

# Childbirth care in a regional healthcare network of the Mãe Paranaense Network

Atenção ao parto em regional de saúde da Rede Mãe Paranaense

#### How to cite this article:

Camatti FPS, Ferreira H, Ferrari RAP, Silva RMM, Zilly A. Childbirth care in a regional healthcare network of the Mãe Paranaense Network. Rev Rene. 2020;21:e44067. DOI: https://doi.org/10.15253/2175-6783.20202144067

Fabiane Puerari da Silva Camatti<sup>1</sup>
Helder Ferreira<sup>1</sup>
Rosangela Aparecida Pimenta Ferrari<sup>2</sup>
Rosane Meire Munhak da Silva<sup>1</sup>
Adriana Zilly<sup>1</sup>

<sup>1</sup>Universidade Estadual do Oeste do Paraná. Foz do Iguaçu, PR, Brazil. <sup>2</sup>Universidade Estadual de Londrina. Londrina, PR, Brazil.

#### **Corresponding author:**

Adriana Zilly Avenida Tarquínio Joslin dos Santos, 1300, Jardim Universitário, CEP: 85870-650, Foz do Iguaçu, PR, Brazil. E-mail: aazilly@hotmail.com

#### Special Call 1 - Maternal and Obstetric Health

EDITOR IN CHIEF: Ana Fatima Carvalho Fernandes ASSOCIATE EDITOR: Renan Alves Silva

#### ABSTRACT

Objective: to analyze childbirth care in a regional healthcare unit within the Mãe Paranaense Network. Methods: a cross-sectional descriptive study conducted with 395 mothers applying a structured questionnaire, data analysis using the Chi-Squared test or G-test, complemented by an adjusted residual analysis (p<0.05). Results: higher education, higher income, abortion and interpartal period <2 years increased cesarean rates. Intrapartum complications and antibiotic therapy were related to cesarean sections. Most did not visit the maternity, had their delivery choice respected, had a companion and mother-baby contact; however, 28.9% did not have their delivery choice respected. Conclusion: there was a reduction in cesarean sections among multiparous, an increase in women who suffered a miscarriage, with an interpartal interval <2 years. Antibiotic therapy and disrespect for the delivery choice were greater for women undergoing cesarean sections. Use of oxytocin, presence of a companion and mother-baby contact were more evident in vaginal delivery.

**Descriptors:** Pregnancy; Health Care (Public Health); Delivery, Obstetric; Quality Assurance, Health Care.

#### RESUMO

Objetivo: analisar a atenção ao parto em maternidades de uma regional de saúde na Rede Mãe Paranaense. Métodos: estudo transversal, descritivo, em maternidades, com 395 puérperas, com aplicação de questionário estruturado, com análise de dados pelo teste de associação Qui-Quadrado ou teste-G, complementado pela análise de resíduos ajustados (p<0,05). Resultados: maior escolaridade, maior renda, aborto e período interpartal <2 anos aumentaram as taxas de cesáreas. Intercorrências intraparto e antibioticoterapia estiveram relacionadas às cesáreas. A maioria não visitou a maternidade, foi respeitada, teve acompanhante e contato pele a pele (mãe-bebê), contudo, para 28,9%, houve desrespeito na escolha ao parto. Conclusão: verificou--se redução de cesáreas entre multíparas e aumento para mulheres que sofreram aborto e com intervalo interpartal <2 anos. Antibioticoterapia e desrespeito a escolha do parto foram maiores para mulheres submetidas a cesáreas. Uso de ocitocina, presença de acompanhante e contato pele a pele foram mais evidentes no parto vaginal.

**Descritores**: Gravidez; Atenção à Saúde; Parto Obstétrico; Garantia da Qualidade dos Cuidados de Saúde.

## Introduction

The guidelines of the World Health Organization show that childbirth is a natural event which does not need control, but care. Scientific and technological advances aim to prevent health problems and mortality in childbirth care, however it is observed that many complications are caused by advancement and abuse of techniques, procedures and medicalization, causing unnecessary interventions and high rates of cesarean sections due to generalizing pregnant women in labor<sup>(1)</sup>.

