto Vaginal N (%)	p
Non-invasive care technologies	Categories	Vaginal delivery N (%)	p
Freedom of position			0.001
1	Yes	1067 (71.3)	
	No	160 (55.2)	
Aromatherapy		` ,	0.001
.,	Yes	51 (87.9)	
	No	1176 (68.0)	
Shower bath			0.032
	Yes	572 (66.2)	
	No	655 (71.0)	
Breathing exercise		,	0.076
	Yes	502 (71.1)	
	No	725 (67.1)	
Massage		,	0.148
	Yes	266 (71.9)	
	No	961 (67.8)	
Birthing stool		,	0.247
	Yes	55 (75.3)	
	No	1172 (68.4)	
Birthing horse		` ,	0.286
	Yes	210 (66.0)	
	No	1017 (69.2)	
Swiss ball		` ,	0.316
	Yes	444 (67.2)	
	No	783 (69.5)	
Hot pack		•	0.432
-	Yes	10 (58.8)	
	No	1217 (68.8)	

Legend: N ((population analyzed).

DISCUSSION

Based on the results presented, and considering the historical period during which the data were collected (the COVID-19 pandemic), it is observed that good practices in delivery and birth care are implemented in the service that served as the study setting, as demonstrated by the statistical analysis, which showed significantly positive results for vaginal delivery (VD).

The variables analyzed show that most pregnant women are between 20 and 39 years old. This result is consistent with the Nascer no Brasil study, in which 70% of women give birth within this age range⁽¹⁰⁾. However, data from the Live Birth Monitoring Panel reveal that, over the years, there has been an increase in births among mothers aged 30 to 34 years⁽¹¹⁾. This fact may be related to women's professional advancement and their increasing participation in the labor market, which

significantly influences couples' decisions about when to have children, leading to later pregnancies⁽¹²⁾.

Screening for obstetric risk stratification should be carried out continuously at every opportunity when pregnant women access prenatal care. Early identification of risks is one of the key factors for reducing maternal and perinatal mortality. Among the clinical diagnoses of High-Risk Pregnancy (HRP) are: hypertensive syndromes (Pregnancy-Specific Hypertensive Syndrome (PSHS) and preeclampsia PE), gestational diabetes mellitus (GDM), fetal growth restriction, upper urinary tract infection, oligohydramnios/polyhydramnios, placenta previa, among others⁽¹³⁾. Some of these conditions were also found in this study, with the first three being the most prevalent.

Complications related to HRP (high-risk pregnancy) have a higher potential for developing

pathologies with possible negative outcomes or maternal-fetal death. Among these is prematurity, whose occurrence is high worldwide; in Brazil, it is around 11%. Preterm birth is defined as occurring before 36 weeks and 6 days of gestational age (GA), and complications related to prematurity are the leading cause of neonatal death⁽¹⁴⁾. In this study, it was found that 19.8% of newborns were considered premature based on Capurro assessment.

The high number of premature births reflects both access to healthcare services and the quality of care provided to pregnant women and their partners during prenatal care, reinforcing the need for healthcare professionals to pay attention to women throughout pregnancy. Guidance on health care and the development of healthy lifestyle habits are essential in order to reduce the occurrence of complications during pregnancy, delivery, and the postpartum period⁽¹⁵⁾.

Among the healthcare professionals involved in obstetric care, the role of the Obstetric Nurse (ON) stands out, as her actions should be based on best practices in delivery and birth care, in accordance with national and international public health policies. In this way, she contributes to increasing the rates of vaginal births (VB) and promotes women's autonomy as active participants in their own delivery process⁽⁶⁾.

Vaginal delivery is a physiological and natural process that can be experienced without complications by most women and newborns. The inclusion and consolidation of the Obstetric Nurse's role represents potential for change within the current obstetric care model⁽¹⁶⁾. The results of this study show that only 2.7% of vaginal delivery in the study setting were attended by a Obstetric Nurse. Issues related to the reduced number of Obstetric Nurses directly impact their scope of practice.

