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Factors associated with the implementation of the partogram as a facilitating technology in childbirth care

Fatores associados à implementação do partograma como uma tecnologia facilitadora na assistência ao parto

Factores asociados a la implementación del partograma como tecnología facilitadora en la atención del parto



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ABSTRACT

Objective: To evaluate the implementation of the partogram as a facilitating technology in childbirth care and associated factors. Method: Cross-sectional study conducted in a maternity hospital in the city of Divinópolis, MG, in 2023. A structured questionnaire on childbirth care was applied to the puerperal women, gathering clinical data and the pregnant woman's booklet. Descriptive statistical analysis of the data was performed, and Fisher's exact test, Pearson's Chi-square test and Mann Whitney test were used to verify associations. The results considered significance level at 5%.

Results: 213 puerperal women participated in the research. Effective best practices included the presence of a companion (94.4%) and the administration of oxytocin after the expulsion period (92.5%). Information about the partogram was obtained from 180 (84.5%) medical records. Among these, the prevalence of births that were monitored with the professionals' entries in the partogram was 36.6%. The partogram was more frequently completed in the records of married puerperal women (p=0.027) and those who had premature rupture of membranes (p=0.029).

Conclusions: The Partogram was implemented in an incipient manner in the maternity ward and was more frequently completed in the medical records of married puerperal women and those who had premature rupture of membranes.

Descriptors: Midwifery; Nursing; Humanizing Delivery; Tocology.

RESUMO

Objetivo: Avaliar a implementação do partograma como uma tecnologia facilitadora na assistência ao parto e fatores associados. Método: Estudo transversal realizado em uma maternidade do município de Divinópolis, MG, no ano de 2023. Utilizou-se formulário estruturado sobre a assistência ao parto aplicado às puérperas reunindo dados clínicos e caderneta da gestante. Realizou-se análise estatística descritiva dos dados e, para verificar as associações, foram utilizados o Teste exato de Fisher. Qui quadrado de Pearson e Mann Whitney. Os resultados consideraram significância em 5%.

Resultados: Participaram da pesquisa 213 puérperas. As boas práticas efetivas incluíam a presença do acompanhante (94,4%) e a administração de ocitocina após o período expulsivo (92,5%). Obteve-se informações sobre o partograma em 180 (84,5%) prontuários. Entre estes a prevalência de partos que tiveram acompanhamento com o registro dos profissionais no partograma foi de 36,6%. O preenchimento do partograma foi maior no caso de puérperas casadas (p=0,027) e aquelas que tiveram ruptura prematura de membrana (p=0.029).

Conclusões: O partograma foi implementado de forma incipiente na maternidade e seu preenchimento foi mais frequente no prontuário de puérperas casadas e as que tiveram ruptura prematura de membrana.

Descritores: Assistência ao Parto; Enfermagem; Humanização de Assistência ao Parto; Tocologia.

Objetivo: Evaluar la implementación del partograma como tecnología facilitadora en la atención del parto y factores asociados.

Método: Estudio transversal realizado en una maternidad de la ciudad de Divinópolis, MG, en 2023. Se utilizó un formulario estructurado sobre la atención del parto aplicado a las puérperas, recogiendo datos clínicos y el cuaderno de la gestante. Se realizó análisis estadístico descriptivo de los datos y se utilizó la prueba exacta de Fisher, la prueba Chi-cuadrado de Pearson y la prueba de Mann Whitney para verificar las asociaciones. Los resultados consideraron significancia al 5%.

Resultados: Participaron de la investigación 213 puérperas. Las buenas prácticas efectivas incluyeron la presencia de un acompañante (94,4%) y la administración de oxitocina después del período de expulsión (92,5%). La prevalencia de nacimientos que fueron acompañados con el registro de los profesionales en el partograma fue del 36,6%. La finalización del partograma fue mayor en el caso de puérperas casadas (p=0,027) y en aquellas que presentaron rotura prematura de membranas (p=0,029).

Conclusiones: El Partograma se implementó de manera incipiente en la maternidad y se completó con mayor frecuencia en los prontuarios de las puérperas casadas y de aquellas que presentaron rotura prematura de membranas.

Descriptores: Partería. Enfermería. Parto humanizado. Tocología.

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■ INTRODUCTION

The operationalization of safe childbirth requires an adequate structure, detailed monitoring of the entire process and the use of good practices in labor and childbirth care, such as the partogram, the birth plan and the promotion of a physiological birth. Unnecessary interventions should be avoided, thus promoting gold-standard care for the mother/baby dyad⁽¹⁾.

