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Original Article

Analysis of childbirth care practices in a public maternity hospital

Análise de práticas de atenção ao parto e nascimento em maternidade pública

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Objective: to analyze childbirth and birth care practices in a public maternity hospital. **Methods:** a cross-sectional descriptive study made in a tertiary maternity hospital with 264 puerperal women. Collection proceeded by means of a form based on good childbirth care practices. **Results:** prevalence of good childbirth care practices. It was observed that 233 (88.3%) received information, 256 (97.0%) had freedom of position, fetal monitoring occurred in 260 (98.5%), 198 (75.0%) used non-pharmacological pain relief methods, 263 (99.6%) were entitled to a companion, skin-to-skin contact in 258 (98.1%). **Conclusion:** practices such as early amniotomy and repeated touches were found that should be used with caution. In addition, the use of the Kristeller maneuver was verified, although in a low percentage, which should be eliminated from delivery care.
Descriptors: Natural Childbirth; Humanizing Delivery; Obstetric Nursing.

Objetivo: analisar as práticas de atenção ao parto e nascimento em maternidade pública. **Métodos**: estudo transversal, descritivo, realizado em maternidade terciária, com 264 puérperas. Coleta procedida por meio de formulário, tendo como base as boas práticas de atenção ao parto. **Resultados:** prevalência das boas práticas de atenção ao parto. Observou-se que 233 (88,3%) receberam informações, 256 (97,0%) tiveram liberdade de posição, monitoramento fetal ocorreu em 260 (98,5%), 198 (75,0%) fizeram uso dos métodos não farmacológicos de alÍvio da dor, 263 (99,6%) tiveram direito ao acompanhante, contato pele a pele em 258 (98,1%). **Conclusão:** encontraram-se práticas, como amniotomia precoce e repetidos toques, que devem ser utilizadas com cautela. Ademais, verificou-se uso da manobra de Kristeller, embora em percentual baixo, a qual deve ser eliminada da assistência ao parto.
Descritores: Parto Natural; Parto Humanizado; Enfermagem Obstétrica.

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Introduction

Childbirth is one of the most important events in the woman's life, being the health professionals supporting this experience, whose role in care should be to recognize and judge the need for interventions in the parturition process, using knowledge, so that the binomial mother and baby are guaranteed[1].

Childbirth and the hospital environment happen with the use of several technologies to make them safer for mother and baby. However, while these technologies contribute to the improvement of maternal and neonatal indicators, on the other hand, they validate a care model that deals with pregnancy, childbirth and birth as pathologies and not as a natural part of the human life cycle[2].

In 2018, the World Health Organization issued recommendations on intrapartum care, based on the latest scientific evidence. The objective is to promote quality care, regardless of the unit of care and level of health care[3].

To ensure the safety of the maternal-fetal binomial during normal delivery, the health team must be prepared and act upon scientific evidence during complication management and procedures. In addition, it is essential to create a bond between professional and client and assistance that considers the individuality of each woman, to convey her tranquility and confidence[4].

Some institutions have been implementing integrated work between nurse and medical professionals in childbirth care as institutional policies. However, as they are not realized as a systematized practice, the effectiveness and efficiency of these practices are not yet known. The realization of this study, then, is also justified based on the need to produce data regarding this care model[5].

The introduction of evidence-based practices in hospital care goes through the process of overcoming barriers and behavioral changes and, therefore, requires more than knowledge and convictions on the part of professionals[6]. Therefore, in order to guarantee the right of decision of the pregnant woman by way of delivery, in order to consider health gains and risks, it is necessary that health care happens in a shared way between the multi professional team and the woman[2].

The study of these practices of childbirth care refers to the need to investigate and, in a way, monitor the implementation of good practices, to know the real situation and in reference units, and thus be able to collaborate in a critical analysis of this reality.

Based on the above, this study aimed to analyze the practices of childbirth care in a public maternity hospital.