A study pointed out that the main difficulties in integrating Obstetric Nurses into the delivery process may be related to a shortage of specialized professionals; lack of space for the Obstetric Nurse's performance and autonomy, including work processes based on domination, power, dynamics, and/or gender which must be considered; political and partisan factors influencing institutional management; conflicts with obstetric physicians; and the absence of nurses in the delivery room⁽¹⁷⁾. Delivery should

take place in the same setting as labor—that is, in the same pre-labor, delivery, and postpartum (PDP) room. When a different location is designated for delivery, the physiological process may be compromised.

Regarding newborn care, the Golden Hour is defined as the first postnatal hour of life for both preterm and full-term newborns. This concept in neonatology encompasses the implementation of all evidence-based interventions aimed at achieving better short- and long-term outcomes⁽¹⁸⁾. Timely umbilical cord clamping, skin-to-skin contact (SSC), and breastfeeding within the first hour of life are important practices recommended during the Golden Hour⁽⁶⁾.

The timing of umbilical cord clamping is associated with placental transfusion and has effects on cardiovascular transition at birth, contributing to improved oxygen saturation, reduced blood pressure fluctuations, and enhanced cerebral blood flow. Timely umbilical cord clamping is defined as occurring between the first and third minute after birth or after the cessation of umbilical cord pulsation. In the case of preterm newborns, delayed clamping is also recommended, based on guidelines from scientific societies supported by the best available evidence⁽¹⁹⁾. This recommendation is an established practice in the study setting, where more than 68% of newborns received timely cord clamping.

During the waiting period for clamping, a vigorous newborn may be placed in skin-to-skin contact on the mother's abdomen or chest during the first hour after birth. The benefits of this practice include prevention of hypothermia, facilitation of newborn colonization by the mother's skin flora, and support for the regulation of the newborn's respiratory and circulatory patterns^(6,20). The present study found that 15% of births did not have delayed umbilical cord clamping: however, mother-infant dvads engaged in skin-to-skin contact in more than 86% of cases. The effectiveness of timely umbilical cord clamping is significantly associated with SSC, which serves as a protective factor for the timely performance of clamping, reducing by 24% the likelihood of early clamping⁽²¹⁾.

Moreover, SSC promotes breastfeeding within the first hour of life, which is the 49th WHO recommendation⁽⁶⁾. It is indicated for all newborns, including low-birth-weight infants, provided they are clinically stable and able to breastfeed. Additionally, both SSC and breastfeeding are practices that strengthen the mother—infant bond^(6,20,22). This result aligns with the findings of the present study, which identified vaginal delivery as a protective factor for the early initiation of breastfeeding.

In the present research, it became evident (Table 2) that vaginal births present greater chances of timely umbilical cord clamping, postpartum lactation, stimulation of breastfeeding in the first hour after birth, when compared to cesarean section. The development of guideline concludes the international immediate and uninterrupted postpartum lactation should be a standardized care regardless of the delivery method and in preference to non-essential routine care, which is safe and contributes to the physiological adaptations of the newborn⁽²³⁾. Cesarean section can be a limiting factor for the performance of postpartum lactation, potentially delaying the start of breastfeeding and shortening the duration of exclusive breastfeeding, and, despite good practices being increasingly implemented, difficulties in adherence are still observed when it comes to cesarean section⁽²⁴⁾.

Regarding cesarean section, the WHO considers an occurrence rate between 10 and 15% to be adequate⁽²⁵⁾, however, a high number of cesarean sections are observed worldwide. corresponding to 21.1%, with Brazil standing out in second place with 55.7%, behind only the Dominican Republic which surpasses it with 58.1%⁽²⁶⁾. Given this, the Robson classification is used as an instrument to evaluate, monitor and compare indicators between services or over time within a service, clarifying requirements for the indication of cesarean section in health institutions. It is organized into 10 groups, based on six basic obstetric variables: parity, number of fetuses, previous cesarean section, and onset of labor. gestational age and fetal presentation. The woman should be classified into only one group. The findings of this research are consistent with the groups and their delivery outcomes, following WHO recommendations, grouping pregnant women according to their obstetric characteristics. thus avoiding unnecessary cesarean sections⁽²⁵⁾.