Several strategies have been developed in Brazil in the last 40 years with the purpose of improving the care quality and reducing the cesarean section and maternal and neonatal mortality rates, promoting the physiological and pathological processes related to pregnancy, labor/delivery and childbirth on a more individual basis<sup>(2)</sup>.

Thus, the Brazilian Ministry of Health created the Comprehensive Care Program for Women's Health as a strategy in the 1980s, aimed at providing care in different stages of life. This Program was further influenced by the Unified Health System in the 1990s, becoming a National Policy for Comprehensive Attention to Women's Health, with health actions for women's rights and reducing mortality from preventable and avoidable causes<sup>(3)</sup>.

In search of improvements for obstetric care, the Brazilian Ministry of Health implemented the *Rede Cegonha* Program in 2011, which aims to ensure women the right to reproductive planning and care in pregnancy, childbirth and the puerperium, as well as giving children healthy birth and growth. This Program has the priority to implement practices which envision quality of care for pregnant women, to reduce unnecessary interventions and reduce diseases and maternal and neonatal mortality in Brazil<sup>(3)</sup>.

Following this model, the State of Paraná, Brazil, launched the *Mãe Paranaense* Network in 2012, aiming to organize maternal and child care in the state and following the principles of the Healthcare Networks. The *Mãe Paranaense* Network as well as the *Rede Cegonha* seeks to guarantee qualified prenatal care, delivery, birth and newborn care based on strati-fying maternal and child risk<sup>(4)</sup>.

This care network is in force in Paraná, and guides basic care principles such as guaranteeing women's autonomy, the presence of a companion during hospitalization and the participation of women in their own decisions; for example, on their position of preference in labor and delivery. It also proposes changes in the care model for pregnant women and women who have recently given birth, serving as a parameter to evaluate delivery care in health institutions<sup>(4)</sup>.

However, research on maternal child care and the *Mãe Paranaense* Network showed incipient results with respect to infant mortality and prenatal care practices<sup>(5-6)</sup>, highlighting the need to direct attention to improve and promote mother and child healthcare. Regarding research on childbirth care in Paraná, no investigations have been conducted since implementing the current health policy to assess the impact of the Network to qualify healthcare at the time of birth. In view of the above and in order to contribute to human and safe obstetric practices, this study was developed based on the guiding question: which practices are used in the care of vaginal and cesarean delivery based on the basic care principles outlined by the *Mãe Paranaense* Network?

In this context, this study aimed to analyze childbirth care in maternity hospitals in a regional health center within the *Mãe Paranaense* Network.

#### Methods

A cross-sectional, descriptive study carried out in three maternity hospitals belonging to the ninth Regional Health Region of the State of Paraná, located in the western region of the state, comprising nine municipalities (Foz do Iguaçu, Itaipulândia, Matelândia, Medianeira, Missal, Ramilândia, Santa Terezinha de Itaipu, São Miguel do Iguaçu and Serranópolis do Iguaçu).

Pregnant women classified as habitual risk and

intermediate risk are monitored in the municipalities in which they live, and in the event of any complication which may pose risks to their or their baby's health they are referred to Foz do Iguaçu, PR, which has a reference maternity hospital for attending high risk pregnancy for all municipalities which compose the ninth Regional Health Region of Paraná. It is important to highlight that Foz do Iguaçu is located on a triple border, being a tourist destination together with Cidade de Leste (Paraguay) and Porto Iguaçu (Argentina). Thus, the municipality often provides healthcare for the population of neighboring countries as well as for the floating/visiting population related to crossborder trade and tourism itself.

The sample consisted of a non-probabilistic sample calculation (n=395) by convenience of women/users who went through the delivery process in the three maternities located in Matelândia, Medianeira and Foz do Iguaçu in the first semester of 2018.

A questionnaire was created based on the guidelines for childbirth care as recommended by the Mãe Paranaense Network<sup>(4)</sup> in order to obtain data, with the independent variables being organized as follows: a) maternal sociodemographic factors: maternal age, race/color, Body Mass Index (BMI), education, marital status, family income, family allowance; b) obstetric factors: parity, abortions, interpartal period < 2 years, diseases in previous pregnancies, intrapartum complications; c) use of medications: antibiotics, misoprostol and oxytocin; d) obstetric quality practices contemplated in vaginal and surgical deliveries: visit to the maternity hospital, companion, respect for parturient women, skin-to-skin contact, type of delivery chosen, auscultation of fetal heartbeat, and cardiotocography. Vaginal or cesarean delivery were considered as the dependent variables.

