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## PARTOGRAM: DIFFICULTIES IN THE WORK PROCESS THAT INTERFERE IN THE QUALITY OF CARE

#### Luciana Fonseca de Moura

Centro Universitário do Espírito Santo – UNESC Colatina – ES

http://lattes.cnpq.br/0601119634803475

#### Lara Gomes Gimenez

Centro Universitário do Espírito Santo – UNESC Colatina – ES http://lattes.cnpq.br/4863214723060312

#### Maria Eduarda Linhares Serrano Zuccon

Centro Universitário do Espírito Santo – UNESC

Colatina – ES

https://lattes.cnpq.br/7494429267905165

#### Ana Clara Linhares Serrano Zuccon

Centro Universitário do Espírito Santo – UNESC

Colatina - ES

http://lattes.cnpq.br/5928698316525762

#### Milena do Vale Costa

Centro Universitário do Espírito Santo – UNESC Colatina – ES

http://lattes.cnpq.br/4682818167538788

#### Brunely Souza de Miranda

Centro Universitário do Espírito Santo – UNESC

Colatina - ES

http://lattes.cnpq.br/2799671278052698

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#### Thais da Silva Noia

Centro Universitário do Espírito Santo – UNESC

Colatina - ES

http://lattes.cnpq.br/2083229219561592

#### Millena de Barcellos Liberato

Centro Universitário do Espírito Santo – UNESC

Colatina - ES

http://lattes.cnpq.br/3324227577777199

#### Beatriz Andréa Lorenzoni

Centro Universitário do Espírito Santo – UNESC

Colatina - ES

https://lattes.cnpq.br/0483469333461848

#### Luisa Dardendo Ramalho

Centro Universitário do Espírito Santo – UNESC

Colatina - ES

http://lattes.cnpq.br/5410852108197292

#### Virginia Garcia Peixoto

Centro Universitário do Espírito Santo – UNESC

Colatina – ES

https://lattes.cnpq.br/1091358000796621

#### Greice Kelly Palmeira Campos

Centro Universitário do Espírito Santo – UNESC

Colatina - ES

http://lattes.cnpq.br/3621497067853119

**Abstract**: The partogram is a graphic representation of labor, seen as an excellent visual resource to monitor labor. However, it is observed that the partograms are not always completed in their entirety. Thus, the present study aims to analyze the difficulties encountered by professionals who as sist womenin labor with regard to the use and completion of the partogram. This is an integrative review type research. The inclusion criteria used were: full text available, in the LILACS, MEDLINE and BDEnf databases, from 2013 to 2023. After the bibliographic search, only 09 articles were part of the study because they brought more relevant information regarding the use of the partogram. For the analysis and discussion of the results found, the following category was created: Use of the partogram X difficulties X outcomes. After the discussion, it was concluded that despite being a mandatory practice, the proper use of the partogram is still a challenge. Therefore, it is believed that this research contributes positively to the improvement of assistance, trying to unravel and alleviate the difficulties in using and completing the partogram.

**Keywords**: Health care; Medical records; Normal birth.

#### INTRODUCTION

In recent decades, with the advancement of technology, childbirth has undergone significant changes, becoming increasingly centered on the obstetrician and increasing unnecessary interventions. If, on the one hand, birth in a hospital environment allowed improvements in maternal morbidity and mortality rates, on the other hand, it transformed labor into a medical procedure. For this reason, there is a search for tools that are effective in the early diagnosis of intrapartum dystocia and that also allow the pregnant woman to have a physiological delivery. With this objective, the partogram

has been emphatically recommended in order to properly conduct the birth (BRAZIL, 2017).

The partogram is defined as the graphic representation of labor in its active phase, in addition to demonstrating maternal-fetal conditions. Therefore, this tool helps to identify abnormalities during childbirth. In the partogram, the identification of the pregnant woman, cervical dilation, the descent of the presentation, the elapsed time, the uterine dynamics, fetal heart rate, drugs, interventions used, conditions of the water bag and amniotic fluid must be recorded (BRAZIL, 2017).

Furthermore, the partogram recommended by the World Health Organization (WHO) has two lines, one called the "alert line" and the other the "line of action", and the time elapsed between them is 4 hours. These lines were developed to guide the health professional to identify when the evolution of the delivery is abnormal (FEBRASGO, 2010). Its use was introduced after a study carried out in Central Africa to guide midwives who provided home care to recognize intrapartum complications and be able to refer parturients to a hospital in time to revert to that situation (ROCHA et al., 2009).