Non-invasive care technologies in the delivery and birth process aim to assist the progress of labor and delivery also provide relief from pain, and discomfort during this period, configuring themselves as nursing care based on the concept of demedicalization⁽²⁷⁾. The provision of these technologies is part of the 21st and 22nd WHO recommendations⁽⁶⁾, and includes: physiotherapy during labor, freedom of position, free ambulation, breathing exercises, massage, immersion bath, acupuncture, Swiss ball, among others⁽²⁷⁾.

In this study, the variables freedom of position, aromatherapy and shower bath were related to the outcome of VD. Freedom of position during labor and delivery implies benefits such as minimizing the perception of maternal pain, highlighting an increase in comfort, well-being and satisfaction on the part of the parturient when performing ambulation. A randomized clinical trial conducted in southern Jordan shows that this practice had a positive impact on maternal outcomes, without a negative impact on neonatal outcomes, and produced better clinical and economic results⁽²⁸⁾.

Aromatherapy, using essential oils, has been shown to be beneficial for pain relief and anxiety reduction, and can be applied alone or in combination with other therapies and has a low cost for its implementation. However, it is still a little-known practice, indicating the need for professional qualification to use this technology⁽²⁹⁾.

Another technology is the hot bath, whether by spraying or immersion is a non-invasive technique of superficial heat skin stimulation, promotes pain relief, and when combined with other technologies can increase the frequency of uterine contractions and reduce the duration of labor⁽³⁰⁾. This is also a low-cost and low-complexity practice, however, it is recognized that there is a need for investment in improving the infrastructure of obstetric centers, since sometimes the number of bathrooms (showers) available does not accommodate the number of parturients needing to use them at the same time. In addition, even more difficult, is the availability of bathtubs for immersion bathing. Shower baths and the use of Swiss balls, in addition to promoting significant pain relief, also lead to relaxation of the parturient, decreasing the duration of labor, increasing uterine contractions, assisting in cervical dilation and fetal descent, among other benefits⁽²⁷⁾.

The limitation found in this study refers to the incompleteness of some information in the documents used as a source for data collection, due to filling errors that could not be retrieved. This

impacts the analysis of the data, revealing the importance of filling in the information that represents the quality of care provided in the service.

CONCLUSION

The results of this investigation reveal advancements in the field of health and nursing in the obstetric setting, considering a reference context for high-risk pregnancies. hospital characterized Although historically by interventional approach, this context has directed efforts and investments towards the adoption of humanized practices aligned with current obstetric care guidelines. The analyses indicate that the care provided to pregnant women and newborns is aligned with national and international guidelines and recommendations, contributing significantly to the strengthening and consolidation of quality

standards in obstetric care.

The findings of this investigation allowed for the analysis of the care provided to women and newborns, and the relevance of the results lies in indicating that good practices in delivery and birth care are present in the study setting, associated with vaginal delivery. However, the evidence points to the need to reduce non-recommended care practices, such as: routine venipuncture, episiotomy, and lithotomy position during the expulsive phase. Furthermore, it highlights the importance of intensifying recommended practices, such as: other positions during the expulsive phase freely chosen by the woman, timely clamping of the umbilical cord, postpartum sterilization and breastfeeding in the first hour of life, and the role of the Obstetric Nurses in assisting with low-risk vaginal deliveries.

ANÁLISE DA ASSISTÊNCIA PRESTADA À MULHER E AO RECÉM-NASCIDO NO PROCESSO DE PARTO E NASCIMENTO

RESUMO

Objetivo: analisar a assistência prestada à mulher e ao recém-nascido no processo de parto e nascimento. **Método:** estudo transversal, com dados secundários dos anos de 2020-2021, obtidos por meio de fichas de monitoramento do parto de 3547 mulheres assistidas em um hospital universitário do Sul do Brasil. A análise dos dados foi descritiva e inferencial após aprovação pelo comitê de ética. **Resultados:** o parto vaginal obteve associação estatisticamente significativa com: clampeamento oportuno do cordão umbilical, amamentação e contato pele a pele (p<0,001); Classificação de Robson 1, 3 e 4 (p<0,001); liberdade de posição, aromaterapia e banho de aspersão (p<0,05). Partos assistidos por médicos (99,9%), com posição litotômica no período expulsivo (62,82%) e episiotomia (8,2%). **Conclusão:** as boas práticas na atenção ao parto e nascimento são desenvolvidas neste serviço e foram associadas ao parto vaginal, entretanto, se faz necessário reduzir a incidência de posição litotômica e episiotomia e ampliar a atuação da enfermeira obstétrica.