The questionnaire was applied in person in the joint accommodation of the referred maternities within 24 hours after delivery being carried out by fourth year students of the Nursing course at a public educational institution who were trained and performed in a test pilot under the supervision of two nursing professors of the course. A descriptive analysis and the Chi-Squared association test or G test were performed for data analysis, complemented by an adjusted residual analysis. Statistical tests were performed using the Bioestat 5.0 software and the adopted significance level was 5% (p<0.05).

This study is part of a larger project carried out in three health regions in Paraná, Brazil, which was submitted to and approved by the Research Ethics Committee according to opinion No. 2,053,304/2017 and Presentation Certificate for Ethical Appreciation No. 67574517.1.1001.5231, meeting the standards for research with human beings.

### Results

The study sample consisted of 395 mothers. The predominant age group was 20 to 34 years for both groups (71.1%), most of the pregnant women were white (53.4%), having a BMI greater than 25 (72.9%), education between 10 and 12 years old (58.0%) and with a partner (90.1%). The most frequent family income was one to two minimum monthly salaries (44.0%), with 20.2% living on less than one minimum monthly salary, and most of them did not receive any government assistance (84.8%). Although there is no statistical significance, there was a slight increase in the prevalence of cesarean sections among women over 35 years of age, BMI over 25, with a higher education and income.

A greater proportion of participating women for both birth groups were primiparous (44.8%). The occurrence of abortion was not frequent (82.3%), with an interpartal interval greater than two years (59.5%) and absence of diseases in previous pregnancies (57.7%). There was a statistical difference for the presence of intrapartum complications and cesarean delivery (p<0.05) (Table 1). There was a reduction in the number of cesarean sections among multiparous women, but an increase for women who had an abortion and with an interpartal interval of less than two years. **Table 1** – Distribution of the gross (n) and relative (%) frequency of women according to obstetric factors and comparison by type of delivery. Foz do Iguaçu, PR, Brazil, 2018

Variables	Vaginal	Cesarean	Total	*n voluo	
variables	n(%)	n(%)	n(%)	*p-value	
Parity					
1st	88 (49.7)	89(50.3)	177(44.8)		
2nd	53(45.7)	63(54.3)	116(29.4)	0.074	
3rd	26(44.1)	33(55.9)	59(14.9)		
≥4th	29(67.4)	14(32.6)	43(10.9)		
Miscarriage					
Yes	32(45.7)	38(54.3)	70(17.7)	0.556	
No	164(50.5)	161(49.5)	325(82.3)		
Interpartal period <2 year	irs				
Yes	8(36.4)	14(63.6)	22(5.6)		
No	123(52.3)	112(47.7)	235(59.5)	0.273	
Not applicable	65(47.1)	73(52.9)	138(34.9)		
Diseases in previou	S				
pregnancies					
Yes	87(52.1)	80(47.9)	167(42.3)	0.459	
No	109(47.8)	119(52.2)	228(57.7)		
Intrapartum complicatio	ns				
Yes	4(12.5)	28(87.5)	32(8.1)	$0.000^{\dagger}$	
No	192(52.9)	171(47.1)	363(91.9)		

\*Chi-squared test; †G-Test

A statistical difference was found between the use of antibiotic therapy and the delivery types, being more used in cesarean deliveries. There was a statistical difference for the use of oxytocin regarding the use of inducers and conductors of childbirth, with greater proportions for vaginal delivery. It is noteworthy that antibiotics were used for 25.6% and oxytocin for 44.0% of participating women (Table 2).

