Original Article

TEXTO & CONTEXTO ENFERMAGEM
TEXT & CONTEXT NURSING TEXTO & CONTEXTO ENFERMERÍA

MATERNAL ROLE DURING CHILD'S HOSPITALIZATION IN THE NEONATAL INTENSIVE THERAPY UNIT

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ABSTRACT

Objective: to identify the experience of motherhood during the hospitalization period of the newborn in a neonatal intensive care unit.
Method: a descriptive and exploratory research, with a qualitative approach, based on the Maternal Role Attainment Theory. A semi-structured interview was conducted in June 2018 with 23 mothers of newborns in a neonatal therapy unit of a public teaching hospital in the state of Ceará (Brazil). The method for data analysis was the Descending Hierarchical Classification based on the *Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires* software.
Results: with the codings and analysis of the empirical material, it was found that mothers presented negative feelings such as fear, sadness and anguish. Consolidated feelings were based on experiences faced by these women, making it difficult to exercise the maternal role in the neonatal intensive care unit.
Conclusion: data from this research signaled at the lack of maternal protagonism considered important by the theory used, so that the bond between mother and child is established in the neonatal intensive care unit.

DESCRIPTORS: Neonatal intensive care units. Neonatal nursing. Newborn. Mother-child relations. Maternal behavior.

HOW CITED: Santos AS, Rodrigues LN, Santos MSN, Sousa GJB, Viana MCA, Chaves EMC. Maternal role during child's hospitalization in the neonatal intensive therapy unit. Texto Contexto Enferm [Internet]. 2019 [cited YEAR MONTH DAY]; 28:e20180394. Available from: http://dx.doi.org/10.1590/1980-265X-TCE-2018-0394

PAPEL MATERNO DURANTE A HOSPITALIZAÇÃO DO FILHO NA UNIDADE DE TERAPIA INTENSIVA NEONATAL

RESUMO

Objetivo: identificar a experiência da maternidade no período da hospitalização do recém-nascido em uma unidade de terapia intensiva neonatal.
Método: pesquisa descritiva e exploratória, de abordagem qualitativa, com aporte da Teoria da Consecução do Papel Materno. Foi Realizada entrevista semiestruturada no mês de junho de 2018 com 23 mães de recém-nascidos em uma unidade de terapia neonatal de um hospital público de ensino do Estado do Ceará (Brasil). O método para análise dos dados foi a Classificação Hierárquica Descendente a partir do *software Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires*.
Resultados: com as codificações e a análise do material empírico, identificou-se que as mães apresentaram sentimentos negativos, como medo, tristeza e angústia. Os sentimentos consolidados se embasaram em vivências enfrentadas por essas mulheres, dificultando o exercício do papel materno na unidade de terapia intensiva neonatal.
Conclusão: os dados desta pesquisa sinalizaram para a falta do protagonismo materno considerado importante pela teoria utilizada, para que vínculo entre mãe e filho seja estabelecido na unidade de terapia intensiva neonatal.

DESCRITORES: Unidades de terapia intensiva neonatal. Enfermagem neonatal. Recém-nascido. Relações mãe-filho. Comportamento materno.

EL ROL DE LA MADRE DURANTE LA INTERNACIÓN DE SU HIJO EN LA UNIDAD NEONATAL DE CUIDADOS INTENSIVOS

RESUMEN

Objetivo: identificar la experiencia de la maternidad en el período de internación del recién nacido en una unidad neonatal de cuidados intensivos.
Método: investigación descriptiva y exploratoria de abordaje cualitativo, con aporte de la Teoría de Consecución del Rol Materno. Se realizó una entrevista semiestructurada en el mes de junio de 2018 con 23 madres de recién nacidos en una unidad neonatal de cuidados intensivos de un hospital escuela público del estado de Ceará (Brasil). El método para el análisis de los datos fue la Clasificación Jerárquica Descendente a partir del *software Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires*.
Resultados: con las codificaciones y el análisis del material empírico, se identificó que las madres presentaron sentimientos negativos como miedo, tristeza y angustia. Los sentimientos consolidados se basaron en vivencias de estas mujeres, que dificultaron el ejercicio del rol materno en la unidad neonatal de cuidados intensivos.
Conclusión: los datos de esta investigación indicaron la falta del protagonismo materno considerado de importancia por la teoría utilizada para que se establezca el vínculo entre madre e hijo en la unidad neonatal de cuidados intensivos.