Palavras-chave: Enfermagem. Saúde da Mulher. Parto. Enfermagem Obstétrica. Assistência Perinatal.

ANÁLISIS DE LA ASISTENCIA PRESTADA A LA MUJER Y AL RECIÉN NACIDO EN EL PROCESO DE PARTO Y NACIMIENTO

RESUMEN

Objetivo: analizar la asistencia prestada a la mujer y al recién nacido en el proceso de parto y nacimiento. **Método:** estudio transversal, con datos secundarios de los años 2020-2021, obtenidos por medio de fichas de monitoreo del parto de 3547 mujeres asistidas en un hospital universitario del Sur de Brasil. El análisis de los datos fue descriptivo e inferencial, después de la aprobación del comité de ética. **Resultados:** el parto vaginal obtuvo asociación estadísticamente significativa con: pinzamiento oportuno del cordón umbilical, lactancia y contacto piel a piel (p<0,001); Clasificación de Robson 1, 3 y 4 (p<0,001); libertad de posición, aromaterapia y baño en ducha (p<0,05). Partos asistidos por médicos (99,9%), con posición de litotomía en el período expulsivo (62,82%) y episiotomía (8,2%). **Conclusión**: las buenas prácticas en la atención al parto y nacimiento se desarrollan en este servicio y se asociaron al parto vaginal, sin embargo se hace necesario reducir la incidencia de posición de litotomía y episiotomía y ampliar la actuación de la enfermera obstétrica.

Palabras clave: Enfermería. Salud de la mujer. Parto. Enfermería Obstétrica. Asistencia Perinatal.

REFERENCES

1. Aguiar C de A, Lopes GA, Bussadori JC de C, Leister N, Riesco MLG, Alonso BD. Modelo de atenção em centros de parto normal

peri-hospitalares brasileiros: uma revisão de escopo. Ciênc saúde coletiva. 2025. 30(1):e09382023. DOI: https://doi.org/10.1590/1413-81232025301.09382023

2. Medeiros R de C da S, Nascimento EGC do. "Na hora de fazer não chorou": a violência obstétrica e suas expressões. Rev Estud