**Table 2** – Comparison of medication use according tothe type of delivery. Foz do Iguaçu, PR, Brazil, 2018

	5	0,			
Variables	Vaginal	Cesarean	Total	*** ***	
variables	n(%)	n(%)	n(%)	*p-value	
Antibiotics					
Yes	26(25.7)	75(74.3)	101(25.6)	0.000	
No	170(57.8)	124(42.2)	294(74.4)		
Misoprostol					
Yes	21(58.3)	15(41.7)	36(9.1)	0.356	
No	175(49.0)	184(51.5)	359(90.9)		
Oxytocin					
Yes	126(72.4)	48(27.6)	174(44.0)	0.000	
No	70(31.7)	151(68.3)	221(55.9)		
*Chi-squared test					

There was a statistical difference for delivery performed and chosen in the two groups studied for the variables: most pregnant women did not visit the maternity ward before delivery (63.3%), did not feel disrespected during delivery (92.1%), companions at the time of delivery and skin-to-skin contact occurred in most births, being higher for the vaginal delivery group (86.6%), while the parturient had chosen to have a vaginal delivery, but a cesarean delivery was performed (79.8%), according to Table 3.

Regarding care for fetal well-being, there was auscultation of the fetal heartbeat (97.2%) and intrapartum cardiotocography (79.7%) for most participants.

**Table 3** – List of practices used in childbirth care compared according to the type of delivery. Foz do Iguaçu, PR, Brazil, 2018

Variables	Vaginal	aginal Cesarean Total		* 1
	n(%)	n(%)	n(%)	-*p-value
Visited the maternity wa	ard			
Yes	76(52.4)	69(47.6)	145(36.7)	0.397
No	120(48.0)	130(52.0)	250(63.3)	
Companion present				
Yes	169(51.8)	157(48.2)	326(82.5)	0.039
No	27(39.1)	42(60.9)	69(17.5)	
Felt disrespected				
Yes	20(64.5)	11(35.5)	31(7.8)	0.084
No	176(48.3)	188(51.6)	364(92.1)	
Skin-to-skin contact				
Yes	183(53.5)	159(46.5)	342(86.6)	0.000
No	13(24.5)	40(75.5)	53(13.4)	
Birth delivery type di ferent than chosen	f-			
Yes	23(20.2)	91(79.8)	114(28.9)	0.000
No	173(61.6)	108(38.4)	281(71.1)	

\*Chi-squared test

# Discussion

The exclusion of parturients residing in other countries and who routinely used the tertiary service in Brazil, such as Paraguay and Argentina, can be cited as a limitation of this study. The use of the transversal method makes it impossible to identify cause and effect relationships between the analyzed variables.

The contributions of this study enable implementing care practices in childbirth and birth care based on evidence and on the guidelines established by the *Mãe Paranaense* Network, which is essential to guarantee the maternal and fetal well-being, as well as the sexual and reproductive rights of women. In any case, reflection on the proposed theme and its relevance is instigated to qualify care at the time of childbirth, as this care for childbirth is not yet occurring as recommended by the *Mãe Paranaense* Network.

The results of this investigation show that the relationship between obstetric factors and the type of delivery was not evident; however, the literature demonstrates that having performed a cesarean delivery up to 11 times due to medical decision, even without indication or scientific basis, and it is still evident that the uterine scar has little influence on the evolution of the next delivery, except that the new surgical delivery increases the risk of infections<sup>(7)</sup>. Therefore, greater use of antibiotics can be associated with cesarean sections, as shown by the present investigation in which antibiotic therapy was higher in women undergoing cesarean section.

It is noteworthy that although the results indicate a greater use of antibiotics in cesarean delivery, the need for this prophylaxis may occur for both types of delivery. Group B Streptococcal disease is a major cause of morbidity and mortality in newborns. This disease is caused by bacteria of the *Streptococci* species, a microorganism of the human intestinal tract which colonizes 18.0% of the vaginal canal of pregnant women worldwide. Transmission occurs vertically at delivery, and intrapartum antibiotic therapy is recommended because it significantly reduces vertical transmission<sup>(8)</sup>.

Still regarding antibiotic therapy, there were statistical differences between the proportions of intrapartum complications and the delivery types analyzed. The proportion of complications is higher in cases of cesarean sections with the use of antibiotic therapy. These factors that can result in an Apgar score below 7 in the fifth minute of the neonate's life<sup>(9)</sup>. However, cesarean section may have been the justification for resolving the complication, but which put mother and baby at risk for life in these situations. In light of the above, new research and protocols on the rational use of antibiotic therapy during childbirth must be conducted<sup>(8)</sup>.

