Journal of Nursing
Revista de Enfermagem
UFPE On Line
ISSN: 1981-8963

ORIGINAL ARTICLE

OBSTETRIC AND NEONATAL RESULTS OF ASSISTED CHILDBIRTHS

RESULTADOS OBSTÉTRICOS E NEONATAIS DE PARTOS ASSISTIDOS

RESULTADOS OBSTÉRICOS Y NEONATALES DE PARTOS ASISTIDOS

Régia Christina Moura Barbosa Castro[1], Clarice Mendes de Freitas[2], Ana Kelve de Castro Damasceno[3], Cinthia Gomes Escoto Esteche[4], Tatiane da Silva Coelho[5], Amanda de Freitas Brilhante[6]

ABSTRACT

Objective: to evaluate obstetric and neonatal outcomes of assisted births. ***Method:*** quantitative, descriptive, retrospective study with parturients assisted by resident nurses. The data were collected from the information about the births, recorded in the registry book, analyzed in SPSS, version 20.0, grouped in tables and submitted to descriptive and numerical inferential analysis. ***Results:*** resident nurses attended 147 births of parturients aged between 20 and 24 years and 44.9% were nulliparous. Of these, 43 had intact perineum after delivery; 61 presented first degree laceration; 38, of second degree and five, of third degree. The episiotomy index was 4.8%. The non-pharmacological methods of pain relief most used during labor were breathing, bathing, and massage. All newborns had Apgar in the fifth minute equal to or greater than seven and 93.2% of them were placed in skin-to-skin contact with the mother. ***Conclusion:*** maternal and neonatal outcomes were favorable, demonstrating that the Obstetric Nursing residency program is based on scientific evidence and results in fewer interventions in the parturition process. ***Descriptors:*** Normal Birth; Obstetric Nursing; Humanized Birth; Nurses; Newborn; Pregnancy.

RESUMO

Objetivo*:** avaliar resultados obstétricos e neonatais de partos assistidos. ***Metodo*:** estudo quantitativo, descritivo, retrospectivo, com parturientes assistidas pelas enfermeiras residentes. Os dados foram coletados a partir das informações referentes aos partos, anotadas no livro de registro, analisados no SPSS, versão 20.0, agrupados em tabelas e submetidos à análise descritiva e numérica inferencial. ***Resultados: as enfermeiras residentes assistiram 147 partos de parturientes com faixa etária entre 20 e 24 anos e 44,9% eram nulíparas. Destas, 43 tiveram períneo íntegro após o parto; 61 apresentaram laceração de primeiro grau; 38, de segundo grau e cinco, de terceiro grau. O índice de episiotomia foi de 4,8%. Os métodos não farmacológicos de alívio da dor mais utilizados durante o trabalho de parto foram a respiração, o banho de aspersão e a massagem. Todos os recém-nascidos tiveram Apgar no quinto minuto igual ou maior que sete e 93,2% deles foram colocados em contato pele a pele com a mãe. ***Conclusão:*** os resultados maternos e neonatais foram favoráveis demonstrando que o programa de residência em Enfermagem Obstétrica se norteia nas evidências científicas e resulta em menos intervenções no processo de parturição. ***Descritores:*** Parto Normal; Enfermagem Obstétrica; Parto Humanizado; Enfermeiras; Recém-Nascido; Gestação.

