

## Mother's Perception About the Experience in the Neonatal Intensive Care Unit

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### Research Article

#### ABSTRACT

**Objective:** To understand the mother's perception of their experience in the Neonatal Intensive Care Unit.

**Materials and Methods:** Descriptive research with qualitative approach, conducted with nine mothers whose newborn children were hospitalized in the Neonatal Intensive Care Unit. Data were collected through a semi-structured interview in the wards of a reference hospital and, for the data treatment, the collective subject discourse method was used.

**Results:** Eight main ideas were identified: The neonatal intensive care unit welcomes, supports and has good reception; The unit provides a lot of information; The neonatal intensive care unit has shared care; Unit brought hope and victory; My child's hospitalization brought a frightening environment; My child's hospitalization brought the fear of death and hope; The health team showed quality of care, willingness, confidence and the health team was attentive and helpful.

**Conclusion:** The construction of interpersonal relations between the mother and the health team facilitated the exchange of information, the humanized welcome, the care directed to the fragility of the woman and the creation of bonds for the mother-child dyad.

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#### INTRODUCTION

It estimates that 15 million premature babies born every year in the whole world and this rate has increased. In 184 countries, the rate of premature birth varies from 5% to 18% of babies born and more than 60% of premature births occur in Africa and in south Asia. Prematurity is a global problem that requires specific care and of high complexity in the environment of the Neonatal Intensive Care Unit (NICU)<sup>[1]</sup>.

The NICU is characterized as an invasive environment, cold, with the presence of audible noises and intensive care due to the occurrence of situations and multiple events and difficult to manage. The NICU can arouse in relatives ambiguous feelings: at the same time that is a place of hope, becomes an environment of fear and uncertainty<sup>[2,3]</sup>.

The hospitalization of newly born preterm infants in a NICU can generate emotional imbalance in the mother and the family structure. In addition, the newborn can evolve with many complications arising from the period of hospitalization in

this sector. Many countries have implemented actions that meet the psychosocial needs of mothers who experience hospitalization of the newly born, once the residence of the son in a NICU arouses feelings of anguish<sup>[4,5]</sup>.

In this sense, the care directed to the mother should be performed at each visit, as well as the provision of new information about the real state of the newly born to ensure that they participate actively in the process of treatment/rehabilitation. The mother takes a more assertive posture in relation to the son, playing her role and forming the family ties and affective<sup>[2]</sup>.

During the hospitalization of the child, to help mothers overcome their fears, their difficulties and answer their questions, it is essential to understand what feelings the mother experiences forward to events with their newborn infants admitted to the NICU and how their host is in the unit.

Thus, the objective of this study was to understand the perception of mothers about their experience in the Neonatal ICU, recognizing their feelings during the hospitalization of a newborn, in addition to describing the assistance provided to mothers by the multiprofessional team during hospitalization in the NICU.

### MATERIALS AND METHODS

This was a descriptive study with a qualitative approach, carried out in the facilities of a university hospital located in the Brazilian northeast. This hospital was chosen because it is a reference maternity hospital for high-risk pregnancy, with Neonatal ICU beds.

Data were collected in the period from May to August 2018, through semi-structured interviews with nine mothers whose newborn children were admitted to the NICU.

The inclusion criteria to compose the sample were mothers, aged over 18 years, whose newborn children were in the NICU and who had physical and emotional conditions for the interview. The method to invite the mothers to participate in the study occurred through sorting the number of the newborn's chart. Women with mental disorder or with communication problems were excluded.

There were two meetings with each participant and the instrument used for data collection was a semi-structured interview consisting of two parts: the first concerning socioeconomic, gynecological-obstetric information, cause of prematurity and/or admission to the Neonatal Intensive Care Unit (NICU), and the second containing questions about women's experience in the NICU environment. To do this, the following guiding questions were used:

- 1) How is your experience in the Neonatal Intensive Care Unit?
- 2) How is your welcome in the sector?

The data collection was interrupted by the saturation criterion of speech that occurred in the ninth participant. The interviews were recorded with the aid of audio digital media and fully transcribed, preferably on the same day they were carried out, and submitted for analysis.