The administration of misoprostol used to induce labor can be associated with a higher number of cesarean deliveries<sup>(10)</sup>. This justification refers to the fact that a pregnancy may reach 40 weeks, but the mother does not go into labor. Thus, the use of this medication is recommended in these cases to induce changes in the uterine cervix followed by the contraction action; however, failure to induce leads to the need to perform cesarean delivery as the gestational age advances<sup>(10)</sup>. This relationship between the use of misoprostol and cesarean delivery was not evident in this research.

The proportion of positive responses to use oxytocin during childbirth is higher in cases of vaginal delivery. It is also commonly used to accelerate labor, however oxytocin infusion to stimulate labor is significantly associated with increased rates of cesarean sections, in addition to a higher percentage of maternal intrapartum fever<sup>(10-11)</sup>. Despite the risks associated with the use of oxytocin, its use is very common in hospitals and may be related to the hospital care culture<sup>(12)</sup>.

Most of the participants did not visit the maternity hospital before delivery, even though this possibility exists in Brazil. A visit by the pregnant woman to the maternity hospital is legally guaranteed and outlined in the *Mãe Paranaense* Network. This action is appropriate for childbirth, as it enables the pregnant woman to familiarize herself with the service, contributing to decrease fear, misinformation, insecurity, doubts and uncertainties about childbirth.

The presence of partners is very common in developed countries, which is different from developing countries where the partner cannot always be with the pregnant woman at the time of delivery<sup>(11)</sup>; however, the partners were present at the time of birth in 82.0% of the deliveries in this study.

The presence of a partner is an important indicator of the quality of childbirth care, enabling women to be satisfied with care and have a positive effect on health (pain relief, mobility aid, massage, practical and emotional support, helping with confidence and security), in addition to influencing a better relationship and communication of the parturient with health professionals<sup>(11)</sup>.

Disrespect for pregnant women during childbirth is a violation of fundamental human rights and a quality indicator which can be associated with social and economic issues, and above all with a violation of public policies for comprehensive women's healthcare, such as the *Rede Cegonha* and the *Mãe Paranaense* Network<sup>(13)</sup>. Disrespect for pregnant women is a silent cause of maternal morbidity and even mortality, with neglected records in many countries<sup>(14)</sup>. Disrespectful acts such as disinformation, psychological abuse such as rude words, degradation and contempt, abandonment, privacy violations and physical abuse are all considered disrespectful<sup>(15)</sup>.

Skin-to-skin contact between the mother and the baby is an important act recognized worldwide which enables thermoregulation, cardiorespiratory stability, reduced crying, and a protective effect on the risk of hospitalization. It also constitutes a relevant practice to support, promote and maintain breastfeeding. Immediate contact allows exclusive breastfeeding upon discharge and continuity until the baby's six months of age<sup>(15)</sup>.

Other procedures associated with childbirth care in a hospital environment refer to continuous fetal heart rate monitoring and cardiotocography, which were similarly performed in normal and cesarean deliveries. These are considered important interventions, but which need to be used with caution as both can cause increased risk of unnecessary interventions, especially cesarean section, as it makes it difficult for pregnant women to walk and presents possible false--positive results, compromising the delivery option. It is emphasized that fetal heartbeat monitoring and cardiotocography are related to the clinical condition of the fetus; therefore, they can and should interfere in the type of delivery in order to ensure the well-being of the baby<sup>(16)</sup>.

There was a change in the delivery type of pregnant women in the studied group. Several factors affect the decision about the delivery which is most appropriate for the mother's and baby's health, including decisions based on fear, location, number of interventions and medical indication. Most pregnant women who are informed about the labor process opt for vaginal delivery<sup>(17)</sup>. However, defining the type of delivery in this group at the time of delivery became a medical decision.

The fact that the woman does not have adequate knowledge about the physiology and labor time makes her more vulnerable to the decisions of the health teams and reduces her power of choice; therefore, informing the woman about the functioning of her own body can be an important tool to give new significance to vaginal delivery<sup>(7)</sup>.