In addition to the proposed advantages, the routine use of the partogram allows documenting the evolution of the birth and, when added to the pregnant woman's medical record, this document becomes a legal protection for the medical team (BRAZIL, 2020).

And also, through this instrument, it is possible to see an improvement in the communication of health professionals during the parturition process and attenuation of divergent behaviors, improving the assistance to pregnant women. It also proved to be an advantageous mechanism in helping employees change shifts, as it provides important information regarding

the evolution of labor. Thus, it is important to highlight that the partogram contributes to the reduction of some unnecessary medical conducts, in addition to guiding the professional in choosing the appropriate conduct (VASCONCELOS et al, 2013; RANI et al., 2014; RITTER et al., 2020).

Due to the numerous benefits of the partogram, its routine use is considered a good obstetric practice and encouraged by both the World Health Organization and the Ministry of Health of Brazil in the care of parturients. The implementation of the partogram is low cost and easy to access, and does not require devices to be put into practice. Nevertheless, the general averages of use of the partogram in Brazil are normally less than 45%, demonstrating the difficulty of implementation in maternity hospitals. Despite being highly recommended, in some maternity hospitals the use of the partogram is still very limited or even absent. This is justified due to the lack of knowledge of health professionals about filling it out and also the resistance in the implementation of new intrapartum tools (LEAL et al., 2014; LUCENA et al., 2019; SILVA et al., 2020).

This way, the present research aimed to identify what are the difficulties encountered regarding the use and completion of the partogram. The study was of the integrative review type, with the objective of gathering, evaluating, synthesizing the research results on the subject in a systematic and orderly manner and answering the following guiding question: what are the difficulties encountered by professionals who assist women in the work of delivery regarding the use and completion of the partogram;

#### **METHODOLOGY**

It was an integrative literature review, descriptive with a qualitative approach, whose theme was to identify what are the difficulties encountered regarding the use and completion of the partogram. The steps suggested by the literature for carrying out an integrative review were used, divided into the following steps: establishment of the hypothesis and objectives; establishment of inclusion and exclusion criteria for articles (sample selection); definition of the information to be extracted from the selected articles; analysis of results; discussion and presentation of results and the last step consisted of presenting the review.

The question proposed to underpin this article was: what are the difficulties encountered by professionals who provide assistance to women in labor regarding the use and completion of the partogram?

To compose the sample, articles found in the Virtual Health Library (VHL) were used. For greater effectiveness of the analysis, the terms were used: partogram, childbirth and obstetrics, associated with the Boolean operator AND. Inclusion criteria were: articles that were in full; in English, Portuguese, Spanish; published in the period between 2013 and 2023, in the databases of MEDLINE, LILACS and BEDENF. Exclusion criteria were articles that were outside the thematic axis, repeated in the database, that were not available and that did not respond to the research problem.

In the first stage, using the descriptors with the application of filters, 15 articles were found in the VHL database. We continued to carry out a careful reading of the titles and abstracts, resulting in 09 articles. After exhaustive reading of the articles in full to verify if they responded to the research problem, the final sample consisted of only 09 articles.

The script was prepared with the following variables: Title of the article, authors/year of publication, journal, objectives, methods/types of research, main conclusions. Data were validated by two researchers. As an

endorsement of all review items, the PRISMA protocol of 27 assessment items was used. There was no funding for the research.

#### **RESULTS AND DISCUSSION**

After classifying all the material, the data were organized, facilitating the visualization and understanding of the material selection process, as shown in the flowchart in Figure 1.

Table 1 presents the specifications of each of the selected articles, describing the title of each article, the names of the authors and year of publication, the journal in which the article was published, the objective, method and/or type of research that was carried out for the construction of the article and the main conclusions.

Fifteen articles met the established inclusion criteria, (12) in LILACS, (10) in BDENF and (01) in MEDLINE, and (06) articles were excluded due to duplicity in the databases and/or for not answering the guiding question, thus only 09 articles made up the final sample.

Thus, after systematic analysis of the articles, it was necessary to include ONE thematic axis: 3.1 Use of the partogram X difficulties encountered x outcomes.