Data analysis was performed using the Collective Subject Discourse (CSD). The CSD is a technique for tabulation and organization of qualitative data based on the theory of Social Representation. The CSD is a speech-synthesis prepared with parts of speeches of similar meaning, by systematic and standardized procedures that aggregates testimonials without reducing them to quantity. This technique allows the knowledge of collective thoughts, representations, beliefs and values on certain topic. The main information source is the testimony and speeches are made by the central ideas or anchorages and their respective key expressions<sup>[6-8]</sup>.

This study used women's statements and, to create the CSD, the following steps were performed: selection of key expressions of each discourse; identification of the central idea of each key expression; identification of the convergent central idea and formation of the CSD through the key expressions related to convergent central ideas.

After recognizing such methodological figures, the data were interpreted and gathered in a single speech, representing the mother's perception about the context of the NB admission in the NICU.

In accordance with the precepts of Resolution 466/2012 for this study, the project was previously submitted to the Research Ethics Committee involving human beings of the Federal University of Maranhão (UFMA) and approved under opinion 2,652.121 issued on May 14, 2018.

### RESULTS

Nine mothers were interviewed, in the predominant age group over 30 years old, with complete secondary education. As for the marital status, the majority declared stable union and did not have a paid work.

In relation to gynecological-obstetric data of the puerperas, the majority was multiparous and presented some complications in pregnancy. Regarding the number of prenatal visits, the majority attended four or five consultations, and the predominant type of delivery was the cesarean surgery. Among the reasons that led to the premature birth are obstetric causes (n=3), gynecological etiology (n=1) and maternal clinical causes (n=5). Regarding the gestational age, the deliveries took place between the 26<sup>th</sup> and 36<sup>th</sup> week of gestation.

The literal transcription of speeches resulted in the identification and extraction of 49 key expressions. The analysis of these expressions allow identifying the linking of eight central ideas. From the aggregation of key expressions were built eight speeches. When considering the sample size (n=49) and the significant amount of key expressions, in this article, only the core ideas and CSD were presented.

The transcription of speeches allowed identifying 32 key expressions. From the analysis of these key expressions, eight core ideas were identified as shown in **Table 1** and from the agglutination of the key expressions, the CSD was built.

**Table 1.** Description of the central ideas grouped from women’s perception in the experience of the Neonatal Intensive Care Unit, São Luís-MA, Brazil, 2018.

Central idea code	Central Idea
1	The NICU welcomes, supports and has good reception.
2	The NICU provides a lot of information.
3	The NICU has shared care.
4	The NICU brought hope and victory
5	My child’s hospitalization brought a frightening environment.
6	My child’s hospitalization brought the fear of death and hope.
7	The team showed quality of care, willingness, confidence.
8	The team was attentive and helpful.

**Table 2** shows the collective subject discourse from women’s perception on the experience in the Neonatal Intensive Care Unit.

**Table 2.** Discourses of the collective subject from women’s perception about the experience in the Neonatal Intensive Care Unit, São Luís-MA, Brazil, 2018.

Central Idea	Collective Subject Discourse
1	“Look, the nurse always received me very well. In fact, everyone always welcomed me very well, welcomed me, brought them close [...] the environment is heavy, but every time we arrive, they treat us well. The atmosphere is heavy but we feel very welcomed, embraced [...] a positive point is that parents have free access in the NICU, professionals encourage us to visit more often [...] when I got there I was very sad and they welcomed me very well, they always try to take away my sadness, they take good care of me [...] it was very good, they received me in a respectful, affectionate way and understood my pain [...]” (DSC1)
2	“Every time I arrive it’s the same thing, they give me a lot of information about my son, but I see it as a good thing, I do not have to worry about seeking information [...] I was well informed on visits, I knew how my daughter had spent the night, whenever I asked she had a professional ready to inform me [...] they always inform me and adapt the language so I understand [...] today I know what each device does and why it is important, they explained everything to me” (DSC2).
3	“From the beginning they tried to place me to help take care of them, in what I could and without harming my son, I was even afraid [...] they explained to me the kangaroo method and they did everything for my son to put him on my lap [...] they always told me to touch her, to touch her, to talk while I still could not help [...] I saw that my dream of taking care of my son could not be prevented from happening just because he was there [...] [...] today I made the kangaroo the first time, I cried because I had a will to take care [...]” (DSC3).
4	“In the heart, there is hope that she will leave there well and that we will go home together [...] Today I understand that she is there to improve, to be cured, that is what I believe and I have faith [...] that she will leave there with health, I have hope [...] for me, it is to trust that we will leave here victorious [...] I felt psychologically shaken the first time, but then I understood that there would be my daughter’s guarantee to live and I could see her grow well [...] I understood that it was different, that they go to ICU to recover because they come before the time. At first, I was afraid, but then there was hope because I know he will get out of there well [...] is of a new life” (DSC4).