In the last two decades, organizations such as the Brazilian Ministry of Health and the World Health Organization (WHO) have encouraged the performance of natural childbirths and the reduction of cesarean sections. Best practices should ensure autonomy and respect for the woman's right to be the protagonist during pre-labor and delivery, encourage the use of non-pharmacological methods of pain relief, freedom of position and always be based on scientific evidence⁽¹⁾.

The best evidence reinforces that good practices and humanization in labor and childbirth care aim to provide well-being for women and reduce risks for the mother, baby and family. These practices are considered to motivate successful experiences in obstetric processes and are achieved by reducing negative perinatal outcomes⁽²⁾.

The movement for humanization in childbirth care was initially emphasized with the categorization of care practices in childbirth management in 1996 by the WHO, which were divided into four categories. Category "A" lists useful practices that should be encouraged; "B" describes harmful practices that should be eliminated; and category "C" lists practices without evidence to support a recommendation. Category "D" lists practices that are frequently used inappropriately. The description of these categories was implemented in an attempt to strengthen the correct use of best practices and promote evidence-based care throughout the childbirth process, aiming for care based on pain relief, physical and emotional comfort, freedom of choice for the baby's birth and the best mode of delivery⁽³⁾.

In care practice, there is a gap between what is recommended by scientific evidence and the implementation of best practices. The use of the partogram, for example, has been recommended by the WHO since 1994, and by the Brazilian Federation of Gynecology and Obstetrics Associations (*Federação Brasileira das Associações de Ginecologia e Obstetrícia* - Febrasgo) since 1998, but it is still little used in Brazilian maternity hospitals⁽⁴⁾.

The partogram is a graphic representation of labor (LAB), that allows monitoring its progress, documenting and diagnosing abnormalities, as well as indicating appropriate measures to correct these deviations, thus avoiding unnecessary interventions. It comprises a portrait of the labor progress, through which we evaluate cervical dilation, fetal presentation descent, fetal heart rate, contractions, amniotic sac rupture, among other aspects⁽⁴⁾. Therefore, the partogram is an important instrument in quaternary prevention, which comprises a set of activities used to identify patients who are at risk of over-medicalization and reduce such interventions to minimize iatrogenesis⁽⁵⁾.

It is believed that the use of technologies in health-care can qualify maternal and perinatal care, enabling a continuous and longitudinal development of care processes and, consequently, greater safety during labor and childbirth⁽⁶⁾. Among these technologies, the creation of safety protocols recommended by the WHO stands out. In 2017, the WHO launched the guide for implementing the Safe Childbirth Checklist (SCC). The purpose of this tool is to reduce avoidable adverse events in maternal and perinatal care through simple and effective practices⁽⁷⁾.

Introducing practices that are based on scientific evidence, such as the partogram, requires more than knowledge and convictions, as it involves behavioral changes, overcoming barriers, and filling gaps in knowledge transfer. Healthcare professionals play an important role in its implementation in labor and childbirth care⁽⁸⁾.

Regarding maternal and child care, improving care associated with patient safety is the basis for reducing maternal and infant mortality rates. It is known that 830 women die every day worldwide due to problems related to pregnancy and childbirth. It is estimated that better care before and after childbirth would prevent maternal and infant deaths, potentially reducing these deaths by 1.49 million per year worldwide⁽⁶⁾.

It is considered that, for safe and respectful childbirth care, it is essential to respect the practices proposed by the WHO, as well as to use tools that include them in the daily routine of healthcare services. It becomes urgent for healthcare professionals to base their practices on scientific evidence, without neglecting the human and intimate aspect of childbirth. Therefore, this research raises the following question: Do healthcare professionals use the partogram as a facilitating technology in their clinical practice? What factors may be associated with the implementation of best practices, such as the use of the partogram?

Therefore, this study aims to evaluate the implementation of the partogram as a facilitating technology in childbirth care and associated factors.

METHOD

This is an analytical observational study with a cross-sectional design, following the recommendations of the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) for observational studies.

The study was conducted in a medium-sized maternity hospital, a reference for the Unified Health System (*Sistema* Único *de Saúde* - SUS) and the supplementary network, located in Divinópolis, which serves the entire health micro region and has a neonatal and adult ICU. The maternity hospital has 40 beds, of which 16 are for supplementary health. The inpatient unit consists of a pre-delivery room with four individual beds for SUS users, and the obstetric center has 3 rooms. The service also has 20 shared beds for SUS users, with four beds for gestational complications. The professional team includes 10 obstetric nurses, working on a 12x36-hour shift rotation.