RESUMEN

Objetivo: evaluar resultados obstétricos y neonatales de partos asistidos. **Método:** estudio cuantitativo, descriptivo, retrospectivo, con parturientas asistidas por las enfermeras residentes. Los datos fueron recolectados a partir de las informaciones referentes a los partos, anotadas en el libro de registro, analizados en el SPSS, versión 20.0, agrupados en tablas y sometidos al análisis descriptivo y numérico inferencial. **Resultados:** las enfermeras residentes asisteron 147 partos por las enfermeras residentes, parturientas con grupo de edad entre 20 y 24 años y 44,9% eran nulíparas. De ellas, 43 tuvieron perineo íntegro después del parto; 61 presentaron laceración de primero grado; 38, de segundo grado y cinco de tercer grado. El índice de episiotomía fue del 4,8%. Los métodos no farmacológicos de alivio del dolor más utilizados durante el trabajo de parto fueron la respiración, el baño de aspersión y masaje. Todos los recién nacidos tuvieron Apgar en el quinto minuto igual o mayor que siete y el 93,2% de ellos fueron puestos en contacto piel a piel con la madre. **Conclusión:** los resultados maternos y neonatales fueron favorables, demostrando que el programa de residencia en Enfermería Obstétrica se basa en las evidencias científicas y resultando en menos intervenciones en el proceso de alumbramiento. ***Descriptores:*** Parto Normal; Obstétrica de Enfermería; Parto Humanizado; Enfermera; Recién Nacido; Embarazo.

[1]PhD, Department of Nursing, Federal University of Ceará / UFC. Fortaleza, Brazil. E-mail: regiabarbosa@hotmail.com ORCID iD: http://orcid.org/0000-0002-0673-9442; [2]Obstetric Nurse, Federal University of Ceará / UFC. Fortaleza, Brazil E-mail: clarice_mendes_@hotmail.com ORCID iD: http://orcid.org/0000-0001-8744-1586; [3]PhD, Department of Nursing, Federal University of Ceará / UFC. Fortaleza, Brazil. E-mail: anakelve@hotmail.com ORCID iD : http://orcid.org/0000-0003-4690-9327; [4]Master, Maternity School Assis Chateaubriand / MEAC / UFC. Fortaleza, Brazil. E E-mail: cinthiaesteche@gmail.com ORCID iD: http://orcid.org/0000-0001-6958-3185; [5]Masters student, Maternity School Assis Chateaubriand / MEAC / UFC. Fortaleza, Brazil. E-mail: E-mail: tatiane25coelho@gmail.com ORCID iD: http://orcid.org/0000-0003-4088-9687; [6]Obstetric Nurse, Federal University of Ceará / UFC. Fortaleza, Brazil. E-mail: mandinhabrilhante@hotmail.com ORCID iD: http://orcid.org/0000-0003-4875-7785

INTRODUCTION

The birth and birth scenario throughout history has been permeated by changes. At the outset, delivery care was female-dominated and midwives were solely responsible for this practice. The male figure in the process of parturition was considered uncomfortable, and childbirth was a moment of experience lived only by women in their homes.[1]

Around the twentieth century, after World War II, hospitalization was the predominant practice in Brazil, allowing the medicalization and control of the pregnancy-puerperal period, evidencing "the end of the feminization of childbirth" and the rise of the medical power.[2]

The act of giving birth, as a natural, subjective and familiar event, begins to be experienced within health institutions where women undergo more invasive and interventional actions, often without their consent and real indication. As a consequence of this assistance model, the pregnant woman loses her autonomy and becomes a coadjuvant in the parturitive process.[2]

The loss of the protagonist role makes the woman fragile and vulnerable to situations that deprive her, infantile and rape her. In this condition of weakness, the parturient experiences a feeling of fear and begins to perceive childbirth and birth as a threat of pain, suffering and death, finding cesarean delivery as a means of escape and protection, since the "normal" delivery model was perceived as demeaning.[3]

The technocratic model of obstetric and neonatal care was incorporated into society, and childbirth became frequently understood as pathological, justifying the use of more intense interventions.[4] However, indiscriminate adherence to technologies, without the proven need in a physiological process, results in risk and possible maternal and neonatal damages.[5-6]