5	<p>“It is a very scary place, but knowing and seeing that my baby is being cared for makes me feel more calm [...] I was very afraid of what it would be like to see my son being cared for by someone other than me, but when I saw the size of the love they feel for everybody’s babies, I saw that this hospitalization served to meet so many good people [...] I was very scared and today I feel confident, the NICU does not make me have butterflies in my stomach, my son is well taken care of [...] the environment is heavy, scary, but seeing their care and attention with my son relieves me, the team is great [...]” (DSC5)</p>
6	<p>“It was very difficult, for fear of death, but the psychologist and social worker have calmed me down [...] it’s a sad environment, there is a big fear of the worst, it seems that life and death are next to each other [...] it is a mixture of suffering and hope at the same time [...] I do not want anyone to feel what I felt, but they (the professionals) in the way they care make me hope [...] when we leave our child, it generates fear, anxiety, insecurity and faith in the end” (DSC6).</p>
7	<p>“They are always very willing to take care of my son and me, they help me a lot and even comfort me [...] I feel a great security in the team, my baby is in good hands [...] I did not know the people and it frightened me, if anything could happen to my son, even though they treat me well, but over time I already trusted them [...] they are super intelligent and make us feel safe about what they are doing, we trust this type of care” (DSC7).</p>
8	<p>“I feel well accepted and I do not see them uncomfortable with me there, they ask if I do not want to make the kangaroo, they feel very comfortable [...] the nurse said I could call her whenever I needed, she would help me, anything [...] told me everything my daughter had, which was done as often as necessary for me to understand in the greatest patience [...] they were always very attentive to me [...] the nurse always supported me, talking directly to me, asking how I was, showing that she cared about me too [...] when I thought my life was over, they gave me a new life, taking good care of my daughter and me, making her better” (DSC8).</p>

## DISCUSSION

The situation of prematurity is unexpected and unplanned in a pregnancy, causing insecurity, fear, anxiety, doubts, shock and feeling of guilt especially for mothers. The hospitalization of a child in the NICU brings moments of stress, anguish and loss of control. It provokes fears, frustrates the woman-mother and leads to an uncertain future. The adaptation to the new context is individual and each person has a level of coping<sup>[9]</sup>.

The need for a newborn to receive care in a NICU after birth can be related to multiple factors, such as socioeconomic, biological and health professionals, institutional, as a reflection of health actions that should always be improved. The repercussion of worsening in the perinatal period in a newborn can mark him/her throughout life, but the performance of professionals who work in the sectors of obstetric and neonatal care and a good structure of neonatal ICU may change reality<sup>[9]</sup>.

Thus, the understanding of the feelings that permeate mothers at this moment becomes an important benefit for the planning of welcome actions by the multiprofessional team in the NICU, contributing to greater coping with the situation, in order to make the experience less traumatic<sup>[10]</sup>.

The results of the study point to a profile of young puerperal women, with predominance of age between 30 and 38 years. In Brazil, in 2016, were computed 877,497 births in women in this age group, corresponding to 30.7% of the total number of births among all age groups, and, of this percentage, 3.52% occurred in situation of prematurity. However, the number of deliveries occurring during adolescence represents approximately 20% of the total number of births in the country. The early pregnancy is often considered a risk factor for labor and birth, and this is evidenced when 15% of the total number of maternal death were women in adolescence<sup>[11,12]</sup>.

