Educational intervention to improve normal childbirth care

Intervenção educacional para melhoria na assistência ao trabalho de parto normal

Intervención educacional para mejora en la asistencia al trabajo de parto normal

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https://doi.org/10.6018/eglobal.382581

Received: 5/06/2019
Accepted: 18/09/2019

ABSTRACT:

Introduction: The performance of obstetric nursing in the scenario of labor and childbirth has gained prominence because nursing professionals are considered indispensable actors for the achievement of humanized birth, to rescue the autonomy of women.

Materials and methods: This is a quasi-experimental study of the before and after type, in which an educational intervention was developed, conducted through a training course applied to the nursing staff. The study was accomplished from August 01 to 03, 2018, in the childbirth room of a maternity hospital in Teresina-PI. Authorization from the teaching and research committee of the institution was requested, with a favorable Opinion for its realization.

Results: Thirty-two professionals participated in the intervention. The majority was from the obstetric center; 87.50% were nursing technicians and 85.71% obstetric nurses. There was a greater number of errors in questions 5 (46.87% of error) and 10 (32.50% of error) in the pre-test, in the theme nursing care in labor and childbirth, and an improvement of to 18.75 and 9.25 of error, respectively, in the post-test.

Discussion: Among the several options of instructional strategies, continuing education has a prominent place in nursing, as the results of this study showed an improvement in the knowledge of professionals after application of the educational intervention.

Conclusion: The intervention allowed the professionals to broaden their knowledge and provide the mother-newborn binomial with a humanized care supported by scientific evidence.

Key words: Normal childbirth; Evidence-based nursing; Humanized childbirth.
RESUMO:
Introdução: A atuação da enfermagem obstétrica no cenário do trabalho de parto e parto vem ganhando destaque por esse ser um profissional considerado uma figura indispensável para o alcance de um parto humanizado, com intuito de resgatar a autonomia da mulher.
Materiais e Métodos: Trata-se de um estudo quase experimental, do tipo antes e depois, o qual foi desenvolvido uma intervenção educacional, realizada por meio de curso de capacitação aplicado à equipe de enfermagem. Realizado no período de 01 a 03 de agosto de 2018 na sala de parto de uma maternidade em Teresina-PI. Solicitada autorização do comitê de ensino e pesquisa da instituição, com parecer favorável para realização.
Resultados: Participaram da intervenção 32 profissionais, havendo a presença majoritária da equipe de enfermagem do centro obstétrico, com a composição de 87,50% de técnicos de enfermagem e 85,71% de enfermeiros obstetras. Pode-se observar que no pré-teste houve maior número de erros nas questões 5 com 46,87% de erro e a 10 com 32,50% de erro da temática cuidados de enfermagem no trabalho de parto e parto, com melhoria após aplicação da intervenção com 18,75 e 9,25 de erros respectivamente no pós teste
Discussão: Diante de diversas opções de estratégias instrutivas, a educação continuada possui um lugar de destaque na enfermagem, pois a partir dos resultados, podemos perceber a melhoria dos conhecimentos dos profissionais após aplicação da intervenção educativa.
Conclusão: A intervenção possibilitou que os profissionais ampliassem seus conhecimentos e proporcionar ao binômio mãe-RN um cuidar humanizado e respaldado das evidências científicas.
Palavras chave: Parto normal; Enfermagem baseada em evidências; parto humanizado