In the context of the transformation of childbirth care, there are social movements in defense of women's sexual and reproductive rights and criticisms of the hegemonic biomedical model, characterized by medicalization and intervention. In response to this dissatisfaction, the Ministry of Health (MOH) determines actions that aim to qualify and humanize childbirth care and birth at the time[7]. Among the initiatives, the Humanization Program in Prenatal and Birth, the National Humanization Policy of the UHS and the Maternal and Perinatal Networks Qualification Plan of the Legal and Northeast Brazilian Amazon.[8]

The meaning of humanized care is quite broad. According to the Ministry of Health, when applied in the context of obstetrics and neonatology, it refers to the set of actions, knowledge and behaviors that aim at the promotion of birth and physiological birth and the prevention of maternal and perinatal mortality.[8]

To consider care as humanized, it is necessary to provide a holistic care where the professional offers women freedom of choice and emotional support, clarifies doubts that may exist, establishes a relationship of trust through dialogue, respects beliefs and values of the parturient considering their individuality, interfering as little as possible in the parturition process and making it as tranquil and natural as possible.[9]

The state of pregnancy and birth are considered as a unique event and a lot of emotion and meaning for the woman and all the experiences she experiences at these moments will be etched in her mind, further evidencing the need for the professional to provide humanized assistance .[4]

The World Health Organization (WHO), in turn, after meeting with the Pan American Health Organization (PAHO) in 1985, lays down guidelines that emphasize good practices of childbirth and birth care based on evidence scientific, and it is a natural event in which there is no need for control, but rather for care.[6]

Childbirth care aims to have a mother and child in good health and with as few interventions as possible at the level that ensures safety. To interfere with the natural process of normal birth, there must be a real reason. Normal or low-risk delivery is considered by the WHO to be spontaneous onset between 37 and 42 complete weeks of gestation, without identification of risk factors during the whole period, terminated by the birth of a newborn in a cephalic apex position . The WHO highlights the nurse-midwife as the best professional to attend this type of delivery.[6]

Despite WHO guidelines, it is observed that the model of "normal" childbirth most practiced in Brazil, including in teaching units, is the technocratic one, centered on medical professionals and unnecessary interventions[10]. According to the Ministry of Health, the non-adoption of scientifically proven care measures, which will promote protection of the lives of women and children, constitutes a negligent and iatrogenic act, placing the mother-child binomial at risk.[8]

In an attempt to modify the obstetric and neonatal outlook in Brazil, based on and extending the PQM, the federal government inaugurates the Stork Network (SN) in 2011, which is a network of care aimed at ensuring the right to the mother-child binomial to humanized care during prenatal, childbirth and puerperium.[11]

The SN strategy proposes qualification and organization of maternal and child care and management, throughout the national territory, with technical incentives and financing related to changes in the birth and delivery model. According to the Ministry of Health, in addition to these issues, the SN incorporates in its guidelines the reduction of infant and maternal mortality rates, child care of up to two years, defense of sexual and reproductive rights, Normal Childbirth (NCB) and Pregnant, Baby and Nursing Homes (PBNH).[12]

In September 2012, the Ministries of Health and Education launched the National Residency Program in Obstetrical Nursing (Pronaenf), which aims to stimulate higher education institutions to train specialists in Obstetric Nursing that would be inserted in regions that had adhered to SN.[13]

The residency consists of a Lato sensu postgraduate teaching modality, in the form of a specialization course, characterized by in-service teaching, with a minimum duration of two years, a weekly workload of 60 hours, for the training of obstetrical nurses. [13]

In this scenario, we intend to answer the following question: how are the obstetric and neonatal outcomes of births attended by nurses residing in a Brazilian Northeast maternity ward?

OBJECTIVE

- To evaluate the obstetric and neonatal outcomes of assisted births.

METHOD

A quantitative, descriptive, retrospective study with systematically analyzed data, 14 carried out at the Maternity School Assis Chateaubriand (MEAC) located in Fortaleza - CE, Brazil. In 2012, in all its care units, this institution started actions based on the strategy of the Stork Network and was chosen as the place to conduct the research because it is a space for the nurses of the Residency Program in Obstetric Nursing Federal University of Ceará / UFC.