- Fem. 2022. 30:e71008. DOI: https://doi.org/10.1590/1806-9584-2022v30n371008
- 3. Organização Mundial da Saúde. Maternidade Segura. Assistência ao Parto Normal: um guia prático [site de Internet]. Genebra; 1996 [citado em 20 ago 2022]. 63 p. Disponível em: https://bvsms.saude.gov.br/bvs/publicacoes/maternidade_segura_assi stencia parto normal guia pratico.pdf
- 4. Rodrigues DP, Alves VH, Silva AM, Penna LHG, Vieira BDG, Silva SÉD da, et al. Women's perception of labor and birth care: obstacles to humanization. Rev Bras Enferm. 2022. 75:e20210215. DOI: https://doi.org/10.1590/0034-7167-2021-0215
- 5. Backes MTS, Carvalho KM de, Ribeiro LN, Amorim TS, Santos EKA dos, Backes DS. A prevalência do modelo tecnocrático na atenção obstétrica na perspectiva dos profissionais de saúde. Rev Bras Enferm. 2021. 74:e20200689. DOI: https://doi.org/10.1590/0034-7167-2020-0689
- 6. World Health Organization. Recommendations: intrapartum care for a positive childbirth experience [site de Internet]. Geneva; 2018 [citado em 20 ago 2022]. 210 p. Disponível em: https://iris.who.int/bitstream/handle/10665/260178/9789241550215-eng.pdf?sequence=1
- 7. Leal M do C, Bittencourt S de A, Esteves-Pereira AP, Ayres BV da S, Silva LBRA de A, Thomaz EBAF, et al. Avanços na assistência ao parto no Brasil: resultados preliminares de dois estudos avaliativos. Cad Saúde Pública. 2019. 35:e00223018. DOI: https://doi.org/10.1590/0102-311X00223018
- 8. Souza KCR, Silva TPR, Damasceno AK de C, Manzo BF, Souza KV, Filipe MML, et al. Coexistence and prevalence of obstetric interventions: an analysis based on the grade of membership. BMC Pregnancy Childbirth. 2021. 21:618. DOI: https://doi.org/10.1186/s12884-021-04092-x
- 9. Vidal ÁT, Barreto JOM, Rattner D. Barriers to implementing childbirth recommendations in Brazil: the women's perspective. Rev Panam Salud Publica. 2021. 45:e17. DOI: https://doi.org/10.26633/RPSP.2021.17
- 10. Leal M do C, Granado S, Bittencourt S, Esteves AP, Caetano K. Nascer no Brasil II: pesquisa nacional sobre aborto, parto e nascimento 2022-2023 [site de Internet]. Rio de Janeiro; 2023[citado em 14 mar 2024]. 33 p. Disponível em: https://nascernobrasil.ensp.fiocruz.br/wp-
- content/uploads/2023/11/Dados-preliminares-da-pesquisa-Nascerno-Brasil-2.pdf
- 11. Ministério da Saúde (Br). Painel de Monitoramento de Nascidos Vivos [site de Internet]. Departamento de análise epidemiológica e vigilância de doenças não transmissíveis. Secretaria de vigilância em saúde e meio ambiente; 2023 [citado em 20 nov 2023]. Disponível em: https://svs.aids.gov.br/daent/centrais-deconteudos/paineis-de-monitoramento/natalidade/nascidos-vivos/
- 12. Maloney SI, Abresch C, Grimm B, Lyons K, Tibbits M. Factors associated with giving birth at advanced maternal age in the United States. Midwifery. 2021. 98:102975. DOI: https://doi.org/10.1016/j.midw.2021.102975
- 13. Correa-de-Araujo R, Yoon SS. Clinical Outcomes in High-Risk Pregnancies Due to Advanced Maternal Age. Journal of Women's Health. 2021. 30(2):160–7. DOI: https://doi.org/10.1089/jwh.2020.8860
- 14. Ministério da Saúde (Br). Secretaria de Atenção Primária à Saúde. Departamento de Ações Programáticas. Manual de gestação de alto risco [recurso eletrônico] / Ministério da Saúde, Secretaria de Atenção Primária à Saúde. Departamento de Ações Programáticas.1ª ed. Brasília: Ministério da Saúde, 2022 [citado em 20 nov 2023]. 692 p. Disponível em: https://portaldeboaspraticas.iff.fiocruz.br/wpcontent/uploads/2022/03/manual gestacao alto risco.pdf
- 15. Ye CX, Chen SB, Wang TT, Zhang SM, Qin JB, Chen LZ. Risk factors for preterm birth: a prospective cohort study. Zhongguo Dang Dai Er Ke Za Zhi. Chinese Journal of Contemporary Pediatrics. 2021. 15;23(12):1242–9. DOI:

- https://doi.org/10.7499/j.issn.1008-8830.2108015
- 16. Dulfe PAM, Crespo NCT, Almeida VLM, Alves VH, Pereira AV, Rodrigues DP, et al. Assistência da enfermeira obstétrica ao parto e nascimento: uma revisão sistemática. Revista Saúde. 2022. 48:44323-17. DOI: https://doi.org/10.5902/223658344323
- 17. Ferreira RN, Vargas MA de O, Velho MB, Zocche DA de A, Rabelo M, Nhime ASS. Identidade profissional e limitação da autonomia da Enfermeira Obstetra em hospital de ensino: estudo qualitativo. Esc Anna Nery [Internet]. 2024. 28:e20240064. DOI: https://doi.org/10.1590/2177-9465-EAN-2024-0064pt
- 18. Lamary M, Bertoni CB, Schwabenbauer K, Ibrahim J. Neonatal Golden Hour: a review of current best practices and available evidence. Curr Opin Pediatr. 2023. 35(2):209-217. DOI: https://doi.org/10.1097/mop.000000000001224
- 19. Surak A, Elsayed Y. Delayed cord clamping: Time for physiologic implementation. J Neonatal Perinatal Med. 2022. 15(1):19-27. DOI: https://doi.org/10.3233/NPM-210745
- 20. Brimdyr K, Stevens J, Svensson K, Blair A, Turner-Maffei C, Grady J, et al. Skin-to-skin contact after birth: Developing a research and practice guideline. Acta Paediatrica. 2023. 112(8):1633–43. DOI: https://doi.org/10.1111/apa.16842
- 21. Strada JKR, Vieira LB, Gouveia HG, Betti T, Wegner W, Pedron CD. Factors associated with umbilical cord clamping in term newborns. Rev esc enferm USP. 2022. 56:e20210423. DOI: https://doi.org/10.1590/1980-220X-REEUSP-2021-0423
- 22. Canario MA dos SS, Maria Aparecida Baggio, Caldeira S, Maciel Cardelli AA, Valongo Zani A, Pimenta RA. Boas práticas e intervenções no parto em maternidades públicas de referência. Ciênc. cuid. saúde. 2024. 230. DOI: https://doi.org/10.4025/ciencuidsaude.v23i0.68452
- 23. Brimdyr K, Stevens J, Svensson K, Blair A, Turner-Maffei C, Grady J, et al. Skin-to-skin contact after birth: Developing a research and practice guideline. Acta Paediatr. 2023. 112(8):1633–43. DOI: https://doi.org/10.1111/apa.16842
- 24. Getaneh T, Negesse A, Dessie G, Desta M, Temesgen H, Getu T, Gelaye K. Impact of cesarean section on timely initiation of breastfeeding in Ethiopia: a systematic review and meta-analysis. Int Breastfeed J. 2021. 5;16(1):51. DOI: https://doi.org/10.1186/s13006-021-00399-9
- 25. Organização Mundial de Saúde. Declaração da OMS sobre taxas de cesáreas [site de Internet]. Suiça, 2015 [citado em 10 nov 2024]. Disponível em: https://iris.who.int/bitstream/handle/10665/161442/WHO_RHR_15. 02_por.pdf?sequence=3
- 26. Betran AP, Ye J, Moller AB, Souza JP, Zhang J. Trends and projections of caesarean section rates: global and regional estimates. BMJ Global Health. 2021. 6(6):e005671. DOI: https://doi.org/10.1136/bmjgh-2021-005671
- 27. Prata JA, Pamplona ND, Progianti JM, Mouta RJO, Correia LM, Pereira AL de F. Tecnologias não invasivas de cuidado utilizadas por enfermeiras obstétricas: contribuições terapêuticas. Esc Anna Nery. 2021. 26:e20210182. DOI: https://doi.org/10.1590/2177-9465-EAN-2021-0182
- 28. Khresheh R, Mosleh S, Shoqirat N, Mahasneh D, Lesley Barclay AO. Effects of Ambulation during the First Stage of Labor on Maternal and Neonatal Outcomes: A Randomized Controlled Trial. Nursing and Midwifery Studies. 2023. 12(1):1. DOI: 10.4103/nms.nms 18 22
- 29. Kaya A, Yeşildere Sağlam H, Karadağ E, Gürsoy E. The effectiveness of aromatherapy in the management of labor pain: A meta-analysis. European Journal of Obstetrics & Gynecology and Reproductive Biology: X. 2023. 20:100255. DOI: https://doi.org/10.1016/j.eurox.2023.100255
- 30. Biana CB, Cecagno D, Porto AR, Cecagno S, Marques VA, Soares MC. Non-pharmacological therapies applied in pregnancy and labor: an integrative review. Rev Esc Enferm USP. 2021. 55:e03681. DOI: https://doi.org/10.1590/S1980-

220X2019019703681

Corresponding author: Tassiane Ferreira Langendorf. Av. Roraima nº 1000 Cidade Universitária Bairro - Camobi, Santa Maria - RS, 97105-900. Telefone: (55) 999954956, Email: tassi.lang@gmail.com

Submitted: 11/03/2025 **Accepted:** 07/11/2025

Financial support:

This work was carried out with support from the Coordination for the Improvement of Higher Education Personnel (CAPES) – Brazil (BR) – Funding Code 001.