DESCRIPTORES: Unidades neonatales de cuidados intensivos. Enfermería neonatal. Recién nacidos; Relaciones madre-hijo. Comportamiento materno.

INTRODUCTION

The Neonatal Intensive Care Unit (NICU) is an environment which has high technological complexity and its patients are neonates with unstable clinical conditions that require specialized care by the health team.[1] The abundance of rules and routines present in the units contribute to the distancing of parents, especially mothers, because they are the ones who experience hospitalization more intensely, which can cause serious damage in the formation of the bond between the binomial.

Child's hospitalization in an NICU is an unexpected situation for the mother, in which she experiences numerous negative feelings, due to the complexity of the environment, which can make it difficult to establish mother-child relationships. It is believed that the negative impact can be reduced through dialog and welcoming by the health professionals, directed to mothers. At this time, it is important to support them, since the first maternal impression of the environment surfaces psychological distress triggered by the hospitalization of the baby.[2–3]

According to the Maternal Role Attainment Theory, becoming a mother is related to the parturient insertion in the performance of care actions for her child, so that she acquires a maternal identity.[4] The theorist describes three main components of the maternal role: bonding with the baby; attainment of competence in maternity behaviors; and expression of the reward for mother-child interactions.[5]

In the NICU, the mother is often not encouraged to participate in any care consistent with her maternal role, being left aside from the decisions made about her baby's health. In this sense, professionals should be sensitized to support the mothers and to encourage them to participate in their children's care.[6]

The mothers must be involved in the care and decision-making process for their children, and a space should be provided for them to assume their maternal role during hospitalization. Allowing them to participate in child care in the NICU is a humanizing action which promotes increased interaction between the binomial and provides training for these mothers after discharge.[7–8]

For maternal protagonism to occur, it is necessary for nurses to know the emotional, social and, above all, clinical aspects experienced by mothers of NICU-hospitalized neonates, in order to support the performance of the maternal role and to reduce the tensions and anguish they experience, in an attempt to strengthen the bond between the binomial.[9]

The feelings most experienced by the parents about their child's hospitalization in the NICU were fear, stress and insecurity, all permeated by diverse difficulties to overcome. Such feelings may hinder the approximation between mother and child, demonstrating the importance of guidance provided by the health team during hospitalization and before discharge to prepare mothers to perform care actions appropriate to their maternal role.[10]

We emphasize the significance of defining how mothers experience the baby's hospitalization and what information they would like to know or learn about their child's care during hospitalization to guide the nursing team assistance for the promotion of maternal protagonism in the NICU.

This research aimed to identify the experience of motherhood during the hospitalization period of the newborn in a neonatal intensive care unit.

METHOD

This is a descriptive and exploratory study with a qualitative approach, developed at NICU of a public teaching hospital in the state of Ceará (Brazil).

Participated in the research, 23 mothers of newborns hospitalized in the NICU, identified as M1, M2, M3...M23 and selected for convenience. All mothers present for the visit to the child on the days of data collection were included until reaching sample saturation. Saturation was considered when the researcher found the internal logic of the object, in its connections and interconnections, in the speeches of the participants.[11]

Data collection was performed in June 2018 and was made through the individual application of a semi-structured interview script, built by the researcher. In the interview script, the questions were related to the characteristics of the mothers: age, years of schooling, marital status, duration of pregnancy, pregnancy planning and type of delivery; and about the maternal experience during the baby's hospitalization in the NICU: How was your first contact with your child in the NICU? Would you like to know or learn about some care of your baby in the NICU? If so, could you describe what you would like to know?

Each interview lasted approximately 10 minutes and was recorded, with the mothers' permission, using the voice recorder of the iPhone 7 mobile phone and later transcribed. The expressions demonstrated by the mothers were observed, such as sadness, insecurity and fear, and it was necessary to pause the interview and talk to them at some moments.

The interview was held in an area reserved for mothers, near the NICU. Initially, the mothers were invited to participate in the research and, if they accepted, the research objectives were clarified, as well as its benefits and risks. Signing of the Free Informed Consent Form was requested. It is noteworthy that there was no refusal to participate by any of the mothers invited to the study.