The study population consisted of the parturients assisted by resident nurses, from July 2015 to June 2016, who were registered in the register of births attended by the residents, in order to record the obstetric data of the parturients and the assistance provided by the students .

The sample consisted of 147 vaginal births of which all variables were duly filled in the log book.

The data were collected from the information regarding the deliveries assisted by the residents recorded in the registry book. The variables studied were: maternal age; provenance; obstetric profile / parity; gestational age; use of non-pharmacological methods of pain relief during labor and perineal integrity. Regarding the variables related to the newborn, the Apgar index in the first and fifth minutes and the skin-to-skin contact were approached.

Statistical Package for the Social Sciences (SPSS), version 20.0 was used to organize the data. The data were grouped into tables, submitted to descriptive and numerical inferential analysis, as well as analyzed based on literature.

The study obeyed the ethical and legal precepts of research involving human beings established in Resolution No. 466/2012 of the National Health Council.

The research project was submitted and approved, with CAEE 1,684,564, by the Assis Chateaubriand School Maternity Ethics Committee, through the Brazil Platform.

RESULTS

During the period from July 2015 to June 2016, a total of 147 births were attended by resident nurses duly registered in the register of births of the residents.

The majority of parturients came from the city of Fortaleza (n = 128 / 87.1%), but some came from the metropolitan region (n = 16 / 10.9%), as well as from the interior of the State (n = 2%).

Age was divided by age group, with the predominant range, between 20 and 24 years old, accounting for a third of the sample. The results also pointed out a significant percentage of adolescent women between the ages of ten and 19, a cause of concern for maternal health.

Regarding the obstetric profile, the majority of women were primigravida (n = 66 / 44.9%) and nulliparous 74 (50.3%) and 19 (12.92%) of them had at least one abortion in life , according to table 1.

Table 1. Obstetric profile of women attended by residents of Obstetric Nursing. Fortaleza (CE), Brazil, 2016.

Variables	n	%
Number of pregnancies (n = 147)		
	66	44.9
Primiparous	44	29.9
Second pregnancy	19	12.9
Terciparous	18	12.3
Multiparous		
Number of births (n = 147)	74	50.3
Nulliparous	42	28.6
Primparous	19	12.9
Second pregnancy	12	8.2
Multiparous		
Nº Abortions (n = 147)	128	87.1
none	12	8.2
One	05	3.3
Two	02	1.4

All deliveries evaluated in this study were from full-term pregnancies, with a prevalence of 39 weeks of gestational age, corresponding to 31.3% (n = 46).A percentage of 29.3% (n = 43) of parturients remained intact perineum after delivery; 41.5% (n = 61) presented first degree laceration; 25.9% (n = 38), second degree and 3.4% (n = 5), third degree. There was no case of fourth degree laceration.As for the episiotomy, the occurrence was observed in seven parturients (4.8%), and in only one case of these cases, the Apgar score of the NB was less than seven in the first minute.The non-pharmacological methods of pain relief used during labor were sprinkler bath, Swiss ball, ponytail, massage, ambulation, conscious breathing, and penumbra. Adherence of parturients to each of the methods was demonstrated in table 2.

Table 2. Distribution of the number of parturients attended by Obstetric Nursing residents according to the non-pharmacological methods used for pain relief. Fortaleza (CE), Brazil, 2016.

Variables	n	%
Sprinkler Bath (n = 147)		
Yes	82	55.8
No	65	44.2
Swiss ball (n = 147)		
Yes	60	40.8
No	87	59.2
Horseback (n = 147)		
Yes	40	27.2
No	107	72.8
Ambulation (n = 147)		
Yes	49	33.3
No	98	66.7
Penumbra (n = 147)		
Yes	23	15.6
No	124	84.4
Conscious Breathing (n = 147)		
Yes	91	61.9
No	56	38.1
Massage (n = 147)		
Yes	69	46.9
No	78	53.1

Of the 147 newborns (NBs), only seven (4.8%) presented Apgar less than seven in the first minute of life. Of these, two received Apgar five, recovering in the fifth minute; one of them received Apgar seven and the other eight. The other five received Apgar six recovering in the next evaluation for eight (two of them) and nine (the remaining three). As for the fifth minute, all NBs had Apgar equal to or greater than seven indicating good vitality.