In relation to marital status, most of the women reported that they had a companion. The father’s participation is very important and should be encouraged during the pre-natal and, thus, prepare the couple for the labor and birth in any condition. In the situation of prematurity, the support to the woman is of fundamental importance due to the great emotional distress experienced<sup>[12,13]</sup>.

Regarding education, two women had complete higher education, five had complete high school, one incomplete high school and one incomplete primary education. Some studies have indicated a lower level of schooling as a risk and vulnerability factor to a premature delivery and neonatal mortality. Mothers with little education are more prone to risk situations, which may negatively affect her health and the newborn’s health. This was demonstrated by a study in Turkey, in which 93% of the mothers had no schooling beyond secondary education, constituting a significant factor inside the multicausality of preterm delivery. Another study suggests that education should not be used as an analysis factor only, and must be considered in conjunction with access to health services - number of prenatal consultations<sup>[9,14,15]</sup>.

In relation to work and income, in the present study, over half of the interviewees had no paid activity and no income, corroborating other work<sup>[14]</sup> which showed that 87% of the mothers of newborn admitted to the NICU did not work. In contrast, in a study carried out in a reference maternity in Piauí-Brazil, 60.8% had paid activity and was also considered as a predictive factor for premature delivery<sup>[16]</sup>.

The clinical and reproductive characteristics of the puerperal women showed that 67% of them were multiparous (n=6). Similar data were found in a study carried out in a reference maternity in Teresina-Brazil<sup>[16]</sup>, where, of the 208 puerperal women surveyed, 124 (59.6%) had 2 or more children. A small number of women (22%) was able to attend the six or more consultations recommended in pre-natal care, because they have been affected by the bias of early delivery. In the survey conducted in a NICU in Distrito Federal/Brazil, most women attended six or more prenatal consultations and even so, most fetuses had unfavorable outcomes-prematurity and low birth weight, raising questions about the prenatal care quality, since the literature shows that the more prenatal consultations, the better the assistance and outcome of pregnancy<sup>[17]</sup>.

The results show that complications in pregnancy occurred in almost all cases, causing premature delivery. In one case in the present study, pregnancy was uneventful, without amendments, however, the outcome was premature rupture of amniotic membranes without any other associated factor. In the survey conducted in Distrito Federal/Brazil, the studied population is different from that addressed in this study, most mothers presented blood pressure alteration and urinary tract infection as complications, confirming what was evidenced in this study, since 54% of the origin of preterm delivery was clinic with a predominance of these two comorbidities. When a premature birth occurs due to these conditions there is a high rate of maternal and neonatal mortality. The severity increases in pregnant women with preeclampsia or superimposed preeclampsia when compared to gestational hypertension alone. These pathologies bring neonatal infections, prematurity, respiratory distress syndrome, among others<sup>[17,18]</sup>.

The cesarean surgery had the highest prevalence (78%), because of some complications in pregnancy that have partial or absolute indication for this form of delivery. The number of cesarean surgeries has increased dramatically in recent years, surpassing the percentage recommended by the World Health Organization (WHO), which is 15%. Brazil occupies a concerning position in this world rank, once more than half of all deliveries are by cesarean surgery. In 2016, in Maranhro-Brazil, the rate of cesarean sections was 44.52% of deliveries performed, and 3.52% of these were made in preterm births<sup>[15-19]</sup>.

There were proportions similar to the classifications of prematurity according to gestational age. According to the Datasus<sup>[11]</sup>, in 2016, the largest number of premature births occurred in the gestational age between 32 and 36 weeks (86.2%). The statistics obtained from the Datasus resemble the results found by another study<sup>[20]</sup> in the state of Paraná, Brazil, which, although in gestational age considered as prematurity, the births occurred in a period near the end of the pregnancy. A premature birth before 29 weeks-the period in which the fetus gains more weight-results in low birth weight infants. The new technologies minimize and retard the threat of an early birth. The main intervention is tocolysis, whose function is to inhibit the contractions and postpone the outcome of pregnancy<sup>[21]</sup>.