Methods

This is a descriptive, cross-sectional study with a quantitative approach. The field chosen for research is a reference maternity hospital in the state of Ceará, Brazil. The data collection period occurred between May and October 2017. The probabilistic sample was representative based on the number of deliveries occurred in 2016 for the calculation of finite populations, adopting a 95% confidence interval, a 50% prevalence for cases of vaginal deliveries and maximum allowable sample error of 5%, totaling a sample size of 264 women. The selection criteria were: legal age, usual risk pregnancy, in the normal postpartum period and presenting general conditions that would allow participation in the research as respondent. Exclusion criteria were women who were diagnosed with fetal death or early neonatal mortality due to interference in the use of data from newborns, as well as the non-observance of practices in these cases.

Data collection took place in the postpartum ward, on the first floor of the maternity hospital studied, through the application of a structured and pre-tested form with 10 women, using the interview technique, with an average time of 15 minutes for each participant.

In the first moment, during the postpartum hospitalization, the mothers were contacted to explain

about the study objectives, in the respective beds, in the postpartum wards, by the researcher. Then, an individual interview was conducted with each postpartum woman. The form was prepared by the researcher and consisted of sociodemographic data and assistance during labor and delivery. The variables investigated were age, marital status, education, income, information received at the maternity hospital, respected privacy, freedom of position, fetal monitoring, non-pharmacological pain relief methods, companion presence, skin-to-skin contact, amniotomy, Kristeller, repeated touches and episiotomy.

Data were compiled and analyzed using the statistical program Statistical Package for Social Sciences, version 20.0. Continuous variables were expressed by averaging; for categorical ones, absolute and relative frequencies were obtained. To verify possible association between variables, we used Chi-square and Pearson tests and Fisher's exact test, which established the $p<0.05$ as statistically significant. However, the application of such tests did not reveal statistically significant associations. The findings were presented in tables and discussed in light of the World Health Organization's classification of best practices[3].

The research complied with the norms of Resolution 466/2012 that guides research with human beings and was approved by the Assis Chateaubriand School Maternity Research Ethics Committee, according to the Certificate of Presentation for Ethical Appraisal nº 65798017,0,0000,5050 and Opinion nº 1,991,234 / 17.

Results

The sociodemographic characterization of the puerperal women allowed us to infer that 240 (90.9%) were under 35 years old; 205 (77.7%) of them presented consensual union, stable or by marriage; 197 (74.6%) low monthly income, with a value less than or equals to one minimum wage; as for education, (166) 62.9% of the mothers had completed at least elementary school.

Regarding childbirth care, 150 (56.8%) of births were attended by obstetricians; 114 (43.2%) by obstetric nurses. Regarding access to information during maternity care, 233 (88.3%) of the women reported that they received guidance during labor and delivery by the staff on duty, and 174 (74.6%) obtained by a nurse, 25 (10.7%) by the doctor, 11 (4.7%) by the nursing technician, 23 (9.8%) could not inform the professional category, this may be due to the fact that some professionals did not identify themselves and 31 (11.7%) reported not receiving information (Table 1).

Privacy was respected in 251 (95.1%) of the study population. Fetal monitoring was reported by 260 (98.5%) of the sample. The presence of a companion was respected by the professionals of the institution studied in 263 (99.6%) of the reports. The use of non-pharmacological methods for pain relief during labor occurred in 75.0% (198) of the patients. Freedom of position was reported by 256 (97.0%) women, in addition to the promotion of skin-to-skin contact occurred in 259 (98.1%) of postpartum women (Table 1).

Chi-square and Pearson tests and Fisher's exact test were used, which established $p<0.05$ as statistically significant. However, the application of such tests did not reveal statistically significant associations.

Table 1 – Distribution of appropriate variables during labor and birth care (n=264)

Variables	n(%)
Information	
Yes	233(88.3)
No	31(11.7)
Privacy	
Yes	251(95.1)
No	31(4.9)
Freedom of position	
Yes	256(97)
No	8(3)
Fetal monitoring	
Yes	260(98.5)
No	4(1.5)
Non-pharmacological method	
Yes	198(75)
No	66(25)
Companion presence	
Yes	263(99.6)
No	1(0.4)
Skin-to-skin contact after childbirth	
Yes	259(98.1)
No	5(1.9)

Table 2 – Distribution of variables on practices not recommended during labor and birth (n=264)

Variables	n (%)
Amniotomy	
Yes	82(31.1)
No	182(68.9)
Kristeller	
Yes	12(4.6)
No	252(95.5)
Episiotomy	
Yes	15(5.7)
No	249(94.3)
Repeated ringtones	
Yes	147(55.7)
No	117(44.3)

Regarding the practices that should be abolished because they are clearly harmful or ineffective, the trichotomy, the transference of the parturient to another room during the expulsive period and the use of enema were not reported by the women interviewed in the studied institution, therefore, were not illustrated in Table 2.