Table 3. Distribution of the number of parturients / RNs according to Apgar. Fortaleza (CE), Brazil, 2016.

Variables	N	%
Score in the 1st minute (n=147)		
5	2	1.4
6	5	3.4
7	10	6.8
8	47	32.0
9	83	56.5
Score in the 5th minute (n=147)		
7	01	0.7
8	09	6.1
9	128	87.1
10	09	6.1

Immediately after delivery, 93.2% (n = 137) of the newborns were placed on immediate skin-to-skin contact with the mothers and 6.8% (n = 10) did not undergo this experiment.

DISCUSSION

It is important to emphasize that the Residency Program in Obstetric Nursing was inserted a little more than three years ago in the institution where the study was carried out. Although the team counted on obstetrician nurses, the care model adopted at the maternity center was centered on the physician's figure, including, in the scope of teaching.

It is noteworthy that the assistance to the described deliveries occurred under the supervision of the nurses and doctors of the institution, observing some interventions made by these professionals. It was verified that the residents of Obstetric Nursing are increasingly inserted in the care of women in the prepartum, delivery and postpartum, just as Obstetric Nursing has been contributing and participating in the changes in the process of giving birth in this institution through , for example, the adoption of non-pharmacological methods of pain relief, in addition to providing autonomy for the parturients.

Because it is an institution linked to education, parturition assistance is divided among inmates and residents of Nursing and Medicine. Although there are a large number of students, the number of births attended by Nursing residents was similar to that found in a study carried out in Rio Grande do Sul[15], perceiving a homogeneity in the practice of residents in training.

Although government data show a reduction in the birth rate and fertility rate of women in Brazil in the last ten years, it is observed that, in adolescence, this decline is lower when compared to other ranges[13-16]. The results of this study showed that more than a quarter of assisted births were adolescents, that is, women between the ages of 10 and 19, 6 data similar to those found in research conducted in the capital of Mato Grosso and Rio de Janeiro.[15-7]

Regarding the obstetric clinical profile, nulliparity was a frequent obstetric feature found in the deliveries attended by nurses residing in Obstetrics, as demonstrated in previous studies (41.8%, 36.9% and 58.3%). Such a finding increases the possibility of women achieving a history of parturition with fewer interventions, since the deliveries attended by obstetrical nurses show greater respect for the process of giving birth respecting the physiological, providing the woman with the recovery of her self-confidence and the consequent autonomy in the at the time of labor.[18]

The percentage of episiotomies observed was 4.8%, a result similar to that found in a study carried out in Mato Grosso[17], matching the ideal index recommended by the WHO, which suggests a rate of approximately 10% .[6]

A case-control study in Recife, which analyzed factors related to episiotomy, concluded that the practice of this procedure is strongly associated with physician-assisted deliveries, and is less frequent in those assisted by nurses.[19] Corroborating this result, it was found that, although the deliveries of this study were not properly performed by physicians, most of the episiotomies performed in the parturients of this research came from a medical decision intervening in the behavior of the obstetric nurse during childbirth.