RESUMEN:
Introducción: El desempeño de la enfermería obstétrica en el escenario del parto y el parto ha ido ganando protagonismo por ser una profesional considerada una figura indispensable para el logro de un parto humanizado, con el objetivo de rescatar la autonomía de las mujeres.
Materiales y métodos: Este es un estudio cuasi experimental, antes y después, que desarrolló una intervención educativa, realizada a través de un curso de capacitación aplicado al personal de enfermería. Celebrada del 01 al 03 de agosto de 2018 en la sala de partos de un hospital de maternidad en Teresina-PI. Se solicitó la autorización del comité de enseñanza e investigación de la institución, con una opinión favorable para llevar a cabo.
Resultados: Treinta y dos profesionales participaron en la intervención, con la mayoría del personal de enfermería del centro obstétrico, con 87.50% de técnicos de enfermería y 85.71% de enfermeras obstétricas. Se puede observar que en la prueba previa hubo un mayor número de errores en las preguntas 5 con 46.87% de error y 10 con 32.50% de error en el tema de cuidados de enfermería en trabajo de parto y parto, con mejora después de la aplicación de la intervención con 18.75 y 9.25 errores respectivamente en el examen posterior.
Discusión: Frente a varias opciones de estrategias de instrucción, la educación continua tiene un lugar destacado en enfermería, porque a partir de los resultados, podemos ver la mejora del conocimiento de profesionales después de aplicar la intervención educativa.
Conclusión: La intervención permitió a los profesionales ampliar sus conocimientos y proporcionar al binomio madre-RN una atención humanizada respaldada por evidencia científica.
Palabras clave: parto normal; enfermería basada en la evidencia; parto humanizado.

INTRODUCTION

Childbirth, until the twentieth century, was an event of an intimate and private nature, being shared only among women, considered a natural phenomenon surrounded by cultural meanings, and the birth was celebrated as a remarkable event of life. However, over the years, there have been changes that have made this culture into a medical-hospital based event (1).

These changes started with the valorization of women as protagonists of childbirth and the planning of childbirth as a physiological event. On this basis, the concept of humanized childbirth is understood as the practice of childbirth care that ensures a
safe quality of care and values the choice of giving birth in a private, natural and familiar way. The concept of humanized care is broad and involves a set of knowledge, practices and attitudes aimed at promoting childbirth and healthy birth and preventing maternal and perinatal morbidity and mortality. It is necessary to have a relationship of trust, focusing on the needs and wishes of the parturients, besides allowing a safe birth \(^{(2)}\).

Humanizing childbirth does not only mean doing normal childbirth, performing procedures or not, but also making the woman a protagonist in this moment and not a mere observed, giving her freedom of choice in decision making. Humanized childbirth includes respect for the physiological process and the dynamics of each birth, in which interventions must be careful, avoiding excesses, and using the technological resources available \(^{(3)}\).

Given this, Brazil has implemented public policies applied to the context of obstetric and neonatal care aimed at promoting healthy childbirth and preventing maternal and perinatal morbidity and mortality, in order to ensure that medical professionals, obstetric nurses, nursing technicians and midwives perform procedures proven to be beneficial for women and newborns, avoiding unnecessary interventions and preserving the privacy and autonomy of these subjects, thus reinforcing good childbirth care practices \(^{(1)}\).

For some authors \(^{(2)}\), health professionals are coadjuvant in this experience, as they have the opportunity to put their knowledge at the service of the well-being of women and babies, recognizing the critical moments when their interventions are necessary to ensure the health of both. They can minimize the pain, stay at the woman’s side, comfort her, provide clarification and guidance, and ultimately help to give birth.

In this sense, it is emphasized that the nursing team is supported by the Law of Professional Exercise number 7,498 of June 25, 1986, to act directly in the care of women during labor and childbirth. Understanding how the nursing team has been acting in obstetric care allows us to propose improvements in the care to parturients and thus contribute to the growth and advancement of the nursing practice, in the context of humanization of care \(^{(4)}\).

In humanized childbirth, it is fundamental that the nursing staff – composed of nurses, technicians and/or nursing assistants – explores non-pharmacological pain relief care methods. These professionals have a fundamental role in performing this care, providing the parturients with pain relief through simple measures such as freedom to adopt varied positions, exercises that facilitate labor, ambulation, rhythmic and gasping breathing, shower and immersion baths, touch and massage. Such actions give to women the opportunity to have a good experience during this special moment that is the arrival of the child \(^{(3)}\).

The embracement of parturient women by the nursing team can contribute to a humanized care, but this will only happen if embracement is understood as a process in which all who make up a multiprofessional team are trained and qualified for such act \(^{(4)}\).