It is important to describe that as of January 2020, in Paraná, Brazil, Law No. 20,127, which provides for women's rights in childbirth care, article 1, item VII, was sanctioned and describes that in elective situations it is right of the pregnant woman to opt for a cesarean section provided that she has received all the information in an appropriate way about the types of delivery, benefits and risks of these, and has undergone gestational risk assessments during the prenatal period. Thus, it is ensured by law that the woman chooses the type of delivery considering her convictions, beliefs and values<sup>(18)</sup>.

It is imperative to note the counterpoint of the women involved in this study, despite that the majority indicated that they had not been disrespected in the delivery process, almost 30.0% of them had a different delivery from their chosen type. Thus, it is clear that misinformation makes them not realize that

they have the right to make decisions regarding their own body. Health education and continuous education are necessary processes to raise society's awareness and promote respect for women's rights<sup>(19)</sup>.

In addition, the quality of childbirth care as well as the legal measures which ensure the rights of pregnant women strongly involve the commitment of the professionals responsible for assisting women in the entire pregnancy, childbirth and puerperium processes. Moreover, identifying the risk factors for maternal and child mortality is essential to guide planning actions to change these indicators. Following the principles of Mãe Paranaense Network can cause positive changes in the reality of Paraná maternity hospitals.

# Conclusion

There was a general increase in the prevalence of cesarean sections for women over 35 years of age, having a BMI over 25, higher education and income. There was also a reduction in the number of cesarean sections among multiparous women, in addition to an increase for women who had a miscarriage and who had an interpartal interval of less than two years.

Antibiotic therapy was more used in cesarean deliveries and oxytocin for vaginal delivery. Most pregnant women did not visit the maternity ward before delivery, did not feel disrespected during delivery, and the frequency of companions at the time of delivery and skin-to-skin contact were higher for the vaginal delivery group. However, disrespect of the parturient's choice of delivery was greater for cesarean section, considering that she had opted for vaginal delivery in these cases.

# Acknowledgements

To the Conselho Nacional de Desenvolvimento Científico e Tecnológico for the financial support to carry out the project and for granting a scientific initiation scholarship.

## **Collaborations**

Camatti FPS, Ferreira H, Ferrari RAP, Silva RMM and Zilly A contributed equally to the study conception and design, as well as the data analysis and interpretation, writing the article, conducting a relevant critical review of the intellectual content and final approval of the version to be published.

## **References**

- 1. Balsells MMD, Oliveira TMF, Bernardo EBR, Aquino PS, Damasceno AKC, Castro RCMB, et al. Evaluation of prenatal care process for habitual-risk pregnant women. Acta Paul Enferm. 2018; 31(3):247-54. doi: http://dx.doi. org/10.1590/1982-0194201800036
- 2. Lopes GDC, Gonçalves AC, Gouveia HG, Armellini CJ. Attention to childbirth and delivery in a university hospital: comparison of practices developed after Network Stork. Rev Latino-Am Enfermagem. 2019; 27:e3139.doi:http://dx.doi. org/10.1590/1518-8345.2643-3139
- Ministério da Saúde (BR). Secretaria de Atenção 3. à Saúde, Departamento de Ações Programáticas Estratégicas. Saúde da Mulher [Internet]. 2020 [cited Apr 26, 2020]. Available from: https:// www.saude.gov.br/saude-para-voce/saude-damulher/sobre-a-area
- 4. Secretaria de Estado da Saúde do Paraná Linha guia: Rede Mãe Paranaense [Internet]. 2017 [cited Apr 26, 2020]. Available from: http://www.saude. pr.gov.br/sites/default/arquivos\_restritos/files/ documento/2020-04/linhaguiamaeparanaense\_ final\_2017.pdf
- 5. Baggio MA, Pereira FC, Guimarães ATB, Caldeira S, Vieira CS. Rede Mãe Paranaense program: analysis of prenatal care in a regional health district. Cogitare Enferm. 2016; 21(3):1-10. doi: http:// dx.doi.org/10.5380/ce.v21i3.45301
- 6. Netto A, Silva RMM, Santos MF, Tacla MTGM, Caldeira S, Brischiliari SCR. Child mortality: assessment of the Rede Mãe Paranaense programa at a regional health district in the state of Paraná. Cogitare Enferm. 2017; 22(1):e47634. doi: http:// dx.doi.org/10.5380/ce.v22i1.47634