Another finding is that 30.7% of the women, who were not submitted to the episiotomy, did not present perineal laceration, similar to that found in a study conducted in Rio de Janeiro (36.4%). [15] These findings corroborate the understanding that not all women require episiotomy, as they indicate that the restricted practice of such procedure reduces perineal trauma, complications in healing and sutures.[20]

Similar results to the study performed by the Normal Childbirth House in Rio de Janeiro[21] point out that conscious breathing / respiratory movements was the non-

pharmacological method of pain relief most used by the parturients in this study. Bathing, massage, Swiss ball and walking were practices with a good percentage of acceptance by women also demonstrated in other studies with a similar population.[17-21]

Non-pharmacological methods of pain relief are low-cost practices and can therefore be easily delivered by public services and have the capacity to provide comfort to parturients, improving care for labor and delivery, and reducing drug administration with analgesic and anesthetic function.[22]

Perinatal asphyxia related to childbirth is one of the main causes of neonatal morbidity and mortality. The Apgar score of less than seven in the fifth minute of life was used as a reference for the diagnosis and prognosis of asphyxia.[23] The results for neonatal asphyxia obtained in this study show a trend similar to those investigating deliveries assisted by obstetrician nurses . The results of this study, regarding neonatal vitality using the Apgar measurement equal to or greater than seven in the fifth minute of life (100%), were similar to those found in other studies, with 99.4% of newborns in the maternity ward. Rio de Janeiro15, 99% of newborns in a hospital in Mato Grosso[17] and 96.7% of newborns in the state of Rio Grande do Sul.[24]

In this study, 93.2% of newborns were placed on skin-to-skin contact with the mother immediately after delivery. This practice demonstrates the strengthening of the bond between the mother and the newborn and provides the stability of the infant's temperature by avoiding hypothermia, facilitating the early establishment of the onset of breastfeeding, as well as helping placental attachment.[25-7]

The results presented in this research evidenced that the delivery assistance performed by residents in Obstetric Nursing respects the good practices at birth and at birth, recommended by the WHO, the use of non-pharmacological methods of pain relief, promotion of skin-to-skin contact and respect to the autonomy of the parturient.

In addition to achieving positive maternal and neonatal outcomes in terms of delivery outcomes, such as low episiotomy rates and no cases of neonatal asphyxia, it is emphasized that the practice performed by Obstetric Nursing is performed efficiently and safely.

As limitations of the study, it was considered that the register of births assisted by the residents did not contemplate some indicators, as well as the patient's medical record number or full name, which makes it impossible to retrieve the data by medical records. It is suggested to carry out studies that can compare the assistance provided by the obstetrician nurse with that of other professionals, as well as the execution of methodological designs that may indicate a greater power of precision in their results.

It is also worth noting that the results came from the births attended by residents of the first groups of Obstetric Nursing Residency, during which time these students were still trying to gain space to act autonomously, without unnecessary medical intervention.

The results of this study further reinforce the importance of obstetrician nurses in the birth and birth scenario, contributing to the inversion of the obstetric model in the country, and the difference that a training in the modality of residence adds to the competence, ability and attitude of these nurses.

CONCLUSION

Participants in the study were mostly young women from Fortaleza, primigravidae, nulliparous, non-pharmacological methods of pain relief, and had safe birth and delivery assistance.

The maternal and neonatal outcomes obtained in this assistance model were favorable, that is, they followed the recommendations of the WHO, which demonstrates that the Residency Program in Obstetric Nursing, as a means of training and qualifying professionals, is based on the scientific evidences, the resulting in fewer interventions in the parturition process, which directly reflects improvements in perinatal health, as well as reducing maternal and neonatal morbidity and mortality.

Among the contributions to care, the experience described in this research highlights the need for the training of skilled obstetrician nurses and the inclusion of these professionals in institutions that provide assistance to parturients. Regarding research, it is important to note the importance of carrying out studies that show the performance of nurses in the obstetric area.

REFERENCES

1. Paiva MS. Conferência: competências específicas da equipe de enfermagem na obstetrícia. In: II Seminário Estadual sobre a qualidade da assistência ao Parto: contribuições de enfermagem. Anais do II Seminário Estadual sobre a qualidade da assistência ao Parto: contribuições de enfermagem. Curitiba: ABEn-PR; 1999.