Annually, it is estimated that 1,038 vaginal births occur in this reference maternity hospital. The eligible population for the study consists of parturients admitted to the maternity between January 1 and December 31, 2023, who had a vaginal birth through SUS at this service, aged between 14 and 40 years. The sample size was calculated using the Open Epi software version 3.01, for a 95% confidence level, 5% precision, and a

50% proportion for multiple outcomes, which provides the largest sample size for a finite population (n=1,038). Thus, meeting the design criteria⁽⁹⁾ the estimated sample size was 213 puerperal women.

A research form was developed containing 30 questions about information (sociodemographic, clinical and related to obstetric care practices). The latter were based on the WHO SCC⁽⁷⁾. The data source initially consisted of the medical records of the puerperal women and, subsequently, interviews with the participants to complement the information missing from the secondary data. This strategy favored the completion of 100% of the questions.

The dichotomous variables (yes/no) obtained from the medical records of the puerperal women and listed in the SCC⁽⁷⁾ were: presence of a companion, administration of IM oxytocin in the 1st minute after delivery, the baby's stay with the mother and breastfeeding in the first hour of life, uterine dynamics, auscultation of the FHR every 30 minutes and use of the partogram. Also extracted from the medical records were: delivery position (lithotomy, vertical/squatting, lateral, hands and knees, no information) and cord clamping (timely, early, no information). The variables collected in the interview and which were also prepared from the SCC(7) were: pharmacological pain relief (shower, shower and ball, shower, ball and massage, other, none used); and the dichotomous variables (yes/no): directed pushing instructions, choice of delivery position by the parturient, and skin-to-skin contact.

The sociodemographic and clinical characteristics of the study participants were obtained from interviews with the puerperal women and constituted the independent variables of the investigation. The sociodemographic variables were: age group (complete years); origin (Divinópolis, Carmo do Cajuru, Perdigão and others); race (white and non-white); marital status (single/widowed and married/stable union); education level (incomplete elementary school, complete elementary school, incomplete high school, complete higher education); family income (up to 1 minimum wage, from 1 minimum wages to 1.49 minimum wages, from 1.5 minimum wages to 1.99 minimum wages, from 2

minimum wages to 2.49 minimum wages and above 2.5 minimum wages); profession/occupation (employed, unemployed). Pregnancy and delivery data were also categorized, with complications during pregnancy and artificial rupture of membranes being classified as "yes" and "no". The number of pregnancies, number of deliveries, number of abortions and gestational age were also extracted. The dependent variable of the study was the completion of the partogram. The data was tabulated using a Microsoft Excel 2016 spreadsheet. Data consistency analysis was performed, and any discrepancies were resolved. Statistical analysis was performed using the Statistical Package for the Social Sciences (SPSS) software, version 20.0.

Qualitative variables were presented in absolute and relative frequencies. The normality of quantitative variables was tested using the Shapiro-Wilk test, and, because they had an asymmetric distribution, they were presented in median and quartiles.

To compare qualitative variables with the outcome of completing the partogram, Pearson's chi-square test and Fisher's exact test were used. The comparison of quantitative variables with the partogram completion was performed using the Mann-Whitney test. The significance level adopted was 95% (p \leq 0.05).

This study was submitted to the Research Ethics Committee with Human Beings at the *Universidade Federal de São João del-Rei*, as well as the institution involved, and received a favorable opinion; data collection was carried out after reading and signing the Informed Consent Form, as well as the assent form for adolescent participants.

■ RESULTS

A total of 213 puerperal women participated in the study, ranging from 14 to 40 years old, with a predominance of the 19 to 30 age group (69.5%). Regarding marital status, 62.9% were single or widowed and 37.1% were married or in a stable union. Among the puerperal women, 48.3% had complete high school and 22.1% had a family income of up to one minimum wage.

Regarding the occupation of the participants, 72 (33.8%) were unemployed, 138 (64.8%) were engaged in some work activity and two of them did not wish to provide information. The majority of the participants were from the city where the maternity hospital was located (46.5%) and were non-white (80.8%), as shown in Table 1.

The median number of pregnancies was 2 (Q1: 1; Q3: 3) and births at 2 (Q1: 1; Q3: 2). The median gestational age was 39.2 weeks (Q1: 38; Q3: 40.1) and the median number of prenatal consultations was 10 (Q1: 8; Q3: 12).