Regarding the improperly used practices during labor and delivery: amniotomy was performed in 182 (68.9%) of women hospitalized with intact membranes; Kristeller's maneuver in 12 (4.6%); episiotomy, in 15 (5.7%); Repeated vaginal touches were reported by 147 (55.7%) of the study population during labor.

Discussion

The limitation of the study is mainly due to the type, since cross-sectional studies have as disadvantages the non-direct cause and effect relationship, as well as confounding factors. Therefore, it would be interesting to carry out studies that could observe the actors involved in the care of women during the parturition process.

The results of this study may contribute to the change in health processes focused on women's care, recognizing the importance of care that considers the uniqueness of each individual. Rescue of childbirth as a physiological process is sought, using educational activities and good practices based on scientific evidence, in the evolution of labor and delivery.

The data from the present study showed a smaller number of habitual risk deliveries attended only by obstetric nurses in the maternity ward. A study corroborates the positive impact of childbirth care provided by obstetric and midwifery nurses, such as fewer interventions and greater satisfaction of women with the experience of childbirth, and therefore recommends that health managers take part in ensuring favorable conditions for a greater performance of the those professionals in the parturition process[2].

Regarding access to information during maternity care, this was satisfactory, as women reported that they received guidance during labor and delivery by the staff on duty. Access to quality information, as a way of empowering women to promote active participation in childbirth, guarantees their role as protagonist and makes the experience of parturition a conscious process, which is once again perceived as natural and physiological[7].

The results revealed that most of the participants had their privacy preserved, corroborating with a survey conducted in public maternity ward in Curitiba, Brazil, in which 78.0% of women had their intimacy preserved. This is an important factor that requires the contribution of professionals in guaranteeing it, because undue exposure is opposed to the values recommended by humanization and the principles of integrality and individuality[8].

In the findings of this research, freedom to walk and move was similar to a recent study, whose ambulation rate was 208 (96.0%)[5]. The free movement allows the parturient woman to adapt comfortable and appropriate postures to the period of labor and delivery. This should be encouraged by professionals during care.

This fact demonstrates how the service is adequate to respect the implementation of good practic-

es in childbirth care, contributing to a real change of scenery that until then revolved around professionals and not parturient women, who are passively assisted.

With regard to fetal monitoring, it was routinely observed during labor. Fetal well-being assessment in low-risk parturients should be performed with intermittent auscultation at all delivery sites, the purpose of intrapartum fetal well-being monitoring is to assess the adequacy of fetal oxygenation during labor and, consequently, preventing damage resulting from the interruption of oxygen transfer from the environment to the fetus, thus ensuring the birth of a child in good condition[2].

Almost all women in this study remained with a free-choice companion during the hospitalization period. This converges with Law no. 11,108/2005 in Brazil, in which the pregnant woman is entitled to a companion during labor, delivery and immediate postpartum[9].

The presence of the companion favors a positive experience in the parturition process, as it ensures greater satisfaction and tranquility of the woman, relieving fear, pain and tension[10].

In this context, we highlight the non-pharmacological methods for pain relief during labor that were well accepted by women in this study. This reinforces the need to establish pain coping strategies by health professionals, in order to promote humanized care throughout the labor and delivery process[11].

The data revealed that the mothers were allowed to contact their children soon after birth and, in addition, breastfeeding was stimulated in the first hour of life of the newborn. All this corroborates research conducted in a maternity hospital in Pernambuco, Brazil, in which most women received the baby immediately after delivery[12]. This practice should be encouraged regardless of the mode of delivery, as it favors the success of exclusive breastfeeding and the mother-child bond.