- Kottwitz F, Gouveia HG, Gonçalves AC. Route of birth delivery preferred by mothers and their motivations. Esc Anna Nery. 2018; 22(1):e20170013. doi:http://dx.doi.org/10.1590/2177-9465-EAN-2017-0013
- Hasperhoven GF, Al-nasiry S, Bekker V, Villamor E, Kramer BWW. Universal screening versus risk-based protocols for antibioticprophylaxis during childbirth to prevent early-onset group B streptococcal disease: a systematic review and meta-analysis. BJOG. 2020; 127(6)680-91. doi: http://dx.doi.org/10.1111/1471-0528.16085
- Santos NCP, Vogt Sibylle E, Duarte ED, Pimenta AM, Madeira LM, Abreu MNS. Factors associated with low Apgar in newborns in birth center. Rev Bras Enferm. 2019; 72(supl.3):297-304. doi: https://dx.doi.org/10.1590/0034-7167-2018-0924
- 10. Helmig RB, Hvidman LE. An audit of oral administration of Angusta<sup>®</sup> (misoprostol) 25 μg for induction of labor in 976 consecutive women with a singleton pregnancy in a university hospital in Denmark. Acta Obstet Gynecol Scand. 2020. doi: http://dx.doi.org/10.1111/aogs.13876
- Bohren MA, Berger BO, Munthe-Kaas H, Tunçalp Ö. Perceptions and experiences of labour companionship: a qualitative evidence synthesis. Cochrane Database Syst Rev. 2019; 8:3. doi: http:// dx.doi.org/10.1002/14651858
- Oliveira FAM, Leal GCG, Wolff LDG, Gonçalves LS. The use of Bologna Score to assess normal labor care in maternities. Rev Gaúcha Enferm. 2015; 36(spe):177-84. doi: http://dx.doi. org/10.1590/1983-1447.2015.esp.56940
- 13. Miltenburg AS, Van Pelt S, Meguid T, Sundby J. Disrespect and abuse in maternity care: individual consequences of structural violence.

Reprod Health Matters. 2018; 26(53):88-106. doi: https://dx.doi.org/10.1080/09688080.2018.150 2023

- Bekele W, Bayou NB, Garedew MG. Magnitude of disrespectful and abusive care among women during facility-based childbirth in Shambu town, Horro Guduru Wollega zone, Ethiopia. Midwifery. 2020; 83:102629. doi: http://dx.doi. org/10.1016/j.midw.2020.102629
- 15. Agudelo S, Díaz D, Maldonado MJ, Acuña E, Mainero D, Pérez O, et al. Effect of skin-to-skin contact at birth on early neonatal hospitalization. Early Hum Dev. 2020; 25(144):105020. doi: http://dx. doi.org/10.1016/j.earlhumdev.2020.105020
- Guida NFB, Pereira ALF, Lima GPV, Zveiter M, Araújo CLF, Moura MAVA. Compliance of nursing care practices with technical recommendations for normal birth. Rev Rene. 2017; 18(4):543-50. doi: https://dx.doi.org/10.15253/2175-6783.2017000400017
- Andaroon N, Kordi M, Kimiaee SA, Esmaeili H. The effect of individual counseling on attitudes and decisional conflict in the choice of delivery among nulliparous women. J Educ Health Promot. 2020; 28(9). doi: https://dx.doi.org/10.4103/jehp. jehp\_472\_18
- 18. Assembleia Legislativa do Estado do Paraná. Lei nº 20.127 de 15 de janeiro de 2020 que institui a Lei que garante à gestante o direito a escolher o tipo de parto no Paraná [Internet]. 2020 [cited Apr 13, 2020]. Available from: http://portal.assembleia. pr.leg.br/index.php/pesquisalegislativa/ proposicao?idProposicao=82378
- Brito CMC, Oliveira ACGA, Costa APCA. Violência obstétrica e os direitos da parturiente: o olhar do Poder Judiciário brasileiro. Cad Ibero-amer Dir Sanit. 2020; 9(1):120-40. doi: https://dx.doi. org/10.17566/ciads.v9i1.604

#### (cc) BY

This is an Open Access article distributed under the terms of the Creative Commons