Table 2 shows the frequency of implementation of best practices in labor and childbirth care.

From the total study participants (n=213 100%), information on the partogram was obtained from 180 (84.5%) medical records. Among these, the prevalence of births monitored by professionals registered on the partogram was 36.6%.

In the analysis of factors associated with partogram completion, there was no association with quantitative variables, only with qualitative variables, as shown in Table 3.

DISCUSSION

This study shows that being married is associated with the completion of the partogram, as well as artificial rupture of the membrane. In the case of a single marital status, there is a greater risk of negative perinatal outcomes, since the presence of the father contributes to maternal support and care during labor and the puerperium⁽¹⁰⁾. This aspect may have led healthcare professionals to a greater need for detailed monitoring of labor and childbirth, with the completion of the partograph, minimizing the risks to the health of the mother and baby due to a weakened support network⁽¹¹⁾. It is emphasized that 53.5% of births did not have their progress recorded on the partograph. This finding is greater than the results found in the Born in Brazil (Nascer no Brasil) survey, according to which 41.4% of patients had their labor progress recorded in this instrument⁽¹²⁾.

Table 1 – Sociodemographic characteristics of the study participants. Divinópolis, MG, Brazil, 2023. (n=213)

Variables	n (%)
Age group	
14 – 18 years	20 (9.4)
19 – 30 years	148 (69.5)
31 – 40 years	43 (20.2)
No information	2 (0.9)
Education level	
Incomplete Elementary School	18 (8.5)
Complete Elementary School	24 (11.3)
Incomplete High School	42 (19.7)
Complete High School	102(47.9)
Incomplete Higher Education	10 (4.7)
Complete Higher Education	15 (7.0)
No information	2 (0.9)
Family income	
< 1 minimum wage	47 (22.1)
1 minimum wage to 1.49 minimum wage	30 (14.1)
1.5 minimum wage to 1.99 minimum wage	42 (19.7)
1.99 minimum wage to 2.49 minimum wages	34 (16.0)
> 2.5 minimum wages	35 (16.4)
No information	25 (11.7)
Origin	
Divinópolis	99 (46.5)
Carmo do Cajuru	15 (7.0)
Perdigão	13 (6.1)
Others	24 (11.3)
No information	62 (29.1)

Table 2 – Frequency of implementation of best practices with study participants. Divinópolis, MG, Brazil, 2023. (n=213)

Variables	n (%)
Non-pharmacological pain relief methods	
Shower	53 (24.9)
Shower and ball	28 (13.2)
Shower, ball and massage	49 (23.0)
Others	33 (15.5)
Not used	45 (21.1)
No information	5 (2.3)
Presence of companion	
Yes	201(94.4)
No	9 (4.2)
No information	3 (1.4)
Guidance on directed pushing	
Yes	170(79.8)
No	40 (18.8)
No information	3 (1.4)
Choice of delivery position by the parturient	
Yes	142(66.7)
No	67 (31.5)
No information	4 (1.8)
Delivery position	
Lithotomy	167(78.5)
Vertical/Squatting	28 (13.1)
Lateral	3 (1.4)
Hands and knees	10 (4.7)
No information	5 (2.3)
Uterine dynamics	
Yes	94 (44.1)
No	104 (48.9)
No information	15 (7.0)

Table 2 – Cont.

Variables	n (%)
FHR auscultation every 30 min.	
Yes	184 (86.4)
No	23 (10.8)
No information	6 (2.8)
Partogram	
Yes	66 (31.0)
No	114 (53.5)
No information	33 (15.5)
Cord clamping	
Timely	133 (62.5)
Early	65 (30.5)
No information	15 (7.0)
IM Oxytocin administration in the 1st min. after birth	
Yes	197 (92.5)
No	0 (4.7)
No information	6 (2.8)
Baby remained with the mother in the 1st hour of life	
Yes	153 (71.8)
No	59 (27.7)
No information	1 (0.5)
Baby breastfed in the 1st hour of life	
Yes	105 (49.3)
No	108 (50.7)
Skin-to-skin contact performed	
Yes	105 (49.3)
No	108 (50.7)

Table 3 – Factors associated with partogram completion. Divinópolis, MG, Brazil, 2023