### USE OF THE PARTOGRAM X DIFFICULTIES ENCOUNTERED X OUTCOMES

More important advances in modern obstetric care have suggested the use of the partogram. During labor monitoring, the instrument has been particularly useful as it allows documentation and avoids unnecessary interventions, improving the quality of care at birth. However, despite recognition of the effectiveness of the instrument, many studies prove the low level of knowledge on the part of health professionals (AQUINO et al., 2023).

However, the non-registration of data related to labor in the partogram makes it

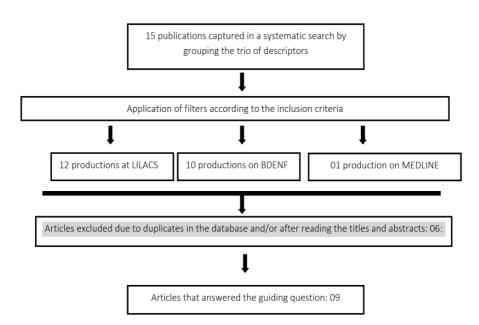


Figure 1 - Flowchart and procedures used to select articles. Source: Prepared by the authors (2023).

PERIODIC	AUTHOR/ YEAR	ARTICLE TITLE	OBJECTIVES	RESEARCH METHODS AND TYPES	MAIN CONCLUSIONS
Nurse Current Costa Rica (Online)	Aquino et al., 2023.	Medicalization of normal delivery care: Profile of pregnant women assisted in a usual risk maternity	To describe the profile of assistance to pregnant women, verifying the prevalence of the use of medications, instruments and protocols, during labor and delivery, in a public health maternity, aimed at assisting pregnant women at normal risk.	Cross-sectio- nal study.	The present study was relevant to demonstrate that most professionals did not use labor-accelerating drugs; considered the integrity of the membranes before drug induction, with a higher prevalence of oxytocin use compared to misoprostol in cases of need for induction with the same conditions of the uterine cervix. Most professionals also stated that they used delivery care protocols, although they were not institutional ones.
Rev. Bras. Maternal Health Infant. (On- line)	Alcântara e Silva, 2021.	Obstetric practices in childbirth care and usual risk birth	To analyze the incidence of obstetric practices in child-birth care and normal-risk births in a tertiary hospital.	Cross-sectio- nal study.	Advances in the adoption of good practices based on scientific evidence are highlighted, however, the technocratic model of childbirth care persists, compared to the care of women at usual risk.
Rev. baiana nurse	Silva et al., 2021.	Adherence to good obstetric practices: construction of qualified assistance in teaching maternity hospitals.	To analyze the frequency of implementation of good obstetric practices in teaching maternity hospitals.	Descriptive, retrospective and documen- tary study.	In the maternity-schools analyzed, the frequency of carrying out good obstetric practices occurred more judiciously in some cases, but adequacy of care would still be necessary.
Rev. Bras. Maternal Health Infant. (On- line)	Rsende et al., 2020.	Profile of childbirth care in a public maternity hospital.	To describe the profile of childbirth care in a reference maternity hospital in the state of Piauí, based on the 2018 World Health Organi- zation Recommendations.	Retrospective cross-sectional quantitative study.	This study made it possible to know the delivery care indicators of the ser- vice, which are generally better than the national indicators and those of the Northeast region. The importance of recording indicators for evaluating care is highlighted.