After analyzing the clinical, demographic and reproductive characteristics, there was an exhaustive reading of the transcribed material, in order to allow the identification of the primary ideas. The CSD of the first question was expressed by the central ideas 1, 2 and 3 and reveal feelings of participants in relation to the team's welcome, as well as the desires of caring for the child, sadness when entering the environment, how the information is relayed and seized by them, considering their inexperience and fragility with the situation.

The prematurity causes panic on who is living with this condition, and each one has a way to face adversity. The Central idea 1 provided the terms, "welcome" and "good reception" for the construction of the first CSD. The analysis of the mothers' speech showed that, as well as in another study<sup>[22]</sup>, the assistance provided in the NICU of the studied hospital is also using the philosophy of family-centered care, as evidenced by the principles of human dignity, respect, family collaboration, shared information and participation of parents in care through appropriate strategies and tools that meet the need of the woman as mother and care receiver, aiming to minimize possible traumas that this situation might generate, receiving emotional support at each visit, obeying the peculiarities and limitations of each one.

The mother needs to understand how the subject of care and the team should also involve them in their assistance, demonstrating her that everyone needs care. The humanization facilitates the interaction of the triad mother-father-son/family/professional, and ends up making the mother a passive or active subject in care, minimizing the harmful effects that hospitalization can generate and contributing to the quality of life of the mother and child survival. The neonatology services are concerned to become welcoming and less impersonal environments, not only in the physical space, such as the team's behavior, combining technology and humanized care, and this phenomenon can be seen through the statements of each mother about the service<sup>[22,23]</sup>.

Still based on question 1, a second central idea came, in which the collective speaks of "too much information". In the construction of the discourse of the collective subject 2, once this environment is unknown and new, the lack of information could cause emotional instability in the mother and the fear of losing her child. With the formulation of the speech, mothers talk about having information always available, highlighting that the professionals sought to update them in the situation of the NB. This result differs from another<sup>[24]</sup>, where the mothers reported that the team was not always available to meet them and keep them informed about the real state of health of their children, generating feelings of anguish, fear, insecurity and emotional instability. There was no feeling of involvement in the care of the NB,

because their individual needs were not being met. A study in the South region of Brazil, with the family of the newborns admitted to the NICU<sup>[25]</sup> also showed that the lack of information among parents and staff affected the establishment of an interpersonal relationship and the development of mutual trust. In the present study, mothers stated categorically that in the beginning there was certain fear with professionals on how to take care, however, as they watched and confirmed the high level of knowledge of the team, they began to rely entirely on the care providers. The mothers reported that the professionals that provide information were nursing technicians and nurses, a result similar to another study<sup>[26]</sup>, because nursing is in a key position to give information and provide support to parents.

Therefore, the assistance provided in the NICU of the studied hospital sought to provide the mother the maximum comfort. The information has been of great importance for the mothers, making them more confident and secure about the prognosis of their children.

The third central idea of the 1st question is represented by the term “shared care” and the speeches organized in CSD 3, the participants reported that the multiprofessional team always involve them in care, stimulating the creation of bond through touch, extraction of breast milk, conversation, to stabilize clinically the PTNB as soon as possible and start the practice of the kangaroo position, which brings positive repercussions on the process of recovery of the newborn. Another study<sup>[25]</sup> managed to capture feelings of ambiguity in relation to motherhood, demonstrating that the mothers were not protagonists nor “extras” of care to the NB, highlighting reports in which the mother expressed that she had a child, but she felt like she did not. A research<sup>[26]</sup>, after analyzing the population of its study, stated that parents felt the need to act as caregivers of children. This analysis shows that, in the scenario of this study, the shared care is a reality and mothers managed to accomplish it in conjunction with the health team<sup>[27]</sup>.

With the shared care, the trend is the stimulation of the team to perform the kangaroo position as soon as possible. A study<sup>[24]</sup> obtained as results that the method works in various aspects such as: aid to maintain milk production and stimulation to the mother, improvement of the bond between mother and child, the mother’s appropriation in relation to her child, perceptible wellbeing of the PTNB during the kangaroo position due to better organization. Another advantage of this practice is the enormous satisfaction verbalized by parents, generating good expectations for the next trip to the NICU, in order to be able to enjoy again of this experience. The speeches presented by mothers corroborate the examined research, where they felt satisfied in making the kangaroo position and recognized the importance of the practice for the PTNB.