Variables		Partogram Completion			
	Yes (n%)	No (n %)	Total (n)	P-value	
Marital status (n=180)					
Single/Widowed	34 (51.5)	78 (68.4)	112 (62.2)		
Married	32 (48.5)	36 (31.6)	68(37.8)	0.027 †	
Total	66 (100)	114(100)	180 (100)		
Education level (n=178)					
Incomplete Elem. School	3 (4.5)	12 (10.5)	15 (8.3)		
Complete Elem. School	5 (7.6)	17 (14.9)	22 (12.2)		
Incomplete High School	14 (21.2)	22(19.3)	36 (20.0)		
Complete High School	31 (47.0)	49 (43.0)	80 (44.4)	0.279*	
Incomplete Higher Edu.	6 (9.1)	4 (3.5)	10 (5.6)		
Complete Higher Edu.	5 9 (7.6)	10 (8.8)	15 (8.3)		
Total	64(100)	114(100)	178(100)		
Family income (n=180)					
>1 min. wage	14 (21.2)	23 (20.2)	37 (20.6)		
>1 min. wage. <1.5 min. wage	12 (18.2)	16 (14.0)	28 (20.6)		
>1.5 min. wage <2 min. wage	8 (12.1)	22 (19.3)	30 (16.7)		
>2 min. wage <2.5 min. wage	14 (21.2)	189 (15.8)	32 (17.8)	0.742*	
> 2.5 min. wage	10 (15.2)	21 (18.4)	31(17.2)		
No information	8 (12.1)	14 (12.3)	22 (12.2)		
Total	66 (100)	114 (100)	180(100)		
Race (n=180)					
White	13 (19.7)	23 (20.2)	36 (20)		
Non-white	53 (80.3)	91 (79.8)	144(80.0)	0.938*	
Total	66(100)	114	180(100)		

Table 3 – Cont.

Variables	Partogram Completion			
	Yes (n%)	No (n %)	Total (n)	P-value
Complications during pregnancy (n=179)				
Yes	30 (45.5)	61(53.5)	91(50.6)	
No	36 (54.5)	52 (45.6)	88 (48.9)	0.271*
Total	66 (100)	113 (100)	179 (100)	
Artificial rupture of membranes (n=177)				
Yes	41 (62.1)	49 (43.0)	90 (50.0)	
No	25 (37.9)	62 (57.0)	87(50.0)	0.029 †
Total	66 (100)	111(100)	177 (100)	
Gestational age				
Q1	38.1	38.0		
Median	39.2	39.2	171	0.795‡
Q3	40.2	40.1		
Number of pregnancies				
Q1	1	1		
Median	2	2	176	0.299 [‡]
Q3	2	3		
Number of childbirths				
Q1	1	1		
Median	1	2	176	0.306 [‡]
Q3	2	3		

*Pearson's chi-square

**Fisher's exact test †Mann Whithney

A national study found the same association when we observed the artificial rupture of membranes and showed that this practice was used recklessly, especially before the moment when the instrument itself indicates the need for interventions⁽¹³⁾. The *Nascer no Brasil* survey also showed that this practice is repeated to accelerate the labor process and reduce the number of instrumental deliveries⁽¹³⁾, however, the WHO categorizes amniotomy as a practice with insufficient evidence to support a clear recommendation, making it a practice that should be used cautiously⁽³⁾.

In the present study, 48.4% participants underwent artificial rupture of membranes during labor. Authors found similar and even lower results in the *Nascer no Brasil* survey. This practice is categorized as a practice of inappropriate use⁽³⁾, often being used only to accelerate the labor process and needs to be reconsidered, considering the numerous advantages for the mother/baby dyad⁽¹³⁾.

The association between partogram completion and premature rupture of membranes found in this study can be explained by considering that this procedure predisposes to negative outcomes in childbirth, such as infection, which may have led to greater concern and attention from the professional, resulting in partogram completion. (14) It can also be explained by the high turnover of beds in the maternity ward and the need to release beds quickly, leading professionals to adopt a routine of interventions to create the "ideal" scenario. Therefore, in addition to using the partogram, there is a need to train these professionals to understand the interventions and to complete the partogram properly, as its incorrect use may increase the chance of unnecessary cesarean sections. (15) In fact, a systematic review with meta-analysis showed that the training received by professionals increased six times the chance of them performing active management of care for the parturient in the third stage of labor⁽¹⁶⁾.