Rev. nurse. UFSM	Santos et al., 2020.	Safe practice for deliveries in a university hospital.	Identify the application of the essential practices of the Checklist for Safe Child- births (LVPS) of the World Health Organization carried out in a University Hospital.	Cross-sectio- nal study.	LVPS presents itself as an innovative tool in obstetric care. It offers opportunities for improvements and qualification of care, standardizing essential conducts, such as guidance on clinical signs and recording on the partogram, favoring the safety of the mother-baby binomial.
Acta Paul. Nurse (Online)	Ritter et al. 2020.	Care practices in usual risk deliv- eries assisted by obstetric nurses.	To compare care practices in normal-risk deliveries assisted by obstetric nurses at a public hospital in Porto Alegre/RS in 2013 - the beginning of the collaborative model at the institution - with care practices carried out in 2016.	Cross-section- al, retrospec- tive, analytical study.	Faced with the predominant model of obstetric care in Brazil, centered on the obstetrician and interventionist practices, the collaborative model of childbirth care, with the performance of obstetric nurses, is shown to be a way to care for women, with respect to the physiology of the childbirth and the protagonism of women.
Thesis. International databases.	Coelho, 2019.	Analysis of maternal and neonatal outcomes associated with interventions performed during labor in low-cost nulliparous women.	To analyze maternal and neonatal outcomes associated with interventions performed during labor and delivery of low-risk nulliparous women.	Observational, cross-sectional, descriptive and prospective study.	The implementation of Good Practices is a service routine. With the exception of labor analgesia, all other interventions had high frequencies. High percentage of cesarean sections. Interventions in labor and delivery can reduce the duration of the second stage, but present an increased risk of postpartum hemorrhage. For neonatal outcomes, carrying out the interventions proved to be a "protective" factor for the outcomes of newborns. The prevalent expulsive period time was up to 2 hours. There was an association between encouraging the Valsalva maneuver and shorter expulsion time and an association of labor analgesia with longer expulsions. Healthy newborns were removed from skin-toskin contact even without the need for positive pressure ventilation, use of O2 or Apgar < 7 in the 5th minute. (AU)
Rev. nurse. attention health	Almeida et al., 2016.	Care process for normal delivery in a public mater- nity hospital in the State of Piauí, 2015.	To analyze the natural childbirth care process in a public maternity hospital of reference in the state of Piauí.	Descriptive study.	The natural childbirth care process is being carried out adequately, but it is necessary to search for new studies that allow the identification of new procedures to reduce or remedy the difficulties encountered.
Thesis. International database.	Oliveira, 2015.	Evaluation of perinatal care in usual risk maternity hospitals in a city in southern Brazil.	To analyze the practices carried out by the services in perinatal care associated with the usual risk condition.	Cross-sectional, retrospective study with a quantitative approach.	The results indicate that the three maternity hospitals need to make efforts to achieve quality standards according to the care model advocated by ``Rede Cegonha`` and the World Health Organization. The adoption of intersectoral measures, network actions and insertion of the Obstetric Nurse in childbirth care are viable possibilities in this regard.

Table 1– Description of the variables of the articles, final version of the study (n=09).

Source: elaborated by the authors (2023).

impossible to analyze whether or not there was a need for interventions carried out in the studied group, since the correct completion of this document subsidizes the decision-making power of the assistant professional (SILVA et at, 2021).

It is noteworthy that it can contribute to reducing the duration of labor, vaginal exams, the rate of cesarean sections and to improving maternal and neonatal outcomes, therefore, it is believed that its use must be encouraged (RITTER et al., 2020).

According to Aquino et al. (2023), in their study and corroborating with Alcântara and Silva (2021) as an instrument for graphical representation of the evolution of labor, 65.4% of professionals stated that they always or almost always filled out the partogram, evaluating the progression of the first period of labor through the following criteria: dilation of the uterine cervix, descent and rotation of the cephalic pole, intensity, duration and frequency of uterine contractions and rupture of the ovular membranes.

However, 61.5% and 80.8% do not value the records of descent and rotation of the cephalic pole and rupture of the ovular membranes, respectively. These aspects are considered fundamental for the diagnosis of failure to progress in the first period of labor, according to the National Guidelines for Assistance to Normal Childbirth, which confirms the underuse of the instrument by professionals (AQUINO et al., 2023).

In another study, through the analysis of 191 medical records of pregnant women, it was observed that the partogram was completed in 40.6% of assisted normal deliveries. As for the professionals who completed the instrument, 62.8% were nurses. The analysis of the variables verified at the time of opening the partogram allowed us to identify that 99.5% were started in the active phase of labor. Despite the adequacy of the opening

records of the graph, the data show that the labor monitoring process is still ineffective, as 59.2% had only a single record (AQUINO et al., 2023).

Certain studies attribute factors to low adherence and underutilization of the partogram, such as: unavailability of the instrument in the parturients' medical records, lack of human resources in the face of care and bureaucratic activities, lack of institutional protocols, diversity of partogram versions, graphic skills and lack of training (MEDEIROS et al., 2020).

Thus, from this perspective, it is possible to consider the need for the institution involved in this research to adopt educational strategies, in order to provide training on the standardized use of the tool, including through the use of institutional protocols, which can provide greater security to the assistance provided to maternal and neonatal health (AQUINO et al., 2023; SANTOS et al., 2020).