As interviews occurred, new challenges emerged. Thus, there came the 2<sup>nd</sup> question about the meaning of the Neonatal ICU for mothers, resulting in a central idea with the terms “hope”, “victory” and, with it, the formation of the CSD 4. The mothers reported the difficult to adapt to the environment, but they had great faith that all would be well and that their NB would be discharged soon. They saw the place as the certainty of healing and a promising and happy future. A study<sup>[27]</sup> evaluated that, although mothers were biopsychosocially exhausted, without being able to perform the care the way they wanted, they kept the hope and confidence in the team, with the certainty that the professionals would do the best for the recovery of their children and the way they provided care increased even more the feeling. The provision of complete information, the fact of knowing the whole team and the support received contributed even more to the maintenance of hope, improving the quality of life of the participants. The mothers of NB from the hospital kept great hopes on the recovery of their children. They reported that the provided care often dissuaded fear and reinforced more and more the certainty of a speedy recovery with little or no damage. The quality of care advocated by the team and the creation of the bond of trust were fundamental for keeping positive evaluations.

In the question that seeks to understand how the mother envisioned and faced the NICU and the admission of her child, there were two central ideas. The first was characterized by “the scary environment” and its CSD 5, because it was how they defined it, and the second was the “fear of death”, “hope”. They expressed that it was the first time within that place, which generated fear, however, with frequent trips, they realized that the NICU should not be feared because it means life. They could see their children being well taken care of, which calmed them down. The team contributed significantly to the cultivation of good feelings, although the environment does not favor it. Another study<sup>[23]</sup> showed that the participants of the two surveys had similar perceptions, because they claimed that arriving at the NICU and seeing their children in various clinical health conditions, and in an unknown environment for them, caused panic, but, when observing the care offered, the feeling of fear gave place to the faith as an emotional support, source of healing and survival of the child.

A study<sup>[25]</sup> was able to demonstrate that the first visit to the unit was important to change prejudices regarding the unit. The establishment of bonds, emotional support and exchange of information are crucial to develop or elaborate the feelings about the NICU. The fear of death gradually decreased when the team demonstrated knowledge and ability to deal with the peculiarities of each case. With the development of actions focused on the family and inclusion of parents in care, the experience of hospitalization gained a new meaning.

The team, through assistance, managed to unfold bad feelings and helped in the development of hope. The fear of death was attenuated by the observation of care, and the respect and dignity of the NB and mother were essential to mitigate possible traumas.

In the last dimension evaluated, mothers needed to talk about the relationship with the team, the care provided to the mother-child dyad and a recommended and primordial factor within the environment of the Neonatal ICU: the creation of bonds. The results obtained in the CSD 6, 7, and 8 showed a good relationship with the multiprofessional team, emphasizing that the care provided was anchored in the mother-child dyad and that there was a continuous stimulus to establish the bond between mother and child as soon as possible. Two central ideas were found: in the first the terms addressed were "quality of care", "willingness", "trust". The second brought the words "attentive" and "helpful", "contact". Another study<sup>[28]</sup> showed that mothers have more contact with the nursing staff and doctors, their relations are unique and exclusive team-companion, informing the general state of the child, not keeping the communication as a way of promoting welcome and sensitive listening, facts that are completely opposite to those found in the present study, where the relationship between team members and parents go beyond mechanistic care techniques, because, in addition to providing information and assistance to the PTNB, they saw the woman as a subject that needed care, who needed to find safety, comfort and support of the team.

The narrowing of the interpersonal relations made mothers feel safe, confident, finding in the professional an additional emotional support. Furthermore, the scientific field of care techniques was an important point to establish bonds between the triad mother-team-child because they put the trust of the child care in people who think they have the capacity to provide a favorable outcome to the NB<sup>[29]</sup>.