It is important to highlight that in this study, the partogram was underused, as shown in a study in the city of Goiânia, where 28.5% of patients had the instrument attached to their medical records, with 13% of them having no notes at all, raising the issue of professionals' lack of knowledge and difficulties regarding its use⁽¹⁷⁾. Another study reaffirms the need to raise

awareness among professionals regarding the correct and continuous completion of the partogram and also its understanding in order to prioritize its completion even when the work routine is challenging⁽¹⁸⁾.

The present study also showed that 78.4% of women gave birth in the lithotomy position. The number listed in this study, regarding the lithotomy position during birth, is lower than that found in other studies, including the *Nascer no Brasil* survey. Despite this, discussing body position during childbirth is relevant, since the most reliable international evidence proves that this is the reason for greater perineal pain, high incidence of instrumentalization during childbirth and non-reassuring fetal heart rate (18).

It is necessary to reflect on the lithotomy position considering that it is part of the context of childbirth in a cultural way and this makes it appropriate for childbirth, from the point of view of the parturients themselves, although their perspective positively evaluates the vertical position during childbirth and relates it to greater autonomy during childbirth, less intervention, faster fetal descent, reduced labor duration, decreased pain, and greater comfort. (17) Evidence shows that the same occurs given the healthcare model practiced in our country, which leads to the process of medicalization in childbirth (15).

Research in Brazilian institutions has strengthened the adherence of parturients to the vertical position and states that this scenario is even more frequent in the presence of an obstetric nurse⁽¹⁹⁾. Scientific evidence also points to the importance of movement during labor and that the vertical, squatting or even standing positions facilitate the expulsive stage⁽¹⁷⁾.

Regarding care for the newborn (NB), in most deliveries the umbilical cord was clamped at an appropriate time. This practice has been the subject of discussion in the literature about the favorable moment for its performance. The WHO recommends clamping the umbilical cord after its pulsation has completely stopped, which is defined as timely clamping. It is evident that most parturients had the cord clamped at an opportune time, corroborating Brazilian research⁽²⁰⁾.

Among the benefits related to this practice, we can mention: higher blood levels, greater iron supply, favoring the reduction of iron deficiency in the first year of life, higher rates of maintenance of exclusive breastfeeding and stability of the baby's body temperature⁽²⁰⁾. Still, it is important to emphasize that such recommendations are based on a favorable scenario and usual risk in birth care, and that the numbers reflected in this study did consider the scenario in which the cord clamping was performed. Therefore, early cord clamping may be necessary in complications with newborns or the parturient, thus considering the need and risk/benefit.

It was observed in this study that, among the practices analyzed, those that showed the best results were the high proportion of companion presence (94.4%) and the application of oxytocin in the third stage (92.5%), corroborating what is outlined in the Improvement and Innovation in Care and Teaching in Obstetrics and Neonatology (Aprimoramento e Inovação no Cuidado e Ensino em Obstetrícia e Neonatologia - APICE ON) project, which is a project of the Ministry of Health in partnership with reference health institutions in Brazil, which recommends improvements in the scope of care during labor and childbirth, reproductive planning and care for women in situations of sexual violence in teaching hospitals of the Rede Cegonha, with the objective of increasing the scope of the performance of hospitals in the SUS network(21).

It is important to highlight that in this study, less than half of the parturients were able to breastfeed their babies in the first hour of life. According to the National Study of Infant Feeding and Nutrition (*Estudo Nacional de Alimentação e Nutrição Infantil -* ENANI), the prevalence of breastfeeding in the first hour of life in Brazil is low: the rate is 62.4%, which highlights the need for actions involving healthcare professionals to improve this rate. A study conducted in a medium-sized hospital in the city of Maringá found a lack of knowledge among healthcare professionals about breastfeeding in the first hour of life; this care is not guaranteed in the institution, revealing challenges and suggestions for implementing this best practice⁽²²⁾

Best practices have a cost/benefit and a significant impact. A study conducted in a Birthing Center in Rio de Janeiro lists the costs of natural birth care, making a comparison with some other studies. One of these comparisons shows that cesarean sections have higher

costs, around 50% more, than normal births, with the most relevant point being the medicalization of child-birth care. However, although best practices have a lower cost than harmful practices, it is important to emphasize that ensuring adequate perinatal care requires free and safe access for women at all stages of the labor and childbirth process⁽²⁴⁾.

The adoption of best practices is easy to implement and can bring about considerable changes in obstetric care in Brazil, going far beyond saving financial resources. Adopting such practices provides numerous maternal and infant health benefits, which directly impact the promotion of health for this population and can contribute to a cultural shift in childbirth⁽²⁾.