The encouragement and trust conveyed by a careful nursing team can have a strong influence on reducing emotional tension during labor, especially when women are given the opportunity to discuss their feelings, ask questions and express their fears\(^{(5)}\).
In this sense, it is of paramount importance that the nursing staff be trained based on evidence of good practices in terms of humanized intra-partum care measures recommended by the World Health Organization - WHO, Ministry of Health - MOH and the National Policy of Humanization at Childbirth and Birth. The objective is to open the possibility of providing a holistic and embracing care to the parturient women and the newborns, so that, together with the multidisciplinary team, a safe and humanized childbirth and birth be promoted.

Thus, this study had as guiding question: are the nursing team professionals who work in the childbirth room prepared to provide care to women during labor and childbirth according to the recommended evidences?

To update these professionals, this study aims: to train the nursing staff of the childbirth rooms and NCC of a reference maternity hospital in Teresina-PI to improve the assistance provided to normal labor and childbirth.

**MATERIALS AND METHODS**

This is a quasi-experimental study of the before and after type, carried out through application of an educational intervention in which topics on best practices recommended by WHO and the MOH on care for parturient women and newborns were addressed in a training course applied to the nursing team, and whose effectiveness was assessed by applying a pre-test and post-test.

The educational intervention was performed at the nursing home at the superior obstetric center (SOC) of a reference maternity hospital in Piauí, located in the southern region of the city of Teresina-PI. The hospital has 248 obstetric beds and 167 neonatal beds, and it is the largest in the state, accounting for 63% of births in the city of Teresina (6).

In the hospital, the Normal Childbirth Center (NCC) and the Superior Obstetric Center (SOC) provide care for normal childbirth. The NCC has a 5-bed structure for individualized PCP (Prepartum, Childbirth and Postpartum) room. The parturients are attended by Obstetric Nurses and nursing technicians. The obstetrician is called only when complications arise. The pediatrician is responsible for the hospital discharge of the newborn (6).

The SOC is an obstetric center that has 3 nursing wards, totaling 9 beds. It has 4 beds for PCP room. It has an NB room, where the first care measures for NBs are conducted, a vaccine room, and a nursing station. The assistance is provided to parturient women by obstetricians, physical therapists, obstetric nurses, and nursing technicians.

Aiming at the best convenience for these professionals, the course was taught at the SOC.

This intervention was performed with nursing technicians and nurses from the SOC and NCC of the maternity hospital, who agreed to participate in the training. In the SOC, the nursing staff consists of 21 nursing technicians (NT) and 13 obstetric nurses (ON). In the NCC, the nursing staff is composed of 11 nursing technicians and 12
obstetric nurses. Thus, the universe of participants was 57 professionals of the nursing team.

The inclusion criteria were: professional bond in the institution of at least one year. And the exclusion criteria were: professionals who were on medical leave, indeterminate leave, and/or on vacation during the data collection period.

After applying the exclusion criteria, the final population was 49 professionals from the nursing staff. The sample was random, according to the availability and routine of the shift, totaling 32 nursing professionals.

The proposal of the educational intervention was conducting a course which addressed the evidence and recommendations in humanized labor and care of newborns in the childbirth room. In order to assess the effectiveness of the course, a pre-test and a post-test were applied to the participants. The pre-test and the post-test had objective, multiple-choice questions to test the knowledge about care for parturients in labor, childbirth, non-pharmacological pain relief methods, and care for NB in the childbirth room. The course had a workload of 5 hours/class and was held in August 2018, with classes distributed in different shifts and dates so as to cover the largest number of professionals, totaling 5 classes.

Data collection was divided into three steps. The first step was the application of the pre-test and socioeconomic questionnaire. Both were structured and self-applying. The tests were elaborated and applied by the researchers, after a pilot test. For this, 30 minutes was allowed for filling in the pilot test.

The second step of data collection was the realization of the class (educational intervention). The subjects discussed in the class were: humanization policies (Stork Network; Childbirth Humanization Policy; National Humanization Policy); good practices in childbirth care recommended by the World Health Organization (WHO) and Ministry of Health (MOH); skin-to-skin contact; breastfeeding in the first hour of life; clamping of the umbilical cord at the most appropriate moment; and initial care to the newborn in the childbirth room according to the precepts of the Brazilian Society of Pediatrics and the MOH. Each class lasted 3 hours in each group, and active methodologies were used to promote interaction between the participants. Then, the third step of the collection was the request to complete the 30-minute post-test.