2. Santos RAA, Melo MCP, Cruz DD. Trajetória de humanização do parto no Brasil

a partir de uma revisão integrativa de literatura. Cad Cult Ciênc. 2015 Mar;13(2):76-89. Doi: http://dx.doi.org/10.14295/cad.cult.cienc.v13i2.838

3. Andrade MAC, Lima JBMC. O modelo obstétrico e neonatal que defendemos e com o qual trabalhamos. In: Ministério da Saúde (BR), Universidade Estadual do Ceará. Cadernos HumanizaSUS: volume 4: humanização do parto e do nascimento [Internet]. Brasília: Ministério da Saúde; 2014 [cited 2017 Mar 19]. Available from: http://www.redehumanizasus.net/sites/default/files/caderno_humanizasus_v4_humanizacao_parto.pdf

4. Zanardo GLP, Uribe MC, Nadal AHR, Habigzang LF. Violência obstétrica no Brasil: uma revisão narrativa. Psicol Soc. 2017 July 10;29. Doi: http://dx.doi.org/10.1590/1807-0310/2017v29155043

5. Organização Mundial da Saúde, Saúde Reprodutiva e da Família, Unidade de Maternidade Sagura. Saúde Materna e Neonatal. Brasília: OMS; 1996.

6. Ângulo-Tuesta A, Giffin K, Gama AS, d'Orsi E, Barobosa GP. Cooperation and conflict in childbirth care: representations and practices of nurses and obstetricians. Cad Saúde Pública. 2013 Sept/Oct;19(5):1425-36. Doi: http://dx.doi.org/10.1590/S0102-311X2003000500021

7. Melo LPT, Doudou HD, Rodrigues ARM, Silveira MAM, Barbosa EMG, Rodrigues DP. Práticas de profissionais de saúde na assistência ao parto e nascimento. Rev Rene. 2017 Jan/Fev;18(1):59-67. Doi: 10.15253/2175-6783.2017000100009

8. Sanfelice CFO, Abbud FSF, Pregnolatto OS, Silva MG, Shimo AKK. Do parto institucionalizado ao parto domiciliar. Rev Rene. 2014 Mar/Abr; 15(2):362-70. Doi: 10.15253/2175-6783.2014000200022

9. Ministério da Saúde (BR). Relatório Final do Plano de Qualificação das Maternidades e Redes Perinatais da Amazônia Legal e Nordeste/Rede Cegonha. Brasília: Ministério da Saúde; 2012.

10. Brasil. Poder Executivo. Resolução CNRMS Nº 2, de 13 de abril de 2012. Comissão Nacional De Residência Multiprofissional Em Saúde. Diário Oficial da União. 16 abr. Seção I, 24-25; 2012.

11. Marconi MA, Lakatos EM. Fundamentos de Metodologia Científica. 8 ed. São Paulo: Atlas; 2017.

12. Ministério da Saúde (BR), Conselho Nacional de Saúde. Resolução nº 466 do Conselho Nacional de Saúde de 12 de dezembro de 2012. Aprova as diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos [Internet]. Brasília: Ministério da Saúde; 2012 [cited 2016 Mar 14]. Available from: http://conselho.saude.gov.br/ultimas_noticias/2013/06_jun_14_publicada_resolucao.html

13. Reis TR, Zamberlan C, Quadros JS, Grasel JT, Moro ASS. Obstetric nurses: contributions to the objectives of the Millennium Development Goals. Rev Gaúcha Enferm. 2015;36(Spe):94-101. Doi: http://dx.doi.org/10.1590/1983-1447.2015.esp.57393

14. Ferreira RA, Ferriani MGC, Mello DF, Carvalho IP, Cano MA, Oliveira LA. Spatial analysis of the social vulnerability of adolescent pregnancy. Cad Saúde Pública. 2012 Feb;28(2):313-23. Doi: http://dx.doi.org/10.1590/S0102-311X2012000200010