One of the limitations of the study was the lack of information on the pregnant women's card and medical records of the puerperal women. Also highlighted was their lack of knowledge regarding relevant aspects of the gestational period, making it impossible to complete the interview questionnaire. However, despite this limitation, this study provides relevant contributions regarding the implementation of best practices and associated factors, indicating the need for greater investment in the qualification of professionals and institutional infrastructure, favoring its implementation.

CONCLUSION

This study found that the partogram was implemented incipiently in the maternity ward and that its completion was more frequent in the medical records of married puerperal women and those who experienced premature rupture of membranes.

■ REFERENCES

- Pereira SB, Diaz CMG, Backes MTS, Ferreira CLL, Backes DS. Good practices of labor and birth care from the perspective of health professionals. Rev Bras Enferm. 2018;71(suppl 3):1313—19. https://doi. org/10.1590/0034-7167-2016-0661
- Fundo das Nações Unidas para a Infância (UNICEF). Rede pela Humanização do Parto e Nascimento (ReHuNa). Assistência ao parto e nascimento: uma agenda para o século 21[Internet]. Brasília (DF). Unicef: ReHuNa. 2021[cited 2024 Jan 30]. Available from: https://www.unicef.org/brazil/media/17491/ file/assistencia-ao-parto-e-nascimento-uma-agenda-para-o-seculo-21.pdf

- 3. Magalhães PAP, Paes LBO, Cavalcante LF, Silva MEGA, Santana MLC, Dias GC. Conhecimento das boas práticas ao parto por parte dos profissionais de enfermagem: uma revisão integrativa da literatura. Braz J Health Rev. 2022;5(5):18176—98. https://doi.org/10.34119/bjhrv5n5-031
- Nicida LRA, Teixeira LAS, Rodrigues AP, Bonan C. Medicalização do parto: os sentidos atribuídos pela literatura de assistência ao parto no Brasil. Ciên Saúde Coletiva. 2020;25(11):4531—46. https://doi. org/10.1590/1413-812320202511.00752019
- 5. Salazar ÉRS, Leal RC, Rodrigues JP, Vilanova RF, Silva IS. O uso do partograma na assistência ao trabalho de parto em uma maternidade pública. Enferm Bras. 2021;19(3):230—37. https://doi.org/10.33233/eb.v19i3.2848
- Pedroni, VS, et al. Patient safety culture in the maternal-child area of a university hospital. Rev Gaúcha Enferm. 2020;41(spe):e20190171. https:// doi.org/10.1590/1983-1447.2020.20190171
- World Health Organization (WHO). WHO safe childbirth checklist implementation guide: improving the quality of facility-based delivery for mothers and newborns [Internet]. Genebra: WHO; 2017[cited 2024 Jan 30]. Available from: https://www.who.int/publications/i/item/9789241549455
- Rodrigues ES, Ferreira ES. O uso do partograma como ferramenta de redução de intervenções: um relato de experiência. Rease [Internet]. 2023[cited 2024 Jan 30];1(1):450-9. Available from: https://periodicorease.pro.br/ rease/article/view/10536
- 9. Hulley SB, Cummings SR, Browner WS, Grady D, Hearst N, Newman TB, et al. Delineando a pesquisa clínica: uma abordagem epidemiológica. Porto Alegre: Artmed Editora; 2003.
- 10. Manente MV, Rodrigues OMPR. Maternidade e trabalho: associação entre depressão pós-parto, apoio social e satisfação conjugal. Pensando Fam[Internet]. 2016[cited 2024 Jan 30];20(1):99—111. Available from: https://pepsic.bvsalud.org/pdf/penf/v20n1/v20n1a08.pdf
- 11. Dutra MVS, Faria HMC. A rede de apoio como forma de prevenção à depressão pós-parto. Cad Psicol [Internet]. 2022[cited 2024 Jan 30];4(8):117-33. Available from: https://seer.uniacademia.edu.br/index.php/cadernospsicologia/article/view/3408/2402
- Leal MC, Pereira APE, Domingues RMSM, Theme-Filha MM, Dias MAB, Nakamura- Pereira M, et al. Intervenções obstétricas durante o trabalho de parto e parto em mulheres brasileiras de risco habitual. Cad Saúde Pública. 2014;30:S17—32. https://doi.org/10.1590/0102-311X00151513
- 13. Rocha IMS, Oliveira SMJV, Schneck CA, Riesco MLG, Costa ASC. O Partograma como instrumento de análise da assistência ao parto. Rev Esc Enferm USP. 2009;43(4):880—8. https://doi.org/10.1590/S0080-62342009000400020