After data collection, the values obtained were entered twice in an Excel database and then exported and analyzed using the Statistical Package for the Social Sciences - SPSS, version 20.0.

To perform this intervention, authorization was requested from the teaching and research committee of the institution, with a favorable Opinion for CEMDER-2018080003.

RESULTS

Regarding the composition of nursing professionals, the total sample was 32 participants. Table 1 below contemplates the distribution of the participants according to sector and professional category.
Table 1- Distribution of participants in the course by sector and professional category.

<table>
<thead>
<tr>
<th></th>
<th>NURSING TECHNICIAN (NT)</th>
<th>OBSTETRIC NURSES (ON)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>SOC</td>
<td>14</td>
<td>87.50</td>
</tr>
<tr>
<td>NCC</td>
<td>2</td>
<td>12.50</td>
</tr>
<tr>
<td>TOTAL</td>
<td>16</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Direct survey conducted with the professionals (2018)

Thirty-two professionals participated in the intervention, with predominance of the SOC nursing team, with a composition of 87.50% of NT and 85.71% of ON.

Among the participants, there was a prevalence of female professionals, aged between 35-45 years. There were a 53.12% of married people. Regarding the type of training, 43.75% had only vocational secondary education and 50% had postgraduate education. Regarding the time of work in the institution, 50% of the participants had more than 5 years in the maternity ward. As for the work shift, 50% worked in the night shift, 31.25% in the morning shift, 9.37% were one-day workers in the morning shift, and 9.37% one-day workers in the afternoon shift.

In order to evaluate the effectiveness of the course, Table 2 shows the results of the pre-test and post-test applied to the participants.

Table 2 - Distribution of pre-test and post-test responses applied during the course. Teresina-PI 2018

<table>
<thead>
<tr>
<th>APPLIED KNOWLEDGE</th>
<th>Phase of application of the evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUESTIONS</td>
<td>Pre-test (n32)</td>
</tr>
<tr>
<td></td>
<td>Post-test (n32)</td>
</tr>
<tr>
<td></td>
<td>Hits</td>
</tr>
<tr>
<td>Nursing care in labor and childbirth</td>
<td>N</td>
</tr>
<tr>
<td>1 Zero diet during the labor?</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>00</td>
</tr>
<tr>
<td>2 Privacy to the parturient woman in childbirth rooms?</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>00</td>
</tr>
<tr>
<td>3 Routine use of enema??</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td>4 Routine trichotomy?</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td>5 Recommended non-supine positions during labor?</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>6 Should movement be stimulated during labor?</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td>7 Routine serotherapy during labor?</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Question</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>8</td>
<td>Are directed pulls recommended?</td>
</tr>
<tr>
<td>9</td>
<td>Are Kristeller maneuver and episiotomy routinely used during the expulsive period?</td>
</tr>
<tr>
<td>10</td>
<td>Vaginal touch in low risk parturients – recommendation 4/4hrs?</td>
</tr>
</tbody>
</table>

**NB care**

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
<th>Correct</th>
<th>Incorrect</th>
<th>Total</th>
<th>Percentage Correct</th>
<th>Percentage Incorrect</th>
<th>Percentage Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Skin-to-skin care recommendations</td>
<td>32</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>100.0</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Adequate room temperature and in the NB room</td>
<td>19</td>
<td>7</td>
<td>3</td>
<td>3</td>
<td>90.6</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Benefits of breastfeeding</td>
<td>30</td>
<td>5</td>
<td>1</td>
<td>7</td>
<td>93.7</td>
<td>6.25</td>
</tr>
</tbody>
</table>

Source: Direct survey conducted with the professionals (2018)

In Table 2, it is observed that in the pre-test there were more errors in questions 4, with 18.75% of errors, question 5, with 46.87%, and question 10, with 32.50% on the theme nursing care in labor and childbirth, and in question 2, with 40.63% of errors on the theme care to the newborn. It was found that after the educational intervention, the errors in these questions decreased, confirmed after the application of the post-test.