For the organization of the responses produced by the mothers, the *Interface R pour les Analyses Multidimensionnelles de Textes et de Questionnaires* (IRAMUTEQ) software was used.[12] This software divides the textual *corpus* into segments, sharing the same vocabulary for performing the lexical analysis. From the identification of these segments, the Initial Context unit is formed, in which words are fragmented by their frequency to generate the Elementary Context Units (ECUs).[12]

Data was processed using the Descending Hierarchical Classification (DHC).[12] In this form of analysis, the software organizes the data analysis into a dendogram, which illustrates the relationships between the classes, which should be read from left to right: the closer one class to another, the stronger the relationship between them.[13] DHC represents the quantity and lexical composition of the classes, using a grouping of similar terms, from which the absolute frequency of each one and the value of the chi-square aggregate are obtained.[13] So that it is useful to classify any textual material, the analysis through DHC must take advantage of 75% of the text segments.[14]

Data was discussed with the support of the Maternal Role Attainment Theory,[4–5] considering the following concepts: early mother-infant separation due to baby's illness and/or prematurity; stress perceived by maternal feelings, from events positively or negatively experienced; tension role viewed from the difficulties experienced by women in fulfilling the maternal role.[15]

All ethical aspects of research involving human beings were respected during the study.

RESULTS

Participants' age ranged from 16 to 42 years old; 48% were 20 to 35 years old, 30% over 35 and 22% between 16 and 19 years old. Schooling ranged from First Elementary to College Education, with the majority (69%) having more than 8 years of study. Regarding marital status, 52% said they were in a stable union, 35% were single and 13% were married.

Regarding the variables of clinical characterization of women, pregnancy ranged from 26 to 41 weeks, with the majority (70%) having premature children (<37 weeks); of these, 26% were classified as extreme premature (26 to 29 weeks); 83% had unplanned pregnancies and 61% underwent cesarean delivery.

The textual *corpus* analyzed was composed by the reports of 23 participants with 62 follow-ups, from which 49 Elementary Context Units (ECUs) were obtained, producing seven classes. The analysis yielded 79.03% of the *corpus*.

Figure 1 shows classes and the relationships among them. Class 7 was the first to form and it is subdivided into two complementary ones (3 and 2). These three comprise all the others. Classes 1 and 6 are complementary and were formed simultaneously from the last two classes (5 and 4), which are also complementary to each other.

Class 7 showed the need for mothers to learn about baby care, which was subdivided into classes 3 (unperformed maternal role) and 2 (maternal insecurity). Interruption of the maternal role, caused by the early separation of the binomial soon after birth, caused several obstacles to the bond between mother and child. This may have been due to the tension in fulfilling her role as a mother, combined with a number of stressful life events and feelings ranging from distress and sadness for their child's hospitalization to happiness for the baby's survival.

Participants' speeches showed that the equipment and procedures could also hinder the performance of basic care actions, with the most frequent words being the following: teaching, changing diapers and milk, as shown by the reports: *I wanted to know about the care I can do, about the equipment and procedures,* [...] *to know about the care, I didn't do any mother care because she is in the equipment* (M18); *I didn't touch, I was very afraid and nobody told me I could touch* (M11); *I would like to know how to clean the belly button, change the diaper, if I can breastfeed, how to lay him on my lap, how to bathe, can I bathe?* (M7); according to these reports, the need for information to ensure safety in basic care is highlighted, according to Class 7.

Class 3 pointed out that mothers often felt helpless in the NICU environment because they could not perform any care with the baby, the most frequent words being the following: I can breastfeed, put in my arms, bathe and clean, as reported: [...] *I feel helpless because in the NICU I can't take care of him, he's in other people's hands* (M19); *I wanted to know what procedures are performed on him, what the equipment is for, what care the professionals perform, if I can change the diaper, bathe, clean him and feed him* (M11); *can I touch the baby? Can I talk? Can I put him in my arms? Can I breastfeed?* (M4)

Reports showed mothers' insecurities in taking care of the baby in the NICU, emphasizing the use of many equipment and wires connected to the baby, as evidenced in the speeches: *I felt insecure to touch him, so much equipment and so many wires, I was afraid to touch him* (M12); *I kept thinking a thousand things, I had never entered the ICU, it's not easy for you to see that there's a baby in the NICU full of gadgets, in this intubated state, I can't take him, I can't hold him, I could touch, but I couldn't hold him in my arms because he's in the equipment* (M20); such reports can be observed by Class 2, which presented as following as the most frequent words of the ECUs: care, equipment, procedure, wire and feed.