- Borges AP, Silva ALR, Correa ACP, Nakagawa JTT. Characterization of pregnancy labor assistance of primigravida adolescents in the city of Cuiabá–MT. Ciên, Cuid Saúde[Internet]. 2016[cited 2024 Jan 30];15(2):212—2. Available from: https:// periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/29474/17584
- Medeiros AB; Freire ILS; Santos FR; Silva BCO; Batista GFM; Menezes MM. Partograma: instrumento de segurança no cuidado multidisciplinar. Rev Cuidarte[Internet]. 2020[cited 2024 Jan 30];11(3). https://doi.org/10.15649/ cuidarte.1046
- Gelaw KA, Assefa Y, Birhan B, Gebeyehu NA. Practices and factors associated with active management of the third stage of labor in East Africa: systematic review and meta-analysis. BMC Pregnancy Childbirth. 2023;23:438. https:// doi.org/10.1186/s12884-023-05761-9
- Sousa JL, Silva IP, Gonçalves LRR, Nery IS, Gomes IS, Sousa LFC. Percepção de puérperas sobre a posição vertical no parto. Rev Baiana Enferm[Internet].
 2018 [cited 2024 Jan 30];32. Available from: https://periodicos.ufba.br/ index.php/enfermagem/article/view/27499
- Rocha BD, Zamberlan C, Pivetta HMF, Santos BZ, Antunes BS. Posições verticalizadas no parto e a prevenção de lacerações perineais: revisão sistemática e metanálise. Rev Esc Enferm USP. 2020;54:e03610. https:// doi.org/10.1590/S1980-220X2018027503610
- Martins Neto C, Campelo CL, Lima JFB, Mendes KDSM, Mouzinho LSN, Santos AM, et al. Factors associated with the occurrence of upright birth in Brazil. Rev Bras Epidemiol. 2022;25:e220041. https://doi. org/10.1590/1980-549720220041
- 20. 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. https://doi.org/10.1590/1980-220x-reeusp-2021-0423
- 21. Ministério da Saúde (BR). APICE ON-Aprimoramento e Inovação no Cuidado e Ensino em Obstetrícia e Neonatologia[Internet]. 2017[cited 2024 Jan 30]. Available from: https://portaldeboaspraticas.iff.fiocruz.br/apice/o-projeto/
- 22. Universidade Federal do Rio de Janeiro (UFRJ). Aleitamento materno: prevalência e práticas de aleitamento materno em crianças brasileiras menores de 2 anos 4[Internet]: ENANI 2019. Rio de Janeiro, RJ: UFRJ; 2021[cited 2024 Jan 30]. 108 p. Available from: https://enani.nutricao.ufrj.br/index.php/relatorios/
- 23. Oliveira FA, Progianti JM, Peregrino AAF. Custos diretos do parto envolvidos com a prática obstétrica de enfermagem em Casa de Parto. Esc Anna Nery. 2014;18(3):421—7. https://doi.org/10.5935/1414–8145.20140060
- 24. Voldner N, Eick F, Vangen S. 'Goodbye and good luck' Midwifery care to pregnant undocumented migrants in Norway: a qualitative study. Sex Reprod Healthc. 2023;37:100878. https://doi.org/10.1016/j.srhc.2023.100878

■ Data and material availability

Access to the dataset can be obtained upon request to the corresponding author.

Authorship contribution

Conceptualization: Maryana Rodrigues Vieira, Márcia Christina Caetano Romano, Virgínia Junqueira Oliveira Data curation: Maryana Rodrigues Vieira, Márcia Christina Caetano Romano, Virgínia Junqueira Oliveira Investigation: Maryana Rodrigues Vieira, Poliane Moreira Costa, Paulo Henrique Nogueira da Fonseca, Arlessandro Pinto de Souza Carvalho, Márcia Christina Caetano Romano, Virgínia Junqueira Oliveira Methodology: Maryana Rodrigues Vieira, Poliane Moreira Costa, Paulo Henrique Nogueira da Fonseca, Arlessandro Pinto de Souza Carvalho, Márcia Christina Caetano Romano, Virgínia Junqueira Oliveira Supervision: Márcia Christina Caetano Romano, Virgínia Junqueira Oliveira

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The authors declare that there is no conflict of interest

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