According to the study by Resende et al. (2020), in the first period of childbirth, the use of the partogram to monitor deliveries was identified in 34.2% and 94% in the COS and CPN, respectively. Data from the "Nascer do Brasil" survey for the Northeast region indicate that monitoring with a partogram occurred in 30.4% of births. A study carried out in Minas Gerais with 230 patients16 showed 77.4% of use of the partogram. This practice continues to be recommended by the World Health Organization in 2018, as a sensitive instrument for monitoring the evolution of childbirth, but without the criterion of dilation of 1 cm/hour for any intervention to be adopted.

In Coelho's work (2019), it was observed that 390 (73%) of the labors were accompanied with a partogram. Worrying data, since the partogram is the instrument responsible for the graphic monitoring of labor, revealing that

in 144 (27%) deliveries there was no adequate monitoring. Proper use of the Partogram allows the early identification of complications related to labor and prevents maternal and perinatal mortality.

The completion of the partogram was not carried out in 68.3% of deliveries, but it is known that in obstetric care it is necessary to understand the importance of skill and systematic use of this instrument, being necessary for professionals who aim for a competent, humanized professional performance and safe during labor, enabling the identification of deviations from normality during parturition and the taking of appropriate and timely measures aimed at correcting potential harm to the woman and the fetus during labor (ALMEIDA et al., 2016).

In a study with the objective of determining the level of use of the partogram and the perspectives of the health worker for its use, researchers found that there is an ongoing debate about which guidelines and monitoring tools are most beneficial to assess the progression of the disease. labor, to help prevent high rates of intrapartum caesarean sections. The World Health Organization partogram has been used for decades with the assumption of a linear progression of labor (COELHO, 2019).

In Oliveira's research (2015), a record of opening the partogram was identified in 97% (394) of the medical records. Among these charts, 0.5% (2) of them the partogram was opened when the woman was 0 cm dilated; in 54.8% (216) of the records, when the woman was dilated from 1 to 4 cm; and in 43.4% (171) of them, the opening of the partogram occurred when the woman was between 5 and 9 cm dilated. Expulsive periods, where the woman was 10 cm dilated, were found in 1.3% (5) of the medical records that had this record. The partogram was not present in 1.5% (6) of

the records, and in 1.5% (6) of them there was no record of its opening.

On the other hand, this document was absent in 1.5% (6) of the 406 medical records, receiving a score of 0, and present in 98.5% (400) of them, receiving a score of 1. By institution, A and C did not present any medical records without partogram, so both scored 1 in this pattern. However, institution B had 4.8% (6) of its records scored as 0 in meeting this standard, and in 95.2% (120) of the records the score obtained was 1 (OLIVEIRA, 2015).

In this research, the partogram was recorded in 97% of the medical records, unlike the findings in the ``Nascer no Brasil`` study (LEAL et al., 2014), according to which almost 44% of the analyzed medical records indicate that the parturients did not have the work of delivery accompanied by the partogram. In the southern region, approximately 51% of deliveries were performed using a partogram (OLIVEIRA, 2015).

The findings of other studies may indicate that there is little appreciation of this instrument in professional practice, although in this research notes were found in most (97%; 394) of the investigated medical records, which suggests that this appreciation occurs in maternity hospitals with usual risk in Curitiba (OLIVEIRA, 2015).

In a systematic review published in the Cochrane Library, the authors analyzed six studies regarding the use of the partogram with a range of 7,706 women, in which no results were found that could generate a recommendation for the routine use of the instrument (LAVENDER, HART, SMYTH, 2013).

Although the presence of the partogram is a positive indicator of the quality of care, it must be used correctly and efficiently, otherwise its objective will not be achieved. However, international research does not

generally relate the use of the partogram with better outcomes for mothers and babies (OLIVEIRA, 2015).

#### CONCLUSION

Initially, it is necessary to point out that the partogram can contribute to reducing the duration of labor, vaginal exams, the rate of cesarean sections and to improving maternal and neonatal outcomes, therefore, it is believed that its use must be encouraged.

It is also opportune to mention that the difficulties encountered in using the partogram are related to insufficient knowledge about the instrument, lack of an institutional protocol and implementation of the partogram in maternity wards, failure in communication between professionals and inadequate understanding of the importance of the partogram.

Therefore, it remains to be admitted that although the partogram is a positive indicator of the quality of care, it must be used correctly and efficiently, otherwise its objective will not be contemplated.

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