15. Medeiros RMK, Teixeira RC, Nicolini AB, Alvares AS, Corrrêa ACP, Martins DP. Humanized Care: insertion of obstetric nurses in a teaching hospital. Rev Bras Enferm. 2016 Nov/Dec;69(6):1029-36. Doi: http://dx.doi.org/10.1590/0034-7167-2016-0295

16. Pereira ALF, Lima TRL, Schroeter MS, Gouveia MSF, Nascimento SD. Maternal and neonatal assistance results at Birthing Center in the municipality of Rio de Janeiro. Esc Anna Nery Rev Enferm. 2013 Jan/Mar;17(1):17-23. Doi: http://dx.doi.org/10.1590/S1414-81452013000100003

17. Caus ECM, Santos EKA, Nassif AA, Monticelli M. The process of giving birth assisted by obstetrician nurse in a hospital context: mean for the parturients. Esc Anna Nery Rev Enferm. 2012 Mar;16(1):34-40. Doi: http://dx.doi.org/10.1590/S1414-81452012000100005

18. Braga GC, Clementino STP, Luz PFN, Scavuzzi A, Noronha Neto C, Amorim MMR. Risk factors for episiotomy: a case-control study. Rev Assoc Med Bras. 2014 Sept/Oct;60(5):465-72. Doi: http://dx.doi.org/10.1590/1806-9282.60.05.015

19. Reis CSC, Souza DOM, Nogueira MFH, Progianti JM, Vargens OMC. Analysis of births attended by nurse midwives under the perspective of humanization of childbirth. Rev Pesqui Cuid Fund (Online). 2016 Out/Dec;8(4):4972-9. Doi: http://dx.doi.org/10.9789/2175-5361.2016.v8i4.4972-4979

20. Osório SMB, Silva Júnior LG, Nicolau AIO. Assessment of the effectiveness of non-

pharmacological methods in pain relief during labor. Rev Rene. 2014 Jan/Feb;15(1):174-84. Doi: 10.15253/2175-6783.2014000100022

21. Oliveira TG, Freire PV, Moreira FT, Moraes JSB, Arrelaro RC, Rossi S, et al. Apgar score and neonatal mortality in a hospital located in the southern area of São Paulo city, Brazil. Einstein. 2012 Jan/Mar;10(1):22-8. Doi: http://dx.doi.org/10.1590/S1679-45082012000100006

22. Santos LM, Silva JCR, Carvalho ESS, Carneiro AJS, Santana RCB, Fonseca MCC. Experiencing skin to skin contact with the baby during the postpartum period as a mechanical act. Rev Bras Enferm. 2014 Mar/Apr;67(2):202-7. Doi: http://dx.doi.org/10.5935/0034-7167.20140026

23. Moore ER, Bergman N, Anderson GC, Medley N. Early skin-to-skin contact for mothers and healthy newborn infants. Cochrane Database Syst Rev. 2016 Nov;11:CD003519. Doi: 10.1002/14651858.CD003519.pub4

24. Norris-Grant DM, Jaggers CE. A multidisciplinary approach to improving skin-to- skin contact immediately after birth. JOGNN. 2014; 43(Suppl 1):S29. Doi: http://dx.doi.org/10.1111/1552-6909.12402

25. Ferrer MBC, Jordana MC, Meseguer BC, Garcia CC, Roche MEM. Comparative study analysing women's childbirth satisfaction and obstetric outcomes across two different models of maternity care. BMJ Open. 2016;6:011362. Doi: http://dx.doi.org/10.1136/bmjopen-2016-011362

Submission: 2017/09/11
Accepted: 2018/01/27
Publishing: 2018/04/01

Corresponding Address

Régia Christina Moura Barbosa Castro.
Rua Alexandre Baraúna, 1115, Sala 14
Universidade Federal do Ceará-UFC
Rua Rodolfo Teófilo
CEP: 60416-000 – Fortaleza (CE), Brasil