Concerning the content of the questions, question 4 dealt with the subject of antepartum care, question 5 addressed the indications of non-supine positions, question 10 addressed to the interval for vaginal touch in low-risk pregnant women in active labor, and question 2 addressed the appropriate temperature of the childbirth room and of the newborn at the moment of birth.

The questions correctly answered by 100% of the participants in the pre-test were questions 1 and 2 on care to intrapartum parturients, and question 1 on care to the newborn.

Question 1 addressed what the parturient's diet should be during labor, and question 2, the parturient's privacy in the childbirth room. In turn, question 1, on care for NB addressed skin-to-skin contact of the binominal mother-NB.

**DISCUSSION**

After the analysis of the data, it can be stated that the nursing professionals who provide care to parturient women in the institution studied were mostly female, living with a sexual partner, and aged over 40 years.

It was also seen that, besides being professionals who have reached personal maturity, they had professional experience in the care of women in the pregnancy-puerperal cycle. This is in line with a study (7) where the profile of the studied group revealed characteristics of mature people from both the age and professional point of view.
Thus, it should be emphasized that obstetric nursing care for parturient women consists of a complex process that requires a series of competencies and responsibilities, including practical and theoretical knowledge of the various phases of labor. It is necessary that nurses know how to act from eutocic cases to the recognition of risk situations (8).

Obstetric nurses also work as educators of parturient women, families and caregivers, clarifying doubts and consciously informing about the stages of labor, providing them with emotional and physical support (9).

The results showed that there are still nursing staff professionals with deficits in knowledge about the recommended practices for assistance during normal labor.

In this sense, we must consider that a qualified professional is the one who has been trained and achieved expertise in the skills necessary to manage normal pregnancy, childbirth and the immediate postpartum period and to identify, manage and report complications in women and newborns (8).

Given the many options of instructional strategies, continuing education has an important role in nursing. The concept of continuing education is practices used for the purpose of personal and professional development of workers, through a constant educational process in which improvement of knowledge and consequently of the assistance provided by these professionals is sought (9).

In this conception, when obstetric nurses implementing their obstetric practices in health services with the proposal of humanization recommended by WHO, they make available to users a specific professional knowledge characterized by being essentially relational and derived from a structured knowledge of nurses. Obstetric nurses are also open because they integrate popular knowledge and diverse disciplines in the construction of care. By having bodies as their basic instruments, they provide comfort and autonomy by encouraging women to recognize and develop their own skills (10).

The questions that dealt with the theme of care to the parturient women during labor were the ones that most frequently were correctly answered, corroborating the study (11) which emphasizes that pain relief techniques are something positive in care, something that bring comfort and satisfaction at the moment of giving birth. The idea that women should be treated with tenderness is highlighted, and their time should be respected. Professionals should provide pain relief through exercise, massages, bathing, ambulation and even the adoption of different positions during labor.

During labor, nurses and their teams should value women, assisting them in the process of giving birth, respecting their time, using techniques aimed at relaxation and pain relief such as massages, baths, stimulation of active ambulation, breathing exercises, change of position, comforting touches, and use of birth balls (2).

In this sense, it is important to highlight the movement of humanization of childbirth, which aims at the reduction of unnecessary interventions and the promotion of care to the pregnancy/childbirth/birth/breastfeeding process, which are understood as a singular, natural and physiological processes that require strengthening the role of women as protagonists in this process (12).
The National Humanization Policy addresses communication and qualified listening as tools that facilitate the welcoming in health services; however, it is necessary that professionals understand the importance of welcoming for the permanence of users in these services, because when they feel part of this universe they respond satisfactorily to the treatment provided. Thus, it is understood that humanization essentially means embracing, respecting above all the female autonomy and physiology, with a holistic view of the women, transmitting tranquility and respect throughout the follow-up of childbirth (13).

**CONCLUSION**

There was an improvement in the knowledge of professionals of the nursing team, which will allow the development of humanized care and reduction of obstetric violence rates and maternal and neonatal morbidity and mortality. Constant qualification of the professionals responsible for the care to the parturient women is necessary, so that they be able to support the physiological process of labor. Some obstacles were faced in this study, among them the resistance of some professionals to participate. This difficulty was partially remedied by taking the course to an environment close to the work sector.

**REFERENCES**