Regarding early amniotomy, this study was similar to other research carried out in tertiary level hospitals of the Public Health System in Andalusia, Spain, in which 34.3% participants of the study were observed[13].

The argument used for early amniotomy is that it would shorten the duration of labor. However, this procedure may be associated with some potential complications, such as increased occurrence of fetal heart rate deceleration and infection. Thus, risks and benefits should be evaluated in the light of scientific evidence[2]. Such management associated or not with oxytocin, should not be routinely performed in women who are progressing well[14].

Regarding episiotomy, in this study, a rate below 30.0% was found, recommended by the World Health Organization. Another study conducted in a maternity ward of the Regional Hospital of São José, Santa Catarina, Brazil, the prevalence of episiotomy was 32.1%, being higher in younger parturients with higher education[15].

Unnecessary use of episiotomy causes risk of perineal trauma, need for episiorrhaphy and healing complications, as well as direct reflexes in the sexual life of this woman, indicating if there are signs of acute fetal distress, insufficient progression of delivery or more severe lacerations[14].

Thus, obstetric care providers should be familiar with and willing to consider the use of low-intervention approaches, where appropriate, for the intrapartum management of low-risk women[16].

Regarding the performance of the Kristeller maneuver, there was a low occurrence in this study. This conduct is outlawed and considered a violation of women's right to bodily integrity, as it carries risks for the mother - uterine rupture and the baby - fetal distress.

Thus, scholars point out the importance of the institutions' involvement in the restructuring of services, as well as in the improvement of the professionals involved, based on the good practices of childbirth care[5].

In the Brazilian context, a survey called *Nascer*

no Brasil analyzed 23,894 women from 191 municipalities in 266 public, private and mixed, medium and large hospitals. Among some results, the study showed that most women have children by caesarean (52.0%); in the private sector, this number increases to 88.0% and only 5.0% of vaginal deliveries were without intervention. In contrast, 43.1% had interventions, including zero-birth childbirth (74.8%), episiotomy (53.5%), synthetic oxytocin (36.4%), Kristeller maneuver (36.1%) and 34.1% were elective cesarean[17].

Regarding vaginal touch, this research showed significant quantitative. The World Health Organization proposes that this test be performed only when necessary and at a four-hour interval during the first stage of labor[2]. However, the studied maternity is a field of training of health professionals, causing an increase in the amount of vaginal touch, although it is not recommended.

Conclusion

The study showed that the researched motherhood used the good practices of childbirth care, based on public health policies and scientific evidence. However, unnecessary practices such as early amniotomy, repeated touches and Kristeller maneuver were found, although in a low percentage, but should be avoided while assisting the parturition process.

Collaborations

Barros MAR and Sousa LS contributed to the project design. Américo CF (in memoriam) collaborated with project design. Esteche CMGCE, Damasceno AKC and Vasconcelos FX assisted in the analysis and interpretation of the data. All authors cooperated with the writing of the article, relevant critical review of the intellectual content and final approval of the version to be published.

References

1. Ministério da Saúde (BR). Caderno Humaniza SUS. Humanização do parto e do nascimento [Internet]. 2014 [citado 2019 out 13]. Disponível em: http://portaldeboaspraticas.iff.fiocruz.br/biblioteca/humanizacao-do-parto-e-do-nascimento/

2. Ministério da Saúde (BR). Diretriz Nacional de Assistência ao Parto Normal - Conitec [Internet]. 2016 [citado 2019 out 13]. Disponível em: http://conitec.gov.br/images/Consultas/2016/Relatorio_Diretriz-PartoNormal_CP.pdf

3. World Health Organization. World Health Organization recommendations: intrapartum care for a positive childbirth experience [Internet] 2018 [cited Oct 13, 2019]. Available from: https://www.who.int/reproductivehealth/publications/intrapartum-care-guidelines/en/

4. Pereira SS, Oliveira ICMS, Santos JBS, Carvalho MCMP. Natural childbirth: the work of nurses in the face of humanized care. Tempus Actas Saúde Coletiva. 2016; 10(3):199-213. doi: http://dx.doi.org/10.18569/tempus.v10i3.1727