Texto & Contexto Enfermagem 2019, v. 28: e20180394
ISSN 1980-265X DOI http://dx.doi.org/10.1590/1980-265X-TCE-2018-0394

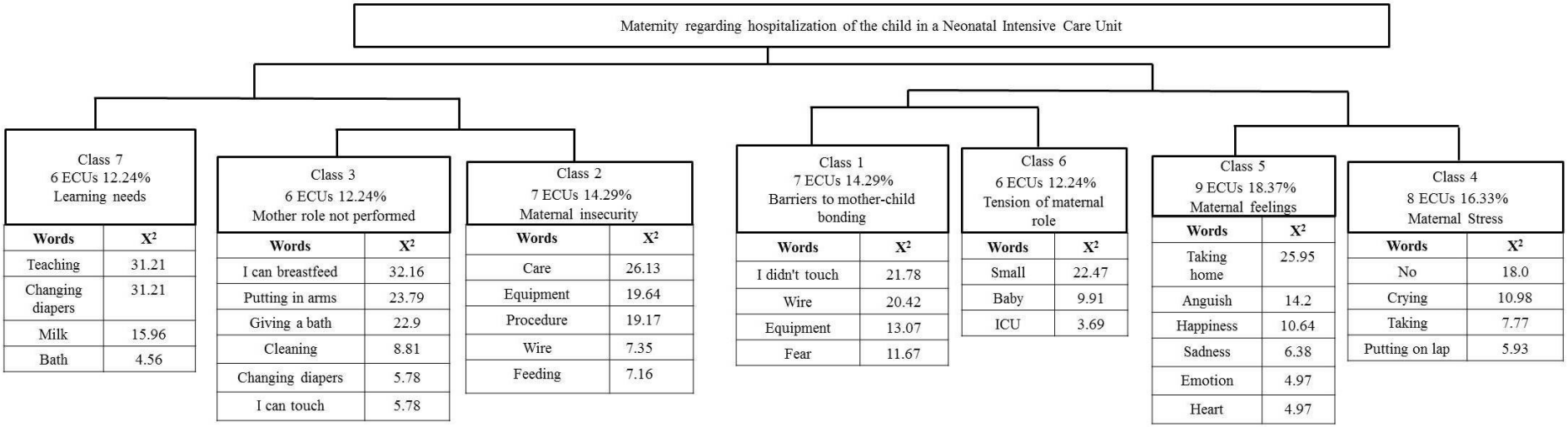

Figure 1 – Descending Hierarchical Classification, by classes and Elementary Context Units, about the maternal experience with regards to the hospitalization of the child in the neonatal Intensive Care Unit. Fortaleza, CE, Brazil, 2018.

Obstacles to the mother-child bond (Class 1) were mainly due to the complexity of the NICU environment, the most frequent words being the following: not touching, wire, equipment, fear; according to the mothers' reports: *at first I felt he wouldn't make it, he was very small and I was cold with him, I walked away. When I touched him I felt he was really mine, I touched after 4 or 5 days. Sometimes I didn't want to come to see him afraid of him dying and me clinging* (M16); *I was heartbroken, I imagined having my healthy baby and seeing him here very small with a lot of equipment and wires, I was very afraid and at the same time happy because he survived* (M11).

The tension regarding the hospitalization of their child was also evident in the mothers' reports, related to the obstacles to the bond between the binomial, as shown in the following speeches: [...] *I was sad, because there are many small babies in the NICU, I didn't want to lose him, but I don't know how long he's going to live, the first time I entered the NICU I didn't touch him, because I couldn't, he was full of equipment and wires, I could only touch him after 1 week* (M17). The words present in the mothers' speeches are represented by Class 6.

Maternal feelings (Class 5) regarding the baby's hospitalization in the NICU had the following as the most frequent words of the ECUs: taking home, anguish, happiness, sadness. This is corroborated by the reports: *I felt happy that he had survived and anguish for not taking him home. I felt so insecure about leaving my baby in this place, afraid of losing him, but it's necessary, isn't it*? (M7)

The stressful events experienced by the mothers (Class 4) were directly related to the feelings they experienced during the baby's hospitalization and presented the following most frequent words: no, cry, take, lay on lap. This is evident in the following speeches: *I cried seeing her like that, so much equipment, I didn't imagine seeing my daughter like that in a NICU. I felt sad, I only took her in my arms after eight days [...] the first time I saw her I was scared, she was full of equipment* (M14); *I was sad to see her in that situation, small, full of wires and equipment I was worried. In the first contact I took her hand and felt love, I could only take her hand. I felt so much like crying, because the first time I saw my baby was in the NICU, I didn't see her on the day she was born* (M13).