In this study, when asked about care promoters, mothers claim to know who are responsible for their child's care, a laudable fact, because it shows the team approach with the mother. Parents need to be able to identify who takes care of the child, so they feel free to ask questions, interact, seek support. This monitoring closer to the mother during hospitalization minimizes unfavorable feelings involved in the situation. Professionals must remember to exercise a role of caregiver accessible and available to talk, listen, ask questions and dissuade concerns<sup>[28]</sup>.

The relationship between team and parents is extremely important, because it provides a better understanding of the clinical evolution of the NB, contributing to the formation of the bond of trust. Interacting with the family is interacting with the NB, because this should be understood as one being connected to mother and father<sup>[30]</sup>. The presence of the mother should not be seen as an obstacle to the assistance, it should be instigated and valued, because it allows establishing dialog and reducing maternal anxiety revealed in the speeches. The care to the woman must be holistic, respectful and ethical to achieve an excellence service. The studied service seeks to place the mother in the care environment, establishing an interpersonal relationship that facilitates care provision, because there was a great confidence of women in the professionals.

The women stated that there is a strong stimulus of the team to establish an early bond between mother and child. The nursing professionals were identified as the main instigators of the relationship, encouraging the daily access and, as soon as possible, the touch, the conversation between mother and child, extraction of breast milk. They reported a high quality specialized care for the fastest possible stabilization of the PTNB.

The free access of parents to the NICU may indicate a good bond of mother-child dyad. The stimulation of the team for the frequent visit to the environment where the PTNB was and the good relationship mentioned by participants with the professionals involved in the care to their children favored the presence of mothers in the Neonatal Unit.

Similar reports were found in relation to the active participation of mothers in the care for the NB, highlighting the role of the nursing team that contributed to the process of construction of affective bonds, thereby relieving the fears and anxieties<sup>[31]</sup>. This affective relationship gives the mother greater security to exercise her motherly care, allowing the empowerment on her new social condition. Small care gestures need valuation of the team, making the appropriation of the role of mother remarkable.

The participants of this study reported that nursing taught and helped them in the care to the NB, building their autonomy. Nevertheless, all the care performed by mothers was constantly supervised, being perceived by the participants as something positive, because procedures apparently harmless could become potential complications for their children. Some still missed the chance to participate in the first bath, but felt that it was not yet possible, and remained confident about performing it as soon as possible<sup>[2,31]</sup>.

The detailing of the care procedures, even though considered simple, will enable skills and security for the mother to perform them successfully, besides ensuring an appropriate technique for promoting the well-being of the NB. The repetition of the care guidelines should be evaluated as a guarantee of assimilation, being the responsibility of the professional monitoring the evolution of the maternal learning. At first, the professional must demonstrate and guide, and then, assist. Finally, supervising the care provided by mothers, intervening only in situations of danger. The woman in this moment should be seen as active subject in the care process. Understanding that each family has its individuality

provides a better relationship between mother and child, and facilitates the appropriation of the new function, the woman feels useful, which can minimize the guilt about the outcome of the pregnancy<sup>[31]</sup>.

The daily coexistence with the child gives the woman confidence and provides the establishment of the maternal role. The creation of bond is, above all, a way to prepare the mother for home care. The interaction makes the woman feel, indeed, the newborn's mother.

The limitation of the present study was performing only two meetings with each woman, not allowing strengthening the bond formed, which may have interfered with the quality of answers. Moreover, some women refused to participate in the study, even after the clarification about the objectives of the study and the guarantee of confidentiality. These limitations open possibilities for future investigations.

### FINAL THOUGHTS

This study allowed elucidating the understanding of the feelings involved in the hospitalization of a preterm newborn in the NICU. The communication and exchange of information represent an important means of renewing hope and faith in relation to the newborn's health. The welcome based the process of humanized assistance in the sector, which was confirmed when observing the valuation of permanence and participation of the mother in care, and the establishment of bonds had a significant importance in reducing maternal insecurity and in the construction of autonomy in care. This study may provide discussions that will help in the process of formation of professionals, so as to make them more sensitive and able to perceive the needs of mothers who will experience the hospitalization of the preterm child.

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