5. Sousa AMM, Souza KV, Rezende EM, Martins DC, Lansky S. Practices in childbirth care in maternity with inclusion of obstetric nurses in Belo Horizonte, Minas Gerais. Esc Anna Nery. 2016; 20(2):324-31. doi: 10.5935/1414-8145.20160044

6. Côrtes CT, Santos CS, Caroci AS, Oliveira SG, Oliveira SMJV, Riesco ML. Implementation methodology of practices based on scientific evidence for assistance in natural delivery: a pilot study. Rev Esc Enferm USP. 2015; 49(5):716-25. doi: http://dx.doi.org/10.1590/S0080-623420150000500002

7. Silva ALS, Nascimento ER, Coelho EAC. Nurses practices to promote dignity, participation and empowerment of women in natural childbirth. Esc Anna Nery. 2015; 19(3):424-31. doi: http://dx.doi.org/10.5935/1414-8145.20150056

8. Apolinário D, Rabelo M, Wolff LDG, Souza SRRK, Leal GCG. Practices in delivery and birth care from mothers' perspective. Rev Rene. 2016; 7(1):20-8. doi: https://dx.doi.org/10.15253/2175-6783.2016000100004

9. Ministério da Saúde (BR). Lei n 11.108, de 7 de abril de 2005. Altera a Lei nº 8.080, de 19 de setembro de 1990, para garantir as parturientes o direito à presença de acompanhante durante o trabalho de parto, parto e pós-parto imediato, no âmbito do Sistema Único de Saúde - SUS [Internet]. 2005 [citado 2019 fev. 22]. Disponivel em: http://www.planalto.gov.br/ccivil_03/_ato2004-2006/2005/lei/l11108.htm

10. Rocha FAA, Fontenele FMC, Carvalho IR, Rodrigues IDCV, Sousa RA, Ferreira Júnior AR. Care during labor and birth: mothers' perception. Rev Rene. 2015; 16(6):782-9. doi: https://dx.doi.org/10.15253/2175-6783.2015000600003

11. Dias EG, Ferreira ARM, Martins AMC, Jesus MM, Alves JCS. Eficiência de métodos não farmacológicos para alívio da dor no trabalho de parto normal. Enferm Foco. 2018; 9(2):35-39. doi: https://doi.org/10.21675/2357-707X.2018.v9.n2.1398

12. Andrade PON, Silva JQP, Diniz CMM, Caminha MFC. Factors associated with obstetric abuse in vaginal birth care at a high-complexity maternity unit in Recife. Rev Bras Saúde Matern Infant. 2016; 16(1):29-37. doi: https://doi.org/dx.doi.org/10.1590/1806-93042016000100004

13. Hidalgo-Lopezosa P, Hidalgo-Maestre M, Rodríguez-Borrego MA. Birth plan compliance and its relation to maternal and neonatal outcomes. Rev Latino-Am Enfermagem. 2017; 25:e2953. doi:https://doi.org/dx.doi.org/10.1590/1518-8345.2007.2953

14. Ministério da Saúde (BR). Secretaria de Ciência, Tecnologia e Insumos Estratégicos. Diretrizes nacionais de assistência ao parto normal: versão resumida [Internet]. 2017 [citado 2019 set 20]. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/diretrizes_nacionais_assistencia_parto_normal.pdf

15. Nunes RD, Mapelli AV, Nazário NO, Traebert E, Seemann M, Traebert J. Avaliação dos fatores determinantes à realização da episiotomia no parto vaginal. Enferm Foco. 2019; 10(1):71-5. doi: https://doi.org/10.21675/2357-707X.2019.v10.n1.1399

16. Committee on Obstetric Practice, King TL, Wharton KR, Ecker JL, Wax JR. Committee opinion no. 687: approaches to limit intervention during labor and birth. Obstet Gynecol. 2017; 129(2):e20-8. doi: dx-.doi.org/10.1097/AOG.0000000000001905

17. Leal MC, Pereira APE, Domingues RMSM, Theme Filha MM, Dias MAB, Pereira, MN, et al. Obstetric interventions during labor and childbirth in Brazilian low-risk women. Cad Saúde Pública. 2014; 30(Suppl1):17-32. doi: http://dx.doi.org/10.1590/0102-311X00151513