It is noteworthy that during the interviews, the mothers showed a lot of emotion when talking about the hospitalization of the baby, by their own clinical condition and particular experience in the NICU, either due to information that they considered insufficient to participate in the care actions or to their own tension and the anxieties experienced during this hospitalization process.

DISCUSSION

The results pointed to the mothers' lack of participation in care during the baby's hospitalization in the NICU, since the broadest class showed the need they have to learn how to take care of their baby. The reports also showed difficulties as for the bonding between the binomial due to negative feelings experienced by the mothers like fear of the baby not surviving, sadness, and anguish, leading to tension and insecurity to provide basic care to the child. These findings are consistent with the concepts used in the Maternal Role Attainment Theory.[15]

The maternal reports of this study pointed to obstacles for bonding with the baby, related to the lack of maternal care performance. This is similar to a research conducted with mothers of premature newborns, which highlighted that the relationship between mother and child may be impaired or not established because of the few opportunities to perform maternal care with the baby.[16] The separation between mother and child by the baby's hospitalization requires the woman's resilience, but she is often not prepared to enter the NICU, which may impair her interaction with the baby,[17] although her insertion in this process is essential.[4]

The use of the Maternal Role Attainment Theory in the practice of neonatology is important to strengthen the care with the newborn in the NICU, since it justifies the maternal protagonism to establish the bond between mother and child, because it emphasizes that the woman only recognizes

motherhood and connects with her child when she acquires competence and satisfaction in maternal care performance.[5]

The diversity of feelings experienced by the mothers in this research, such as fear, sadness, joy for seeing the baby for the first time and the desire to take the child home, was also found in other studies.[9,18] The literature provides maternal reports of feelings experienced by mothers of hospitalized babies in NICUs, such as joy for overcoming difficulties after childbirth and for the fact that the child survived, at the same time referring to concerns and sadness about the separation and hospitalization of the baby in the NICU, since the mother has the desire to take care of him at home.[9,18–19]

Findings of the study indicated that tension and insecurity in the performance of the maternal role are related to the complexity of the NICU environment, in which the baby is surrounded by various equipment, which limits the interaction between mother and child and prevents the establishment of contact between them. Therefore, there should be communication between staff and mothers in an attempt to reduce fear so they can understand the baby's situation.[20]

Studies indicate that it is on the first visit to the NICU that contact between mother and newborn usually occurs,[3,21] being at this moment when the recognition of being a mother occurs through voice, touching and looking, thus overcoming the fear of caring for such a seemingly fragile and small being.[3] These data corroborate the findings of this study.

First visits to the NICU may lead to distancing from the child caused by the fear to touch or hold the baby,[21] according to reports also present in this research. After the initial shock, parents may experience emotional closeness with their babies during hospitalization in the NICU due to the clinical condition of the newborn. However, after the initial shock, the mother may experience emotional closeness to her baby during the hospitalization in the NICU, recognizing that he is truly her own.[21] Thus, to reduce maternal fear and tension, the provision of information by health professionals to mothers is essential.[3]

There is evidence that isolating newborns from maternal contact is harmful to the baby in the short- and long-term, but many units have restrictions on the mother holding the child on her lap in the NICU, despite scientific evidence of its safety and effectiveness in the recovering of the newborn.[22] Thus, the reports pointed out that the most obvious causes of the mother not holding or touching the baby were fear related to equipment and wires, added to the lack of information about what she could do during the visit, signaling the need for support on the part of health professionals, so that the interaction between the binomial happens as soon as possible.

Conversation and maternal touch are essential for the well-being of mother and baby, since from them one perceives the presence of the other.[23] Such action stimulates the bond between mother and child and can function as maternal recognition of the child,[23] being fundamental to establish the relationship between mother and baby for the bonding between them and for the child's development.[24] Despite this importance, the findings of this research indicate the absence of maternal touch in the initial contact of the mother with her baby.

In a study conducted in Rio Grande do Sul (Brazil), based on the care of neonates during hospitalization in the NICU with the support of professionals, the mothers were able to perform care actions like therapeutic touch, putting the baby in their arms, offering food by weaning or breastfeeding, changing diapers, and bathing, among others, the improvement in the clinical condition of their children after skin-to-skin contact and the strengthening of bond being perceived by the mothers.[3] Thus, the importance of health professionals to promote the bond between the mother and child binomial is perceived.

To promote mothers' participation, with a view to maternal protagonism, health professionals (among them, the nursing staff) can offer support to mothers, encouraging them to participate in some care actions like maternal touch, to encourage them to talk to the baby so that he can feel her presence

and, depending on the clinical condition of the neonate, it is fundamental that the mother participates in basic care actions like feeding, so that she feels useful during this period of hospitalization.[21–23] She can even be prepared in the NICU on how to hold her baby in her arms.

Thus, the nursing team has the important role of encouraging the development of mothers' autonomy even in the NICU, providing guidance on the procedures they can performed, using the appropriate technique for the neonate well-being, so as to break the insecurity barrier, and provide skills and competences for the restructuring of the maternal role, allowing to deconstruct the negative impression of the difficulties of caring for the baby in the unit.[6]

Therefore, it is relevant that there are educational activities with mothers of newborns in the NICU to reduce doubts and to alleviate negative feelings about the baby's hospitalization. It is fundamental that nurses offer technical care in addition to the application of relational technologies, aimed at the participation of mothers in daily tasks, in order to encourage bonding and to prepare them for discharge, offering support and dialog among the professionals who assist the newborn and the family members.[25]

The Maternal Role Attainment Theory allows us to visualize the mother within the NICU, with the intention of promoting maternal protagonism during hospitalization and the bond between the binomial. As a limitation of the study, the use of the theory does not include paternal involvement, and the research was conducted in a single hospital in a short period of time.

Despite these limitations, the results present contributions to the practice in the NICU, based on the understanding of the importance and the possibility of the mothers' insertion in baby care during hospitalization, to strengthen the bond between them. From these results it is believed that it is possible to plan and apply educational interventions aimed at promoting maternal protagonism in the NICU, according to the learning needs mentioned by them, so that they feel confident to perform their role. One of the challenges to be faced is the adhesion of the nursing team, so this insertion be realized, combining technical care with a humanized one.

CONCLUSION

The mothers experienced mixed emotions like sadness, fear, tension and stress. In addition, equipment, procedures and wires that surround the baby in the neonatal intensive care unit hinder the interaction between mother and child, a fact added to the information they considered insufficient about what care actions they could perform for their babies.

Data from this research signaled at the absence of maternal protagonism, considered important by the Maternal Role Attainment Theory, so that the bond between mother and child be established. Thus, the need to use relational technologies, such as reception and communication, is highlighted for mothers to act as protagonists of care in a safe environment within the neonatal intensive care unit, maternal touch one being of the ways she has to offer care to her child, which should be encouraged from the first visit, so that interaction occurs between the mother and child binomial.

It is hoped that this research can contribute to foster debate with the nursing staff about the encouragement of mothers' participation in basic child care during hospitalization in the neonatal intensive care unit. These professionals are the ones who provide continuous assistance to the neonate and the most suitable to guide mothers about the care they can offer to their children, adopting an active role in preparing these mothers, so they face the difficulties in performing the maternal role.

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NOTES

ORIGIN OF THE ARTICLE

Extracted from the thesis - Educational technology in nursing to promote the mother-child bond in a neonatal intensive care unit, presented to the Graduate Program in Clinical Care in Nursing and Health, *Universidade Estadual do Ceará*, 2019.

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FUNDING INFORMATION

Graduate Scholarship granted by the *Coordenação de Aperfeiçoamento de Pessoal de Nível Superior*, CAPES Number: 1782463.

ETHICS COMMITTEE IN RESEARCH

Approved by the Ethics Committee in Research with Human Beings of the Hospital Geral de Fortaleza under opinion No. 2.710.388 and Certificate of Presentation for Ethical Appreciation n. 90992918.0.0000.5040.

CONFLICT OF INTEREST

No any conflict of interest

HISTORICAL

Received: October 19, 2018
Approved: February 18, 2019

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